

# China: The Surplus Economy

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# China: The Surplus Economy:

## Three Phases

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- ◆ Phase 1: The Chinese economy operated in the interior of its production possibilities set prior to 1978 (because of central planning, the “ratchet” effect and the lack of incentives) and opening to the world economy permitted the expansion of the consumption possibilities set (thus welfare increased much faster than the productive potential during this phase).
- ◆ Phase 2: The effects of (more efficient) utilization of surplus labor and capital and economies of scale on the supply side and the expansion of export demand and pent-up domestic demand on the demand side under transition to a market economy in goods.
- ◆ Phase 3: The development of excess capacity due to moral hazard and the incentive structure of the local government officials (with the growth of real GDP and employment being their key performance indicators) who discovered the value of the land under their control since 2003.

# Phase 1: The Benefit of Opening to the World

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- ◆ Even if the international relative price is the same as the domestic relative price in the absence of international trade, so that the optimal combination of the goods to be produced remains the same with or without international trade, with the possibility of export and import, every point on the international relative price line is a possible combination of domestic consumption. The domestic consumption point can be different from the domestic production point, and the resulting aggregate social welfare must be higher with international trade.

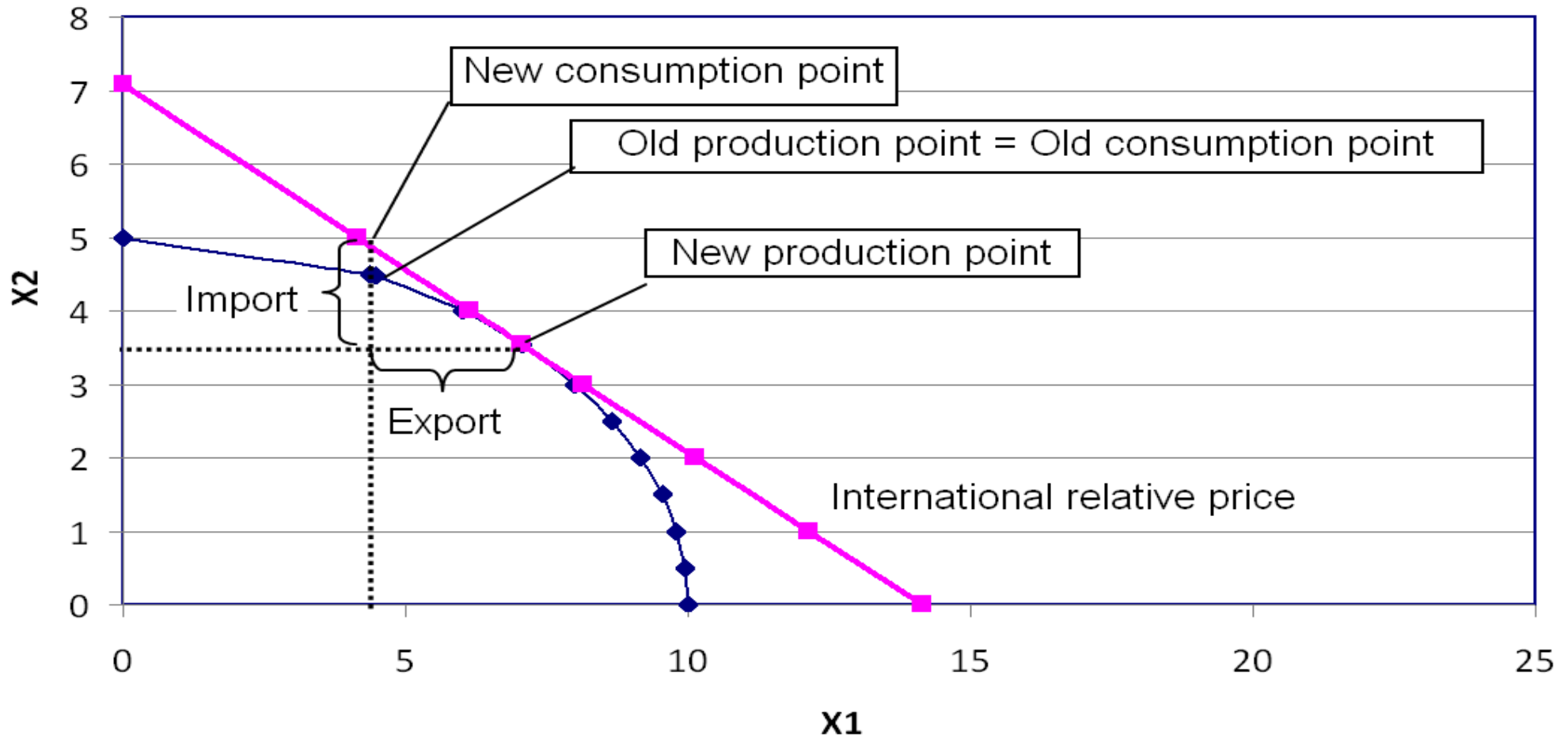
# Phase 1: The Benefit of Opening to the World

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- ◆ The following Chart makes it clear. Without trade, the consumption possibilities set is the same as the production possibilities set. With trade, the consumption possibilities set is the entire triangle bounded by the international price line tangent to the production possibilities set and the two axes. Any point on the international relative price line is a possible consumption point. At the new consumption point selected in the Chart, it is clear that aggregate social welfare must have increased as the same quantity of good 1 and a higher quantity of good 2 are now being consumed with international trade.
- ◆ For example, for an economy scarce in natural resources, with international trade, both the production possibilities set and the consumption possibilities set can be expanded.

