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## **PHILIPS CURVE MODEL AND ITS IMPACT IN CASE OF UZBEKISTAN**

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Everybody knows that many countries celebrate New Year in different way. Some of them celebrate Christmas then New Year or Silvestre. Somebody celebrates New Year on December 31, and then Old New Year on January 13, but somebody else celebrates it after January on March 21, when a day and a night become equal. With the other words somebody used to celebrate New Year with cold weather like Christ frosts on December but others do it on March 21 when it is usually warm.

And Crisis influenced everybody differently: more or less. But there is difference nobody was glad and of course it have not brought happiness to anybody.

Crisis began with failure and insolvency of mortgage lending in the USA and it had a large scale impact on liquidity of the largest banks and financial structures in the world, indices and market value of the biggest companies extremely fell at the world's top stock exchange. Because of it considerable production has decreased, economic growth rate in many countries has sharply reduced with all the negative consequences.

Level and depth of damage of every country depends on the stability and reliability of financial, economic and banking system, and at the same time on how strong are the protective mechanisms integrated into them, not only the strength of the financial currency system, capitalization and liquidity of national credit institution, but their dependence on the foreign and corporate banking structure, on the size of gold reserves and capability of repaying external loans, on the level of sustainability, diversified nature and competitiveness of national economy.

In such cases it is the government which must take a responsibility as a main reformer when it was dictated by long term interests of the country and necessity of resolving extraordinary situations.

After becoming independent Uzbekistan has always followed the principle of denying short- term speculative loans and attracting mainly long term foreign investments with preferential interest rates.

Generally, the total volume of capital investments in 2009 including foreign and internal investments into the economy of the country makes up not less than 25 percent of internal gross production of the country.

Today Uzbekistan is both an integral part of world community and a global financial economic market, and that is why it is clear that it can suffer from financial economic problems of its partners. Besides it, due to the shrinking demand at the world market, the prices for the commodities exported by Uzbekistan are decreasing, such as those for precious and non- ferrous metals, cotton, uranium, oil products, mineral fertilizers and others. It leads to a decrease in the export gains of economic entities and investors, affects their income and profitability of production, and finally, the growth rates and our macroeconomic indicators.

The Republic of Uzbekistan became independent only 19 years ago and it has met the crisis not in an ideal economic condition in the plan of power plant fuel, wheat independence where positive goals were achieved.

The world financial crisis during 2008–09 is a watershed event that cries out for a reexamination not only of industrial countries' bank systems but also of growth strategies in

developing countries. The developing countries are emerging with less damage than in the debt crisis of the 1980s, for Latin America, and the financial crisis of the late 1990s, for East Asia<sup>1</sup>.

China, as the representative country of the emerging market, was affected largely by the world finance crisis; although the GDP in 2009 grew 8.9%, the total export amount in year 2009 was reduced down 16%, which is compared to year 2008. The growth ratio of export was negative since November, 2007 until November, 2009 in China. The Chinese government spent 60 billion USD to drag the economy from the mud of the crisis.

The world economy is recovering from the recession step by step, but it is still very weak. China needs to strike a balance between maintaining a relatively fast and stable development, economic structural adjustment and management of inflation expectation to avert a possible economic "double dip".

"The road ahead is not smooth and may be full of twists and turns," the experts have warned that the world has not yet escaped the clutches of the global financial crisis. They said some of the major problems which caused the crisis have not been fully resolved, and there is still a possibility of a double-dip global recession and many Chinese companies are being kept afloat by emergency stimulus measures<sup>2</sup>.

On the other side of the recession during the financial crisis, the inflation challenge is rising up because most of majority economic bodies defended the financial crisis by increasing their currencies issuing. The inflation can badly lick up the limited achievement that many countries struggled for.

In 2009, Uzbekistan GDP growth rate is up to 8.1%, which compared to year 2008. The large economy legend was created because Uzbekistan government responded early to the global crisis and falling export prices by putting into effect a large-scale anti-crisis fiscal expansion program. Central Bank of Uzbekistan spent \$400 million to recapitalize six major commercial banks to spark lending in rural areas and the government launched a \$600 million public investment program, financed by the Fund for Reconstruction and Development. These measures helped to maintain growth momentum, especially in industry and construction. The anti-crisis measures taken in 2009 have allowed creating more than 940,000 new work places, including over 500,000 in the rural areas<sup>3</sup>.

