

**Prospects for Continued High Economic Growth in China**  
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## **I. Introduction and Summary**

This paper reviews China's current economy with an eye to its future prospects and the kinds of policies that can maximize the probability that China's growth by the middle of this century will leave it with a standard of living closer to that of Spain in the year 2000. The alternative is something more in the direction of a "sick-man" or "chaos" scenario of weak growth, social and political unrest, and resulting international tensions, not to mention standard-of-living challenges for ordinary Chinese.

The paper's approach is ad hoc, but the unifying theme to the paper is a skeptical view of any traditional market-oriented policy proposal that is not first tested against actual conditions in China's inherited environment of market failures and incomplete institutions. If Chinese policy makers continue to address the concerns highlighted in this paper and in some cases if they adjust their approach—especially in terms of rural grain policies—then prospects for continued high economic growth in China are quite good indeed.

## **II. How Hot is Hot? China's Recent Growth**

A year and a half ago, China announced first-quarter growth for 2003 of 9.9 percent. Global oil, steel, cement and other commodity prices started to rise, and China's banking and balance-of-payments statistics showed surging capital inflows leaking through China's capital controls. China seemed to be going from healthy growth to overheated growth and from what many said was a deflationary force in the world to the major cause of price spikes in industrial commodity markets. As China's growth and world commodity markets have played out in the 18 months since, this common interpretation of China's economy has if anything strengthened.

This picture is exaggerated in at least two ways. First, inflation data indicate China is not and has not been overheated, *per se*. What is interesting is that China has for at least three years actually been growing faster than official data show. And some sectors, such as real estate, have shown overheated tendencies. But "overheating" means unacceptably high rates of overall inflation, and we haven't seen that yet. Official CPI inflation is low (roughly 5 percent year-on-year in the third quarter of 2004), and even though other leading inflation indicators are in the high single-digit range, they are not close to levels in the past associated with overheating (see Figure 1). Hence, in spite of high growth rates and the potential for or threat of overheating, China's economy is hot but not overheated. Not yet.

Second, despite the media hype, China's fast growth and China's clear increasing significance for global commodity markets, China does not seem to be the major cause of many recently reported shortages. China has had rapid increases in demand for many commodities, reflected in what are for China large percentage changes in net exports and imports. But when

compared to recent absolute changes in developed country net trade and global trade, China's volume shifts are generally not dominant and in most cases still seem to take a back seat to the recovery of the OECD world from the 2002 recession.

The conclusion is that China's recent growth is hot, but not overheated, and China's contribution to heated global commodity markets is exaggerated. China could still become overheated, and China's importance for commodity prices will be a major part of China's future global role, but on the whole, this is not yet the case.

### A. Recent Growth Record – Official versus Expenditure Account Data

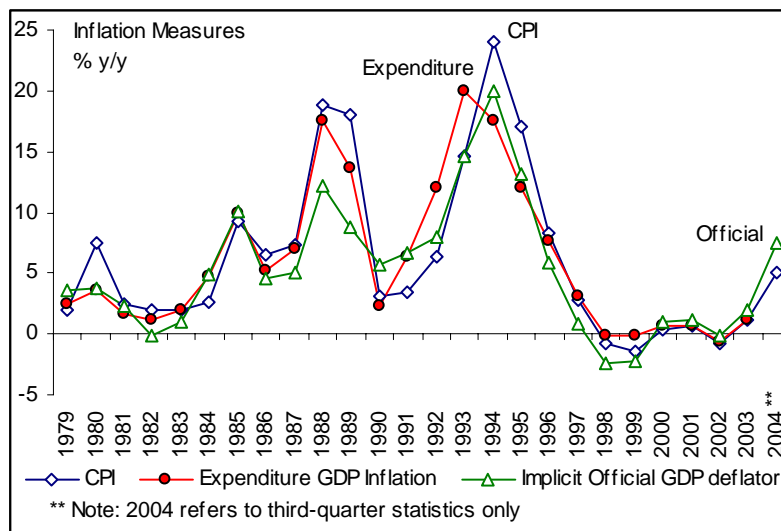
A more accurate picture of China's recent growth than that given by official statistics is found in analysis of China's GDP growth by expenditure accounts (see Figure 2). While official GDP growth rates for 2001, 2002 and 2003 are 7.5, 8.5 and 9.3 percent, respectively, deflation of official GDP expenditure accounts with official sector inflation indexes results in growth rates for these three years of 9.5, 9.8 and 11.1 percent, respectively<sup>1</sup>.

Which data are better, official growth rates or expenditure growth rates? Most of the world uses the expenditure method for calculating GDP and GDP growth, and China is itself preparing to strengthen its publication of expenditure-account GDP data, both annual and quarterly<sup>2</sup>.

Furthermore, National Bureau of Statistics (NBS) professionals have told the author, when asked about calculating an appropriate deflator for GDP, that it would be better to rely on price data that come from actual price surveys. This is not possible for official GDP data. For official GDP data, the growth rate has generally been set independently of current-price data and component price deflators, so that the GDP deflator is always an implicitly derived statistic (see Figure 1).

NBS revisions to GDP growth rates and current-priced data illustrate this point. While NBS over time revises current-priced figures significantly, it rarely revises growth rates. For example, NBS eventually revised downward the official current-priced GDP level for 1998 by 1.5 percent, but the growth rate was never adjusted at all<sup>3</sup>. Modest revisions have begun to appear recently, but the changes still indicate that the official GDP growth rate has a life of its

**Figure 1**  
**CPI and GDP Deflator Measures of Inflation, 1979-2004\*\***



Sources: Author's calculations from data in (NBS 2004) and previous editions of same.

<sup>1</sup> For methodology, see Keidel 2001. This series uses growth based on *t-1* for prices and weights and on NBS Rural Household Survey data for rural household consumption trends.