# The Consumption Possibilities Set (and Social Welfare) is Enlarged with Trade

## Production Possibility Frontier Chart 3



# China: The Surplus Economy:

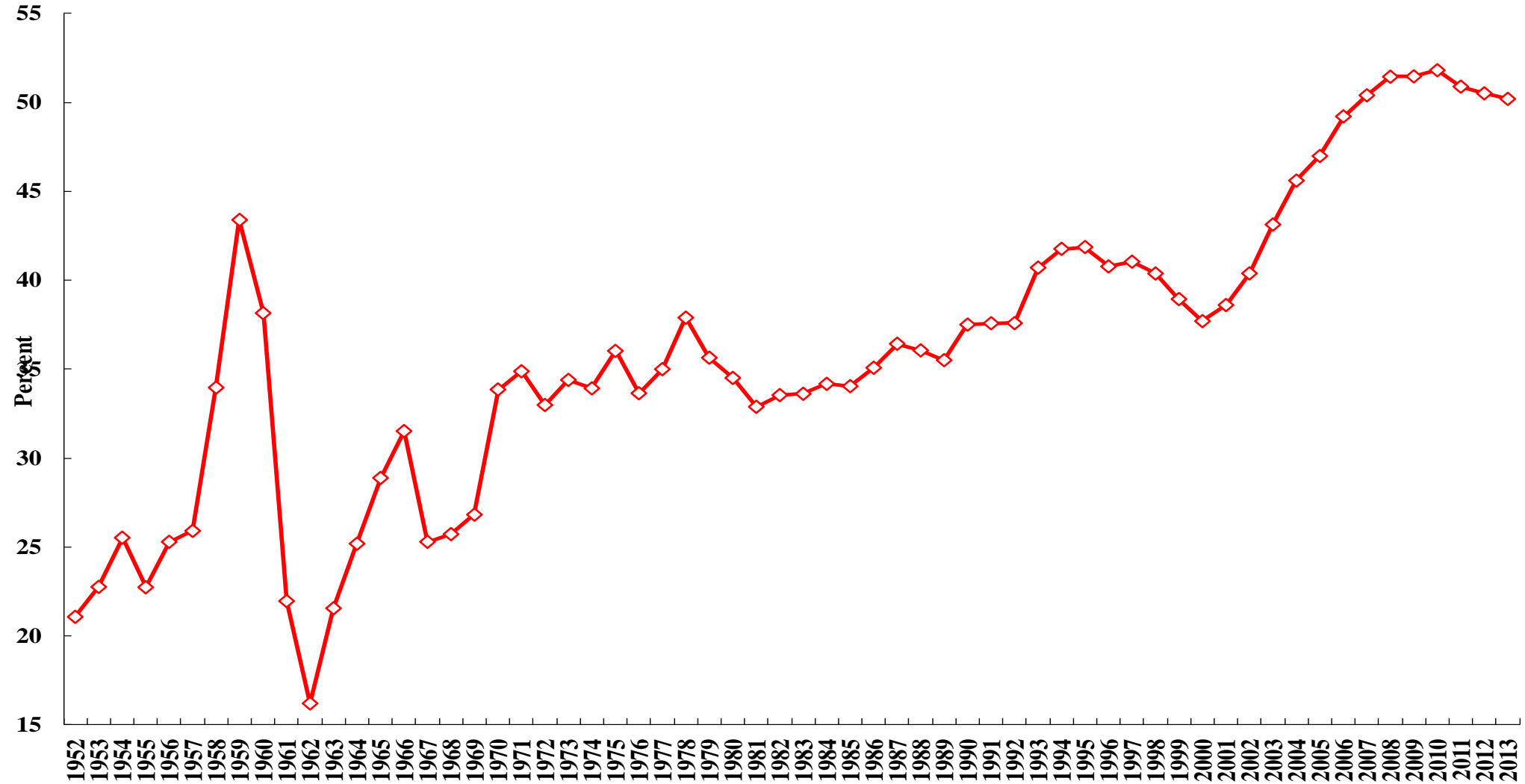
## Surplus Savings

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- ◆ Chinese economic growth since 1978 has been underpinned by three factors:
- ◆ (1) A high rate of investment, enabled by a consistently high national saving rate on the order of 30% and above except for a brief start-up period in the early 1950s. The saving rate has stayed around 40% since the early 1990s and has at times approached or even exceeded 50% in more recent years.
- ◆ This means, among other things, that the Chinese economy can finance all of its domestic investment needs from its own domestic savings alone, thus assuring a high rate of growth of the tangible capital stock without having to depend on the more fickle foreign capital inflows (including foreign portfolio investment, foreign direct investment or foreign loans). This will continue to be the case in the foreseeable future.

