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**THE RISE OF CHINA AS AN ECONOMIC POWER**

C. GOODHART and C. XU

## **ABSTRACT**

In the twenty years since the Cultural Revolution, China has maintained fast real growth. This occurred despite China having similar problems to other transitional economies, eg loss-making State Owned Enterprises (SOEs), eroding fiscal revenues and inflation, (Section 3).

Although China initially adopted the Soviet central planning model, after the 1950s break Chinese planning changed towards a regionally-based system with local planning (Section 2). In contrast to the centrally-based, functionally-specialised (U form or unitary structure) Soviet model, the Chinese economy is organized on a multi-layer-multi-regional (M form) basis. This encouraged development of small size township and village enterprises (TVEs), the main engine of Chinese growth.

Power and control remained with the Party and the State, but was diffused much more widely, regionally and locally. This allowed initiatives at lower (political) levels to establish institutions, both in agriculture (the 'household responsibility system') and industry (TVEs), without state protection. Even among regionally controlled SOEs, 'tournament rivalry' between regions, etc, and between SOEs and TVEs provided competition.

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**C. GOODHART and C. XU**

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Centre for Economic Performance  
London School of Economics and Political Science  
Houghton Street  
London WC2A 2AE

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C. GOODHART AND C. XU

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# THE RISE OF CHINA AS AN ECONOMIC POWER

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## 1. Introduction

It is now twenty years since the end of the Cultural Revolution in China in 1976. During these years, The People's Republic of China (PRC) has achieved an extremely fast rate of economic growth, as shown in Table 1 below:-

**Table 1.1: Economic Growth of China Since 1978**

|     |   | 1978 | 1980 | 1985 | 1990 | 1992 | 1993 | 1994 | 1995** |
|-----|---|------|------|------|------|------|------|------|--------|
| (1) | Real Output*<br>(GNP) yuan:bn               | 650  | 763  | 1275 | 1854 | 2315 | 2623 | 2927 | 3214   |
| (2) | Population:<br>million                      | 963  | 987  | 1159 | 1143 | 1172 | 1185 | 1199 | 1211   |
| (3) | Real output per<br>capita: yuan             | 684  | 773  | 1010 | 1622 | 1975 | 2214 | 2441 | 2654   |
| (4) | Average annual<br>growth rate of<br>(3) (%) | 8.3  |      |      |      |      |      |      | 8.7    |

Notes:       \*1990 prices.  
             \*\*Partly forecast.

Source:       1.     Statistical Yearbook of China, 1990, 1995.  
              2.     People's Daily (Overseas Edition) (20th, October 1995).

There are certainly some doubts about the accuracy of such statistics. In particular, in a country, which still at times of inflationary stress relies on price controls for certain key commodities and raw materials, inflation may be underestimated and output overestimated (see Lund, 1995). Output growth may also tend to be over-estimated in the transition from a traditional to a market economy. Nevertheless the evidence of rapid expansion is clearly visible, especially in the coastal regions. Moreover, the increasing openness of the Chinese economy means that domestic growth is being accompanied by a similar, indeed even faster, expansion of exports and imports, see Table 1.2.

**Table 1.2: Foreign Trade of China since 1976 (\$bn)**

|                          | 1976 | 1980 | 1985  | 1990 | 1992 | 1993  | 1994  |
|--------------------------|------|------|-------|------|------|-------|-------|
| Exports                  | 6.5  | 19.4 | 20.6  | 62.1 | 85.0 | 91.3  | 124.0 |
| Imports                  | 6.2  | 21.5 | 31.8  | 53.4 | 80.7 | 103.4 | 118.6 |
| Balance of Foreign Trade | 0.3  | -2.1 | -11.2 | 8.7  | 4.3  | -12.1 | 5.4   |

Note: Data are in US\$ 1990 year prices.

Source: Statistical Yearbook of China, 1995.