Although Uzbekistan economy is relatively well insulated from global financial chaos by its lack of integration with the world markets and underdeveloped domestic financial sector, obviously Uzbekistan can not flee away among the extreme serious inflation expectation around the world.

Economist Intelligence Unit (EIU) estimates that GDP of Uzbekistan grows at about 8.1%-8.3% respectively in 2010 and 2011, and the Asian Development Bank however, puts growth 6.3% in 2010<sup>4</sup>. Except for the GDP growth, increasing the employment and people's incomes is the other important challenges in the front of Uzbekistan; President Islam Karimov highlighted it in the 2010 State Program "Year of harmoniously developed generation"<sup>5</sup>.

So, the GDP growth, inflation expectation and unemployment, people's incomes, there are a lot of factors the government face to resolve. Here there is an economic theory—Philips curve will bring us some idea to deal with some of criteria economy factors we care about, which often interact to each other.

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<sup>1</sup> William R. Cline(2009), *The Global Financial Crisis and Development Strategy for Emerging Market Economies*

<sup>2</sup> Wen Jiabo (2010.3), *China annual press conference*.

<sup>3</sup> Paper (2010.2.2), *BVV Business Report, Vol no.4 (983)*

<sup>4</sup> Web site of Asian Development Bank :[www.adb.org](http://www.adb.org)

<sup>5</sup> Source: Press Service of the President of the Republic of Uzbekistan, [www.gov.uz](http://www.gov.uz)

### Analysis

Inflation is a popular phenomenon in today's economy in the world. We can simply think that inflation is a rise in the general level of prices of goods and services (say, wholesale price) in an economy over a certain period of time. Normally, people divided it into three major types: demand-pull inflation, cost-push inflation, and built-in inflation:

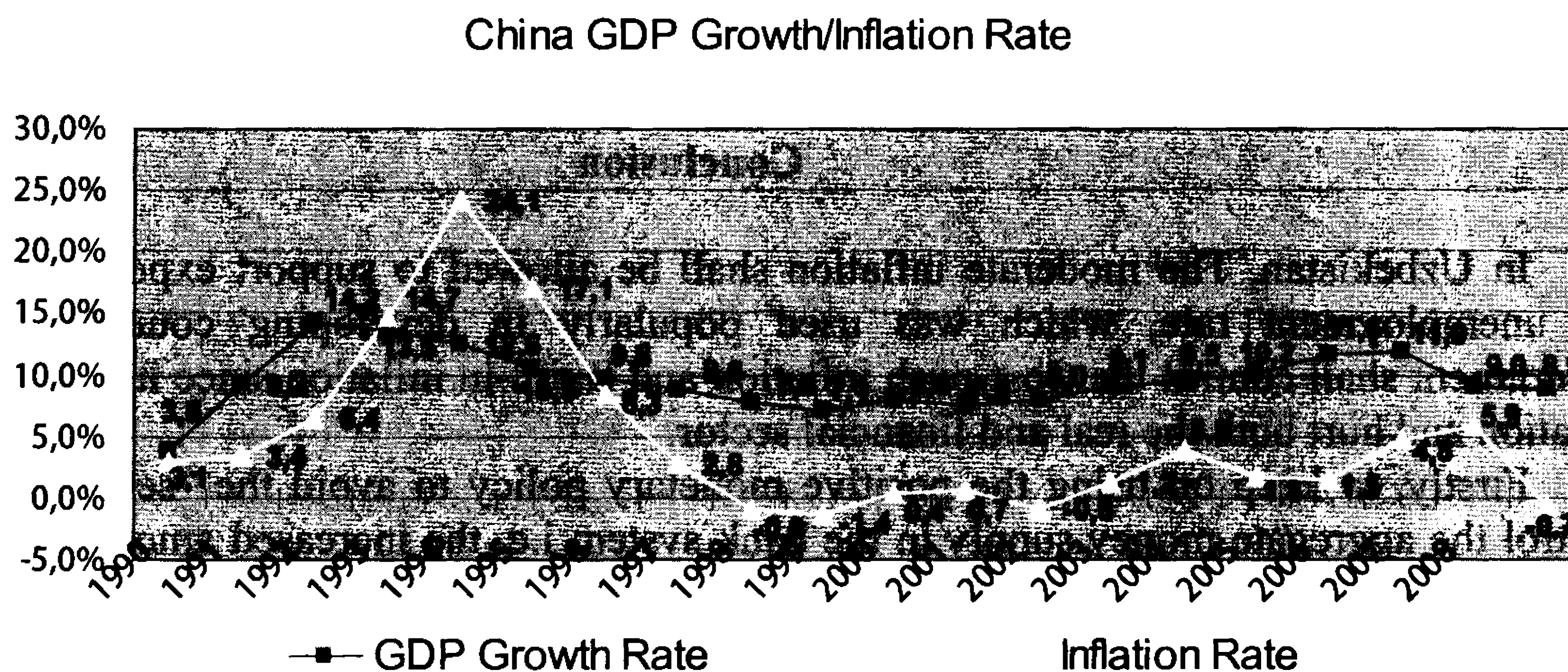
**Demand-pull inflation:** defined as the inflation that is caused by increases in aggregate demand, due to increased spending from private sector and government, etc. Demand inflation leads to a relatively faster rate of economic growth because the overheated demand and favorable market conditions will encourage investment and expansion. The dropping value of money, however, may stimulate spending rather than saving and so reduce the funds available for investment.