# China: The Surplus Economy: Chinese Saving Rate since 1952

Chinese Saving Rate since 1952



# China: The Surplus Economy:

## Surplus Labor

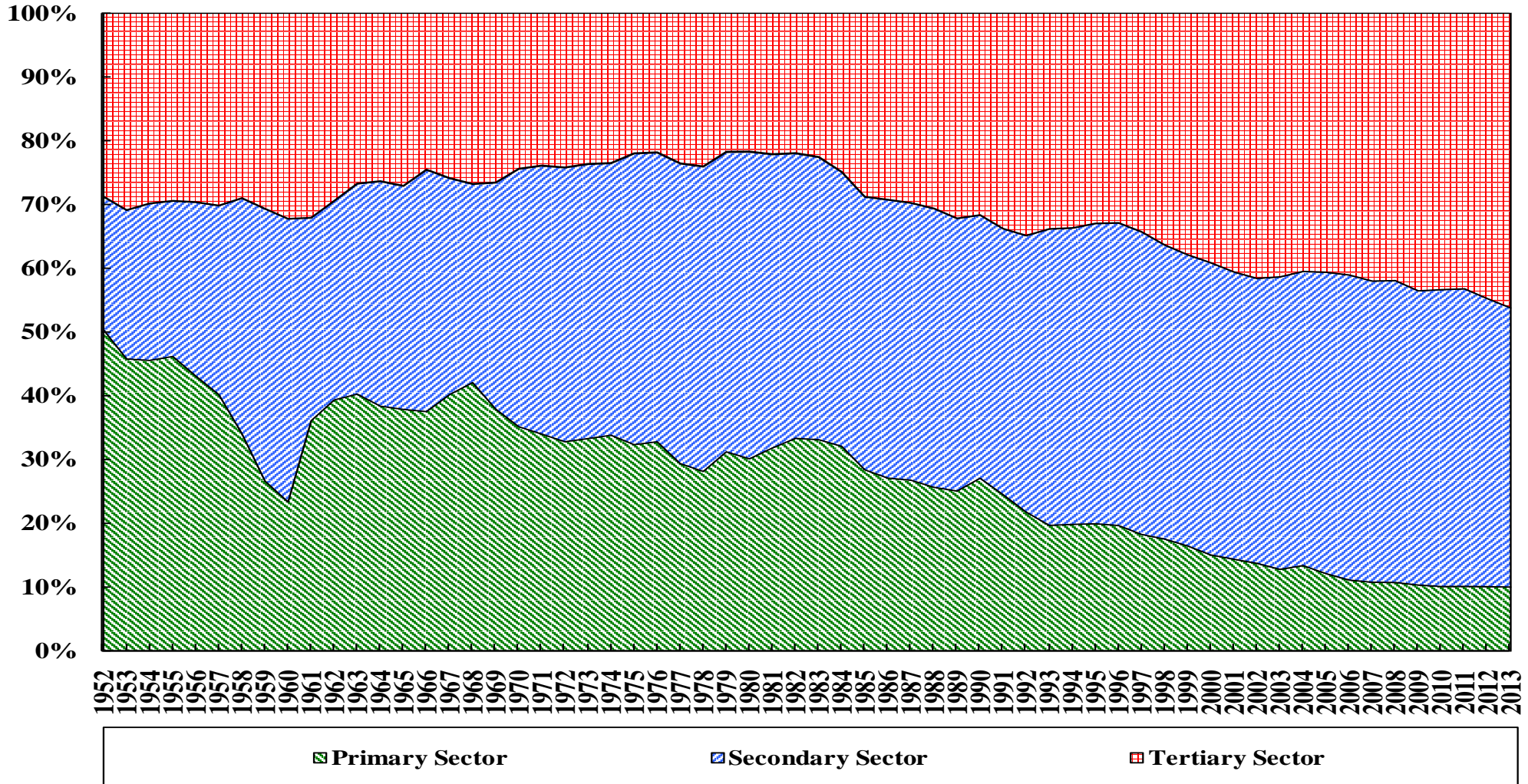
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- ◆ (2) An unlimited supply of surplus labour—there is no shortage of and no upward pressure on the real wage rate of unskilled, entry-level labour.
- ◆ Surplus labour will continue to exist—In 2012, the agricultural sector employs over 33.6% of the Chinese labour force but produces only 10% of the Chinese GDP.
- ◆ There will not be a “real” labour shortage despite the decline of the “working-age population”—the existing retirement ages of 55 for women and 60 for men are too low given the lengthened life expectancy of the Chinese population. One ready solution is to raise the retirement age to 65.
- ◆ The “one-child policy” is already in the process of being modified.



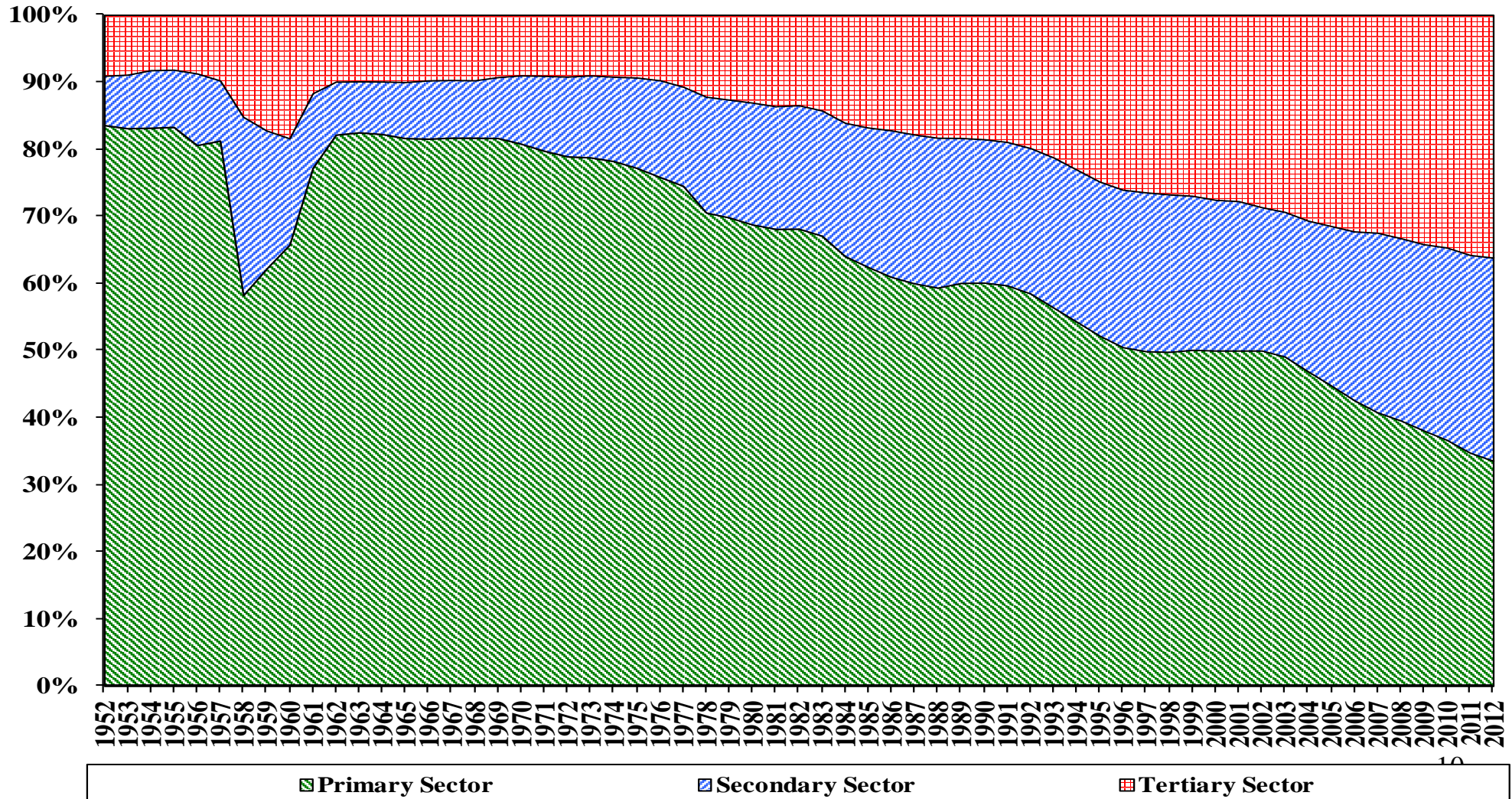
# The Distribution of Chinese GDP by Sector Since 1952