These latter data can be checked, roughly, against the counterpart data of other countries; data, for example, of trade flows between China and other countries passing through Hong Kong, which have been growing at around 20% p.a. in real terms, are consistent. The aggregate growth data can also be checked more or less, by looking at personal consumption statistics from nation-wide household sample surveys, of which some are shown below:-

**Table 1.3 (a): Annual Consumption per Capita (kilograms)**

|      | Grain  | Edible Vegetable Oil | Pork  | Poultry | Eggs | Seafood |
|------|--------|----------------------|-------|---------|------|---------|
| 1978 | 195.46 | 1.60                 | 7.67  | 0.44    | 1.97 | 3.50    |
| 1991 | 234.50 | 5.89                 | 17.44 | 1.98    | 7.10 | 6.79    |
| 1993 | 235.91 | 6.29                 | 18.22 | 2.31    | 7.75 | 7.29    |

**Table 1.3 (b): Living Space per Person (square meter)**

|      | Urban | Rural |
|------|-------|-------|
| 1978 | 3.6   | 8.1   |
| 1991 | 6.9   | 18.5  |
| 1994 | 7.8   | 20.2  |

**Table 1.3 (c): Consumer Durables per 100 Urban Households (Sets)**



|      | Colour Television | Black/White Television | Washing Machine | Refrigerator |
|------|-------------------|------------------------|-----------------|--------------|
| 1981 | 0.59              | 57.06                  | 6.34            | 0.22         |
| 1991 | 68.41             | 43.93                  | 80.58           | 48.70        |
| 1994 | 86.21             | 30.47                  | 87.29           | 62.10        |

**Table 1.3 (d): Consumer Durables per 100 Rural Households (Sets)**

|      | Colour Television | Black/White Television | Washing Machine | Refrigerator | Tape Recorder |
|------|-------------------|------------------------|-----------------|--------------|---------------|
| 1985 | 0.80              | 10.94                  | 1.90            | 0.06         | 4.33          |
| 1991 | 6.44              | 47.53                  | 10.99           | 1.64         | 19.64         |
| 1994 | 13.52             | 61.77                  | 15.30           | 4.00         | 26.08         |

Source: Qian and Xu, 1993; Statistical Yearbook of China, 1995.

While few aggregate economic data for any country are fully reliable, and inter-country comparisons particularly suspect, (owing to differences of taste and the unreliability of exchange rates as measuring rods), there is no good basis for dismissing China's recent growth as representing, to any serious extent, a statistical illusion.

It may nonetheless be helpful both to place China's real income in an international context, and to illustrate how different such comparisons can look when measured by the official exchange rate or on an estimated purchasing power parity (PPP) basis, as shown below. Moreover, neither the exchange rate (Cols. 1 & 2) nor the PPP (Cols. 3 & 4) comparisons suggest as fast a growth rate between 1985 and 1992/93 as indicated by Table 1.1. While this underscores the unreliability of all growth rate and comparative income data, one cannot pinpoint which, if any, of these various data might be incorrect. They all suffer from various weaknesses.

**Table 1.4: Alternative Measures\* of per Capita Income in Current US\$**

|           | WB 1985 | WB 1992 | SH 1985 | PPP 1993 |
|-----------|---------|---------|---------|----------|
| China     | 380     | 470     | 1883    | 2120     |
| India     | 290     | 310     | 696     | 1250     |
| Mexico    | 2300    | 3470    | 5332    | 7100     |
| Hong Kong | 6120    | 15360   | 10183   | 21670    |
| UK        | 8520    | 17970   | 10679   | 17750    |

\* Sources: WB, World Bank, (1994).  
SH, Summers and Heston, (1991).  
PPP, World Bank Atlas, (1995).  
Cols. 1 & 2 use exchange rates; Cols. 3 & 4 use PPP as the basis for measurement.

