## China's Macroeconomic Analysis & Forecasting: First Quarter, 2011

## China's inflation under the conflicted goals between the economic growth and the civil welfare

#### **Abstract**

Having undergone the decline in 2009, the overall price level in China began to rebound in 2010, and went up quarterly, with the extent of the CPI growth reaching 3.3% in 2010. Considering that the real estate price was not adequately included in CPI, that the food prices increase significantly, that the prices are keeping on rising on the already high basis in 2007 and 2008, and that the administrative intervene prevails, the current inflation is probably more severe than that indicated in CPI.

From the economic and social perspectives, the problem of the inflation is no less important than the economic growth. In the last 30 years, the main task for China is to maintain the rapid economic growth, and the people's most urgent hope is to resolve the problem of food and clothing for over one billion population and to gradually go into the well-off society. However, in the process of the fast economic growth, many social conflicts accumulated, and a significant rich-poor gap appeared in particular. Since the inflation in China has more impact on the low-income family and the disadvantaged group and may worsen the already serious wealth gap, the current fragile social structure probably cannot sustain such ever heavier societal unstable burden. 1) The Engel Coefficient for Chinese residents is still high. And the frequent inflation characterized by significant food price rising have many negative impacts on people's lives, particularly on those low-income families and rural residents due to their high ratio of the food expenditure to their total living costs. 2) Savings account for a large portion in the total property structure of Chinese families. Thus consistent low interest rates make these savings very likely earn negative interests in the times of inflation, therefore result in the actual loss of the family properties. For poor families and middle class, they may suffer more loss in inflations because of their higher percentage of savings in their total assets. 3) The wage composition mechanism in China lacks of the mature and effective marketwise measures such as collective negotiation, therefore the salary adjustment is normally time-lagged to inflations, leading to the actual wage decrease in inflation periods. This

leads to more sufferings, for those middle-and- low-income families whose income mainly comes from salaries.4) Compared with poor people and middle class, rich people are more capable of preventing inflations. They can diversify their assets portfolio, especially investing in real estates and other assets to diminish the erosion by the inflations, and to maintain and even increase the real value of their assets

As the capital deepening, real estate affecting economy significantly, and the gradually coming of the Lewis Turning Point, the inflation formation mechanism in China has some new changes: 1) The abundant liquidity, caused by the over-slack monetary policy in 2009, the over-planning money supply in 2010, and the consistent foreign exchange reserve, is looking for exits in agricultural products market and real estate market. The directly leads to the sharp increase of the prices of the general products and real estates, and to make matters worse, the pouring in of the foreign capitals and the rapid money circulation speed under the high inflation expectation further worse the rising process.2) the gradually coming of the Lewis Turning Point prompts the continuous rising of the low-end labors' wages, and the price rising in the low-end services and agricultural products; 3) the international prices of the grain and raw materials, through impacting on the domestic prices of the agricultural products, push forward the CPI even higher. Thus the imported inflation gradually emerges.

Since the reform and open-up policy was enacted, China often confronts the pressure of inflations. Particularly after 2003, inflation tends to be normalized. The fundamental reason of such pressure is originated from the development pattern of solely stressing on the economic growth. China has been simply pursing the fast economic growth for a long time. What's more, the government hopes to solely rely on the higher economic growth to resolve or cover various problems and conflicts in the course of the development, therefore has apparently shown the growth dependent syndrome and the investment thirsty syndrome. The high growth and investment growth brought by such pattern are likely to result in the resource scarcity, economic overheat, demand pulled inflation in the economy. Furthermore, the economic regulation system, treating the growth as the primary goal, provides a lot of liquidity in the economy and worse the inflation pressure. Therefore, unless such development pattern which solely stresses on economic growth is changed, and the government who persist such pattern is transformed into a public-service -typed government, the problem of the frequently emerging inflations will never be revolved fundamentally.

According to the estimations of the CMAFM model, China will have some moderate inflation in 2011, the inflation rate the whole year estimated to be 4.5%, and the high point will appears in the 2<sup>nd</sup> quarter: 1) the large liquidity stock, large inertia of credit, and the high proportion of the foreign exchange reserve provide an adequate liquidity foundation for price rising in 2011; 2) Due to the factors such as spring drought, imported price rising, the opportunity cost increase of the agricultural labors, the rising of the national grain purchase prices, and the flow-in of large sum of hot

money, the agricultural products prices is likely to further rise and prompt the overall price level higher in 2011; 3) US and other major developed economies will continue to implement the slack monetary policies in 2011, further promoting the international prices for bulk raw materials such as energy resources and metals. This will definitely increase the inflation pressure; 4) nonetheless, the real economy is basically balanced and the theme of the regulation policies has been back to stable. Therefore, the basis for hyper-inflation does not exist in 2011.

The main policy suggestions include:

- 1) This whole year, particularly in the first half of the year, the government should implement the prudent and tight monetary policies, focusing on recycling the over-abundant liquidity and actively participating current inflation. Specifically, the government should put forth effort to prevent the M2 growth the whole year from exceeding the expected goal, 16%; and adopt the dynamic-adjusted differential deposit-reserve ratio, i.e. increase the ratio to the range from 20.5% to 21.5% and control the new credit load within 7 trillion. Other measures include increasing the yearly interest to the range from 3.5% to 4%, and moderately speed Renminbi's reevaluation rate to the range of from 3% to 5% in 2011.
- 2) Actively develop the real economy, focusing on promoting the development of the private economy.
- 3) Strengthen the efforts to support agriculture, enhance the comprehensive agricultural capacity, and further solidify the fundamental role of the agriculture, as well as ensure the food security.
- 4) Intensify the reserve construction for energy resources, improve the efficiency of the energy usage, and secure the energy safety.
- 5) Actively promote the market-oriented change of the wage formation mechanism, and set up the wage inflation index mechanism.
- 6) Strengthen the regulation on the real estate, and control and restrain the real estate bubbles.
- 7) Proactively promote the long-term reform, improving the effectiveness of the governance on the inflation; actively promote the market-oriented reform, reducing the administrative tools to intervene the pricing; actively promote the administrative reform, transforming the growth-oriented government to the public service-typed government; actively promote the monetary policy reform, improving the effectiveness of the monetary policies to regulate the prices.

Keywords: inflation; rich-poor gap; China economy

## Part I the current severe inflation will widen the already large rich-poor gap

After undergoing the decline in 2009, the overall price in China began to rebound in 2010, and tends to be on the rise quarterly, with the CPI growth reaching 3.3% in 2010. In view that the real estate price was not adequately included in CPI, that the food prices increase significantly, that the prices are keeping on rising on the already high basis in 2007 and 2008, and that the administrative intervene prevails, the current inflation is probably more severe than that indicated in CPI.

However, a popular opinion believes that Inflation is not the major problem in China, whereas the economic growth is worthy of more attention. The essential logic under this viewpoint is that the inflations in China are often characterized by the rising of food prices, therefore belong to structural inflation. Such inflation, under the circumstances of the excessive capacity of industrial production, will not cause the overall price rising.

We believe the above opinion is debatable. From the viewpoints of the economy and society, the importance of the inflation problem is no less than that of the economic growth. In the past 30 years, the main task for China is to maintain the rapid economic growth, and the people's most urgent hope is to resolve the problem of food and clothing for over one billion population and to gradually go into the well-off society. However, in the process of the fast economic growth, many social conflicts accumulated, and a significant rich-poor gap appeared in particular. Since the inflation in China characterized by the rising of the food prices will worsen the already serious wealth gap, the current fragile social structure probably cannot sustain the so-incurred various societal problems.



Fig.1: CPI quarter-to-quarter comparison and satisfaction

**I.** In view that the real estate price was not adequately included in CPI, that the food prices increase significantly, that the prices are keeping on rising on the already high

basis in 2007 and 2008, and that the administrative intervene prevails, the current inflation is probably more severe than that indicated in CPI.

A. Were the weight of the current high prices of the real estate in CPI considered, the current inflation would be higher, even closed to or higher than the level in 2007 and 2008. The calculation rule of CPI in China has some deficit in treating prices of the residential housing: the high prices of real estate has too little impact on CPI; and simply considering rent as the chief source of living cost leads to the underestimation of the living cost of in the cities where higher prices of real estate prevail. The analysis of the sub-report shows that if the residential housing prices are adequately considered in the CPI calculation, then the CPI in Nov. 2011, calculated in various methods, will all exceed the result published by National Statistic Bureau. In comparison with the adjusted inflation level in Nov. 2010 and that in 2008, the current price growth has reached 6%, closed to the level in 2008. In some methods, the former is even higher than the latter. This demonstrates that the assets bubble characterized by the rising price for the real estate has significantly increase the living cost of Chinese residents.

Sheet1: The recalculated CPI according to the adjusted housing weights and different housing prices

|   | 1      |        |        |           |
|---|--------|--------|--------|-----------|
|   | 2007   | 2008   | 2009   | Nov. 2010 |
| Cost of Buildings Completed                   | 104.83 | 106.1  | 102.52 | 105.23    |
| real estate prices                            | 105.58 | 106.3  | 103.54 | 105.69    |
| Using cost 1                                  | 106.29 | 106.52 | 105.36 | 106.9     |
| Using cost 2                                  | 105.84 | 106.35 | 104.34 | 106.34    |
| Using cost 3                                  | 106.04 | 106.49 | 104.66 | 106.28    |
| Using cost 4                                  | 105.58 | 106.35 | 104.38 | 106.38    |
| Consuming cost 1                              | 106.06 | 106.45 | 104.27 | 105.99    |
| Consuming cost 2                              | 105.1  | 106.25 | 103.62 | 105.91    |
| Consuming cost 3                              | 105.71 | 106.39 | 104.58 | 106.48    |
| Consuming cost 4                              | 105.15 | 106.22 | 103.71 | 106.07    |
| CPI published by National<br>Statistic Bureau | 104.5  | 105.6  | 101.8  | 104.9     |

B. The all-out rises of the food prices, especially the substantial rise of the vegetables and grains, have much negative impact on the residents' lives. This round of the inflation has distinctive structural characteristics, particularly reflected in that the food consumer price rises much faster than the prices of those other seven products in all the months, reaching 7.2% in 2010 the whole year. The rise of the food prices has been particularly significant since the 4<sup>th</sup> quarter 2010, the rising rate exceeding 10% in Oct. and Nov., and 9.6% in Dec., and even reaching 10.3% in Jan. 2011. In various kinds of the food prices, the prices for vegetables and grains rise particularly rapidly: the rise of the vegetable price are basically over 15% all the first

eleven months, and even reached 31% in Oct.; the rise of the grain price are maintained in over 10% every month, and reached the maximum 15.6% in Dec.

Sheet 2: CPI Sorted indices month-on-month growth (%)

| month   | food | Cigarette<br>and<br>beverage | clothing | House hold applia nces and service | Medical<br>health<br>and<br>personal<br>care | Transportation<br>and<br>telecommunica<br>tion | Entrainment<br>, education,<br>culture | Residential |
|---------|------|------------------------------|----------|------------------------------------|--|--|--|-------------|
| 2010-01 | 3.7  | 1.5                          | -0.4     | -1.1                               | 2.3  | -0.5   | -1.2                                   | 2.5         |
| 2010-02 | 6.2  | 1.6                          | -1.3     | -0.8                               | 2.4  | 0.1  | 0.8                                    | 3.0         |
| 2010-03 | 5.2  | 1.7                          | -1.1     | -0.7                               | 2.5  | 0.0  | 0.3                                    | 3.3         |
| 2010-04 | 5.9  | 1.7                          | -1.3     | -0.5                               | 2.8  | 0.0  | 0.4                                    | 4.5         |
| 2010-05 | 6.1  | 1.7                          | -1.2     | -0.3                               | 3.2  | 0.1  | 0.6                                    | 5.0         |
| 2010-06 | 5.7  | 1.7                          | -1.0     | 0.0                                | 3.2  | -0.3   | 0.9                                    | 5.0         |
| 2010-07 | 6.8  | 1.6                          | -0.8     | 0.2                                | 3.3  | -0.7   | 1.1                                    | 4.8         |
| 2010-08 | 7.5  | 1.5                          | -1.2     | 0.4                                | 3.3  | -0.6   | 1.2                                    | 4.4         |
| 2010-09 | 8.0  | 1.4                          | -1.5     | 0.4                                | 3.4  | -0.7   | 1.2                                    | 4.3         |
| 2010-10 | 10.1 | 1.5                          | -1.3     | 0.5                                | 3.7  | -0.5   | 0.9                                    | 4.9         |
| 2010-11 | 11.7 | 1.6                          | -0.7     | 0.7                                | 4.0  | -0.7   | 0.6                                    | 5.8         |
| 2010-12 | 9.6  | 1.8                          | 0.1      | 1.2                                | 4.0  | -0.7   | 0.7                                    | 6.0         |
| 2011-01 | 10.3 | 1.8                          | -0.2     | 1.4                                | 3.2  | -0.1   | 1.0                                    | 6.8         |