The Distribution of GDP by Sector



# The Distribution of Chinese Employment by Sector Since 1952

The Distribution of Employment by Sector since 1952



# China: The Surplus Economy:

## Economies of Scale

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- ◆ (3) A huge domestic market of 1.34 billion consumers with pent-up demand for housing and transportation and other consumer goods and services (e.g., education and health care), enabling the realisation of significant economies of scale in production and in investment in intangible capital, including innovation and goodwill (e.g., brand building), based entirely on the domestic market.
- ◆ Intangible capital (R&D capital, patents, other intellectual property such as brand names) is highly productive in a large economy because once the fixed cost of invention/innovation/branding is amortised, the additional revenue is almost all pure profit.

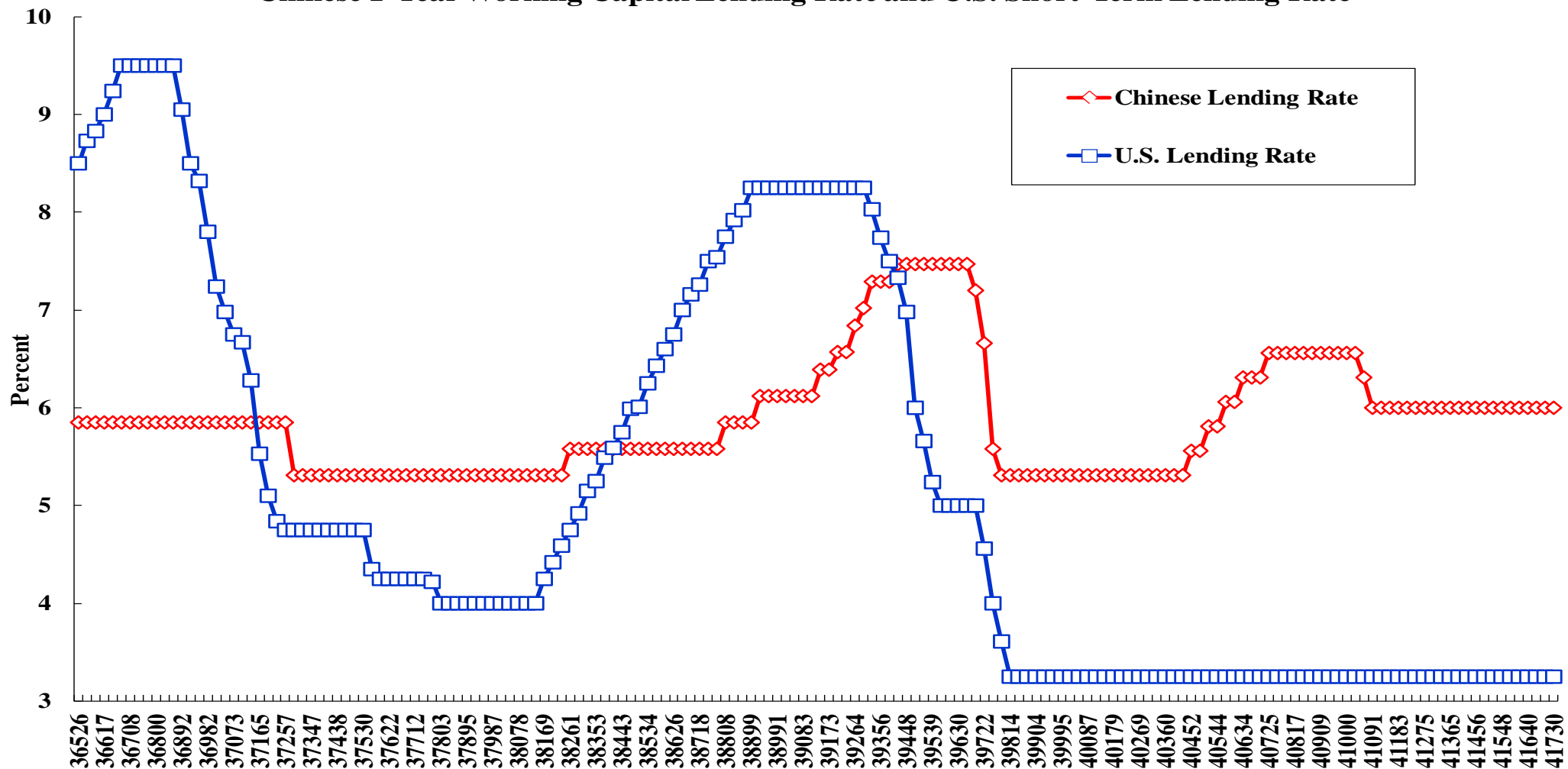
# China: The Surplus Economy:

## The Chronically Excess Demand for Credit

- ◆ Even with a saving rate in excess of 40%, there does not seem to be sufficient credit available in Mainland China.
- ◆ Moreover, even though the Renminbi has been appreciating since 2005, the Renminbi interest rate in Mainland China continues to be much higher than the U.S.\$ interest rate in the U.S., which contradicts the interest rate parity theory. (Granted that there exist capital control in Mainland China, but these controls are at best leaky.) See the following Charts.
- ◆ The chronically excess demand for credit is caused by the fact that many borrowers or potential borrowers do not plan to repay their loans if things do not work out as hoped. When borrowers do not plan to repay their loans when things turn sour, the level of the interest rate does not matter very much. The result is a chronically excess demand for credit and hence a chronically high rate of interest in Mainland China.

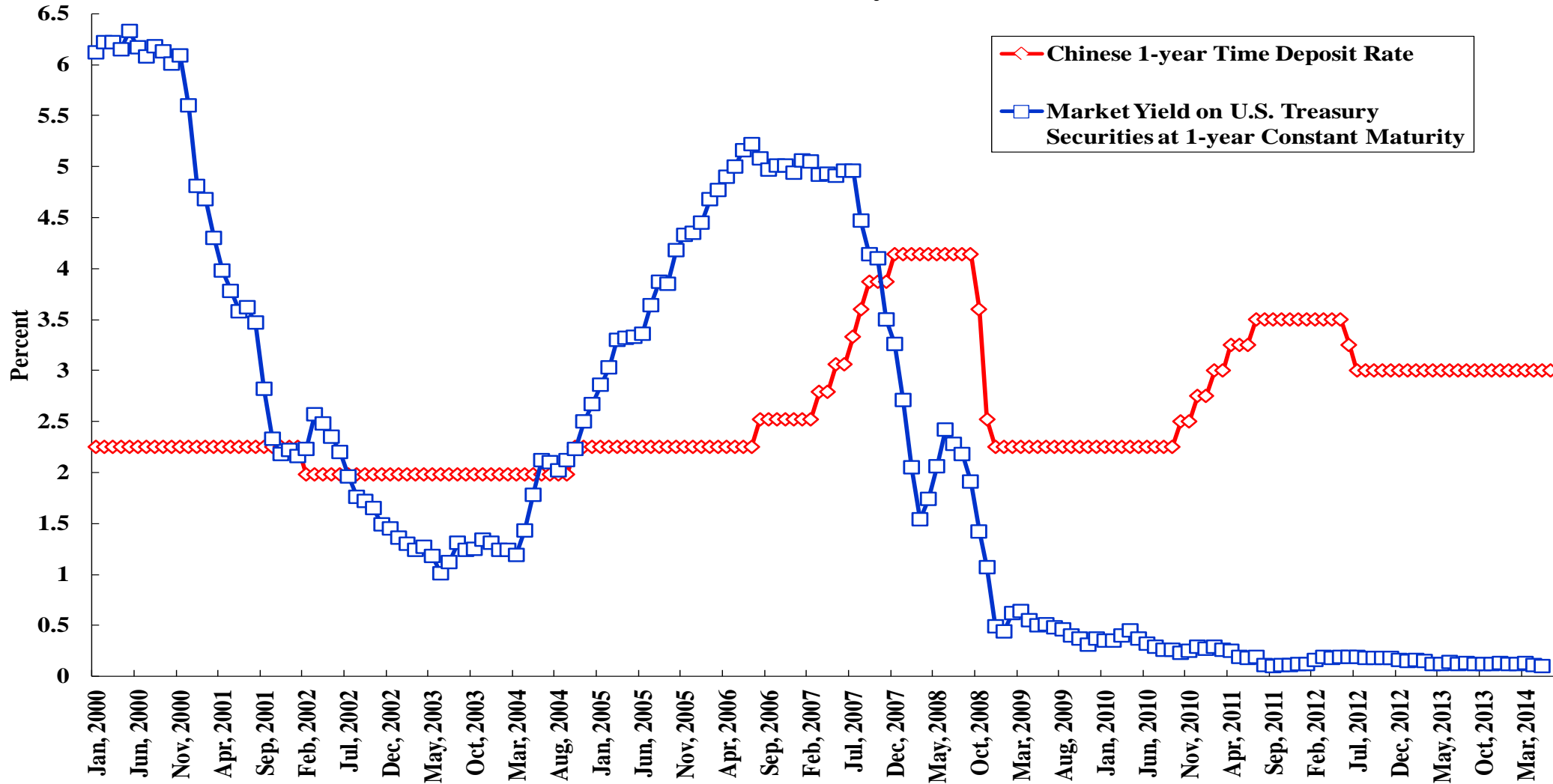
# The Chronically Excess Demand for Credit: China-U.S. Lending Interest Rate Differential