In their Human Development Report (1994) the UN ranked countries on HDI index, which is a weighted combination of life expectancy, adult literacy, years of schooling and income (PPP\$). China had an HDI value of 0.644, just below South Africa, 0.650 and above Peru, 0.642; Canada, 0.932 was top and Guinea, 0.191 bottom (Table A 5.3). In Eastern Europe and the Former Soviet Union (EEFSU), age specific mortality rates have increased since the collapse of communism, sharply so for middle-aged men, (Eberstadt, 1994, for East Germany; and see Ellman, 1994, and Flemming and Matthews, 1994, for Russia); by contrast in China a reduction in infant mortality has raised life expectancy at birth from 67.9 years in 1981 (Almanac of China's population 1985) to 68.5 in 1990 (Statistical Yearbook 1995); while age specific mortality and life expectancy beyond childhood have remained static.

Given the huge size of China, whose population at about 1.2 billion represents almost 25% of the world's estimated population, the acceleration of growth there represents a massive uplift for mankind as a whole. Together with the recent sharp improvement in India's growth (population 883 million; average annual growth 3% in real output per head in 1980-1993), the last decade has, almost certainly, seen the greatest improvement in global living standards ever recorded, despite transitional problems in EEFSU, continuing African stagnation, Eurosclerosis, etc.

Moreover, Chinese growth rates have been, and are predicted to remain, at a level consistent with a (Rostow-style) take-off into self-sustaining growth. They are, and may remain, comparable with the earlier experience of rapidly expanding economies both in East Asia and in the USA.

**Table 1.5 (a): Major Countries' Emergence into The World Economy**

|  | USA       | Japan     | China     |
|--|-----------|-----------|-----------|
|  | 1870-1900 | 1950-1980 | 1980-2010 |

|  |      |      |      |
|--|------|------|------|
| Growth of GNP (% p.a.)                           | 3.9  | 7.7  | 8.1  |
| Share of world output at outset (%)              | 15.4 | 3.2  | 3.6  |
| Share of world output at end                     | 25.7 | 10.1 | 15.4 |
| Share of world exports of manufactures at outset | 3.8  | 3.4  | 0.8  |
| Share of World exports of manufactures at end    | 14.7 | 11.2 | 6.4  |
| Change in share                                  | 10.9 | 7.8  | 5.6  |

**Table 1.5 (b): East Asian Experiences of Rapid Growth**

|                      | Japan   | South Korea | Taiwan  | China     |
|----------------------|---------|-------------|---------|-----------|
|                      | 1950-80 | 1960-90     | 1960-90 | 1980-2010 |
| Growth of GNP % p.a. |         |             |         |           |
| 1950-60              | 8.5     | -           | -       | -         |
| 1960-70              | 10.0    | 9.3         | 9.1     | -         |
| 1970-80              | 4.5     | 8.5         | 9.5     | -         |
| 1980-90              | -       | 9.6         | 7.7     | 8.9       |
| Whole period         | 7.7     | 9.1         | 8.8     | 8.1       |

Source: Sheng (1995) and World Bank (1994).

If so, according to World Bank estimates, the Chinese economic area [China, Hong Kong and Taiwan] might, in purchasing power parity terms, become the world's largest economy, in absolute, but not of course in per capita terms, within one decade.

This development raises a whole host of questions: why, and how, China's progress from a Communist command economy towards a decentralised market economy has been, in terms of real economic growth, so different from, and so much better (so far) than those countries engaged in the same transition in EEFSU. This question has been discussed, eg by Qian and Xu (1993), Sachs and Woo (1994). The following Table 1.6 below, an updated version of Sachs and Woo Table 1, p.103, shows their dissimilar growth rates.