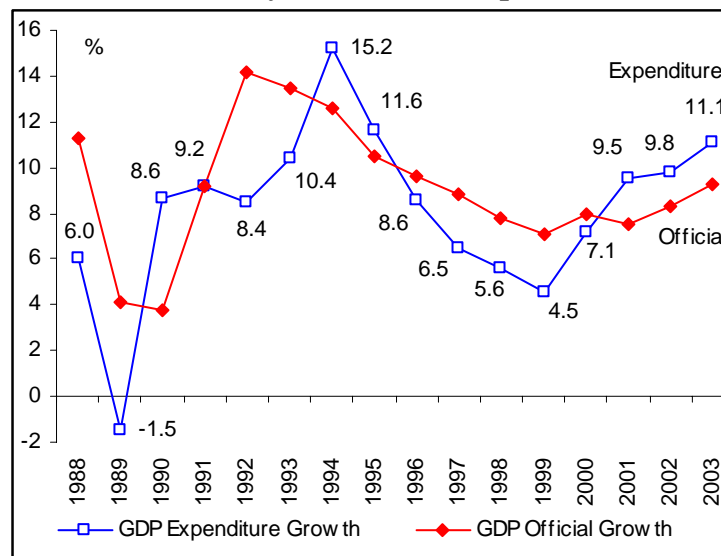
<sup>2</sup> See Xu 2003 and Xu 2004.

<sup>3</sup> See Keidel 2001.

own. For example, since it was first published in 2002, NBS has revised upward the official current-priced 2001 GDP figure by 1.4 percent, but it only increased the growth rate from 7.3 to 7.5 percent, that is, only 0.2 percentage points, when the revision, properly deflated, should have caused an increase of 1.5 percentage points, to 8.8 percent GDP growth.

All of this supports this author's assertion that independently calculated expenditure GDP growth rates are less political and more accurate than official growth statistics.

**Figure 2**  
**GDP Growth Rates by Official and Expenditure Measures**



Sources: NBS 2004, various pages; Peoples Daily English 10/15/2004; author's calculations.

The conclusion is then that China's economy was very hot as early as 2001, when it was already growing at a 9.5 percent rate. How did the economy turn around so fast from the growth slump of 1997-99? This paper will detail in a later section why a shift in rural policies in 2000 likely played an important role. But first, this finding, along with more direct evidence, causes us to reconsider the judgment that China's rapid growth has been a major cause of global commodity shortages.

## **B. Exaggerations of China's Part in Recent Global Price Rises and Instability**

Business media this year, particularly in their headlines, have emphasized China's role in surging world commodity prices, especially oil, saying things like "Booming China Devouring Raw Materials" and "China's Industrial Boom is Inflating Commodity Prices"<sup>4</sup>. Comprehensive statistics on this question are hard to come by, and such an investigation is not central to this paper's general thesis, but a quick examination of a few such claims raises doubts about China's overall responsibility for recent global commodity market spikes.

The first commodity deserving attention is petroleum. Rapidly rising petroleum product prices this year have captured headlines worldwide and influenced stock market swings. Headlines especially like to mention China, such as in the New York Times, "Will Oil Prices Come Down? Growth in China and Falling Dollar Highlight Uncertainty"<sup>5</sup> and from Bloomberg recently, "Oil Extends Two-Day Fall as China's Rate Rise May Cut Demand"<sup>6</sup>.

But when seeking an explanation of oil price rises this year, most analysis focuses on the scale of China's global consumption or on growth rates of Chinese oil imports, rather than on the

<sup>4</sup> Goodman 2004 and Bradsher 2004.

<sup>5</sup> Bradsher 2004

<sup>6</sup> Bloomberg 2004

relative scale of increases in China's oil trade, saying things like, "China recently overtook Japan to become the world's second biggest oil consumer after the US, ..." and "China imported a total of 79.9 million tonnes of oil between January and August [2004], a 39.9% increase on the year, ..."<sup>7</sup>.

What such analysis ignores is that China is not only one of the world's largest consumers of many commodities; it is also one of the world's largest producers.

A preliminary look at relatively easily available data shows more detail for 2003 than for the first three quarters of 2004. The conclusions are similar, however, China is a factor, but not the major factor, and U.S. demand increases alone are greater than China's, not to mention other countries and regions.

For 2003, taking the U.S., Western Europe, Japan, China and the rest of Asia together, crude imports increased by 2 million barrels per day. China only accounted for 440 thousand barrels per day of the increase. U.S. imports increased 600 thousand barrels per day for the year. Europe, Japan and other Asia combined saw an increase of roughly a million barrels per day. The picture for refined petroleum products is more complicated because Western Europe reduced imports and increased exports, but the U.S. in 2003 increased product imports by 300 thousand barrels a day, while China's increase was 130 thousand barrels. For net imports, China's gasoline exports make the difference even larger: U.S. net product imports of 280 thousand barrels, versus China's 60 thousand barrel increase.<sup>8</sup> So, yes, China's increase was high in percentage terms, but in terms of impact on the market, it was not the major factor at all. The world economy recovered from recession in 2003, while China had been growing rapidly since 2001, as we have seen. And this analysis doesn't even include increased consumption due to the war in Iraq, for which data do not seem to be readily available.

For the first three quarters of 2004, easily available data allow only a comparison between China and the U.S., but even here, while China's growth rate for crude oil imports was high (34 percent) compared to the U.S. (6 percent), the increased in volume was actually slightly larger for the U.S. (570 barrels per day, versus 560 barrels per day for China). Further research, as data are available, will hopefully fill out the increases in other parts of the world for the same period, since this paper's 2004 comparison could not find quarterly data on trade in petroleum products or petroleum trade by Western Europe, Japan, other Asia or Iraq. It is clear, however, that China is not the dominant force.

A second example of needed moderation in describing China's current impact on global commodities is cement, the key ingredient in concrete. Headlines like "China's Expansion Squeezes Cement Supply"<sup>9</sup> have been telling the story of cement shortages in more than half of the United States and placing the blame on China's urbanization programs and preparations for the 2008 Olympics, noting that China produces 725 million tons, or 43 percent of the world's cement (in 2003)<sup>10</sup>. While this is true, China also consumed all but 5 million tons, the scale of its 2003 exports, which were up 4.4 percent<sup>11</sup>. Of this 5 million tons in exports, the U.S. imported

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<sup>7</sup> BBC News 2004

<sup>8</sup> All data from Bloomberg, with author's calculations

<sup>9</sup> Fleishman 2004

<sup>10</sup> Wood 2004

<sup>11</sup> PRC Customs 2003

less than 2 million tons, out of total U.S. imports over 20 million tons. In the scheme of things, China's scale of cement exports is not large.