Chinese 1-Year Working Capital Lending Rate and U.S. Short-Term Lending Rate



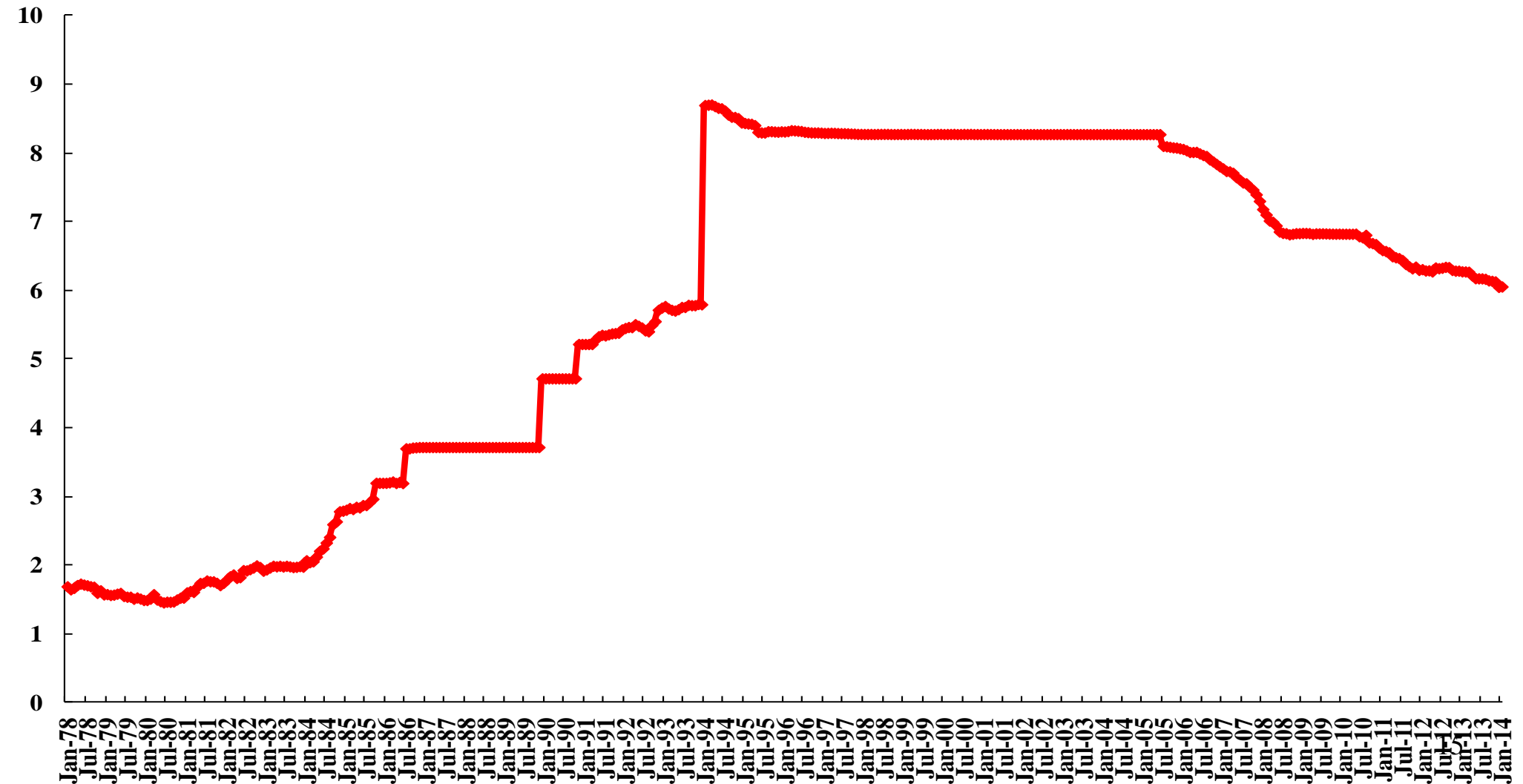
# The Chronically Excess Demand for Credit: China-U.S. Deposit Interest Rate Differential

Chinese 1-Year Time Deposit Rate and Market Yield on U.S. Treasury Securities at 1-Year Constant Maturity



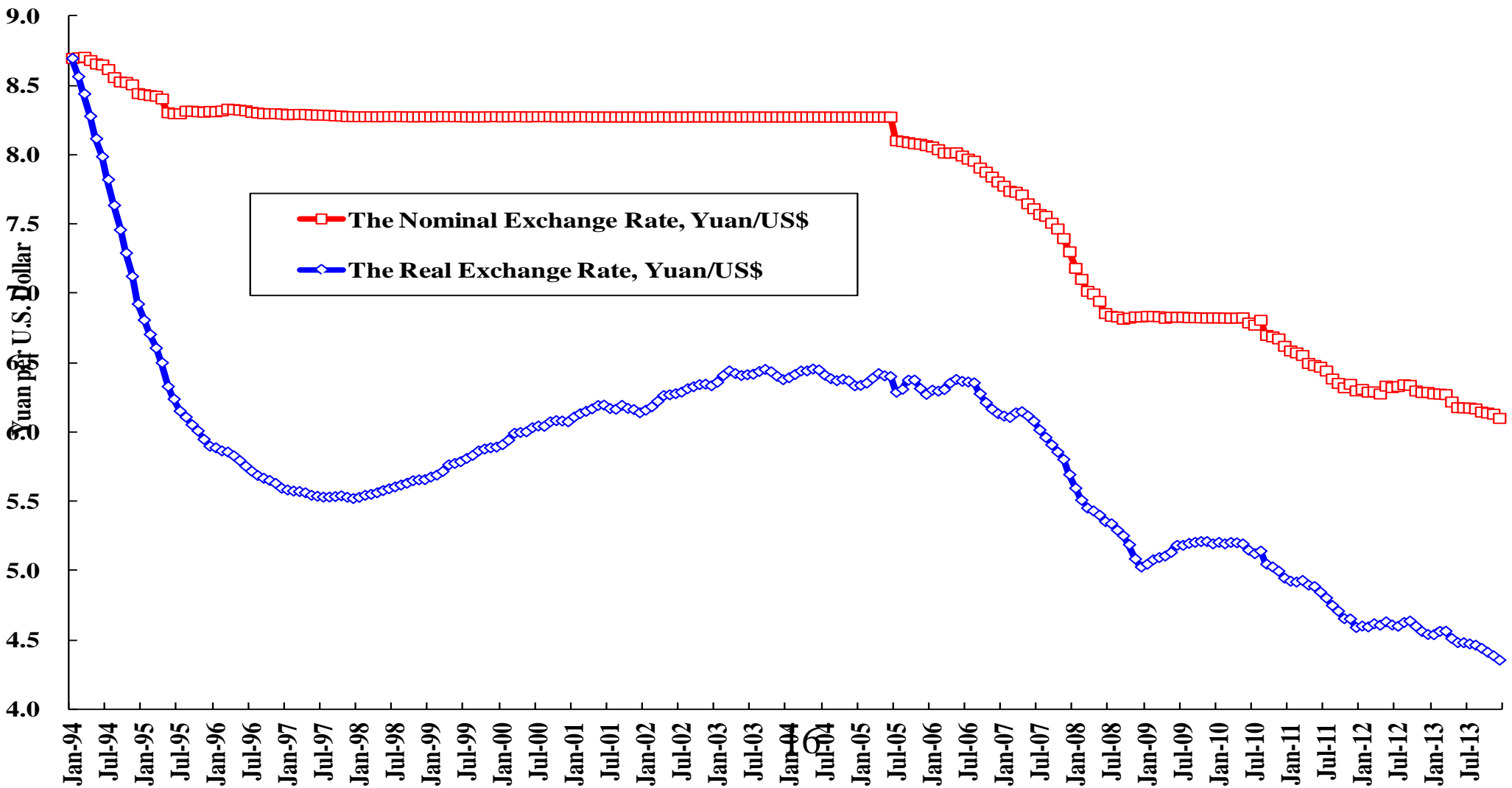
# Nominal Exchange Rate of the Renminbi, Yuan/US\$, 1978-present