Sheet 3: food price sorted indices month-on-month growth (%)

| month Grain | Fresh | Fresh  | Actor | Meat and | aquatic | Exported |     |
|-------------|-------|--------|-------|----------|---------|----------|-----|
|             | vegi- | fruits | eggs  | poultry  | aquatic | food     |     |
| 2010-01     | 9.8   | 17.1   | 9.8   | 6.2      | -3.5    | 3.9      | 1.2 |
| 2010-02     | 9.6   | 25.5   | 19.0  | 8.7      | -1.6    | 8.8      | 2.2 |
| 2010-03     | 9.2   | 18.5   | 18.8  | 5.7      | -2.2    | 6.3      | 2.3 |
| 2010-04     | 10.7  | 24.9   | 16.4  | 1.8      | -1.8    | 5.5      | 2.5 |
| 2010-05     | 11.5  | 21.3   | 11.8  | 0.2      | 0.8     | 5.6      | 2.9 |
| 2010-06     | 11.7  | 14.6   | 9.2   | 2.2      | 1.8     | 6.5      | 3.3 |
| 2010-07     | 11.8  | 22.3   | 4.5   | 7.5      | 4.1     | 7.6      | 3.5 |
| 2010-08     | 12    | 19.2   | 8.1   | 9.6      | 5.4     | 8.5      | 3.7 |
| 2010-09     | 12.1  | 18.0   | 13.2  | 9.9      | 5.4     | 10.9     | 4.1 |
| 2010-10     | 12.3  | 31.0   | 17.7  | 10.5     | 6.8     | 11.1     | 4.5 |
| 2010-11     | 14.7  | 21.3   | 28.1  | 17.6     | 9.9     | 11.9     | 5.9 |
| 2010-12     | 15.6  | -5.7   | 34.4  | 19.0     | 10.2    | 10.9     | 6.8 |
| 2011-01     | 15.1  | 2.0    | 34.8  | 19.0     | 10.9    | 11.1     | 6.9 |

C. The rise of the current price level is continued under the basis of the consistent rise prices in 2007 and 2008, therefore, the current price has a significant increase compared with the price level in 2006. Although the price in China once

declined in 2009, the period from 2007 to 2010 are still the time course in the new century when the price have ever risen the fast. In the short four years' period, the consumer price index for China's residents has risen by 13.84%, far higher than 8.53%, the level from 2001 to 2006. From the perspective of the category index, the risings of the other six types from 2007 to 2010 are all higher than those from 2001 to 2006. Moreover, although the price rise in 2010 are relatively moderate, the current price level has been far higher than that in 2006, taken into consideration that it is the continued rising on the basis of high price in 2008, particularly reflected in the food price which has increase by 38.56% on the base in 2006.

Medical Household Cigarette health Entrainment, appliances Transportation and Clothing Residential consumption food & and education, year telecommunication and beverage personal culture service care 2001-2006 8.53 18.90 1.60 -9.88 -7.51 0.38 -7.47 11.90 19.38 2007-2010 13.84 38.56 7.92 -5.01 4.96 9.72 -4.53 -1.80 11.06

Sheet 4: CPI sorted indices accumulated growth (%)

D. Without the intervention on the price rise by the administrative regulation and other non-economic tools, the current price might have been even higher. In 2010, all level of governments intensively enacted many policies to regulate the inflation, some of them being the administrative intervention on the prices. For instance, the National Development and Reform Commission required that the largest four grain and oil companies should not increase the prices for their small-bagged edible oil products within 4 months. The government in Fuzhou introduced the guidance price for four kinds of vegetables in supermarkets, etc. Among them, the central government's new eight regulation policies, aiming at restraining the rising prices of the real estate, intervene in the real estate market in term of the unprecedented intensity, and the restraints on purchasing the real estate have been updated in full scales. The administrative intervention on the prices has significant impacts on the prevention from the too fast rising of the real estate prices, but at the meantime, also mandatorily change the operation of the economy itself. Without the mandatory limitation of the administrative intervention, the current price level will probably rebound according to the economy itself, and result in the further rising up of the overall price level.

II. The inflation in China is particularly severe to the low-income family and disadvantaged groups, and will worsen the already serious rich-poor gap, which is an intensified unstable social factor unbearable to the current fragile social structure.

1. The Engel Coefficient for Chinese residents is still high. And the frequent

inflation characterized by significant food price rising have many negative impacts on people's lives, particularly on those low-income families and rural residents due to their high ratio of the food expenditure to their total living costs.

The frequent inflations in China characterized by the significant food price rising have substantial negative impacts on people's real lives. Although Chinese Engel Coefficient has been declining since the beginning of the reform, but it is still as high as 40%. In comparison, The Engel Coefficients in US and other developed countries are basically from 6% to 15%. Therefore, the consumption structure in China still needs to be improved, as the food expenditure still makes up for the major portion in the household total expenditure. Meanwhile, since the dual economic structure has existed for a long time and the capitalization of the agricultural products tends to be aggravated, the food consumer price index in China not only fluctuate in a greater extent, but is more likely to rise substantially, and as a result, leads to structural inflation. In the course of the recent rounds of obvious inflations in 1994-1995, 2004, 2007-2008, and 2010, the food consumer price index all once rose higher than CPI did. Furthermore, since 2003 the increase of the food consumer price index has exceeded that of the CPI each year, particularly in 2004 and 2008, when the rising of the food CPI reached 9.9% and 14.3% respectively, far higher than 3.9% and 5.9% according, the corresponding CPIs in the same time period. Thus, the characteristic of the consumption expenditure structure in China and that of the inflation led by the rising of the food prices demonstrate that the inflation has the significant negative impact on most of the Chinese people's lives.

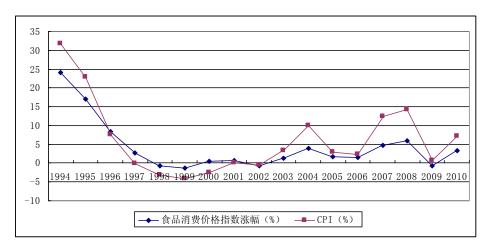


Fig. 2: Food consumption price and CPI

The structural inflation has more negative impact on low-income families and rural residents, of whom Engel Coefficients are higher. In 2009 the Engel Coefficient of the urban residents is 36.5, whereas that of the rural resident is 41.1%, 4.5 percents higher. Among the urban families with different incomes, Engel Coefficient of the top 10% families who have the highest income is 28%, and that of the 20% households

with medium incomes is 39%, yet the Engle Coefficient of the 10% families with the lowest incomes is as high as 46.8%. Therefore, the substantial increase of the food prices affects the living cost of the rural residents more than of the urban residents; by the same token, the living costs of low-income families also rose higher than that of the high-income families do. We calculated the CPIs for the rural and urban families with different incomes according to their corresponding Engel Coefficients. In comparison with the CPIs of the different groups of families, it is more objectively reflected that the structural inflation has more negative impact on the low-income families and rural families of whom the food expenditure account for more portions in their total expenditures. We find that in normal years the differences of the increase of the living cost between rural residents and urban ones, low-income families and high-income ones are not so large; whereas in the period of inflation, the living cost of the low-income families and rural resident rose faster. In July 2004 and Feb. 2008, when inflations are high, the year-on-year CPI risings of rural residents were 7.3% and 11.1% respectively, 1.3% and 1.26% higher than the corresponding indices of the urban residents; the CPI risings of the urban lowest-income families were 7.7% and 12% respectively, 2.8% and 4.1% higher than the corresponding indices of the urban highest-income families; the CPI risings of the rural lowest-income families were 8.5% and 12.6% respectively, 2.3% and 3.0% higher than the corresponding indices of the rural highest-income families.

Sheet 5: the Engel Coefficients of the various classes with different incomes in China (%)

|      |         | 1      | Urban      |         | Rural   |        |            |         |
|------|---------|--------|------------|---------|---------|--------|------------|---------|
|      | general | Lowest | Mid-income | Highest | general | Lowest | Mid-income | Highest |
|      | general | income | who meome  | income  | generar | income | who meome  | income  |
| 1994 | 49.9    | 61.2   | 51.1       | 40.0    |         |        |            |         |
| 1995 | 50.1    | 59.5   | 51.4       | 40.5    |         |        |            |         |
| 1996 | 48.6    | 58.3   | 49.9       | 39.8    |         |        |            |         |
| 1997 | 46.4    | 57.1   | 48.0       | 37.3    |         |        |            |         |
| 1998 | 44.7    | 54.3   | 46.2       | 35.1    |         |        |            |         |
| 1999 | 42.1    | 52.1   | 43.3       | 33.4    |         |        |            |         |
| 2000 | 39.4    | 49.5   | 40.9       | 30.8    |         |        |            |         |
| 2001 | 38.2    | 48.3   | 39.6       | 29.7    |         |        |            |         |
| 2002 | 37.7    | 37.7   | 39.3       | 36.5    | 46.3    | 55.9   | 49.2       | 38.7    |
| 2003 | 37.1    | 47.7   | 39.2       | 29.8    | 45.6    | 54.1   | 48.5       | 38.1    |
| 2004 | 37.7    | 49.7   | 39.7       | 29.2    | 47.2    | 55.6   | 50.5       | 39.1    |
| 2005 | 36.7    | 47.4   | 38.8       | 28.0    | 45.5    | 51.4   | 48.2       | 39.4    |
| 2006 | 35.8    | 46.3   | 38.2       | 27.3    | 43.0    | 49.6   | 45.0       | 37.3    |
| 2007 | 36.3    | 47.2   | 38.9       | 27.6    | 43.1    | 50.4   | 45.1       | 36.8    |
| 2008 | 37.9    | 48.1   | 40.4       | 29.2    | 43.7    | 50.7   | 46.5       | 36.8    |
| 2009 | 36.5    | 46.8   | 39.0       | 28.0    | 41.0    | 47.0   | 43.7       | 34.8    |

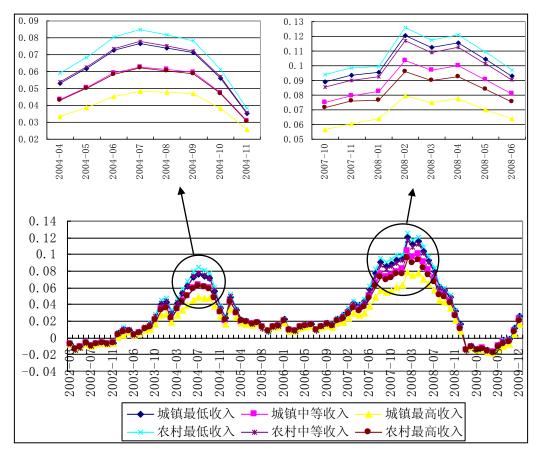


Fig.3: the CPI year-on-year growth for residents from various classes with different

2. Savings accounts for a large portion in the total property structure of Chinese families. Thus consistent low interest rates make these savings very likely earn negative interests in the times of inflation, therefore result in the actual loss of the family properties. For poor families and middle class, they may suffer more loss in inflations because of their higher percentage of savings in their total assets.

Savings is one of the financial assets which is likely to be affected by the inflation and shrink in terms of their actual value, and its real yield will decline as the inflation goes up. Since in China the interest rate has not been completely determined by the market, and thus the interest rate has been quite low for a long time, and the real interest rate is even negative in the time of inflation, the family assets therefore suffered real lost. The 1-year term deposit rate in China has been lower than 5% since 1998, and the average level in the last ten years is even 2.45%; the five-year term deposit rate since 1998 has also remained around 4-5%. The low interest rate and the high inflation have made the real interest in China in the low level for a long time. The real interest rate of the one-year term deposit has been only 0.83% since 1990, and the average rate for the last ten years is only 0.44%. Once a high inflation rate emerges, the real yield of deposits may even turn to be negative. In China there has been four times of the negative real interest rate since 1990, among which the

negative rates in 1992-1995 and 2006-2008 have lasted 38 months and 23 months respectively. The negative interests in fact directly cause obvious erosions to the assets of the many families who hold deposits.

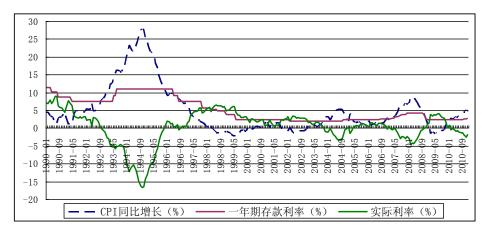


Fig. 4: Real interest rate of One-year-term deposit in China

When the real yields of deposits are low or even negative, yet deposits account for a large portion of the family assets in China, particularly of the low-income and mid-class families' assets, inflations will have these families suffer more loss, and as a result, worsen the rich-poor gap in China. After cleaning and analyzing the data on the family assts survey held by Beijing Aordo Investment Research Center, we find that among the assets held by Chinese urban residents, deposits make up for 28.12%, and the top 10% wealthiest families' deposits account for the smallest portion of the their total family properties, only 18.89%, whereas the middle and lower class families' deposits make up for higher portions of their total family assets, 38.3% and 56.87% respectively.

Sheet 6: The percentage of the residents' deposits to the total assets in China (%)

| lowest 10% | Mid 20%   | Highest 10%   | Total      |
|------------|-----------|---------------|------------|
|            | Wiid 2070 | Tilgliest 10% | households |
| 56.87      | 38.30     | 18.89         | 28.12      |

Data source: Beijing Aordo Investment Research Center

3. The wage composition mechanism in China lacks of the mature and effective marketwise measures such as collective negotiation, therefore the salary adjustment is normally time-lagged to inflations, leading to the actual wage decrease in inflation periods. This leads to more sufferings, for those middle-and-low-income families whose income mainly comes from salaries.