**Cost-push inflation (CPI):** regarded as "supply shock inflation," caused by decrease in aggregate supply because of increased prices of inputs, for example. In a period of time, the supply of oil is reduced suddenly, which would make oil prices increased.

**Built-in inflation:** which is included by adaptive expectations, often related to the "price/wage spiral" since workers try to keep their wages up (gross wages have to increase above the CPI rate to net to CPI after-tax) with prices and then employers passing higher costs on to consumers as higher prices as part of a "vicious circle." Built-in inflation reflects the historical events before, and so might be seen as hangover inflation today or in the future.

**Philips curve model,** which is a basic concept in Keynesian analysis, explains the relationship between inflation and unemployment, suggests that there is a trade-off between price stability and employment. So, a certain levels of inflation could be considered desirable to reduce down unemployment. The Philips curve model described the China experience well in the 1990s, and Uzbek in 2000s (Table1 and Table2).

*Table 1. China GDP Growth vs Inflation Rate*

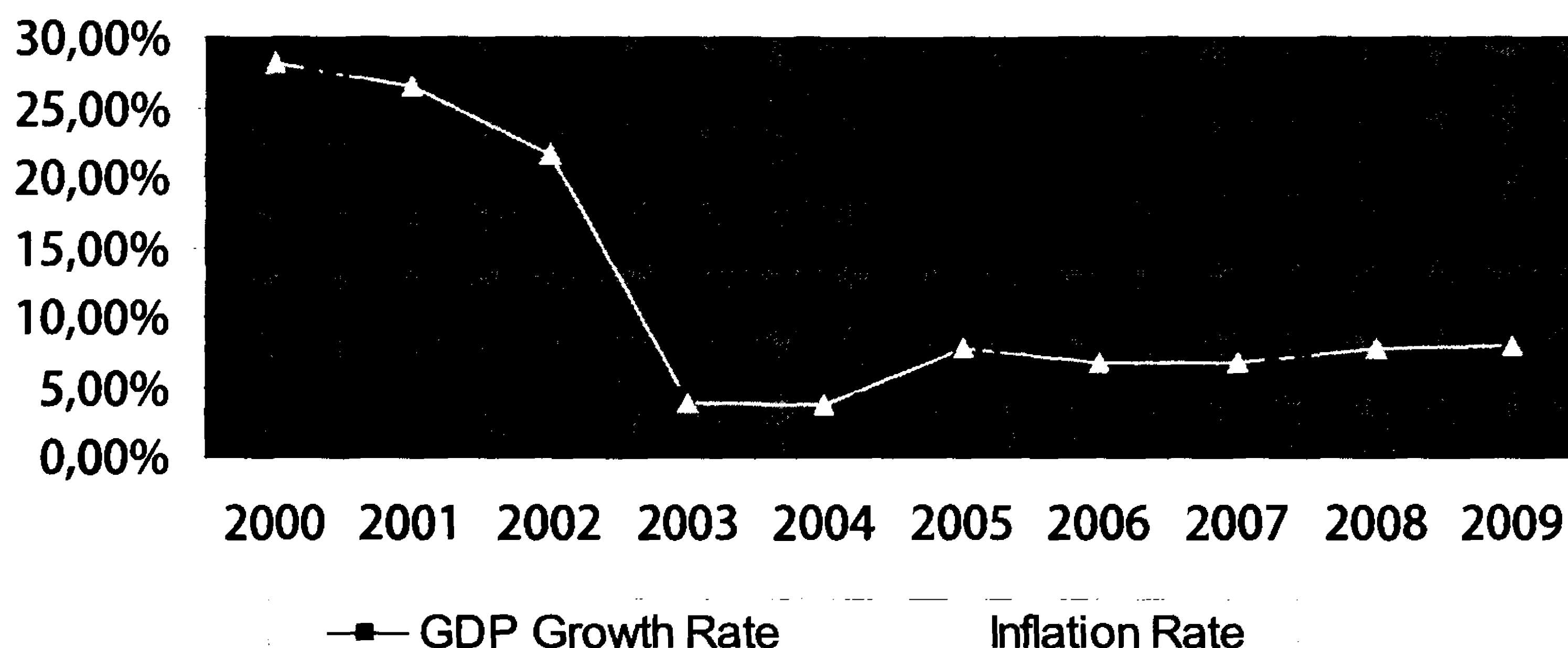


Source: China Inflation and GDP growth: China Statistic Website: <http://www.stats.gov.cn/>

Note: the table shows the GDP growth rate and Inflation rate, and confirmed that the proper percentage of inflation will be helpful to spur the GDP increase.

Table 2. Uzbek GDP Growth vs Inflation Rate

Uzbek GDP Growth/Inflation



Source: Uzbek Inflation and GDP growth. Web site: [www.adb.org](http://www.adb.org)

Thus, modern macroeconomics describes inflation using a Philips curve that shifts (so the trade-off between inflation and unemployment changes) because of such matters as supply shocks and inflation becoming built into the normal workings of the economy. The former refers to such events as the oil shocks of the 1970s, while the latter refers to the price/wage spiral and inflationary expectations implying that the economy “normally” suffers from inflation. Thus, the Philips curve represents only the demand-pull component of the triangle model.