Nominal Exchange Rate of the Renminbi, Yuan/US\$, 1978-present



# The Nominal and Real Yuan/US\$ Exchange Rates

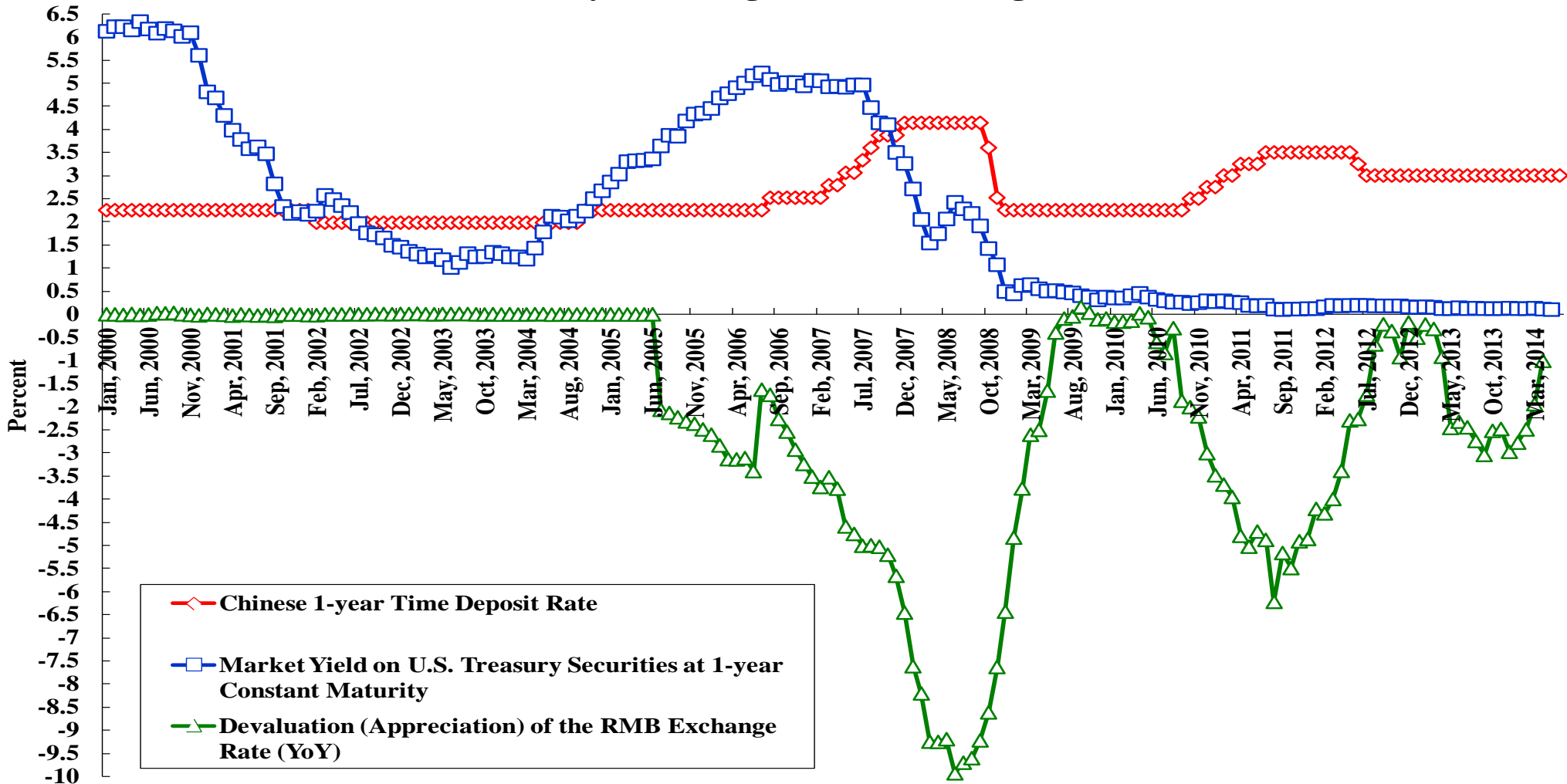
The Nominal and Real Yuan/US\$ Exchange Rates (1994 prices)