Furthermore, other events have made this year a difficult one for the U.S. cement-consuming market, especially in the big Florida market, and these events had nothing to do with China. Many accounts note that the warm winter in the U.S.—and low interest rates—encouraged a US building boom right through the winter of 2003-04, a time when domestic producers of cement usually build up inventories for the coming season. When the season came this year, domestic inventories were depleted. Furthermore, in May, just as the construction season got going, a leading national U.S. cement manufacturer cut back its production in Florida for equipment upgrades<sup>12</sup>. The U.S. has also places high tariffs (50-80 percent) on Mexican cement because of anti-dumping actions.

A final factor, which is also difficult to quantify, is China's impact on dry-bulk shipping availability, making delivery of cement to Florida and other port-dependent U.S. locations much more difficult. Analysis of this issue is beyond the scope of this paper.

In sum, the China Olympics construction angle makes a good story, but just as for petroleum, U.S. domestic demand and supply issues are more important. China's economy is indeed hot, and it is a growing factor to consider, but just as China's domestic market is not yet overheated, so China is not yet so clearly the cause of certain heated global commodity markets. In due time, even if China's economy does not overheat—especially if it does not overheat—China is likely to have a major impact on all global markets even more than today. It is this eventuality to which we now turn.

### **III. What are the Stakes? China's Future Possibilities**

Can China continue to grow at the overall pace it has enjoyed the last 25 years? How much does it matter whether China succeeds in doing so? It is useful to consider the two extremes of China's possible future economic performance.

The first is the success story. If China continues to average high single-digit growth for the next 50 years or so, it will have a standard of living equivalent to Spain's today. This projection is independent of whether one uses national growth rates at commercial exchange rates or appropriately adjusted PPP growth rates with PPP conversion factors. What one must be careful not to do is to use projections of national accounting growth rates from a PPP base. This common practice seriously inflates estimates of China's future economic size—exaggerating the speed with which China's economy will overtake that of the U.S. in total size.

Instead, with reasonable assumptions about U.S. and Chinese future growth, China's total GDP does not overtake that of the U.S. for roughly 50 years, rather than in the two or three decades frequently predicted. The following results come from a three-sector national accounting model in both current prices and real prices, with compatible calculations of commercial exchange rates and PPP equivalents adjusting over time as relative prices adjust in the process of moderate inflation through the year 2050 for both the U.S. and China such that China's relative prices in 2050 approach those of Spain in 2000. The results thus automatically show how China's PPP conversion factor might adjust on a three-sector basis, and the difference

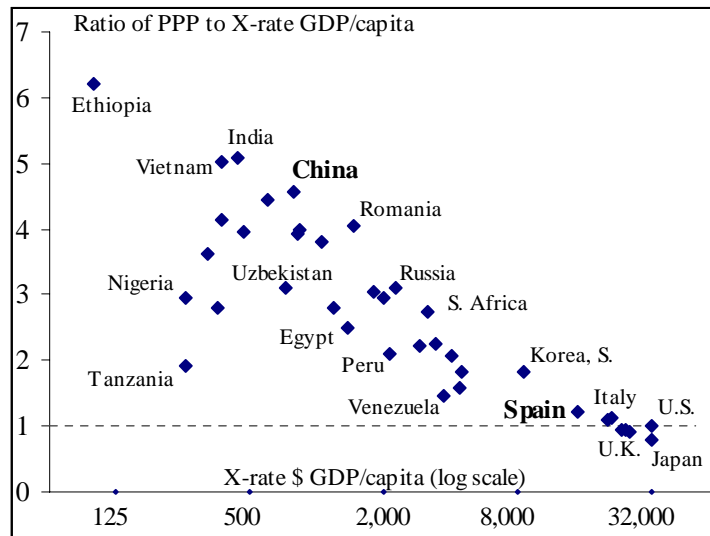
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<sup>12</sup> Metro West 2004

this makes when considering China's actual GDP size in 2050 (and for years in between if wanted).

The major conclusion is that for China between the years 2000 and 2050, the difference in PPP and national accounting growth rates averages 2.7 percentage points per year, if we assume national accounts average growth of 6.6 percent. Hence, if China's GDP in real terms by national accounting statistics averages 6.6-percent growth through 2050, as assumed in this exercise, China's growth rate in PPP terms will be only 3.9 percent. Under these assumptions, by 2050, China's GDP and GDP per capita by national accounting measures (converted at a real exchange rate) will converge to a figure very close to China's PPP measures in 2050.

**Figure 3. Ratios of PPP to Exchange-Rate GDP/Capita**



Source: World Bank World Development Indicators and author's calculations.

The convergence of PPP and national accounting measures converted at commercial exchange rates is commonly noted in PPP studies. What is more, especially in China's case, the adjustment of relative prices during the process of economic reform operates to raise service sector prices dramatically. These are just those prices which, because of their low levels, result in a large PPP-to-exchange-rate-measure (PPP-ERM) ratio. Consequently, there is strong logic supporting the presumption that relative price shifts over time in China will reduce its PPP-ERM ratio in a pattern similar to the cross-section pattern shown in Figure 3.

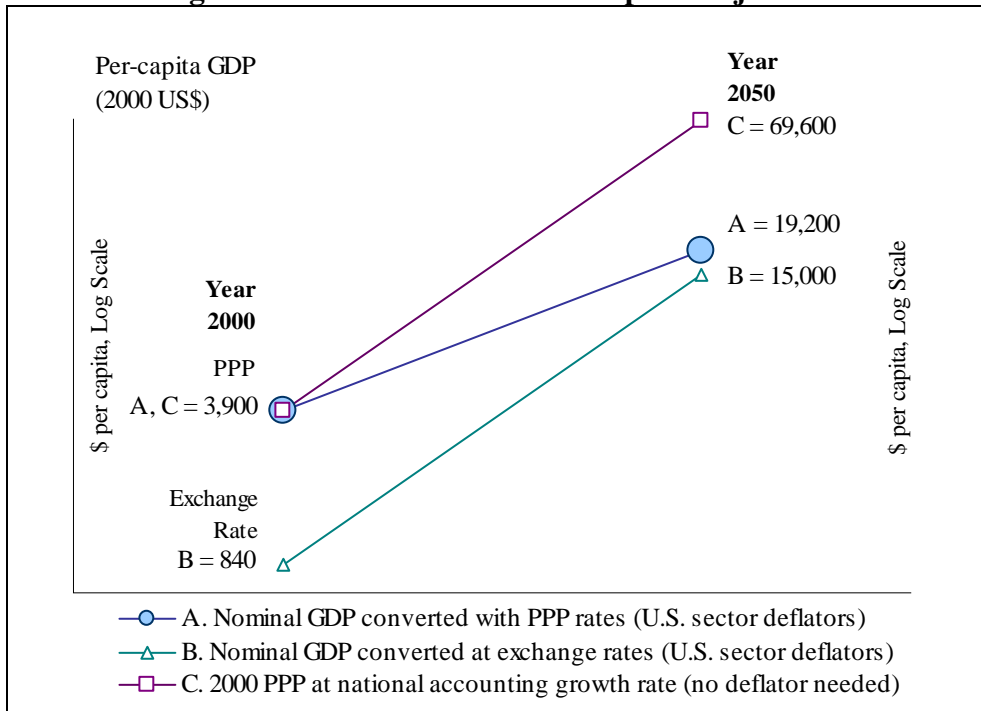
Figure 3 illustrates that for its per-capita GDP level by national accounts and converted at the commercial exchange rate (roughly \$850 in 2000), China in 2002 had a relatively high corresponding World Bank PPP measure (roughly \$3,900 PPP dollars).