**Table 1.6: Economies in Transition: Annual Growth of GDP  
(%) Annual Averages**

|          | 1980-85 | 1985-90 | 1991  | 1992  | 1993  |
|----------|---------|---------|-------|-------|-------|
| China    | 10.2    | 7.8     | 8.4   | 13.8  | 13.9  |
| Russia   | 3.2     | 1.3     | -13.1 | -19.7 | -12.0 |
| Bulgaria | 4.3     | 2.6     | -13.5 | -6.1  | -5.4  |
| Czech    | n.a.    | 1.8     | -14.2 | -7.1  | -0.3  |
| Slovak   | n.a.    | 1.5     | -16.2 | -6.3  | n.a.  |
| Hungary  | 1.8     | 0.6     | -12.0 | -4.8  | -2.0  |
| Poland   | 0.7     | 0.3     | -7.6  | 1.8   | 4.0   |
| Romania  | 3.8     | -2.1    | -13.4 | -14.9 | -4.4  |

- Source:
1. Trends in developing economies 1994, (The World Bank).
  2. Trends in developing economies 1993, Volume 1: Eastern Europe and Central Asia.
  3. International Financial Statistical Yearbook 1994.

Such differential growth has occurred despite China running into some seemingly similar problems as in EEFSSU, for example problems in controlling and improving loss-making State Owned Enterprises (SOEs), relatively declining fiscal revenues accruing to the Central Government, endemic and occasionally severe inflationary pressures, and a lack of the underlying institutional infra-structure (eg laws on bankruptcy and property rights, standardised and transparent accountancy, etc) that supports a market economy. We shall also ask whether these deficiencies, or political problems more broadly, might yet reverse recent economic success in China.

One issue, however, which we shall not explore is what continuing growth in China (and India) might mean for us in Europe. Growth in developing Asian countries has already been blamed for widening income inequalities between unskilled male workers and skilled workers, and for the continuing shift out of manufacturing into (information-based) services in the West, but for reasons of both space and comparative expertise we shall leave such analysis to others and concentrate on economic developments within China.

The Chinese ruling elite has appreciated that a command economy, based on state owned industrial enterprises and collective communes, was incapable of providing satisfactory growth, eg to become a leading international power. Deng's justification for pushing reforms in the late 1970s was to enable China to catch up with the other major powers. The problem was perceived as how to move towards a more vibrant and decentralised (market) economy without weakening the political supremacy of the Party. This has not been an easy exercise.

This dilemma has led the Chinese authorities to look for a middle way towards a decentralized market-based system without losing their political Party control. There has been no blueprint for this, and it has been likened to trying cautiously to feel for stepping stones across a river. It is these experiments in a variety of forms of corporate

governance and economic control that are so fascinating. We shall discuss these at greater length in Section 2. Note, however, that the accompanying decline in the share of industrial output of SOEs does not imply that the balance has been taken up by Western-style standard capitalist organizations. Instead, the balance has been taken up mostly by township-village enterprises (TVEs); about three quarters of the output of TVEs is industrial; the full sectoral breakdown is shown later in Table 2.5.<sup>1</sup> The growth of private sector output, especially in joint ventures between domestic and non-resident businesses, including those from Hong Kong and Taiwan, started from a very low base, but has grown extremely rapidly in recent years, and now produces a considerable share of total industrial output, see Table 1.8 below. Although there has been much publicity of joint ventures involving major Western multi-nationals, these represent only a tiny fraction of output, and they are dwarfed in importance by those involving ethnic Chinese outside the PRC, eg from Hong Kong and Taiwan.

**Table 1.7: Rate of Growth of Industrial Output by Class of Ownership, 1981-94 (Year-to-Year Percentage)**

|                              | 1981 | 1986 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 |
|------------------------------|------|------|------|------|------|------|------|------|
| State Enterprises            | 2.5  | 6.2  | 3.9  | 2.96 | 8.6  | 12.4 | 5.7  | 6.5  |
| Collective Enterprises       | 9.0  | 18.0 | 10.5 | 9.0  | 18.4 | 39.3 | 36.0 | 29.8 |
| Individual/Other Enterprises | 35.1 | 54.1 | 31.0 | 27.5 | 36.4 | 58.8 | 77.5 | 63.8 |
| Total                        | 4.3  | 11.7 | 8.5  | 7.8  | 14.8 | 27.5 | 28.0 | 26.1 |

Source: Statistical Yearbook of China, 1995.

