Inflation is Primarily a Monetary Phenomenon

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Abstract: The primary cause of inflation is the continuing increase in the quantity of money being issued by a Central Bank, relative to the amount of goods and services being produced in the economy. Any other factor which raises prices simply adds on to the built in inflation caused by money creation. When government gets easy access to this new money, in effect a greater quantity of money starts chasing after the same amount of goods and services which consequently forces prices to increase. The paper uses a descriptive as well as a historical approach in discussing the causes of inflation. It uses a theoretical framework which focuses on the quantity theory of money in order to explain why inflation is first and foremost a monetary phenomenon and why any other factor outside of the expansion of fiat currency simply remains as a secondary contributor to the sustained increases in prices in the long run. Since the fiat money system imposed by the Central Bank is a debt based money system, any sustained increases in the quantity of money will always create more public debt since the creation of new money must be backed up by a government bond that guarantees more taxation in the future. Chronic deficit spending financed by monetizing public debt is responsible for creating inflation that reduces the value of money, increases the cost of all goods and services and reduces the value of real income leading to a decline in living standards. Inflation over several years reduces the value of real wages and salaries, savings, pensions and other retirement benefits. Inflation is a hidden tax and is shouldered by every income earning individual. Deficit spending funded by the Central Bank's creation of new money allows government to continually spend beyond its means and transfer this cost to the general public in the form of inflation and a guaranty of more taxation in the future.

Key Words: Inflation; fiat currency; deficit spending; government bonds; public debt;

1. INTRODUCTION

At the end of March 2018, the Bangko Sentral ng Pilipinas (BSP) reported that the inflation rate had increased to 4.3 percent, exceeding the target which it had set at 2 to 4 percent at the start of the year. Over the next eleven months, the inflation rate would continue to exceed the upper limit of 4 percent forcing the BSP to raise interest rates (particularly the overnight reverse repurchase rates) five times from 3 percent in February to 3.25 percent in May, to 3.5 percent in June, to 4.0 percent in August, to 4.5 percent in September and 4.75 percent in November 2018. (BSP, Monetary Policy Decisions Report, 2018). This was done for the purpose of reducing the amount of funds being borrowed by commercial banks through open market operations, to slow down the growth in the quantity of money circulating in the economy reduce aggregate demand and keep inflation back to the targeted rate of 2 to 4 percent. The Deputy Governor of the BSP and the Official Spokesperson of the Office of the President both reported that attempts to slow down inflation have been successful and that the public should be relieved that the economy is moving back towards a condition of price stability, with the expectation of lower inflation going into the year 2019.

This claim, however is misleading. Slower inflation does not lead to stable prices , but still results to a situation with higher prices, a rising cost of living and reduced living standards for the poor, particularly for those relying on fixed incomes such as old age pensioners, academics and other compensation income earning employees. An inflation target of 2, 3 or 4 percent still leads to higher prices, and a reduction in the purchasing power of the Philippine peso. The poor and those who rely on fixed incomes will always end up being able to purchase a lesser amount of goods and services resulting to the continuing decline in living standards.

2. METHODOLOGY

The paper uses a descriptive as well as a historical approach in discussing the causes of inflation. Data was obtained from the Asian Development Bank Key Indicators Report for Asia and the Pacific as well as from the National Government Debt Report of the Bureau of Treasury under the Department of Finance. The paper also uses a theoretical framework which focuses on the quantity theory of money in order to explain why inflation is first and foremost a monetary phenomenon and why any other factor outside of the expansion of fiat currency simply remains as a secondary contributor to the sustained increases in prices in the long run.

3. RESULTS AND DISCUSSION

3.1 The Adverse Effects of Accumulated Inflation

The accumulated inflation over the past four decades for example, had drastically increased the cost of living, reduced the real incomes of the poor, and decreased the real value of both private and public pensions, depriving retirees of the chance to live comfortably in their old age. More taxes and higher tax rates are being imposed primarily because of growing public debts and deficit spending. Social security does not rely on income from investments but depends mainly on the contributions of younger members to finance the benefits of the elderly. Two incomes are necessary for middle and lower middle class families in order to pay for home, medical and child care expenses as well as to put children through good private schools. The real incomes of the middle and lower classes have either remained flat or have declined because of wage and salary adjustments which are not enough to offset the increase in the price of goods and services.