This high PPP-ERM ratio (roughly 4.6) could be due to a number of factors, such as: (1) Exaggeration in the World Bank's PPP measure for China, (2) Undervaluation of China's commercial exchange rate, or (3) especially severe skew in China's relative prices, as service sector prices in 2000 were still unusually low by developed-country standards relative to prices of traded manufactures.

The first and the third reasons above are important, and while relative prices are clearly a potential factor, it is also virtually certain that the World Bank PPP estimate is exaggerated.

China's relative prices, inherited from a planning era, were inordinately skewed in the direction of exaggerating manufactured goods prices and undervaluing all services. In part as a result of this initial skew, relative prices have been adjusting rapidly, especially with recent reforms raising prices for housing, education, healthcare, and transportation—to name only a few. As these reforms continue and as China's markets continue to open under WTO accession, China's relative prices will continue to adjust in the direction of those more common in market economies.

**Figure 4. Alternative GDP Per Capita Projections**



Sources: World Bank 2002, NBS 2004 and author's modeling

Assumptions:

6.6%=China Nat'l Accts GDP Growth Rate; 0.7%=China Population Growth Rate

The World Bank's PPP estimate for China, however, is also likely significantly overstated for two reasons: first, the initial estimate, using 1987 data, was based on rough price comparison data with incomplete account taken of quality differences between the U.S. and China, especially for services. This factor is serious enough to result in significant overstatement of the initial 1987 estimate<sup>13</sup>. Second, The World Bank has subsequently updated this initial 1987 number using aggregate national accounting real GDP growth rates, which make no allowances for rapid shifts in relative prices as service sector prices increased through reform of China's price system. This is equivalent to saying that the PPP-ERM ratio in 2000 was the same as in 1987. To the degree that this is not the case, exaggerations could become amplified.

This exercise illustrates that if China's per-capita GDP grows on average at 5.9 percent a year between now and 2050 (equivalent to 6.6-percent total GDP growth with 0.7-percent population growth), China's GDP per capita in 2050 will reach levels equivalent to Spain's in 2000 (in 2000 prices, roughly \$15,000 at commercial exchange rates and \$19,000 in PPP dollars). Additional crude calculations assuming U.S. average growth of 2.5 percent gives the result that total economic size for China and the U.S. would be about the same in 2050. This is a much later date than what a calculation with national accounting growth rates would give.

Figure 4 illustrates the difference it can make when one assumes that PPP-exchange-rate differences decline significantly by 2050. Points A and B are correct: Point A shows what happens to nominal GDP converted at the correct PPP conversion rate (deflated to 2000 prices with the model's U.S. price deflator); Point B illustrates nominal GDP at commercial exchange

<sup>13</sup> Keidel 1995

rates (similarly deflated). Point C shows the result using an average national accounts real growth rate (in this case 6.6 percent) to project from a PPP base. These results need more work, including extension to intermediate decades between 2000 and 2050, but the lesson is clear—China’s economy will be very big in coming decades, but not nearly as big as some casual PPP-based calculations would make it.

This growth scenario is the optimistic scenario, and one can imagine a concomitant maturing of China’s social and political institutions as well as China’s international relations. Economic success on this scale will certainly make modernization in many such dimensions much easier.

The negative scenario for China, in its extreme version, envisions China’s economic development process failing. This has been called a “chaos” scenario.<sup>14</sup> It might also be called a “sick man” scenario. If the growth process breaks down, for one of a number of reasons including the inability to manage financial crisis or generate adequate sustained domestic demand, social and political repercussions could be far-reaching, including re-emergence of severe widespread poverty, appearance of organized crime on a scale able to intimidate and manipulate local and national governments, and a defensive political regime relying increasingly on jingoistic nationalism if not adventurism to rally support and stay in power. In such a setting, the outflow of boat people would be large and growing, China’s cities would become swamped with poor migrants and high rates of street crime. China’s international relations could become strained at best.

While this sick-man scenario is hard to imagine at the moment, over a period of many decades the world has seen a number of promising economies spiral downward and stagnate, both in Latin America, Asia and Africa. For this reason, the stakes are high, and an understanding of how best to promote something closer to the optimistic scenario assumes considerable importance. The paper’s following sections shed light on a few relevant factors for strengthening such understanding.

## **IV. What to Do? China’s Major Policy Challenges**

The sections below outline five major areas where China’s progress and policy skills will be important for results closer to those outlined above in the optimistic or “Spain 2000” scenario. The common theme for all of them is the need for government to intervene actively and in a timely way at the same time that the much slower process of building market-friendly institutions proceeds. The greatest risks come from policies that assume prematurely that market institutions and conditions for freer markets are in place and operational before they fully are. This implies a continuing role, for quite some time, for economic agencies capable of monitoring the overall economy and designing ad-hoc interventions as they are needed, rather than relying purely on market instruments.