The main income source of the low-income families is from wages, whereas the higher-income families have more income sources such as he yields from the investment from business, real estate, financial markets. Since the reform and

opening-up, the investment returns in many fields, especially in the real estate market, have been relatively high, as the economy developed fast. The investment yields were affected by the market fluctuations in the period of inflations, but the investors often can diversify their assets portfolio to prevent the shocks from the inflation to some extent. Therefore, the high-income families, whose incomes are mainly from investment yields, are less affected by the inflation in terms of their income shrinkage. On the contrary, the wages of the general staffs and workers can be hardly compared with the investment yields, and the growth of the former also far lower than that of the latter. The income growth of many ordinary workers is time-lagged to the inflation rate, resulting in the decrease of the real wages in times of inflations. Thus, income of the low-income families, whose incomes are mainly from the wages, will be severely affected in the times of inflation, further worsening the rich-poor gaps and making these families living harder.

4. Compared with poor people and middle class, rich people are more capable of preventing inflations. They can diversify their assets portfolio, especially investing in real estates and other assets to diminish the erosion by the inflations, and to maintain and even increase the real value of their assets.

Rich people tend to have diversified forms of assets, and they can diversify their assets portfolio to prevent the shock from inflations to their assets. On the contrary, the asset structures of the low-income and mid-class families are relatively less diversifies, mainly made up from deposits and some kind of the stocks and funds, therefore apt to suffer more loss in times of inflations. According to the data from Beijing Aordo Investment Research Center in 2007, rich people invest their money in stocks (5.68%), and funds (6.60%), as well as future stocks (0.42%) and other financial products (0.36%). The middle class and poor, on the contrary, basically do not hold these forms of assets. A more important reason that the rich suffer less loss in inflations, besides their more diversified assts portfolio, is that large portions of their assets are real assets, including real estate, collectibles, and foreign exchanges. These real assets, unlike the nominal assets such as deposits and bonds, will not shrink in value due to inflations and therefore a good way to prevent from inflations. For those top 10% of the rich families, their real assets are allocated into real estate (45.98%), collectibles (1.4%), and foreign exchanges (0.88%). The middle class, however, hold less foreign exchanges and collectibles. And the bottom 10% of the poorest families basically holds no real assets. The assets structure of the middle class and low-income families are mainly composed of the nominal assets, chiefly because holding real estates, collectibles, and other real assets needs high volume of money input, supported by high household incomes. The difference of the families with different household income in terms of the family assets portfolio will definitely result in the fact that inflations erode more on the assets of the middle class and low-income families, therefore further widening the rich-poor gap in China.

Sheet 7 Assets structure of the families with different levels of property (to the total assets,%)

| Assets   | lowest 10% | Mid 20% | Highest 10% | Total<br>households |
|--|------------|---------|-------------|---------------------|
| Stocks   | 3.11       | 3.63    | 5.68        | 3.98                |
| Funds  | 1.18       | 1.83    | 6.60        | 1.95                |
| Futures  | 0          | 0.04    | 0.42        | 0.19                |
| Other financing tools                            | 0          | 0.20    | 0.36        | 0.20                |
| Foreign exchange                                 | 0.05       | 0.33    | 0.88        | 0.48                |
| Market value of collectibles                     | 0.10       | 0.16    | 1.40        | 0.71                |
| Estimated market value of the self-owned Housing | 0.56       | 37.40   | 45.98       | 44.58               |

Data source: Beijing Aordo Investment Research Center

Moreover, since rich people purchase a lot of real estates in prevention of the inflation, the price of real estate also go up, thus widening the rich-poor gaps. Real estate has the dual property of investment and consumption, therefore is highly valuable in terms of preserving and increasing the value especially under the circumstances of China with scarce lands and large population, where urbanization is in process rapidly and traditional culture still prevails. Since the housing system reform in 1998, the rise of the sale prices of the various housings are all higher than the rise of the CPIs each year, and the gaps are even wider after 2001. The investment on real estate need much more money can other kinds of investments; therefore is an investment tool, only suitable for rich people, to prevent from inflation. To purchase a house or an apartment, one has to use one's own money or borrow money from banks. However, the higher percentage of the down payment is difficult to undertake for the low-income people. Thus, the preserve and increase of the value resulted from rising house prices are obviously inclined to the rich people. The inflation promotes the rich to buy more houses to preserve and increase the value of their assets. As consequences, more money for the purpose of investment enters into the real estate market, leading to higher prices, in turn widening the rich-poor gaps among different classes.

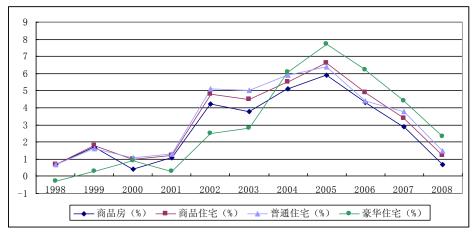


Fig 5: the discrepancies between the growth of sale prices of various housings and CPI growth

### Part II the new Changes of the current inflation formation mechanism in China

The economic background of the current inflation is significantly different from that of the previous ones: the real economy is not over-heated; the output gap is not wide; the economic growth is steady; the supply and transportation of the energy and power does not appear shortage in general; but the inflation pressure is still high. In 2010 the output gap is recovered to some extent under the basis in 2009, and has been in the normal zone, though still negative (-0.56%); besides, the current output gap still has some distance from the positive output gaps when the economy is over-heated, (for instance, 5.09% in 1984, 4% in 1992, and 3.47% in 2007). The growth of the real GDP in 2010 is relatively steady, reaching 10.3%, equivalent to the average economic growth in the economic circle from 2000 to 2009, far lower than 14.2%, the growth rate in 2007 when the economy is overheated. In 2010, the supply and transportation of the energy and power does not appear shortage in general. Take the electricity generation for example, the increase of the electricity generated in the second half year of 2010 consistently decline, the growth rate even lower than in normal time.

Such situation is not unrelated to the significant changes of the macroeconomic mechanism. As the capital deepening, real estate affecting economy significantly, and the gradually coming of the Lewis Turning Point, the inflation formation mechanism in China has some new changes. It is very meaningful to study in-depth the new changes of the inflation formation mechanism for the governance of the targeted inflation currently.

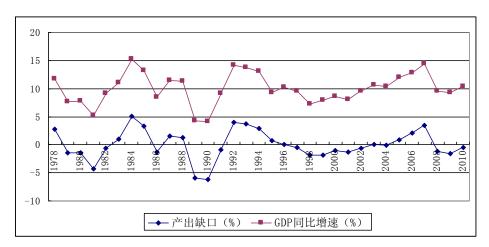


Fig. 6: the output gaps and GDP growth

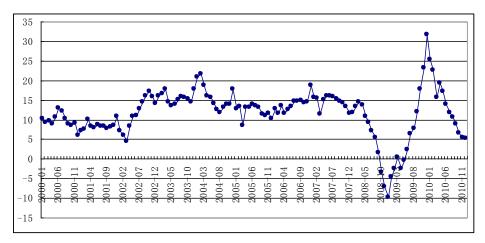


Fig 7: the growth of electricity generated-three months moving average (%)

I. The abundant liquidity, caused by the over-slack monetary policy in 2009, the over-planning money supply in 2010, and the consistent foreign exchange reserve, is looking for exits in agricultural products market and real estate market. The directly leads to the sharp increase of the prices of the general products and real estates, and to make matters worse, the pouring in of the foreign capitals and the rapid money circulation speed under the high inflation expectation further worse the rising process.

#### A. the overabundance of the liquidity is a fact with no doubt.

In 2009, the ratio between M2 and GDP, the growth of M2, the discrepancy between M2 growth and GDP growth, and the total loans in the whole year are all in the high level in history, demonstrating the overabundance of the liquidity. The ratio between M2 and the nominal GDP reached 178% in 2009, the highest level since 1990, about 20 percentage points higher than those in 2002-2008, and higher than that in any year prior 2000. Throughout the four quarters in 2009, the growth of M2 remained over 25%, and the discrepancies between M2 growth and GDP (nominal and real) growth are basically both higher than 20%, both exceeding the maximum growth in history. This indicates that the growth of the money supply in 2009 not only far exceeds that in the previous years, but the gap of the output growth also far exceeds that in previous times, therefore beyond the necessary needs of the real economy. In the aspect of the credit supply, the increase of the credit supply from financial institutions in 2009 are far more than the normal level in history (10-20%), the growth in the 2<sup>nd</sup>, 3<sup>rd</sup>, and 4<sup>th</sup> quarters even exceeding 30%; The total new credit amount in the whole year has reached 9.59 trillion, nearly doubling the 4.9 trillion in 2008.

In 2010, the ratio between M2 and the GDP rose to the highest level in history, and the M2 growth and the credit growth, though dropped slightly, still remained the growth at the high level in history under the high base level in 2009, thus the overabundance of the liquidity is still severe. The ratio between M2 and nominal GDP

in 2010 has reached 182%, the highest level in history, even higher than in 2009. The M2 growth and the credit supply growth, though dropping to about 20%, actually still remains in the high level, only lower than that in 2003 and 2009. The discrepancies between M2 growth and nominal GDP or real GDP are both higher than the level in the high growth times from 2004 to 2008. The new credit supply in the whole year are 7.95 trillion, less than in 2009, but still far more than in 2008.



Fig. 8: the percentage of M2 to the nominal GDP (%)

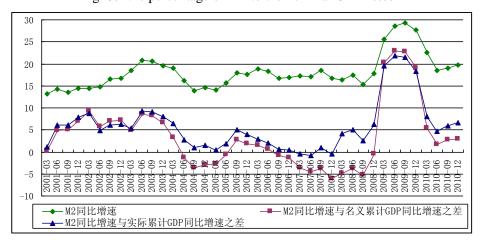


Fig. 9: M2 growth and its comparison with the output growth (%)



## B. The excessive liquidity is mainly due to the over-slack monetary policy in 2009, the over-planning money supply in 2010, and the consistent foreign exchange reserve.

First, in 2009 Chinese government adopted the slack monetary policies and provided much liquidity, to confront the global financial crisis and maintain the steady and rapid growth of the economic development. Influenced by the global financial crisis and the decline in the domestic economic cycle, China's economy faced severe difficulties in the second half of 2008 and the first half of 2009. From the second half of 2008, China economy began to decline, and the economic performance in the 4<sup>th</sup> quarter of 2008 and 1<sup>st</sup> quarter of 2009 is the worst, compared with the last dozens of years, the economic growth being only 6.8% and 6.2% respectively, and the growth of the industrial value added only 6.4% and 5.1% respectively. In confrontation of the severe economic situation, the government enacted a series of macro-control polices to stimulate the economy, using much monetary stimulus, credit stimulus, and fiscal stimulus to energize the economy. The so-incurred large amount of liquidity helped successfully maintain the steady and fast economic growth, but at the same time, inevitably left the hidden trouble of the excessive liquidity after surviving from the economic crisis.

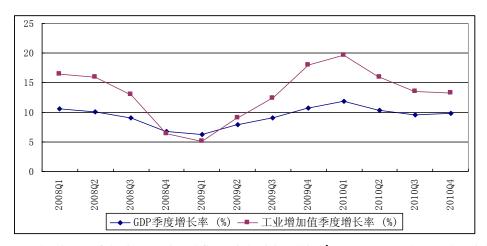


Fig. 11: In the times of the international financial crisis, China's GDP growth & Industrial value added growth (%)

Second, in 2010 the monetary policies are gradually adjusted to be moderate slack, but the monetary supply was still over-planned, and the liquidity in 2010 remained slack. A) Although the growth of the monetary supply slight dropped to 19.7%, it still exceeded the targeted 17%; B) The total credit in 2010 are 7.95 trillion, having exceeded the credit target, 7.5 trillion, set by the government at the beginning last year; C) When the inflation tended to be obvious in the second half of 2010, the

extent of the control by the monetary policies is not enough. Since the tendency of the recovery in the first half of 2010 was not stable yet, the central government, for fear that the economic depression might emerge again, adjusted the required reserve rate three times in order to recycle the liquidity. But the extent of the adjustments is so weak that the required reserve rate of the large financial institutions only recovered to the level at the beginning of 2008, and that of the small and middle financial institutions has not recovered to the level in 2008 yet. From the mid-May 2010 to Mid-October 2010, the central bank has not enacted any tight-money policies for five months, and the growth of CPI in fact has exceeded 3% since July and remained at that level for three months thereafter.

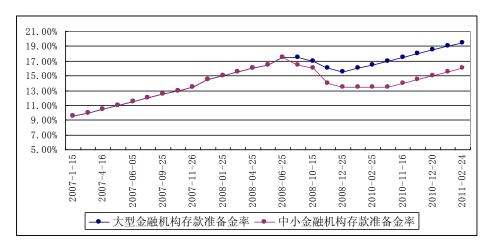


Fig. 12: the adjustment of the deposit reserve ratio

Third, in 2009 and 2010, the trade surplus and the flow-in of the international capitals further propelled the growth of the foreign exchange reserve, resulting in a large number of passive note issuance. In 2009 and 2010, the increased amount of the foreign exchange in China reached 2.6966 trillion and 3.2683 trillion, the fifth and second highest level in history respectively. The consistent increase of the foreign exchange inevitably led to a large sum of passive note issuance in China. In fact, in 2009 and 2010 the ratio between the foreign exchange reserve and M2 was as high as over 30%, the highest level since 1990, with the exception in 2007 and 2008. This means that among the base money currently issued in China, around one third is determined by the international factors.