Philips curve model can be used in Demand-pull inflation, but failed to describe the rising inflation which caused by Cost-push inflation and Build-in inflation.

### Conclusion

In Uzbekistan, The moderate inflation shall be allowed to support exports and reduce the unemployment rate, which was used popularly in developing countries, but the government shall control the Cost-push inflation and Build-in inflation since it will accelerate inflation and hurt both the real and financial sector.

Firstly, to keep on using the positive monetary policy to avoid the “second dip”, and control the aggregate money supply in the bank system i.e. the increased amount of it is less than it was in 2009.

Secondly, the government shall reduce down the affect of Cost-push inflation. To achieve it, the government shall set industrial supervision system to keep an eye on the price of raw materials and input of production, preventing domestic price increase pace, and those productions such as: food, gas, power, and living production. For the export sectors (notably cotton, natural gas and gold), the government can share the benefit of the price increase, which was negotiated in 2009.

Thirdly, the government shall prevent increase of the wage and benefit of workers and government employee faster than the CPI rate, although the Private consumption is expected to suffer from a moderate decline in remittances, and government wages and social payments will be creased by EIU’s expectation in 2010.

It is believed that the timely and well conducted impact assessment may contribute. Moreover, the selection of best Policy choice should be based on empirical evidences, or balanced and effective forecasts of future development trends.

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