### **A. Population Dislocation and Transformational Resistance**

By far the most fundamental challenge facing China’s policy makers is correction of its inherited population dislocation, by which hundreds of millions of workers are in the wrong location and wrong kind of work for the shift to a “Spain 2000” China of the future. Most workers are in agricultural areas in interior locations where a centuries-long equilibrium process

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<sup>14</sup> Whyte 2000.

has put them where rainfall and soil were most propitious. Exacerbating the distribution of the farm labor force is the distribution of industrial workers inherited from the Maoist period, by which manufacturing employment was first concentrated in the Manchurian provinces close to both Japanese industrial investments and technology arriving in the 1950s via the trans-Siberian railway. A second mislocation occurred in the 1960s when China, anticipating large-scale war, moved much of its industrial capacity deep into its interior.

For China's modern economic expansion, many if not most of these workers will have to move to China's growing urban centers, all of which are at major crossroads for transport and communication, heavily located in coastal areas. In addition to moving location, a large-scale employment shift from China's primary sector (basically agriculture) to secondary (industry and construction) and tertiary (services) jobs is essential.

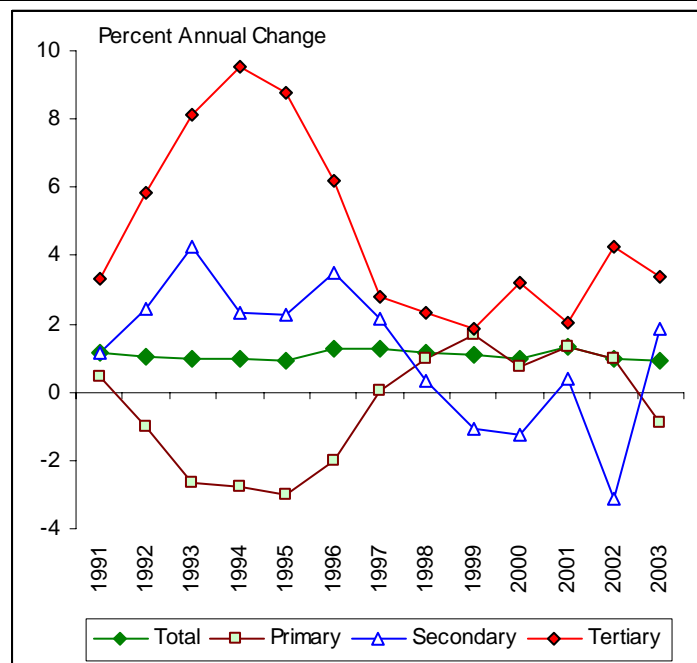
Rural-urban migration has waxed and waned in the last two decades, with statistical analysis difficult at best because of poor coverage by household surveys. But quasi-official statements give the impression that this floating population is on a scale somewhere between 100 and 200 million. Statistical data are available, however, for employment by sector, and the picture has not been an encouraging one over the past 8 years. Figure 5 shows that from 1997 through 2002, employment in farming reversed its direction from the earlier 1990s and actually increased every year. Only last year, 2003, did primary-sector employment begin to decline again.

At the same time, employment growth in services has only gradually and fitfully begun to recover from its sharp decline in the latter 1990s. It has still not reached rates of increased achieved in 1992, the year before China's most recent overheating episode.

Similarly, only last year, in 2003, did secondary employment really begin to grow again. A good portion of the decline in industrial employment in the latter 1990s reflects aggressive reforms in the state-owned sector, and while more work is needed on the question, the downward trend in 2002 might reflect labor shedding linked to recession that year in North America, Europe and Japan.

A major conclusion from this picture of employment pattern evolution is that growth rates in 2001-02 do not seem to have been strong enough to reverse the continued increase in farm employment. If this is true more generally, then China may need a "hot" economy growing close to 10 percent or more to achieve the structural transformation it needs going ahead.

**Figure 5. Employment growth, 1990-2003**



Source: NBS 2004

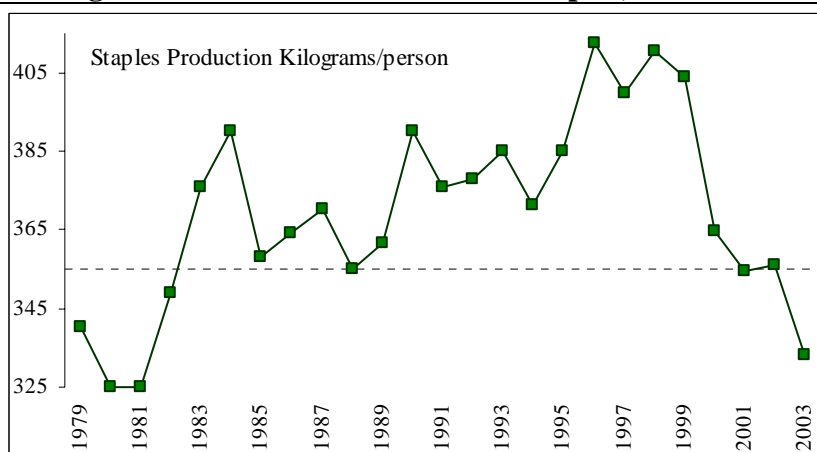
This conclusion may not hold long-term, however, if Chinese policy makers pay more attention to the rural economy and the macroeconomic implications of China’s traditional grain-planting and grain-importing strategies. Figure 6 presents the core problem facing policy makers. Grain production per capita fluctuates dramatically over the reform period since 1978. The declines in per-capita production in 1985, 1988 and 1994 prompted quick policy adjustments to put pressure on Chinese farmers to plant more grain, most recently in 1995 with a policy called the “Governors’ Grain-bag Responsibility System.” A similar effort has been implemented in the winter of 2003-04, with governors again responsible for assuring, by whatever means, an adequate provincial supply-demand balance.

The difficulties with this policy are that farmers make very little money per hectare of grain planted and would much rather plant their limited land in vegetables, fruits and industrial crops, or turn it into fish ponds. Hence, without official pressures to plant—pressures in many cases impossible to resist—farmers shift out of grain planting whenever they get the chance. When they are forced to plant, however, as they are once again this year, the usual successful harvest response is frequently enhanced by good weather, and the second difficulty appears—the price of grain drops so low that farmers’ incomes can be severely affected. In the past, this decline in price and in income for grain-planting farmers has prompted grain purchase subsidy schemes which, despite their high budgetary and state-bank costs, are generally inadequate to improve farmers’ incomes appreciably. The combination of high budgetary cost and low farmer incomes has repeatedly led to abandonment of pressures to plant grain, such as in 1985, 1988, 1991 and 2000.