Fig. 13: the increased foreign exchange and the ratio between foreign exchange and M2

The increase of the current foreign exchange mainly comes from two sources: First, the foreign trade in China has improved along with the global economic recovery, and the trade surplus has recovered to some extent. In 2009 and 2010, the trade surplus only had 195.7 billion US Dollars and 183.1 US Dollars, lower than in 2007 and 2008, but still remains in the high level. Moreover, according to the monthly data in 2010, although in March China had some trade deficit for the first time since May of 2004; later trade surplus quickly took over and has remained in the high level. The average monthly trade surplus from May to December reached 21 billion US Dollars, basically having recovered to the level in 2007.

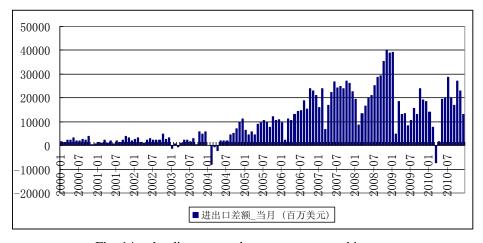


Fig. 14: the discrepancy between export and import

Second, the slack monetary policies implemented by the developed countries such as the US brought a large sum of capital flowing-in to the new emerging economies such as China. To confront with this round of the international financial crisis, some developed countries implemented very slack monetary policies, resulting in the overabundance of the liquidity globally, particularly reflected in the influence of the new round of QE2 polices enacted by the US. The subprime crisis is essentially

due to that fact that the previous round of the technical innovation has quiet down, whereas the new wave of the technical innovation has not emerged yet; therefore the expansionary monetary policies cannot effectively input the liquidity into the real economy. The excessive liquidity thus pours into the virtual economy sectors or international market in search of profitable opportunities.

As a representative of the fast growing emerging economies after the financial crisis, China becomes one of the ideal targets favored by the international capitals, especially the hot money. On one hand, the abundant international capitals hope to share the profits coming from the emerging economies' quick recovery from the international crisis and their maintained rapid growth, and thus the strong growth and potentials in China naturally attracts the attention from the international capitals, and absorb many FDIs. Compared with in 2008, in 2009 and 2010 the amount of the actual foreign capitals utilized in China did not drop much, reaching 91.707 billion US Dollars for the first 11 months in 2010, only slightly lower than the amount for the whole year of 2008.

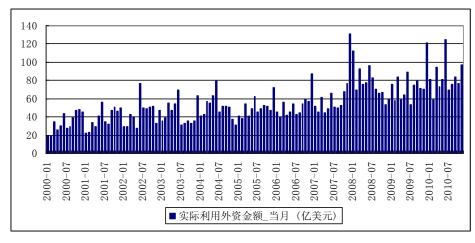


Fig 15: the actual amount of the foreign investment utilized

On the other hand, the new round of the quantitative easing policies by the US underlines the expectation on the Renminbi 's reevaluation, plus the expectation that China will enter into the track of the interest rates raising. These two expectations make a large sum of hot money flowing into China. Before the QE2 officially announced, the outsiders, according to the analysis on the US economic data and policy tendencies, have already formed the strong expectation on the enactment of the policy in Nov. 2011; thus as early as November and ahead the hot money has been highly motivated to pour into China. Furthermore, the higher interest rate raised by the central bank three times on Oct. 20, Dec. 26, 2010, and Feb. 9, 2011 respectively and the expectation that China is about to be in the track of interest rate raising both enhance the motivation for the hot money to flow in. In Sep. and Oct, 2011, the increased foreign exchange reserve from non-trade and non-FDI made the historical

records of 75.2 trillion and 77.78 trillion US dollars respectively, showing that the hot money tended to pour in more. The data of the foreign exchange reserve also indicates the characteristics that the flowing-in of the hot money is accelerating: in Sep. and Oct. 2011, the single-monthly increased foreign exchange reserves are the highest in the 21 century, far more than in other periods; and the amount increased in Dec. was also the highest in 21 century history, just next to those in Sep. and Oct. This may be related to the raising twice of the interest rate and the expectation of the future interest rate raise.

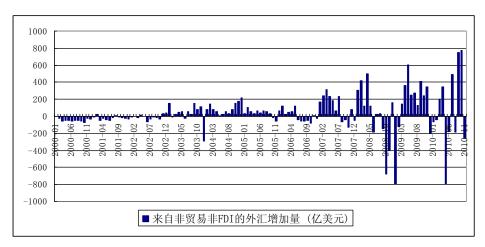


Fig. 16: Foreign exchange increased from non-trade and non-FDI

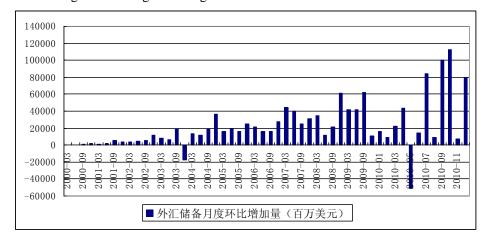


Fig. 17: monthly increased foreign exchange reserve

C. The abundant liquidity searches for the exit in the agricultural market and the real estate market, directly resulting in the rapid increase of the prices if the general goods and the real estate.

First, the excessive liquidity is released to some extent in the agricultural market, leading to the price rising of the agricultural products.

Currently, the real economy in China develops relatively insufficiently, and lacks of the strong economic growth point; the capacity of the real economy is weak to absorb the capital, and the two traditional investment channels, stock market and real estate market, was also weak in 2010 in terms of funds absorption. The Shanghai Composite Index has declined by 14.3% the whole year, the third largest decline all over the world; the uncertainty in the real estate market, where there are prices for the houses but no sales of them, are worse due to a series of the strict control measures by the government.

Under such market environment, a large sum of investments and hedge funds began to shift to other markets, whereas the agricultural products, owing to their markets and the product characteristics, became the targets to which the liquidity shifted and released. The market of the agricultural products is tightly-balanced, with low price elasticity of demand, and unable to substantially increase the supply in a short time, therefore it has enough space to speculate in hopes of making profits. Moreover, the analysis of the sub-report indicates that the current dispersive agricultural products distributing system in China also provide convenience for the speculation of the hot money: The hot money can enter into the distribution channels, vertically integrating the dispersive brokers, wholesalers and retailers, and thus make high profits.

In 2010 the tendency of the capitalization of the agricultural products is serious, and their previous pure property of consumption was changed——part of the price-forming system of the agricultural products significantly varies, with the prices deviating from the supply-demand level and consistently rising. A lot of surplus funds poured to the easy-to-store agricultural necessities whose production areas cluster, leading to the rapid rises of the garlic, cotton, and apples by turns in 2010. In Feb and March 2010, the apple prices substantially increased by over 30%; in May the garlic prices increased to the level over five times the price in the same period last year; in June the corn prices rose by 21.3% of the maximum price up to then in 2010; in November the prices rising of the seed cotton and soy bean reached to the highest peak, 79.45% and 14% respectively; and in December, the apple prices once again rose by 45.9%.

Sheet 8: part of the agricultural products year-on-year price growth (%)

|         | apple | garlic | cotton | soybean | corn  |
|---------|-------|--------|--------|---------|-------|
| 2010-02 | 32.24 |        |        |         |       |
| 2010-03 | 33.43 |        | 29.26  | 4.89    | 19.02 |
| 2010-04 | 21.24 |        | 25.00  | 7.05    | 18.45 |
| 2010-05 | 3.94  | 414.71 | 23.43  | 9.23    | 21.18 |
| 2010-06 | -4.50 | 250.05 | 23.58  | 8.30    | 21.26 |
| 2010-07 | 1.68  | 231.37 | 23.83  | 8.07    | 17.78 |
| 2010-08 | 16.63 | 185.28 | 22.95  | 8.47    | 14.59 |
| 2010-09 | 13.99 | 164.13 | 34.76  | 8.46    | 12.11 |
| 2010-10 | 19.01 | 139.80 | 58.84  | 11.28   | 14.21 |
| 2010-11 | 42.12 | 84.06  | 79.45  | 13.98   | 16.48 |

Second, the abundant liquidity provides the sufficient fund sources for the real estate markets, propelling the recent rapid rising of the real estate prices. In last dozens of years, the money supply and the sales price index of the commercial housing are significantly positively correlated. Generally, the increase of the money supply will lead to the price rising of the real estate, though time-lagged for awhile. For instance, Since 2008 the link between the money supply growth and real estate price has been particularly obvious: the decline of the money supply growth from the beginning of 2008 led to the corresponding decline of the growth of the real estate price index; the increase of the money supply growth from the beginning of 2009 also promoted the recovery of the real estate market, and thereafter the steady increase of the price index. Besides, the interbank offered rate, used to measure the abundance of the funds, also negatively correlated with the real estate price index significantly, and the two indicators' variation are almost synchronized. The substantial decline of the interbank offered rate in 2009 prompted the rapid increase of the real estate price index for the same period.

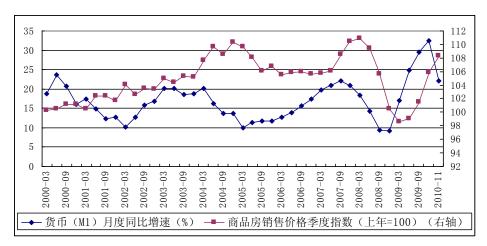


Fig 18: money supply growth and the growth of the sale prices of the commercial residential housing



Fig. 19: CHIBOR and the growth of the sale prices of the commercial residential housing

Third, the pouring-in of the foreign capitals is obviously characterized by the speculations, pushing forward the money to pour into the capital market, real estate market, and agricultural products market. Since 2010, the regulation on the real estate has been increasingly tightened, and the growth of the real estate investing funds decline rapidly after reaching the peak in Feb. Nevertheless, foreign capitals instead poured into the real estate market, regardless of the unfavorable situation, and among the sources of the real estate investing funds, the foreign capitals grow gradually, not only faster than the growth of the average real estate funds sources, but faster than the growth of the foreign capital among the fixed assets investment funds. Therefore, it turns out that the foreign capital tends to invest in the speculative business with economic bubbles. The accelerative entry of the foreign capital into the real estate market, capital market, and the agricultural market, leads to the expansion of the economic bubbles in these markets, further promoting the entry of the domestic speculative funds and pushing higher the prices of the related products.

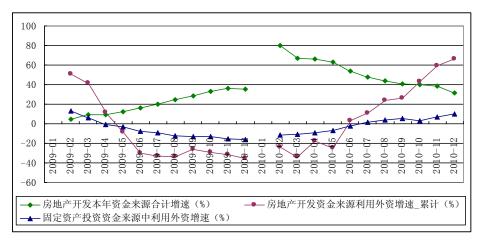


Fig. 20: The entry of the foreign capital into the real estate market

Fourth, The strong expectation of the inflation caused by the overabundance of

the liquidity, speeds up the circulation of the money, and in turn worsens the excessive liquidity, forming the significant inflation pressure. The future expected price index published by the central bank indicates that the residents' inflation expectation has now been in the high level in history. The residents' inflation expectation index has been consistently rising throughout the four quarters, and the future expected price index in the 4<sup>th</sup> quarter has even reached the highest point ever since the 4<sup>th</sup> quarter of 1999. And the percentage of the residents who predict the price rising is as high as 61.4%. From the discrepancy between the M1 growth and M2 growth, throughout the four quarters the discrepancies between the two indicators are all positive, showing that the residents' money tends to be kept in checking account and therefore are relatively active. This also indicates that the inflation expectation remains high.



Fig. 21: M1-M2 growth & price expectation index

# II. The gradually coming of the Lewis Turning Point prompts the continuous rising of the low-end labors' wages, and the price rising in the low-end services and agricultural products

A. The labor cost in the middle and high end labor market did not increase significantly, and the labor productivity has substantially risen; therefore the current inflation is less likely to have been promoted by the rising of the middle-and-high-end labor costs. The labor costs in Chinese enterprises are basically in the normal increasing track in 2010, without showing the tendency of the accelerating rising labor costs. The growths of the nominal and real labor costs of Chinese enterprises in 2010 are both lower than the average level of the last decade; the average quarterly growth of the nominal remuneration of all employed persons is 14% in the first three quarters, slightly lower than 14.75%, the average quarterly growth from 2001 till now, also far lower than 17.93%, the quarterly growth in the inflation period in 2007 and 2008; the average quarterly growth of the real remuneration of all employed persons is 10.82% in the first three quarters, slightly lower than 13.43%, the average quarterly growth from 2001 till now, also far lower than 12%, the quarterly growth in the inflation

period in 2007 and 2008. Furthermore, the current substantial increase of the labor productivity reduces the unit labor cost, enhances the capacity of the enterprises to absorb the rising labor costs, further lowering the possibility of the labor cost rising due to the inflation. In 2010, the growths of the industrial gross output per month are all above 30%, far higher than the growth of the total employment, ranged from 5% to 8%; the industrial labor productivity per quarter is basically above 20%, five percentage points higher than the average remuneration growth of the total employed persons.