3.2 Blaming Agricultural Production, Expensive Oil Imports and other Imported Products

Various reasons are given for the causes of spiking inflation for the eleven months of 2018, however, the explanations provided by government deliberately avoids Central Bank money creation which finances fiscal deficit spending.

The BSP for example, puts emphasis on the structural supply side limitations in agricultural production as well as the increase in world oil prices and other imported products as the cause of the rising prices of domestic goods. The current Secretary of the Department of Agriculture has even gone to the extent of blaming rice cartels or groups of

wholesalers and retailers for deliberately hoarding supply and creating a shortage so that market prices would increase.

It has also been a common practice for government to blame changes in the weather, such as droughts or severe flooding as a major cause of inflation, largely because of the destruction of agricultural crops which reduces supply and raises prices.

These reasons at best may be partly true, but at worst completely hides the fact that rising demand caused by government's easy access to newly created money (fiat currency) which is used to finance fiscal deficit spending is the primary reason for inflation.

Agricultural production may decrease because of flooding or drought, however, shortages in agricultural crops can always be offset with more imports from countries which produce cheaper goods (such as rice from Thailand or Vietnam). The major reason why importation is limited is because of the tariff and quota protection as well as the import licensing and permit restrictions being implemented by government which is the source of the inefficiency in domestic supply and production. The protective effect of import licensing and permit restrictions have been responsible for the existence of cartels because of the limited licenses and permits being issued to a few large importers who could easily hoard huge inventories, create shortages and increase retail prices. Both tariff and non-tariff protection have always lead to higher domestic prices which could only be blamed on severe government intervention.

The higher prices of imported goods is also being blamed for rising prices in the local economy, particularly for the increasing prices of oil in the world market. When imported oil becomes more expensive, the prices of gasoline and diesel increase, which raises the cost of transporting goods, leading to rising prices and inflation. Although this view appears reasonable, it does not provide an adequate explanation, considering that import prices are in foreign currency and the only time that this can be linked to domestic prices is through the exchange rate which is strongly influenced by the quantity of money which is solely created by the Central Bank.

The price of imported goods should not be confused with the general price level. The higher price of imported goods which is in foreign currency is completely detached from domestic currency and can only be linked to local prices once exchange rates are used. Import prices converted into domestic currency only becomes one of the many other components of the consumer price index (or the general price level). This explains why countries like Japan and Germany who import all of the oil used by their industries do not necessarily have high inflation even when oil prices in the world market increase.

Therefore it is not accurate to totally blame import prices and limited agricultural production for rising inflation because government intervention in these two areas is both significant and substantial. This only makes government more accountable for the inefficient outcomes involving imports and agricultural production.

3.3 The Real Primary Cause of Inflation

The primary cause of inflation is the continuing increase in the quantity of money being issued by a Central Bank, relative to the amount of goods and services being produced in the economy. When government gets easy access to this new money, in effect a greater quantity of money starts chasing after the same amount of goods and services which consequently forces prices to increase. This explanation is found in the "Quantity Theory of Money".

3.4 Theoretical Framework

3.4.1 The Quantity Theory of Money

An increase in the quantity of money (M) leads to higher prices (P) if the value of real output (Q) remains constant along with the velocity of money (V). This is the principle behind the quantity theory of money as shown by the following equation:

$$MV = PQ$$

Where: M is the supply of money

V is the velocity of money (or the number of times it is turned-over)

P is the general price level and;

Q is the value of real output

Therefore when a Central Bank increases the quantity of fiat money which is loaned to government, prices will increase as government spends the new money and competes with the private sector for the same amount of goods and services currently available in the economy.

3.4.2 Demand Pull and Cost Push Factors

Mainstream Neoclassical Economics identifies demand pull and cost push factors as being responsible for rising prices. Under demand pull inflation, the use of expansionary fiscal and monetary policies generally increase aggregate demand. However, if productive capacity and aggregate supply do not grow fast enough to meet the increased demand, prices will increase resulting to inflation.

Cost push factors on the other hand, make production more expensive, which may reduce aggregate supply or induce firms to charge higher prices for goods in order to cover the higher cost. In both instances, the expected outcome would still be an increase in prices.