This policy process has had a severe dampening effect on China’s overall macroeconomy in the latter 1990s. By 1997, China had clearly solved its grain production problem, and CPI inflation had fallen close to zero. But policy makers made the mistake of maintaining the planting requirements through 1999, during which time farm consumption outside peri-urban areas declined substantially, weakening markets for low-and medium-end manufactured goods. Chinese officials have variously blamed the growth slump of the late 1990s (which is shown more accurately with the expenditure measure of GDP in Figure 2) on the Asian Financial Crisis and on what they call a “surplus economy”, as if to say China had been too successful in manufacturing consumer goods, creating a surfeit. China’s overall low per-capita levels of consumption for manufactured products contradicts such an explanation.

The connection between this grain-cycle trap and restructuring China’s labor force is the link between an evolving rural middle class and its likelihood of successfully migrating to good non-farm employment, most likely in cities and towns. On the one hand, urban-rural income and consumption inequality provide needed incentives for the farm labor force, especially the younger generation, to migrate

**Figure 6. “Grain” Production Per Capita, 1979-2003**



Source: NBS 2004 and additional previous issues, with calculations.

out of farming voluntarily. On the other hand, however, if the poverty implications of China's traditional grain strategy leave a large segment of the interior rural population so poor that migration is less likely to be successful, then the whole transformation process is slowed.

Recent evidence from a large interior province, Anhui, indicates that this is a significant concern. Size distribution of income data for the rural population in Anhui, which numbers 50 million persons, shows that for 20 percent of the population, incomes actually declined in 2003—this when China's overall economy grew at over 11 percent. The per-capita annual income levels of these ten million rural persons all fell below 160 US dollars<sup>15</sup>. This pattern of a decline in income for the bottom 20 percent of provincial rural population is not seen in coastal provinces for which the author has copies of 2004 yearbooks.

The long-term strategy requirement is for China to import more grain over time, allowing more farmers permanently to leave grain production. Such a step however, has national security implications for Chinese decision-makers concerned that large-scale grain imports would leave China vulnerable to external pressure from grain-supplying regions.

A second important component of China's labor restructuring challenge is increased access for rural migrants to permanent urban citizenship status. China's household registry system (or "hukou" system, in Chinese) has traditionally reserved urban jobs for hereditary urban workers, defined on a matrilineal basis. In this regard, authorities have already made a great deal of progress, and the hukou system in its original form is now abolished in cities as large as Zhengzhou, the capital of Henan Province. Rural migrants can increasingly purchase urban citizenship with proof of a steady job and a permanent residence.

Reform of the hukou system is just one of the more bureaucratically tractable aspects of a broader challenge to labor restructuring—the traditionally subsidized living standard of hereditary urban-registered citizens. To support "socialist" living standards for its industrial labor force, the pre-reform Maoist period used a system of relative prices that overpriced for urban manufactures and under-priced for rural foods and raw materials. The result was an urban population living well above its level of productivity, valued at more reasonable prices. When market reforms in the 1980s resulted in rapidly rising rural prices, eroding urban standards of living, the reaction in 1989 turned violent.

This author's evaluation of the Tiananmen uprising, both from being there at the time and studying it subsequently, is that it resulted largely from erosion of urban subsidies by market reforms—apparent most dramatically in the rampant inflation of 1988. Since that episode, Chinese authorities have treaded lightly on urban standards of living, in spite of the state-enterprise layoffs of the latter 1990s. This potentially explosive urban backlash requires that a whole range of reforms, from financial reforms and enterprise reforms to taxation and housing reforms proceed carefully and with a wide range of non-market economic safety procedures enabled, to ensure that appropriate economic measures to head off potentially violent circumstances are both legal and financially viable.

## **B. Urban and Transport Infrastructure**

The second major challenge for China's economy going forward is to mobilize investment in its capital stock, especially in urban and transportation infrastructure, on a scale

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<sup>15</sup> Anhui BS 2004

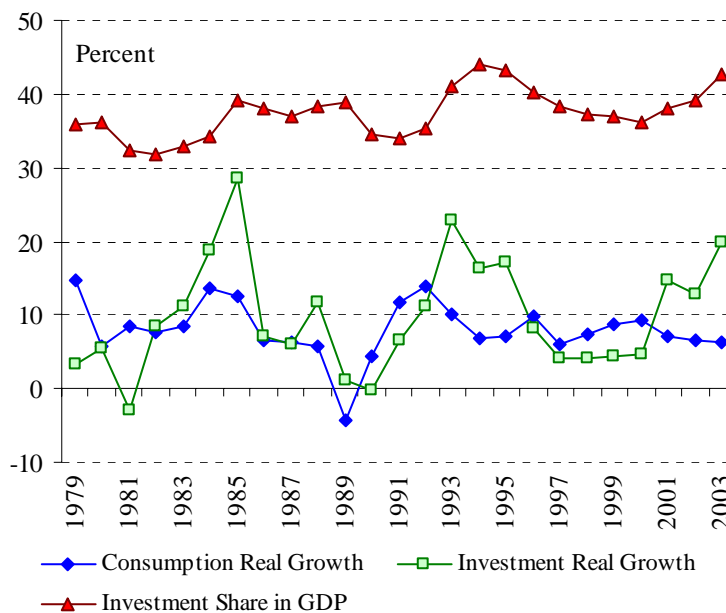
adequate to complement the necessary rural-to-urban and inter-regional migration. Chinese visitors to the U.S. often complain that China has too many people, but the converse of this judgment is that China has too little capital. This is especially so for urban infrastructure and other facilities, including housing and workplace investments.

It is ironic that one of the most important contributions to transformation of China's rural economy could well be investment in China's cities. Not only demand for streets and structures, but also for mass transit, water and sewer, schools, health facilities, electric power and communications capacity in urban areas will present the economy with rapidly expanding demands. By extension, transportation linkages to rural regions and between urban areas will need to continue to improve. All of these developments are clearly on government drawing boards, especially for the considerable public-goods components of future capital investment needs. Successfully managing investments on such a scale and insulating it as much as possible from slowdowns and wasteful misallocation are critical tasks for the coming decades.