Fig. 22: the year-on-year growth of the nominal and real remuneration of the labor-employed



Fig. 23: Industrial productivity Growth and the growth of the average labors' remuneration

#### B. The consistent rising of the low-end labor price leads to the price rising of the low-end service and agricultural products, and pushes higher the overall price rising in turn.

In 2010, the supply of the low-end labor market turned from the surplus in total into the structural surplus, prompting the rising of the low-end labor prices. The demand-supply ratio of the urban labors in 2010 is 1.01, reaching the highest point since the start of the 21<sup>st</sup> century, with the demand of the labor for the first time exceeding the number of job seekers. In east region in particular, the demand-supply ratio of the labors reached the historical highest record, 1.07, and the ratios in the

middle and west regions, where labors are traditionally exported, also exceed 1 for the first time. In some areas the shortage of the rural migrant workers appears again, and tends to spread from the east coastal areas to the middle and west regions. According to the Survey on the Employment Status of the Rural Migrant Workers in 2010 conducted by the Ministry of Human resources and Social Security, the results indicate that 70% of the enterprises in need of new employees expect of having difficulties or having certain amount of difficulties in recruiting, five percentage points more than in last year. The major change in the demand-supply relations of the low-end market prompt the low-end labors prices rising substantially. Over 20 local governments raise the minimum wage standard, the average increase being over 20%. And many foreign-owned companies and private-owned enterprises started to significantly raise the wages for the rural migrant workers in face of the recruiting difficulty. In the first three quarters of 2010, the average wage income per capita in rural families grew by 15%, far higher than did the average wage, suggesting that the wages of the rural migrant workers in fact has significantly increased in 2010.

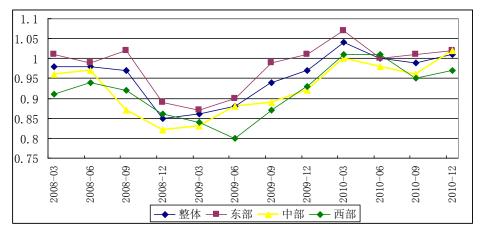


Fig. 24: Urban labors' demand-supply ratio

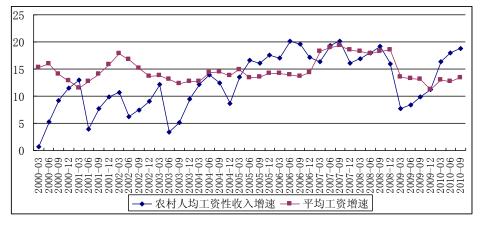


Fig. 25: the growth of the rural income per capita and the average wage growth (%)

The rising of the low-end labor prices push higher the prices of the low-end

services and agricultural products, exerting a big pressure on the inflation in general. On the one hand, the rise of the rural migrant workers' wages directly promote the cost and price of the low-end services to rise. The technologies in service sectors progress relatively slow and need many low-end labors, therefore the price rise of the low-end labors will significantly prompt the rising of the costs and prices for the low-end service sectors. Household services and processing-and-maintenance services are typical low-end services, their price rising per month in 2010 all exceeding the CPI growth by 3.38 percentage points on average. On the other hand, the increase of the rural migrant workers' incomes implies that the opportunities of living on farm increase accordingly. In addition, agriculture is also characterized by slow technology progress and intensively laboring. Therefore, the increase of the labor cost will exert significant pressures in terms of the cost rising of the total agricultural production and prices rising of the agricultural products. Low-end services are widely involved in various aspects of the people's daily life and economy operation. Since agricultural products are typically basic products, the price rising of the low-end labors, by affecting agriculture and low-end services, propels the overall prices to a higher level.

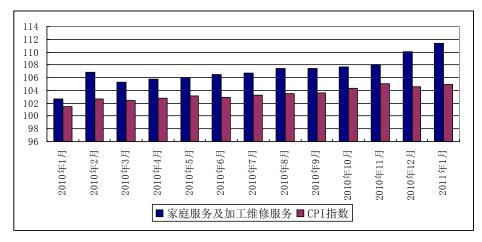


Fig. 26: Household services and processing and maintenance prices and CPI index

#### III. The international prices of the grain and raw materials, through impacting on the domestic prices of the agricultural products, push forward the CPI even higher. Thus the imported inflation gradually emerges.

A. The consistent rising of the international grain prices drive the rising of the domestic agricultural products prices. Influenced by the international agricultural products' prices via the transmission of the prices of the domestic agricultural products, the grain prices in China has been on the rapid rise, led by the rising of the international grain prices, since the second half of 2010. The impact of the international grain prices on the domestic CPI is getting increasingly significant. In 2010, the extreme weather changes frequently happened, resulting in the significantly decrease of the food productions internationally. Additionally, the international

liquidity remained abundant. The international prices for the main agricultural products, therefore, have been on the rapid rise since June 2010. According to the data from the Food and Agriculture Organization of UN, by Jan. 2011, the food price index has kept on rising for seven months. The nominal index in Jan. has reached 231, 3.4% higher than in Dec. 2010, making the highest record, in both nominal and real sense of calculation, ever since 1990 when this index was initially set. Meanwhile, the domestic food prices also began the new round of rapid growth from June 2010, and the year-on-year food price ratio rose from 5.7% in June through 11.7% in November. Thus the consumer prices index in China, under the background that international food price made the historical highest record, also reached the highest point of the last decade. The empirical analysis in the sub-report also demonstrates that the international agricultural products prices have significant impact on the domestic prices in terms of the economic implications. Specifically, the price rising of the international agricultural products gradually brought about the imported inflation.

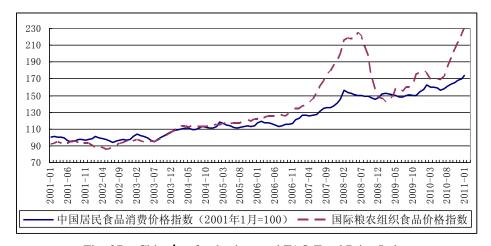


Fig. 27: China's food prices and FAO Food Price Index

First, the dependence on the main imported agricultural products is constantly increased, leading to the fact that the rapid rising of the international prices of the main agricultural products will directly bring about the domestic price rising correspondingly. From 2001 to 2010, the imported agricultural products increased by 22.3% on than other yearly average, much faster large agricultural-products-importing countries. Specifically, the domestic supply gap for soybean is the largest: the total import of the soybean in 2010 added up to 54.86 million tons, far more the domestic production, 20 million tons, and thus the dependence on the imported soybean has been over 70%. Moreover, the domestic supply gap for corns also gradually emerges. The increase of the dependence on the imported agricultural products makes it clearer that the price rising of the domestic agricultural products is characterized by the imported-type.

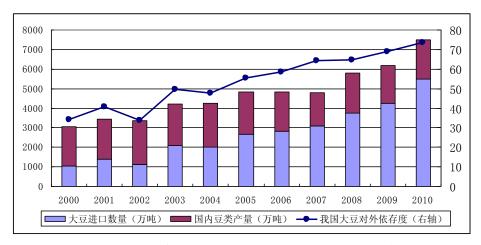


Fig.28: China's foreign dependence on soybean (%)

Second, the main imported agricultural products are upstream grain crops, and the rising of their international prices will directly bring about the price rising of the corresponding downstream agricultural products, therefore strengthen and magnify the impact of the price rising of the international agricultural products. The imported agricultural products on which China depends most are the imported soybean and corn. Since the bean pulp, a by-product of soybean processing, and corn are the major raw feeds materials for pigs and poultry respectively, the international price increase of the soybeans and corns will push higher the prices of the downstream meat and poultry products. The rapid increase of the international grain prices since June 2010 have quickly pushed higher the domestic prices of the soybean, corns and other grains, and gradually transmitted its impact on the prices of the domestic meat and poultry products, and as a result, affected the overall price level. The price index of the domestic meat and poultry products in the 4<sup>th</sup> quarter grew year-to-year by 9.0%, far more than 0.9%, the average growth rate for the previous three quarters.

Third, the rise of the international agricultural futures promotes the prices of the corresponding domestic agricultural futures, and in turn affects the spot price of the domestic agricultural products. According to the domestic and foreign related researches, the CBOT price plays the leading role in terms of transmitting the price information in the global agricultural futures market, and the variations of the futures prices in other countries highly depend on the CBOT price. After July 2010, the major grain future prices of CBOT went all the way up. Affected by the situation, the domestic grain future prices index in Dalian and Zhengzhou Commodity Exchanges also increased in full-scale. As a result, the increase of the domestic grain futures prices brought about the spot price rising of the related commodities.



Fig. 29: China's soybean future prices and CBOT soybean future index

# B. The rapid price rising for the international raw materials brings strong cost-propelling pressures on the domestic agricultural products, and promote the CPI rising, which is in effect led by the food price rising.

The analysis of the sub-report shows that the price variations of the international raw materials are the major external factor to affect the domestic inflation level in China, therefore have some significant impacts on the fluctuations of the domestic prices. The current international raw material prices influence the domestic inflation, mainly via the following sequence: the price rising of the international raw materials  $\rightarrow$  price-rising of the domestic resource products  $\rightarrow$  the price-rising of the domestic agricultural machinery and tools  $\rightarrow$  the price rising of the agricultural products.

First, the substantial price-increase of the international raw materials in 2010 pushed forward the price-rising of the corresponding domestic resources products. The monthly increases of the average price indices of the international crude oil and metals in 2010 have reached 35.6 and 48.8%, respectively. Due to the high import dependence on and the low demand price elasticity of the resource products such as energy resources and metals in China, the impact of the price increase of the international raw materials effectively transmitted to the domestic resource products. The prices of the major domestic resource products such as diesel oil, the leadless gasoline, and stainless steel, under the influence of the international price changes, all reversed the negative growth tendency since 2009, and reached the monthly growth levels of 16.6%, 15% 4%, respectively, in 2010.

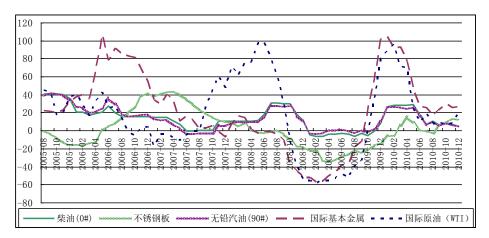


Fig. 30: the domestic and international raw materials price year-on-year growth

Second, the prices of the current domestic resource products bring about the price rising of the agricultural machineries and tools. The price growth of the major resource products such as crude oil and metals, led to the price rising of the agricultural fuel energy, chemical products, and machinery products. The agricultural machine oil, chemical fertilizers, and the agricultural machineries tools are the three types of agricultural production means, whose prices increased most significantly, particularly after October. Such price rising strongly brought about the increase of the agricultural production prices index in general.

Third, the price rising of the agricultural production means promotes the price rising of the current agricultural products. The sector characteristics of the agriculture determine that the cost rising of the agricultural production will generally be transformed into the price rising of the agricultural products. These characteristics include: that the ratio between the costs of the agricultural production means and the total agricultural production cost is high; that the agricultural technology progresses slowly and the capacity to absorb the rising cost is low; and that the market supply-demand of the agricultural products is basically tightly balanced, and thus the prices rising is easy to be accepted y the market. In fact, from the long run, the trend of the price index of the agricultural production means is quite similar with that of the food consumer price index, suggesting that the agricultural products' prices are sensitive to the increase of the cost of the production means, and thus the price increase of the agricultural production means will prompt the price rising of the agricultural products. In the current inflation, the consistent cost rising of the agricultural productions means virtually raised the agricultural production cost, and as a result, pushed higher the food consumer prices significantly.

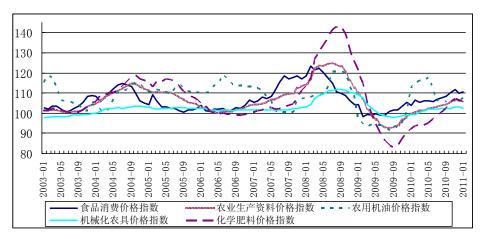


Fig. 31: the Price index for the agricultural production means

## **Part III** The fundamental reason for the inflation pressure in China is the development pattern of "Growthism".

Since the reform and open-up policy was enacted, China has always been confronted with the pressure of inflations, and the inflations did happen frequently. From 1978 to 2010, in 17 of the total 33 years, the CPI growth exceeded 3%, the warning-line level; and in five years among the total, the CPI growth even exceeded 10%. Particularly after 2003, except in 2009, almost every year China faced the risk of inflation, and the inflation tends to be normalized.

The fundamental reason of such pressure is originated from the development pattern of solely stressing on the economic growth. China has been simply pursing the fast economic growth for a long time. What's more, the government hopes to solely rely on the higher economic growth to resolve or cover various problems and conflicts in the course of the development, therefore has apparently shown the growth dependent syndrome and the investment thirsty syndrome. The high growth and investment growth brought by such pattern are likely to result in the resource scarcity, economic overheat, demand pulled inflation in the economy. Furthermore, the economic regulation system, treating the growth as the primary goal, provides a lot of liquidity in the economy and worse the inflation pressure. Therefore, unless such development pattern which solely stresses on economic growth is changed, and the government persisting such pattern is transformed into a public-service -typed government, the problem of the frequently emerging inflations will never be revolved fundamentally.