3.5 Historical Accounts of Money Creation Leading to Inflation

Prior to the end of the second World War , the classical liberal definition of inflation was stated as, "increases in money supply which caused increases in prices" (Reed, 2012). This was the well accepted definition because the actual occurrences of severe inflation before the first and second world wars were clearly attributed to the excessive printing of national currencies by Germany and Austria from 1920 to 1923 and Greece in the early 1940's. Germany had experienced 1 trillion percent inflation, Austria had 1,426 percent inflation in 1923, while Greece had 8.5 billion percent inflation from 1942 to 1944. The Continental paper dollars which were printed excessively to finance the American revolution was subject to massive inflation in 1781 giving rise to the phrase, "not worth a Continental", while President Abraham Lincoln's "Greenbacks" which were printed to finance the civil war had generated inflation of 14 percent in 1862 and 25 percent in 1863 and 1864 (Barbieri, 2014).

3.6 Severe Inflation in the Modern Age

Severe inflation or hyperinflation is defined as a situation wherein prices increase by at least 50 percent per month. Hyperinflation is the outcome of excessive fiat money creation by a Central Bank, conducted in order to fund government spending which is not supported by adequate tax collections. Many examples of irresponsible governments borrowing fiat money created by the Central Bank are recorded in history. The economy of Zimbabwe experienced 89.7 sextillion percent inflation in November 2008 because of a government that had abused deficit spending practices in cooperation with its own Central Bank. Its domestic currency had a largest denomination in the form of a 100 trillion dollar Zimbabwe note. Greece had hyperinflation of 8.5 billion percent from 1942 to 1944, Bolivia had 20,000 percent in 1984 to 1986, Argentina at 4,923 percent in 1989, Brazil at 2,075 percent in 1994, Chile at 1,200 percent between 1971 to 1973, Russia at 2,520 percent from 1992 to 1994, Austria at 1,426 percent from 1921 to 1923 and the Ukraine at 1,400 percent from 1993 to 1995 (Mankiw, 2012).

3.7 Rising Prices with Accumulating Effects in the Long Run

The inflation experience in the Philippines is not hyperinflation but can be described as a slower version of this phenomenon, with prices rising substantially over a longer period of time. For instance, from the year 2006 to 2017, the consumer price index had risen by 47.45 percent or an average rate of 3.593 percent per year. From the year 2001 to 2017, the consumer price index had increased by 82.49 percent (or an average rate of 3.831 percent per year), and from 1997 to 2017, the general price level had increased by 137.82 percent or an average rate of 4.426 percent per year. Similar to the victims of hyperinflation in Latin America, Africa and Europe, price increases in the Philippines over a span of eleven, sixteen or twenty years drastically reduces the purchasing power of fixed income earners and significantly decreasing living standards, with the worst hit being old age pensioners and the poor.

The primary source of inflation is the increase in the quantity of money in circulation. The creation of a greater quantity of money running after a relatively smaller amount of goods and services will force prices to increase. As households and firms with more real money balances increase demand and compete with one another in order to purchase goods and services which are expanding at a slower rate, prices increase and the inflation worsens.

3.8 Slower Output Growth Relative to Faster Money Supply Growth

From the year 2001 to 2017, real gross domestic product (GDP) had grown from P3.6843 trillion to P8.6657 trillion or 2.35 times as much. This represents a growth of 135 percent over the seventeen year period or an average growth rate of 5.49 percent per year. Real GDP represents the value of the actual amount of goods and service produced at constant prices.

The quantity of narrow money (defined as M1 representing currency in circulation and demand deposits) has grown by 8.92 times from P399 billion in 2001 to P3.5623 trillion in 2017. This represents a growth of 792 percent or an annual average growth rate of 14.66 percent.

The quantity of broad money (defined as M2 composed of M1 plus short term savings and time deposits) grew by 5.982 times from P1.7069 trillion in 2001 to P10.2113 trillion in 2017 reflecting an increase of 498.23 percent. This translates to an average growth of 11.83 percent per year.

And finally, total domestic liquidity (defined as M3 composed of M2 plus long term deposits and deposit substitutes such as government securities) increased from P1.723.2 trillion in 2001 to P10.6374 trillion in 2017. This represents an increase of 6.17 times or a growth of 517 percent over the 16 year period. This translates to an average growth of 12.048 percent per annum.