In this regard, it is not clear that there is any necessary reference or guideline concerning the overall level of investment in China. Figure 7 shows the dramatic gyrations of China's investment growth rates over the reform period since 1978 and how once again the rate of investment out of GDP has risen well above 40 percent. Related calculations show that China's incremental capital output ratio (ICOR), for what it is worth, is higher in the 2001-2003 period (3.7 to 4.0) compared to the early 1990s (2.6 to 3.5)<sup>16</sup>.

Is 43 percent too high for China's investment share in GDP?<sup>17</sup> While China has only matched this rate of investment once, in 1994-95, a look again at Figure 7 shows that on that occasion, as presently, consumption growth was anemic, noticeably slower than GDP. If the rural economy were allowed to recover so that total consumption grew somewhat higher than GDP, the investment rate would almost necessarily moderate. More importantly, as long as a high investment rate neither damages consumption levels nor runs into supply constraints that trigger serious inflation, there is no intrinsic upper bound on investment levels as a share of GDP, even if they rise above maximum rates for other economies in their rapid growth periods. It is

**Figure 7. Investment Growth and Share of GDP**



Source: NBS 2004 and author's calculations.

<sup>16</sup> Using expenditure GDP growth rates and noting that ICORs are notoriously sensitive to demand variations, such that the overheating of 1993-95, together with credit tightening and investment deceleration naturally results in an elevated ICOR.

<sup>17</sup> Goldstein and Lardy 2004

more important to relieve supply constraints as they appear while maintaining and improving consumption levels, possibly by shifting to a modest trade deficit.

In sum, sustaining high levels of investment, especially for urban infrastructure—as well as national transportation and communications—is an essential dimension of China’s development challenge. Accomplishing a high investment rate out of GDP, while limiting its overall inflationary impact, should be a long-term goal for Chinese policy makers.

### **C. Fiscal Weakness and Financial Temptation**

Such large investment needs immediately focus attention on China’s fiscal and financial systems. The policy challenge in this dimension is to mobilize resources, especially for a wide variety of public purposes, while at the same time building the institutional framework for a fiscal and financial system eventually relying more heavily on market-oriented instruments and policies. For the time being, however, the task is to use every means available to compensate for market failures in China’s public finances and financial intermediation process and ensure that the levels and directions of investment meet China’s long-term needs.

China’s low tax revenue yield out of GDP is well known, in spite of significant improvements in recent years from a range of reforms over the past ten years, lifting the yield from a low of 11 percent in the middle 1990s to just under 19 percent in 2003<sup>18</sup>. This record is slightly improved when extra-budgetary revenues, mostly local-government, are taken into account. They add between 4 and 5 percentage points to revenue shares in GDP in both the middle 1990s and early 2000s<sup>19</sup>.

With the many current expenditures in China’s budget, investment out of combined central and regional budgets amount to less than 5 percent of GDP<sup>20</sup>. With the many public investment needs for urban, transport and other infrastructure, is this enough? Traditionally, China has also drawn on its financial system to supplement budgetary funds for investments and other expenditures considered strategic, whether investment or current expenditures. It is difficult to quantify this policy-loan dimension of China’s financial system, but it is large and includes careful management of capital-market listing privileges as well, directing the funds to firms considered strategically key for long-term growth.

Given the severely underdeveloped state of China’s financial system, including its bank governance and regulatory systems, and perhaps most importantly the poor quality of its corporate client base—whether private or state-owned—such a hybrid quasi-fiscal financial system is almost certainly optimal for China in this phase of its economic development and transition.

International authorities on this question have not made a persuasive case for rapid introduction of a market-based financial system under such circumstances. For example, The World Bank’s publication on this matter a few years ago, *Finance for Growth*<sup>21</sup>, contains internal contradictions, stretches its statistical findings, and can be said to be missing a chapter.

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<sup>18</sup> NBS 2004.

<sup>19</sup> NBS 2004 with data through 2001.

<sup>20</sup> NBS 2004

<sup>21</sup> World Bank 2001

Internal contradictions arise because of the study's initial assertions that a modern financial system cannot be built on a foundation of "sand"—that is, weak accounting systems, weak regulatory systems, and weak legal systems. The study nevertheless proceeds to recommend a modern financial system for countries that clearly still have foundations of "sand."

The study stretches its statistical findings—which are essentially that a large time-series and cross-section econometric exercise with data from 1960 to 1995 shows that countries with liberalized financial systems at the start of the period experienced higher growth. But the exercise only achieved statistical significance when European countries recovering from World War II were included in the sample. Without them, the results were inconclusive.

Finally, the study is missing the chapter advising developing and transitional countries about an optimal financial system when they still have a foundation of "sand." The study is silent on this issue. Perhaps excluding such a chapter is understandable, so as not to promote a "second-class" set of standards where developing countries might get stuck in their institutional and policy development. But its omission provides no assistance to policy makers in developing and transitional economies about an optimal financial system for use with a foundation of "sand." Nor does the omission help analysts evaluate China's financial system, which is gradually building its financial system as it firms up its foundation from "sand" to more solid institutional supports.

What is more, in China's case, excessively rapid adoption of first-world institutions and policy instruments, as if conditions were ripe for their use, could easily trigger financial crises threatening to China's healthy economic growth. In each instance when China has made liberalizing experiments—with finance companies, with bank decentralization, and most recently with urban cooperative banks—it has found that it needs to pull back and reexamine its regulatory system in light of the loss of control it experienced. Such a tentative, stop-and-go approach is appropriate. Anything more enthusiastically accelerated is courting large-scale trouble and could risk achieving anything close to the "Spain 2000" scenario.

#### **D. Opaque Corporate Governance and Accountability**

An important component of China's "sandy" foundation for financial sector modernization is corporate governance. Weaknesses in China's corporate system extend not just to state-owned, state-controlled and "collective" enterprises, they include domestic private sector firms as well. The only general exceptions are wholly owned foreign-funded firms, and quite a few of these are less than transparent. Accounting transparency is one of the clearest weaknesses, which derives directly from China's low per-capita GDP level of development. There is a strong tradition of book-keeping in China, and this is a good foundation to build upon, but independent accounting professionals are in severe short supply. Furthermore, not only accounts, but business plans, management track records, market analysis and operational mission statements are not yet generally characteristic of China's domestic corporate culture.