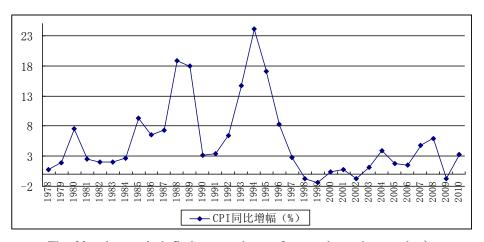


Fig. 32: the yearly inflation rate since reform and opening up (%)

I. The investment-driven growth brought by the development model which solely stresses the economic growth is likely to lead to the resources tension, economic over-heat in the economy, and therefore triggers the demand-driven inflation.

Chinese government emphasizes the economic growth for a long time, and virtually adopts the development model of "Growthism". China has been left behind the west since the modern times and suffered various foreign invaders. To make matters worse, the wars, revolutions, and the policy mistakes after the libration even widen the gaps with the western developed countries in terms of the economic capabilities, peoples' living standard, and some other aspects. Therefore, it is a strong national wish to achieve the economic boom and the nation's rise. Sustained with this strong will, Chinese government, responding to the domestic and international economic and political environmental changes, persists in reform and opening up, and sets the base line of taking the economic construction as the central task, and also treats it as the primary goal for the Party to govern the nation. Such stress on the economic growth makes the government to virtually take the model of "Growthism", in which all levels of the governments are focusing on the economic development.

The performance evaluation for the officials and the fiscal system provide the local governments with strong incentives to promote the economic growth. Economic growth is the most important indicator in the performance evaluation on the officials of Chinese local governments. Thus, in order to posses the competitive positions in terms of the political promotion, local officials, in their term of office, try their best to propel the economic growth. In the aspect of fiscal system, for a long time the fiscal policies in China was to stress key construction projects, and thus the income and benefit of the local governmental officials are directly determined by the fiscal status of the local governments. Since to promote the economic growth can significantly improve the financial status of the local fiscal system, it will in turn effectively raise the income of the local governments and their officials.

The government mainly relies on promoting investment to prompt the economic growth. While the periodical release of the investment impulse will lead to the periodical variation of the inflation level, the rapid growth of the investment recent years brought frequent inflation pressures in China. Among the three big kinds of demand (consumption, investment and net export), the government can influence most on investment. Thus, local governments, under the strong impulse of growth, often regulate the investment to prompt the economic growth. Therefore, once the economic situation is appropriate, the governments will release their investment impulses, resulting in large pressures on the inflation. In fact, whenever China enjoyed the high growth in investment, she often at the same time suffered the inflation; whereas low investment growth, by the same token, always accompanied the low level of inflation. For instance, during the inflation from 1987 to 1989, the total fixed assets investment growth rate remained over 20% from 1985 to 198, higher than GDP growth. In particular, the investment growth in 1985 was even as high as 38.75%, 13.67 percentage points more than the GDP growth. During the inflation

from 1993 to 1995, the total fixed assets investment growth rate remained over 20%. Particularly in 1993 when the inflation was severe, the investment growth was 61.78%, 30.54 percentage points more than the GDP growth. In comparison, when the investment growth consistently declined from 1995 to 1999, the level of inflation also declined. Beside, from 2003 to 2008, the total fixed assets investment average growth rate was as high as 25.79%, 10 percentage points higher than GDP Growth. Such high investment growth also led to the frequent inflation pressures in recent years.

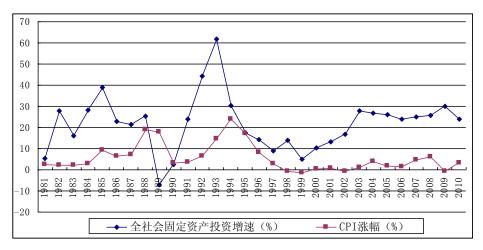


Fig. 33: Total fixed assets investment growth and inflation rate

The investment overheat pushes forward the economy overheat, and thereafter triggers pulled-typed inflation. Thus, all previous inflations in China are resulted from the rapid economic growth. In China, the stress and the promotion on the economic growth by the government have made the economic growth government-dominated. Once economy tends to develop well, the government will actively prompt the investment growth, and then reinforce the good economy trend, even to the degree of overheating, triggering the pull-typed inflation. Our study finds that the economic growth has significant impacts on the overall price level in China, and the positive shock from the economic growth will lead to the significant increase of the inflation level in the short run. Actually, in the years when the economic growth was high, China also suffered from great extent of inflation pressures: for instance, in the economically overheating years from 1992 to 1994, the high inflation also accompanied; and in 2004, the economic overheating also came along with the inflation.



Fig. 34: GDP growth and inflation rate

II. The inflation-caused low real interest rate and even negative interest rate have the families provide strong support for the national economic development, especially for the development of the state-owned enterprises and banking industry. Thus the government with a belief in growthism will be less motivated to govern the inflation.

With an interest rate-regulated system, the interest rate in China is relatively low for a long time. The frequent emergence of the inflations further lower the real interest and is likely to result in the consistently negative interest rate. What needs to be concerned is that negative interest often appears in China. Since 1990, negative interest rate has emerged four times in total, all lasting long. Among them, in the periods of 1992-1995 and 2006-2008, the negative interest rate lasted 38 months and 23 months respectively. This shows that the government is rather tolerant to the negative interest rate.

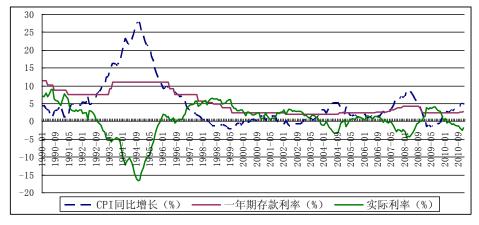


Fig.35: inflation and real interest rate

Sheet 9: the negative interests rates since 1990

| The time period | Lasting times (month) |  |  |
|-----------------|-----------------------|--|--|
| 1992/10-1995/11 | 38                    |  |  |

| 2003/11-2005/03 | 17 |
|-----------------|----|
| 2006/12-2008/10 | 23 |
| 2010/02-        | 13 |

A. Low interest rate reduces the governments' financing cost, providing inexpensive financial support for the various expansive economic policies. For a long time, Chinese government owns a large sum of debts, which tend to be increasing. The national governments bonds issued have exceeded 500 billion Yuan each year since 2001. In 2007, the amount issued even exceeded 2 trillion Yuan. The scale of the bank loans to the government is also very large. Since the 21 century the government has borrowed from the state-owned commercial banks over 750 billion Yuan each year. The amount has been consistently increasing and even exceeded two trillion in 2009. Taken into consideration of the large size of the national bonds and bank loans allowed to the government, the inflation-caused low interest can substantially reduce the government's financing cost, therefore improve the financing capability, and as a result, provide the support for the government to prompt the economic growth.

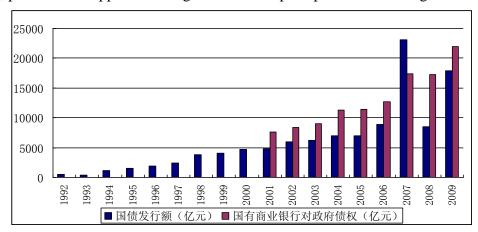


Fig.36: Government Bonds and the creditors' rights the state-owned commercial banks owned to the government

B. Low interest rate provides the state-owned enterprise with large amount of low-cost financial support, encouraging their flourishing. For a long time, the less developed financial market in China forced enterprises to use indirect financing tools as the main financing approach, and the enterprises' financial support relied much on the bank loans. The funds raised via the two big direct financing channels, stocks and corporate bonds, only accounted for 16.3% on average of the total new loans from the financial institutions from 1992 to 2009, and in most of these years the ratio is less than 25%. Since China now is still in the stage of economic transition, the government-dominated resource allocation has not changes yet. The state-owned companies, as the major driving force of the economic growth, still enjoy the privilege in the credit market, and the government, through the government-controlled banking

system, provides most of the loans to the state-own companies and other related enterprises. According to the results of a sampling survey conducted by the People's Bank of China in 2002, the ratios between the loans of state-owned enterprises and the total loans of the financial institutions at the end of Sep. 2009 and the end of Sep. 2010 are as high as 45.9% and 43.6% respectively. Other statistic data also show that in the first two months of 2009, 90% of the new bank loans in China flew into the governmental projects, the bid-winner of which were state-owned companies. The inflation-caused low interest rate makes the large sum of the bank loans inexpensive and easily accessible to the state-owned enterprises, and thus provides the strong financial guarantee for these enterprises to more actively do their business, under the instruction in line with the government's mission of economic development.

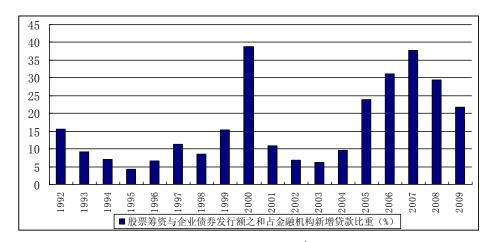


Fig. 37: major financing channels' comparisons

C. Low interest rate raises the interest margins of banks, and thus strongly supports the development of the banking industry. In a very long time, the investment channels in China are relatively narrow, therefore the bank deposits will not reduced much and funds sources will not be significantly affected, even in the circumstances of low or negative real interest rate. For instance, from 1992 to 1995, in the long period when the interest rate was negative, the deposit growth of the financial institutions remained high, and even exceeded 35% in 1994 and became the second highest point in history, only next to the record in 1989. Meanwhile, the low or even negative interest rate greatly stimulate the enterprises' motivation for loan, and the debts growth of the industrial enterprises sharply increased to 25%, the historical record, in 2004, a period of negative interest rate; in another period of negative interest rate, 2007 and 2008, the debt growth hit the historical highest record once again and exceeded by 20%. The substantial increase of the loan amount will raise the banks' loan incomes, and, under the current environment that most of the Chinese banks highly depend on the interest margins, will significantly improve the banks' performance.

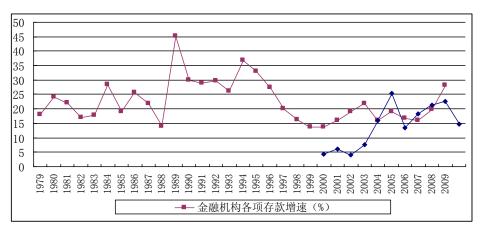


Fig. 38: the deposit of the financial institutions and the debts growth of the industrial enterprises(%)

### III. The slack fiscal policies, primarily targeting at the economic growth, result in the passive and slack monetary policies, and thus provide large amount of the liquidity into the economy, bringing the long-existing inflation pressures.

The rapid increase of the money supply is the major reason for the frequent inflations in China. Taken the long-term relationship between money and inflation into consideration, the monetary school's argument that inflation is a monetary phenomenon is basically well-accepted. The growth of the money supply in China has been very fast, and the average yearly growth from 1991 to 2009 reaches 20.5%. Meanwhile, the growths of money supply in most years are significantly higher than the economic growth: The M2 in 2009 grew 39.6 times more than that in 1990, while nominal GDP grew 18.3 times, and real GDP only increased 6.61 times. In fact, the growth of the money supply in China is closely related to the inflation, and high inflation normally accompanies high growth of money supply: For instance, from 1993 to 1995, the growth of money supply was in the historical high level, and the inflation at same time also remained high; the moderate inflation in 2004 was also very likely to related to the rapid growth of the money supply in 2003; the inflation in 2007 and 2008 was closely linked with the fast growing money supply from 2005 to 2008 as well. Then, what are the reasons for the rapid growth of the money supply in China? In answering this question, we can clarify why the demand-pulled inflation, brought by the large amount of money supply, often emerges in China.

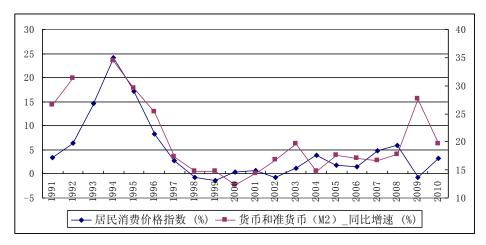


Fig. 39: yearly M2 growth and CPI

### A. Influenced by the viewpoint of Growthism, Chinese government prefers the expansive fiscal policies to prompt the economic growth.

Compared with the complicated procedures in formulating the fiscal policies, the process for the formulation of fiscal policies in China is relatively simple, and the timeliness of the policies is also much better. Therefore, Chinese government prefers to use the fiscal policies to regulate the economy. Since Chinese government treats the economic construction as the major task, all the policies are basically enacted in hopes of promoting the economic growth, and thus the fiscal policies, as the chief tools for the government's economic regulation, are with no exception. From the reform and opening up, the yearly growth of the real fiscal expenditure on average, price factor deducted, is as high as 9.1%, above 5% in most years, and all being over 10% after 1997. Moreover, fiscal deficits with varying degrees commonly existed, except in 1978, 1981, 1985 and 2007. The rapid growth of fiscal expenditure and the existence of fiscal deficits for such a long time also suggest that China is virtually adopting the expansive fiscal policies. Some studies on the periodical characteristics of China's fiscal policies also find that China is in fact implementing the expansion-inclined fiscal policies, rather than economic- cycle-accommodated / reversed fiscal policies. Other variables' impact controlled, the local governments in China adopt the cycle-reversed fiscal policies in the recession times. In other words, whenever the real GDP is one percent lower than the potential GDP, the percentage of local governments' expenditure to the GDP will increase by around 1.7%; in the booming times, the local governments in China instead adopt the cycle-accommodated fiscal policies. To put it another way, whenever the real GDP is one percent higher than the potential GDP, the percentage of local governments' expenditure to the GDP will increase by around 0.25%.