**Table 1.8: Percentage of Industrial Output Produced by State, Collectives, and Individual and Other Owned Enterprises, 1980-94**

|                            | 1980 | 1984 | 1990 | 1991 | 1992 | 1993 | 1994 |
|----------------------------|------|------|------|------|------|------|------|
| State Enterprises (%)      | 76.1 | 69.1 | 54.6 | 52.9 | 48.1 | 43.0 | 34.1 |
| Collective Enterprises (%) | 23.5 | 29.7 | 35.6 | 35.7 | 38.0 | 38.4 | 40.9 |

|                         |     |     |     |      |      |      |      |
|-------------------------|-----|-----|-----|------|------|------|------|
| Private Enterprises (%) | 0.4 | 1.2 | 9.8 | 11.4 | 13.9 | 18.6 | 25.1 |
|-------------------------|-----|-----|-----|------|------|------|------|

Source: Statistical Yearbook of China, 1995.

Given the relatively untried, and somewhat experimental, nature of China's emerging systems of corporate governance, it is, perhaps, intriguing that real growth there has been so strong. Sachs and Woo (1994) argued that, compared with Russia, China had some initial advantages, in part paradoxically because of China's initial comparative backwardness. They noted that the industrial base in China, initially dominated by the SOEs, was comparatively small at the start of the transition, only taking about 18% of the employed population, as compared with about 90% in Russia (Sachs and Woo, 1994). So, when a large proportion of the SOEs began to make losses during the transition, in China as in the EEFSU, the comparative burden on the rest of the economy, in terms of forced reallocation of resources to the SOEs, often via an inflation tax, was less severe.

Although in terms of employment the share of the state sector was then small, in terms of its contribution to GNP its share was above 60% in 1978, when the reform started. If their share of output had remained constant, the influence of a badly performing state sector on the Chinese economy could also have been disastrous. What saved it has been the fast growth of the non-state sector. The surge of the Chinese economy since 1978 mainly came from the new entry and excellent performance of non-state-owned firms, particularly TVEs.<sup>2</sup> The rise of this sector has caused the share of the state sector in GNP to shrink steadily.<sup>3</sup> It is this which differentiates Chinese reform from the transitions in the EEFSU, and thus should be analysed carefully.

**Table 1.9: Comparison of Growth and Efficiency in the State And TVE Sectors, 1979-1991**

| Growth Rates of | In National Industry | In SOE Industry | In TVE |
|-----------------|----------------------|-----------------|--------|
| Output          | 13.3                 | 8.4             | 25.3   |
| Capital         | -                    | 7.8             | 16.5   |

|        |   |     |      |
|--------|---|-----|------|
| Labour | - | 3.0 | 11.9 |
| TFP    | - | 4.0 | 12.0 |

(TFP is total factor productivity)

Source: Weitzman and Xu, 1994.

The Chinese planning system has been organized differently from those of the EEFSU; this provided suitable conditions for the growth of TVEs. Indeed, a strong expansion in TVEs began before the reform started. In Section 2 we shall discuss how this happened historically and institutionally.

Another, and a vital, part of the non-state sector is agriculture. Since 1979, the 'Household Responsibility System' gradually became the main structure in Chinese rural areas. The essence of this reform is to lease out land to rural households, who pay rent and taxes and enjoy the residual income and partial residual rights to the land. Thus rural households have both the incentive and responsibility to take risks and make efforts to improve the land 'allocated' to them, and are held responsible for the outcome. This reform greatly improved agriculture productivity. The average annual growth rate of agriculture increased from about 2% in the 30 years or so before the late 1970s to about 7% in the next five years, 1979-84. So successful was this reformed system, that in 1984 the People's Commune system was officially abolished.