Shortcomings in corporate governance are compounded by the weakness of local legal institutions, and for the financial sector, a major shortcoming is still the inadequacy of China's bankruptcy regime. Courts have a shortage of personnel, including judges, trained in civil and business law. Furthermore, when court decisions are made, enforcement is frequently weak. In this environment, making loans or purchasing bonds purely on the merits of a company's request or prospectus is difficult at best.

For many enterprises, even private companies, the role of the relevant Communist Party committee is also a significant factor in the nature of corporate governance. For nearly all large firms, the Party has traditionally had a say in selecting or approving senior management. There is of course a purpose in this tradition—many companies in China still have a set of goals that go beyond profits and include social and community welfare, including pacing the rate of employee layoffs. Continuation of some version of these multiple purposes for a significant portion of China's corporations is likely for the foreseeable future, and this system almost certainly contributes importantly to the stability and even the pace of China's economic growth.

It is in this sense that ongoing reforms of China's corporate governance establishment are a precursor to effective reform of the financial system along market lines. Not until China's necessarily gradual reform of its overall corporate governance system reaches a much higher level of maturity is it meaningful to talk about turning China's financial sector over to market forces.

### **E. Cyclical and Macroeconomic Instability**

The final area where risks of instability and the “sick-man” scenario may be lurking is in the area of macroeconomic and monetary policy itself. This includes interest rate policy and reform as well as exchange rate reform and reforms to China's capital account regime.

Both of China's most serious overheating episodes, in 1988 and 1993, got out of control when real bank deposit rates remained so low compared to headline inflation that citizens withdrew money in a sudden rush of spending on consumer durables, which at times stripped stores bare of their goods. In both instances, in addition to administrative credit tightening across the board and with special harshness in rural areas, China's central bank indexed deposits to inflation, suddenly lifting real deposit rates from deeply negative levels to zero. And in both cases, this maneuver worked, as deposits quickly flowed back into the banks. The cost, however, was in each case a sharp downturn in the economy affecting income distribution and policy momentum. And in the case of 1988's credit crunch, this paper has already mentioned the author's opinion that it was the real cause of the Tiananmen demonstrations and tragedy.

It is important, therefore, that China's policy makers manage deposit rates so that in real terms they never go negative in a significant way, and if possible stay positive. The central bank's recent (late October) interest rate increase of roughly a quarter point is a step in the right direction, because real deposit rates at this time (early November 2004) are already negative—by from 3-to-4 percentage points. There is a natural resistance to raising deposit rates, which puts a squeeze on bank profits and prompts increases in lending rates—in turn resented and resisted by local officials and their corporate management colleagues. Hence, interest rate decisions, always made by the Party's Politburo and the State Council, are inherently political. A more mechanical rule of thumb, giving authority to the central bank to maintain real deposit rates above a certain (negative) level, would be preferable.

A second cyclical risk comes from the rural grain cycle already treated in an earlier section. It deserves mention again, however, because its links to inflation and potentially negative deposit rates and financial crisis have in the past tied it closely to China's monetary policy instabilities. One of the clearest stages in the “grain cycle” follows the years of declining planted area and output, especially if there is a drought. At this time in the grain cycle, food prices typically spike upwards sharply. In 1993 the price increases started in southern Guangdong Province and rolled north through Hunan to Hubei, Henan and the capital, Beijing.

Because the period of low grain planting and production is also a period of rural affluence, spurring capital investment in local enterprises, employment growth and consumption expansion, it has its own built-in inflationary forces as well. These, combined with high grain prices, have typically been a relevant factor in the inflation that leads to negative real deposit rates and monetary disorder.

Finally, external capital flows and exchange rate developments offer potential for destabilizing financial crisis. The critical factor here is China's ability to maintain its controls on capital flows in and out of the country. Balance-of-payments and banking statistics have documented for years various levels of both leakage in the system as well as surges in legitimate transactions. Once capital flows become unmanageable, China will need to shift to a flexible exchange rate system, to avoid speculative instabilities and so that its domestic interest rate policy need not be tied so closely to international interest rate movements.

But capital flows, especially short-term flows, are a major challenge for an underdeveloped financial regulatory system such as China's. It opens up not only financial institutions but their corporate clients as well to serious exposure involving mismatches in both term structure and currency composition. Ideally, financial regulators should monitor both financial and non-financial institutions for such mismatches, but even in developed economies they rarely do so effectively. Such is even less the case in a poor country challenged to build its staff and legal regulatory foundations. Under such conditions, capital controls are in effect an extension of the weak regulatory system, acting as a first line of defense for what would otherwise be severe vulnerabilities to capital volatility and consequent exchange rate instability on a scale problematic for both financial and commercial transactions.

With no immediate need for more open short-term capital flows, there is also no immediacy for exchange-rate flexibility. Note that this is an entirely separate issue from whether China's currency is currently undervalued. There are simply no persuasive indications that it is undervalued. Indeed, if one wants to explain the large U.S. global trade deficit, China is clearly a minor player. The bilateral balance between the U.S. and China is irrelevant in economic terms (though not in political terms), because China has such a large deficit with the rest of the world that its overall global balance is not large. To explain the U.S. deficit, one needs to ask which other countries and groups of countries have global trade surpluses. In terms of their share of the U.S. deficit, these are: the Euro zone (28 percent), petroleum exporting countries (20 percent), non-China and non-Japan Asia (19 percent), and Japan (15 percent). These countries' global trade surpluses in goods and services account for a total of 82 percent of the U.S. deficit. China's global surplus accounts for 6½ percent of the U.S. deficit.

Overall, China's monetary and macroeconomic policy making skill is vital for ensuring continued moderation in the patches of instability that are certain to crop up, and in the case of the rural grain cycle, fundamental changes leading to greater international reliance for grain (already implicit in China's large imports of fertilizer and petroleum feed stock) are essential.

## **V. How to Think? Foundations for Economic Analysis of China**

In conclusion, this paper seems to be flying in the face of conventional free-market wisdom. But is it? Two of the most basic foundations of economic science are the theorem of the second best and welfare economics. Under the first, we are required to consider China's severe market imperfections when deciding whether a particular market-friendly move is useful

or, indeed, potentially harmful. This paper has applied this analytical process in a number of areas. Welfare economics reminds us that if there are large permanent losers in a reform process or policy sequence, we cannot say that the process or sequence is a good one. Many Chinese policies, and many sources of cautions raised in this paper have at their root an effort to honor this fundamental principal of healthy long-term growth.

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