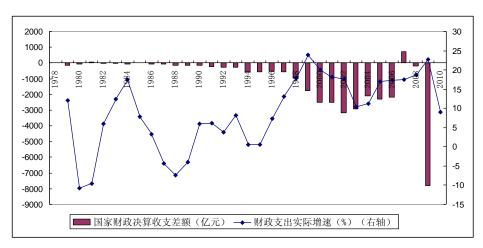


Fig. 40: the real growths of the fiscal surplus and the fiscal expenditures

B. Under the system similar with the fixed exchange rate one, the frequent adoption of the expansive fiscal policies by the Chinese government forces the monetary policies to be passively expansive, resulting in the large amount of liquidity to be poured into the economy.

Although China currently implements the managed floating exchange rate system, the fluctuation of the exchange rate, viewed in the long run, is relatively small, and therefore, it can approximately regarded as the fixed exchange rate system. From Jan. 1994 to May 1995, Renminbi was slowly and steadily being reevaluated, and the Renminbi-to-US Dollars average weighted exchange rate was decreased from 8.7 to 8.4; From June 1995 to June 2005, the exchange rate in China is basically stable, without fluctuations in general; From July 21<sup>st</sup>, 2005, China began to implement the new exchange rate formation mechanism, a managed floating exchange rate system which is based upon the market supply-demand and is also adjustable with reference to a basket of currencies. From then on, Renminbi once again enter into the appreciation zone, though the extent of appreciation is relatively slow; After Sep. 2008, the revaluation of the Renminbi took another turn to slow down. Generally speaking, since 1994, Renminbi has kept stable most of the times; even after the reform on the exchange rate formation mechanism, the extent of Renminbi's appreciation is still limited.

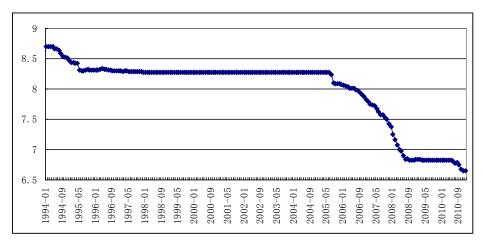


Fig. 41: the weighted Renminbi-USD exchange rates \_ based on the current month (Renminbi/USD)

In the fixed-wise exchange rate system, the expansive fiscal policies force the monetary policies to extensively expand, therefore input large amount of liquidity into the economy. In the fixed-wise exchange rate system, the expansive fiscal policies make the interest rate rising, and then lead to the capital flow-in and increase the pressures on exchange rate appreciation. To maintain the stability of Renminbi, the monetary policies administrations are forced to issue currency in the hope of reducing the interest rate. Moreover, under the fixed exchange rate system, the central bank can hardly enforce the effective monetary policies to control liquidity. Suppose the government adopts the tight monetary policies, the domestic interest rate will be raised and a large amount of capital will flow in, therefore the domestic currency will sustain the pressure of appreciation. To maintain the fixed exchange rate, the central bank will intervene in the foreign exchange market in the way of inputting the domestic currency, and as a result, the supply of the domestic currency increases. This means the monetary policies, consequently, tend to be easing.

### Part IV The predictions on the inflation in China in 2011

According to the estimations of the CMAFM model, China will have some moderate inflation in 2011, the inflation rate the whole year estimated to be 4.5%, and the high point will appears in the  $2^{nd}$  quarter.

## I. The large liquidity stock, large inertia of credit, and the high proportion of the foreign exchange reserve provide an adequate liquidity foundation for price rising in 2011.

A. The high-speed currency issuance for a long time resulted in the currently accumulated large stock of liquidity, which cannot be effectively recycled in the short run. In 2010, The M2/GDP ratio reached the highest point of 182.4% in history. According to the predictions by the People's Bank of China in their Report on the Implementation of the Monetary Policies in China in the 4<sup>th</sup> Quarter 2010, M2 will increase by 16%; combined with the data on the GDP predicted by CMAFM Model, The M2/GDP ratio of China will reach 185.5% in 2011, once again to create the highest record in history, and the problem of excessive liquidity remains severe. To make the M2/GDP in 20100 equal to that in 2010, the M2 growth should be reduced to 14%, which is impossible to achieve in reality. Therefore, as long as the M2 growth is above 14%, the excessive liquidity will be difficult to resolve.

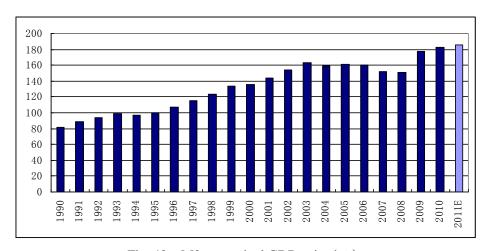


Fig. 42: M2 to nominal GDP ratio (%)

B. The high percentage of long-term loan in 2010 leads to the high inertia effect of the credit loan in 2011, and thus the loan will continue to rapidly grow. In face of the international financial crisis, the government substantially stimulated the in investment growth, particularly the large scaled investment growth. When the size of the direct financing is hard to be significantly extended, many large scaled investment projects have to be rely on the bank loans. This led to the gradually rising of the percentage of the long-term loans from the financial institutions after April 2009. This

ratio, in a short one-year period, was raised from previous 50% to 60%. Many long-period, large-scaled projects require more subsequent financial supports, preventing from shrinking the size of the loans, and this exerts the high inertia effect of the credit loans.

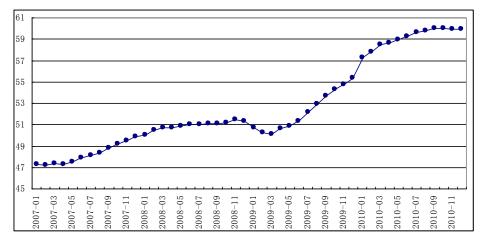


Fig. 43: the long-term loans percentage in financial institutions (%)

C. The flow-in of the hot money and the consistent high level of the trade surplus accounted for the high percentage of the foreign exchange reserve, offsetting the effect of the tight monetary policies. In 2011, major developed countries still face the various problems such as recovering financial system, solidifying the real economy, and resolving the fiscal imbalance, the situation of economic recovery remains doom. According to the predictions by the IMF, the economic growth of developed countries in 2011 will be 0.6% slower than in 2010, and the unemployment will remain at 8.3%, and thus the economic situation in most of major developed countries is less optimistic. Influenced by the weak rebound of the economy, the developed countries are very likely to continue their easing monetary policies, which will further higher the expectation on Renminbi's appreciation and therefore increase the risk of the hot money's flowing-in. Moreover, although China's import, propelled by the government, will continue to increase rapidly, the economic growth in China in the short run is hard to be changed, that is to say, largely relying on the export, China is still highly driven to develop the export-oriented trade. Furthermore, the trade competence of China remains high, and the export growth in 2011 will keep in the high level. Therefore, generally speaking, the trade surplus of China will maintain high in 2011.

Sheet 10: IMF-predicted the future economic indicators of the world and developed countries (%)

| year | world           | Developed entities | US  | Euro-Zone | G7  |  |
|------|-----------------|--------------------|-----|-----------|-----|--|
|      | Economic growth |                    |     |           |     |  |
| 2010 | 5               | 3                  | 2.8 | 1.8       | 2.5 |  |
| 2011 | 4.4             | 2.5                | 3   | 1.5       | 2   |  |
| 2012 | 4.5             | 2.5                | 2.7 | 1.7       | 2.5 |  |
|      | Unemployment    |                    |     |           |     |  |

| 2010 | 8.3 | 9.7 | 10.1 | 8.3 |
|------|-----|-----|------|-----|
| 2011 | 8.3 | 9.6 | 10   | 8.1 |
| 2012 | 7.7 | 8.8 | 9.7  | 7.6 |

II. Due to the factors such as spring drought, imported price rising, the opportunity cost increase of the agricultural labors, the rising of the national grain purchase prices, and the flow-in of large sum of hot money, the agricultural products prices is likely to further rise and prompt the overall price level higher in 2011.

A. Part of the major bread baskets suffered from widespread drought, and thus it is difficult for China to maintain the continuous growth of grain production for 8 consecutive years. Since Oct. 2010, part of the bread baskets in North China has been suffering continuous drought, and the current situation is unlikely to be relieved fundamentally before April. Up to Feb. 8, the drought-influenced areas across the country are over 112 million are, among which, the damaged wheat-sown areas account for 40% of the total sown areas. Since the winter wheat-sown areas and productions in the drought-influenced eight provinces account for over 80% of the total in China, this drought have some degrees of negative impact on the grain production. Moreover, the grain production in China has kept on increasing for seven consecutive years, and thus the future growing is likely to be increasingly harder, and the chances for declining are also growing. To put it clearly, this has made it difficult to maintain the growth of the grain production for this year.

B. The frequent natural disasters globally are likely to lead to the consistent price-rising of the international agricultural products in 2011, and this will bring the imported pressures for price rising of the agricultural products in China. Now the international agricultural products prices are facing the next round of rising, and thus the probability of price rising is high in 2011. FAO Food Price Index has been increasing rapidly since June 2010, reaching the highest point in Jan. 2011 since the index was set in 1990, even higher than the historical record in 2008. Furthermore, this year and last year, the globally frequent extreme weather conditions influenced the supply of the international agricultural products. For instance, drought, and heavy rain have made certain degrees of negative impact on the related agricultural production in the major grain-producing countries such as US, Australia, Argentina, and Brazil. Such reductions in the agricultural supply caused by natural disasters have prompt and will continue to prompt the international agricultural products prices higher. Moreover, since the market supply-demand of the international agricultural products are increasingly tightened in the couple of years, the international grain stock has been in tension, and many grain stocks are approaching their lowest level in history. This also weakens the governments' capabilities to use the reserves to intervene in the agricultural products prices, and perhaps in turn becomes a driving

force for the continued price-rising for the international agricultural products.

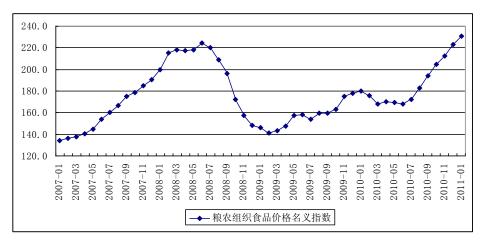


Fig. 44: FAO food price nominal index

C. In 2011, the shortage of rural migrant workers in China will be worse, and the wages for them will continue to increase, and the so incurred agricultural labors' opportunity-cost-rising pressure will further raise the prices of the agricultural products. Along with the transition of the population structure and the coming of the Lewis Turning Point, the working-age population in China's rural areas grows gradually slowly, and the excessiveness of the rural labor also reduces yearly. Since the economy is steadily recovered, the efforts to develop and construct the middle and west regions are reinforced, and thus the employment demands are rapidly expanded. IN 2011, the shortage of rural migrant workers in China will be even worse than in the previous years, with its influenced areas significantly expanded, therefore the pressures for raising the rural migrant workers' wages and for so incurred price rising of the agricultural products are further increased.

D. Under the excessiveness of the liquidity, closely regulated by the policies such as "the New Eight Regulations by the State Council", the real estate market falls in recession, attracting large amount of hot money flowing in the market of the agricultural products, and then push higher the prices of the agricultural products in 2011. Under the consistent impact from the series of the real estate regulative policies such as "the New Eight Regulations by the State Council" and so forth, the real estate industry face the sharply increased financial pressures in 2011, and the housing prices are also likely to drop the declining zone. The relative recession of the real estate market and decline of the attractiveness to the capital, under the background of the liquidity excessiveness, make large sums of money shift to other markets. On the contrary, the agricultural market confronts more negative impacts on the supply side in 2011 and this provide the speculative opportunity for the capitals. Therefore, large sums of money may rapidly flow into the agricultural market and further push higher the prices.

E. In 2011, China will continue to raise the minimum purchasing prices of the agricultural products such as rice and wheat. This probably will further promote the already rising grain prices. On Feb. 9, 2011, the government raised the minimum purchasing prices of rice and wheat: the minimum purchasing prices for the early indica rice, late indica rice, and Japonica rice are raised from 0.93 Yuan per half a kilo, 0.97 Yuan per half a kilo, and 1.05 Yuan per half a kilo in 2010 to 1.02 Yuan per half a kilo, 1.07 Yuan per half a kilo, and 1.28 Yuan per half a kilo in 2011, respectively. Raising the grain purchasing prices can provide the farmers with the incentives to produce, increase their incomes, and therefore are very meaningful to secure the national grain safety. Nevertheless, it must be seen that raising the minimum purchasing prices will at same time push higher the already rising grain prices.