Agricultural output accounted for less than one third of Chinese GNP in the late 1970s. Moreover, the growth rate of agriculture has remained lower than that of aggregate GNP. So, the direct influence of agriculture's improved growth rate should not be exaggerated. By comparison, the growth rate of TVEs' output has been higher than that of agriculture, and the share of TVEs' output in rural material output soon superseded that of agriculture. The importance of the agricultural reform partly lies in its interaction with the TVE sector. First, by abolishing collective farms, rural households were given greater freedom to re-allocate their resources, both labor and investment, optimally between agriculture and TVEs. Second, improved productivity in agriculture further released labour and increased savings/investment for the development of TVEs. Finally, TVEs were developed under the commune system (called commune-brigade enterprises in that system). The abolition of the commune system shifted the focus of community governments from agriculture to TVEs, and had considerable influence in changing the governance of TVEs.

**Table 1.10: Agriculture in Chinese Economy (%)**

| Year | Share of ag. in NI | Ag.output/<br>rural output | Ag. labour/<br>national labour force | Ag. labour force/<br>rural labour force |
|------|--------------------|----------------------------|--------------------------------------|---|
| 1970 | 40.39              | n.a.                       | 80.70                                | n.a.                                    |
| 1975 | 37.79              | n.a.                       | 77.07                                | n.a.                                    |
| 1980 | 35.97              | 68.86                      | 70.37                                | 93.63                                   |

|      |       |       |       |       |
|------|-------|-------|-------|-------|
| 1985 | 35.50 | 57.09 | 60.86 | 81.89 |
| 1990 | 34.76 | 46.10 | 58.75 | 79.35 |
| 1992 | 29.20 | 35.78 | 57.27 | 77.71 |
| 1993 | 25.39 | n.a.  | 55.23 | 75.15 |

Notes: Share of ag. in NI = ag. output (calculated by NI)/national income  
 Ag. output = gross agricultural output value.  
 Rural output = gross rural material output value.  
 Rural labour force = includes: (i) rural labourers who participate in family or cooperative economic activities (agriculture and non agriculture); (ii) workers in state-owned or urban collective-owned units but still have household registration record in rural area (Statistical Yearbook of China, 1993, pp.140).

Source: Statistical Yearbook of China, various years.

**Table 1.11 China: Annual Growth Rate of Agriculture and GDP (%)**

| Year        | 1978 | 1980 | 1985 | 1990 | 1992 | 1993 | 1994 |
|-------------|------|------|------|------|------|------|------|
| Agriculture | 4.1  | -1.5 | 1.8  | 7.3  | 4.7  | 4.7  | 4.0  |
| GDP         | 11.7 | 7.8  | 13.5 | 3.8  | 14.2 | 13.5 | 11.8 |

Source: Statistical Yearbook of China, 1995.

**Table 1.12: TVEs Role in Rural Economy**

| Year | TVE Output (Yuan bn) | Share of TVE Output in Rural Output (%) | TVE Labour Force (Million) | Share of TVE Labour Force in Rural Labour Force (%) |
|------|----------------------|---|----------------------------|---|
| 1978 | 49.31                | n.a.                                    | 28.27                      | 9.22  |
| 1980 | 65.69                | 23.53                                   | 29.99                      | 9.42  |
| 1985 | 272.84               | 43.03                                   | 69.79                      | 18.83   |
| 1990 | 846.16               | 50.91                                   | 92.68                      | 22.06   |
| 1992 | 1797.54              | 70.81                                   | 105.81                     | 24.17   |



|      |         |      |        |       |
|------|---------|------|--------|-------|
| 1993 | 3154.07 | n.a. | 123.45 | 27.89 |
| 1994 | 4258.85 | n.a. | 120.18 | 26.91 |

Note: After 1992, rural output data is not available.