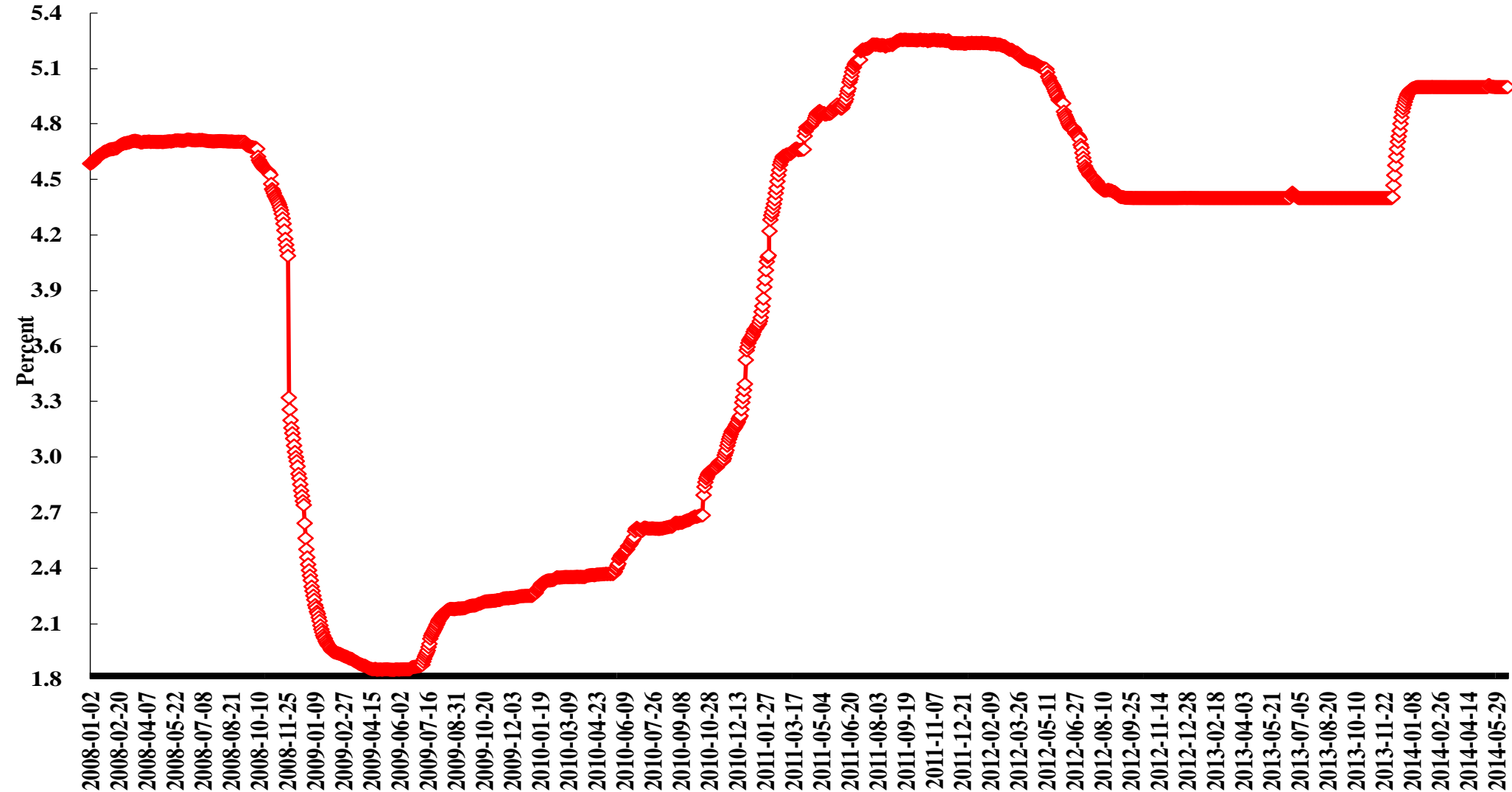
# The Chronically Excess Demand for Credit: Inconsistency with Interest Rate Parity Theory

Chinese 1-Year Time Deposit Rate, Market Yield on U.S. Treasury Securities at 1-year Constant Maturity and Changes of RMB Exchange Rate (YoY)



# The Chronically Excess Demand for Credit: The High Rate of Interest (SHIBOR)

Shanghai Interbank Offered Rate, 1-year



# China: The Surplus Economy:

## Excess Capacities in Manufacturing Sectors

- ◆ The fact that loans do not have to be repaid by the borrowers if things turn out badly leads to blind expansion of manufacturing capacities resulting in huge excesses in industries such as steel, cement, glass, aluminum, ship-building, solar panels, residential housing, etc.
- ◆ It also means that a high interest rate alone is not an effective deterrent to borrowing and to investment—this explains why the central bank has had to resort to credit rationing.
- ◆ The chronically excess demand for credit is also in part responsible for the growth of “shadow banking” in Mainland China. Shadow banking has resulted in higher “effective” borrowing rates for those enterprises and individuals who are able to obtain credit because of the shift to “shadow loans” from regular bank loans.

# Concluding Remarks:

## Sources of Aggregate Demand

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- ◆ Continuing Chinese economic growth going forward will depend mostly on the growth of internal demand (infrastructural investment, public consumption (education, health care and environmental control, preservation and restoration) and household consumption) and not on exports and not on manufacturing capacity expansion in the existing industries.
- ◆ In order to reduce the further growth of excess capacity, one must reduce the moral hazard in borrowing and hence in investing. One must also change the key performance indicators for the local government officials so that long-term economic viability and sustainability are also taken into account in addition to short-term growth in real GDP.

# Concluding Remarks:

## Demand-Constrained Output

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- ◆ One important implication of China being a surplus economy is that its output or GDP is not supply-constrained but demand-constrained—as long as there is aggregate demand, the supply will be there to meet the demand. The Chinese GDP is primarily determined by aggregate demand.
- ◆ Thus, the Chinese economy should have little difficulty in maintaining a real rate of growth of around 7% in the next five to ten years.