Sheet 11: the minimum state-purchasing price of wheat and rice (Yuna / half a kilo)

| Year | early<br>indica<br>rice | late indica | Japonica<br>rice | White<br>wheat | Red<br>wheat | Mixed<br>wheat |
|------|-------------------------|-------------|------------------|----------------|--------------|----------------|
| 2005 | 0.7                     | 0.72        | 0.75             |                |              |                |
| 2006 | 0.7                     | 0.72        | 0.75             | 0.72           | 0.69         | 0.69           |
| 2007 | 0.7                     | 0.72        | 0.75             | 0.72           | 0.69         | 0.69           |
| 2008 | 0.77                    | 0.79        | 0.82             | 0.77           | 0.72         | 0.72           |
| 2009 | 0.9                     | 0.92        | 0.95             | 0.87           | 0.83         | 0.83           |
| 2010 | 0.93                    | 0.97        | 1.05             | 0.9            | 0.86         | 0.86           |
| 2011 | 1.02                    | 1.07        | 1.28             | 0.95           | 0.93         | 0.93           |

# III. The US and other major developed economies will continue to implement the slack monetary policies in 2011, further promoting the international prices for bulk raw materials such as energy resources and metals. This will definitely increase the inflation pressure

Since the economic recovery is slowing down, the developed countries represented by US have strongly implemented the easing monetary policies in recent couple of years. Affected by this, the global excessiveness of the liquidity is even worse, and then causes the consistent deflation of US dollars and the continuous price-rising of the international bulk raw materials. In 2011, the economic recovery in European and American regions is still unclear. Therefore, major developed countries will keep on implementing the easing monetary policies, which will further increase the pressures for US Dollars' deflation, and then push higher the international prices of the bulk raw materials such as the energy resources and metals. Besides, along with the continuous economic growth, China is increasingly relying on the imported bulk raw materials, and the foreign dependence on the crude oil in particular even reaches 53.75, the highest level in history. Taken into full consideration China's high foreign dependency on the bulk raw materials, the international price rising of the bulk raw

materials in 2011 will definitely increase the imported price-rising pressure in the market for the production means. As a result, the consistent price rising of the production means, through the conduction from PPI to CPI, the cost-rising of agricultural production means, and so forth, will undoubtedly push higher the consumer price index in China.



Fig.45: the variation trend of USD index at its closing price

## IV. The real economy is basically balanced and the theme of the regulation policies has been back to stable. Therefore, the basis for hyper-inflation does not exist in 2011.

A. The total demand in 2011 will not significantly increase, and the economy can hardly be over-heated, and the chances are small for the emergence of the wide output gap and then triggering demand-pulled inflation. In 2011, the slowdown of the real estate investment and the maintained stability of other kinds of investment will drop the total investment growth to certain degree. The government's real estate regulation policies in 2011 will continue to be implemented as high pressured as before, which is likely to trigger the deep readjustment of the real estate market. And the growth of the real estate investment will significantly decline and then affect the growth of the total investment. The investment growth in other sectors in 2010 were steady and slow, remaining around 28% monthly; in 2011 when the business environment does not change much, this trend will be kept. Moreover, the consumption is generally decided by the long-term factors such as economic structure, financial development, and culture and customs, therefore can hardly be increased in the short run. The slowdown of the world economic growth, the severe situation faced by the developed countries, and other factors all make the international trade environment less optimistic. IMF predicts that the world trade volume will declined nearly five percentage point, as a consequent, the exterior demand for China will not be substantially improved.

B. the continuous improvement of the industrial productivity will relieve the cost-rising pressures due to the rising for the domestic wages, and in 2011 the spiral of "wage-inflation" will hardly appear in China yet. In 2010, China's low-end labor market had some major structural changes, further pushing forward the wage formation mechanism to the market-oriented direction, and this will increase the chances for the rapid growth of the wages in future. But at the same time, the industrial productivity in China will keep on increasing fast, and the growth of the Industrial Gross Output each month in 2010 are all above 30%, far higher than the growth rate of the employment which is between 5% to 8%; the quarterly growth of the industrial labor productivity are basically above 20%, five percentage points higher than the growth of the average remuneration of the employed people. As the overall economy is relatively steady, the industrial labor productivity will continue to grow rapidly in 2011, and the enterprises still have the enough capacities to absorb the rising costs. This will greatly reduce the pressures from the unit labor cost rising, therefore diminish the chances for the emergence of the "wage-inflation" spiral.

C. The macro-regulative policies have returned to be stable, in 2011. The liquidity is not likely to substantially increase again, nor does the liquidity background for the severe inflation exist. Now China has basically achieved the normalized economic growth, and the government policies are less propelled to guarantee the economic growth, therefore the focus of the regulation policies can be shifted to the control the inflation. In fact, the theme of the government regulation has been transformed. On the CPC Central Committee Political Bureau Meeting held on Dec. 3, 2010, the Bureau set the tone to implement the proactive fiscal policies and prudent monetary policies in 2011. Such policy shift shows that Chinese government has gradually paid attention to the inflation problem. The monetary policies implementation has virtually shown such tendency: since Oct. 2010, the government has raised the interest three times, and raised the deposit reserve ratio five times; the M2 growth in 2011 is primarily estimated to be 16% or so, recovered to the normal value and lower than 17%, the targeted M2 value for 2010 set in early 2010. Therefore, the macro-regulation policies will remain the stress on recycling liquidity, and the base money growth and credit loans will be return to the normal level, therefore the overabundance of the liquidity will be improved.

#### **Part V Policy suggestions**

I. This whole year, particularly in the first half of the year, the government should implement the prudent and tight monetary policies, focusing on recycling the over-abundant liquidity and actively participating current inflation.

In 2011, the central bank, after returning to be stability-oriented, should further tighten the monetary policies, focus on regulating inflation, and moderately less stress on the economic growth goal. The overall economy in 2011 tends to keep on developing in the normal track of the independent growth. Comparatively, the risk of inflation, likely to be 4.5%, is much higher than the risk of the economic slowdown; If the inflation control is not effective, the inflation may be higher, and then its societal negative impact will be serious. The central bank should promptly use the prudent and tight monetary policies to demonstrate the government's determination to restrain the inflation, which will help stabilize the inflation expectation. What should be noted is that the inflation in China in 2011, affected by the carryover effect and the consistent rising of the agricultural products prices, tends to be high at the beginning and then turn to be steady, and the series of the tight monetary policies should be enacted ath first half of the year.

- 1. The government should put forth effort to prevent the M2 growth the whole year from exceeding the expected goal, 16%. Although such growth goal is at the same level as the M2 growth required by the prudent monetary policies, the growth at 16% in 2011 is actually slightly easy, taken into consideration the rapid growth of money supply in 2009 and 2010. Besides, since in most of the years, the money growth will exceed the initial target set by the central bank, if the actual growth this year exceeds the targeted 16%, the problem of liquidity excessiveness will be even severe. Because the liquidity abundance is the core reason of this round of inflation, the liquidity recycling is extremely critical in the hope of controlling inflation. Therefore, taking every measure to keep the M2 growth below the targeted 16% is probably one of the major parts of the implementation of the anti-inflation policies.
- 2. Adopt the dynamic-adjusted differential deposit-reserve ratio, i.e. increase the ratio to the range from 20.5% to 21.5% and control the new credit load within 7 trillion. From 2010 till now, the central bank has raised the deposit reserve ratio eight times, and the ratio for large financial institutions now is as high as 19.5%. Even so, the scale of the credit loan this Jan. is still large. Further tight policies not taken, the size of the loan is likely to keep on growing rapidly throughout the year, and the liquidity excessiveness will be worse. Furthermore, the current economic growth situation is relatively good, and the growth is unlikely to decline. Therefore, reducing the new loan scale, under the basis of the high loan-size in 2009 and 2010, will not have much negative influence on the economic growth.
  - 3. Increase the yearly interest to the range from 3.5% to 4%, As the inflation rate

is likely to be 4.5% this year, and even 6% in some months, the current real deposit interest rate should be lower than -1.5%, and in some months even -3%. Considering people's welfare, the government should raise the interest rate to gradually diminish the negative interest rate. Moreover, the interest raising may also help stabilize the inflation expectation and adjust the total demand.

- 4. Moderately speed up Renminbi's reevaluation rate to the range of from 3% to 5% in 2011. In view that the prices of the international bulk commodities, particularly of the agricultural products, may continue to rise, continuing the reevaluation of Renminbi can reduce the import cost of the primary products, slightly relieve the import-typed inflation pressures. Furthermore, the flowing –in of the hot money will force the foreign exchange reserve consistently rising, and in turn affect the domestic currency issuance significantly. Continuing the reevaluation of Renminbi can relieve the pressure due to the flowing-in of the hot money and improve the situation of the domestic liquidity overabundance.
- II. Actively develop the real economy, focusing on promoting the development of the private economy. The government should actively create the favorable conditions for the development of the real economy: actively free up the industry-entry limitations for private enterprises, expand the unofficial investment channels; strengthen the financial innovations, providing sufficient financial supports for various enterprises, particularly SMEs; improve the reforms of the fiscal system, actively reduce the taxation, release the enterprises' tax burden.
- III. Strengthen the efforts to support agriculture, enhance the comprehensive agricultural capacity, and further solidify the fundamental role of the agriculture, as well as ensure the food security. Invest more on the agricultural infrastructure such as irrigation facilities, and further improve the weak agricultural infrastructure; further raise the agriculture production subsidies, expanding the scope of the agricultural production subsidies, and reform and improve the distribution ways of the subsidies; Use various forms of the policy tools, such as spending more on the R & D related to agriculture, to promote the agricultural technical innovation and agricultural production mechanizations in hopes improve the modernization level; further reinforce the reform on the agricultural distribution system, and improve the agricultural service system; Prompt the reform of the rural financial system, facilitate the rural financing's role to support the modernized agriculture; steadily raise the grain purchasing prices, improve and perfect the grain reserve system, and secure the national grain safety and the stability of the grain prices.

IV. Intensify the reserve construction for energy resources, improve the efficiency of the energy usage, and secure the energy safety. Speed up in promoting the construction on the systems of the strategic reserve of petroleum and commercial reserve of petroleum, further increase the volume of petroleum reserve; actively encourage the energy companies to "go out", enhancing their capacities to participate the international energy development and trade; deepen the market-oriented reform on the domestic energy pricing system, focusing on energy saving, and gradually reduce the unit-GDP-consumed energy; actively push forward the energy structural readjustment, further cultivate and promote the development of the new energy and energy saving industries.

V. Actively promote the market-oriented change of the wage formation mechanism, and set up the wage inflation index mechanism. Gradually form the collective wage-negotiation mechanisms, change the individual's unequal position in negotiation with the employers; fully implement the laws and stipulations on protecting laborers' rights and benefits, including the Labor Law; gradually perfect labor union system, strengthen the legislations on the labor-employer disputes; set up the wage inflation index mechanism, and use such indictor to adjust the people's wage level.

VI. Strengthen the regulation on the real estate, and control and restrain the real estate bubbles. Further prompt the reform on the lands supply system, increase the land supply, rationalize the land price formation mechanism; provide some degree of support to the investment on the development of the commercial residential housing projects, in avoidance of the negative impact on the supply capacity due to the excessive demand management; increase the construction on the government subsidized residential housing, especially focusing on low-rent and public rental housings; do not rely too much on the administrative interventions, instead stress more on the construction of the market-oriented system for the real estate sector.

### VII. Proactively promote the long-term reform, improving the effectiveness of the governance on the inflation.

1. Actively promote the market-oriented reform, reducing the administrative tools to intervene the pricing. Continue to actively promote the market –oriented reform, reduce the mandatory distortions to the prices, and play the role of "the invisible hand" to use market to allocate the resource and adjust the prices; realize the drawbacks of the excessive price regulation; unless in the time of severe economic crisis or the market is seriously failed, the government should not directly intervene in the price control.

- 2. Actively promote the administrative reform, transforming the growth-oriented government to the public service-typed government; Take various actions to actively prompt the transformation of the economic growth model in China, reduce the over-dependency to the investment and the exterior demand, focusing on pushing forward the growth of the interior demand, particularly of consumption demand; pursue no more simply on the growth of economy, instead on the quality of the economic growth, and on the improvement of the people's income and welfare; reduce the weight of GDP in the evaluation criteria on the local governmental officials' performance, and increase the weights of people's welfare, energy saving, environment protection, and so forth; further increase the governmental expenditures on people's welfare, and optimize the governmental expenditure structure.
- 3. Actively promote the monetary policy reform, improving the effectiveness of the monetary policies to regulate the prices.

First, reinforce the independency of the central bank. Alter the current situation that monetary policies may come from different departments, and concentrate the power of the monetary policy enactment into The People's Bank of China; fully endow the decision right on monetary policies to the People's Bank of China, rather than to the dispersed departments like now; further raise the administrative status of the People's Bank of China, reinforcing its indecency on monetary policy enactment.

Second, promote the reform on the target of the monetary policies. Change the current situation in which the targets of the monetary policies are multiple but unclear, instead the major target of the monetary policy should be preventing the inflation, and the next goal should be economic growth. Unless the capital prices are seriously deviated from the equilibrium level, the monetary policy should not may too much attention on capital prices, especially not on stock market prices,

Third, prompt the reform on the tools for monetary policies. Actively promote the market-orientation for the interest rate, in order to improve the adjusting roles of the interest rate; steadily push forward the reform on the exchange rate formation, and further play the fundamental role of the market in the course of exchange rate formation, and reinforce the foreign independency of the monetary policies; promote the construction of the framework on cycle-reversed, prudent financial policies, maintaining the stability of the financial system; further enhance the coordination between price-typed tools and quantity-typed tools, fully act the role of the monetary policy combinations to facilitate the economy.

伟)