Based on the figures presented above, it is quite clear that the quantity of money (either defined as M1, M2 or M3) has always grown faster than the value of output or real GDP. This is the primary reason why a sustained increase in prices of at least 82.49 percent occurred over the 2001 to 2017 period.

Even if the annual average increase in prices (or the inflation rate) was only 3.831 percent, the real damage it causes to earned income and living standards is much more severe if the effects of accumulated inflation of 82.49 percent is considered over the sixteen year period.

The increase in the quantity of money is consistently being done by the Central Bank, not only because it works on the assumption that economic growth must be accommodated by money supply growth but also because of its desire to finance deficit spending by government. Money in the form of paper bills or coins or electronic credits in government bank accounts which the Central Bank creates must always be backed up by government securities in the form of treasury bills or bonds issued by the Bureau of Treasury under the Department of Finance. Although money supply can grow when commercial banks create checkbook money or electronic bank credits every time a loan is granted, a large part of a bank's assets also include government securities which are consequently sold to the Central Bank and becomes the basis to create new money, ending up as additional reserves that could be lent out by the commercial banking system.

The quantity of money in circulation can only become larger every year if the government is spending beyond the amount of taxes it collects. If government operates with a balance budget at the end of the year, (with all public expenditures being equal to tax revenues) in effect, there would be no need to borrow money from the Central Bank, or the commercial banks and no need to issue government securities. This is the reason why the monetary system can only increase the quantity of money in circulation if government keeps on accumulating more debt. The current monetary system is a debt based money system. Fiat currency (or money which is not backed up by any real tangible asset) imposed by government can only be issued by a Central Bank if it is backed up by government bonds (debt) which is literally a guarantee to impose more taxes and higher tax rates on every individual and every type of economic activity that can be engaged in.

3.9 Fiscal Deficit Spending and Public Debt

Fiscal deficit spending which justifies fiat money creation by a Central Bank has been a regular feature of every economy that has relied upon massive government intervention whether in times of rapid economic growth or during recessions. The Philippine government has always been spending beyond its means with the largest fiscal deficit ever recorded at P353.4 billion and P350.6 billion for the years 2016 and 2017 respectively. For the period beginning 2000 up to 2017, the lowest fiscal deficit was at P12.4 billion in 2007. Under the administration of President Joseph Estrada, the largest fiscal deficit recorded was at P147 billion in 2001. The largest fiscal deficit under President Gloria Arroyo was at P210.7 billion in 2002 (after replacing President Joseph Estrada) and P298.5 in 2009 when she was formally elected to serve for a six year term beginning 2004 to 2009. The fiscal deficit under President Benigno Aquino Jr. was at P314.5 billion by the end of 2010 and P353.4 billion by the end of 2016. Fiscal deficit spending accumulates into public debt, and this has been increasing from P2.88 trillion in 2001 to P4.76 trillion in 2008 to P6.28 trillion in 2014 to P7.78 trillion in 2018 (Bureau of Treasury Report, Department of Finance, 2019). This is explains why tax reform programs have always been implemented almost every ten years (1986, 1997, 2007, 2017), for the purpose of increasing tax rates and creating new taxes in order to pay for these debts. Unfortunately, this is the main outcome of fiscal deficit spending, which only becomes possible through fiat money creation by a Central Bank.

4. CONCLUSIONS

Since the fiat money system imposed by the Central Bank is a debt based money system, any sustained increases in the quantity of money will always create more public debt since the creation of fiat money must be backed up by a government bond which is actually a guarantee of more taxation in the future.

Chronic deficit spending financed by monetizing public debt is responsible for creating inflation that reduces the value of money, increases the cost of all goods and services and reduces the value of real income leading to a decline in living standards. Inflation over several years reduces the value of real wages and salaries, savings, pensions and other retirement benefits. Inflation is a hidden tax and is shouldered by every income earning individual. Deficit spending funded by the Central Bank's creation of new money allows government to continually spend beyond its means and transfer this cost to the general public in the form of inflation and a guaranty of more taxation in the future. Deficit spending financed by monetizing public debt hurts every individual in the economy through inflation, the certainty of more taxation in the future and reduced benefits from government because of larger allocations for debt service payments taken from the national budget.

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