Source: Statistical Yearbook of China, 1990, 1995.

One of the main differences between the reform process in China and in the former Soviet Union (FSU) has been the reaction to agricultural privatisation, enthusiastic in the former, grudging in FSU.

Moreover, EEFSU, especially FSU, faced political turmoil, the economic effect of which has been magnified by their central planning system. Under their previous centrally planned system much industrial production was concentrated in a few vast production units, both from a misplaced belief in economies of scale and to make centralised control easier. This was done both nationally and internationally, with all the Eastern Bloc countries linked by COMECON. It was, therefore, vital that trade within the system, especially between these huge units, flowed freely, because there were no potential substitutes. This made comprehensive planning and administrative coordination at the highest levels in the hierarchy (a nation or COMECON) crucial for continuing normal operation. Such an organisation is more susceptible to exogenous economic or political shocks. When such a shock occurred with the break-up of the communist empire, COMECON broke apart and that tore the prior trading structure in EEFSU apart. In contrast the regions of China had gained more power vis-a-vis the centre in Beijing within the regionally based planned economy. This happened for a variety of politico/economic reasons long before the reform officially started. By then, the centre already had abandoned much direct control over trading, or material allocation, and there was no similar extent of dislocation to trading patterns. So, as will be discussed subsequently, political disturbances at the centre, even such extreme manifestations as the Cultural Revolution, had less impact on the relatively self-sufficient regions.

While the object lesson to the Chinese elite of what not to do is given by the collapse of the USSR, the pattern that they would like to emulate is, probably, provided by Singapore, with its combination of continuing tight political control with a free market, competitive, successful economy. Whether it is possible to translate the experience of a small city state to a vast continental power is uncertain. The demise of Deng Xiaoping, which has probably for all practical purposes already taken place, is not expected to divert the Party leadership from pursuing this path (see, for example, Sone, 1995), however improbable, and to liberals undesirable, its viability in the longer term.

The Chinese government's comparative economic success so far has been largely based on their way of organizing the economy, with the development of new forms of corporate entities, eg cooperatives, especially TVEs, alongside the SOEs. We next examine how this structure evolved and how these new enterprises function in Section 2. We then discuss some of the remaining problems facing the PRC, notably including the macro-economic difficulties of controlling the economy by means of fiscal and

monetary policies in Section 3, and we review the effects of China's opening to foreign trade and capital flows in Section 4.

## 2. The Institutional Foundations of Chinese Reform

Many economists argue that the success of China's economic reforms is due to the practice of gradualism, to competition across regions, to the growth of the non-state sector, and to the experimental and the bottom-up approach (eg Jefferson and Rawsky, 1994, McMillan and Naughton, 1992, Perkins, 1988, 1994, Yusuf, 1994). These are fair summaries of major features of the reform. But why China followed such routes still needs to be explored.

As noted earlier, China began its reform period with a relatively small undeveloped state sector, a fact emphasised by Sachs and Woo (1994). Nevertheless, (i) all the most successful regions<sup>4</sup> in this process have been relatively developed with more regionally controlled state-owned (SOE) firms. Such locally controlled firms are representative of the specifically Chinese-type institutions, to be discussed further in this Section; (ii) growth rates in all the developing regions with more centrally controlled SOE firms, an organisational structure closer to the Soviet model, are below average; and (iii) growth rates in all the less developed (rural) regions are below average, as illustrated below in Table 2.1. These data suggest that, as will be discussed further, the institutional and organisational factors have been predominant in determining relative growth.

**Table 2.1: Growth in a Selection of Typical Developed and Underdeveloped Provinces<sup>5</sup> (1978-1992)**

|                                      | 1. Average Annual Growth Rate of National Incomes | 2. National Income per Capita (Yuan) |      | 3. Average Growth Rate of 2 | 4. Average Annual Growth Rates of Population |
|--------------------------------------|---|--------------------------------------|------|-----------------------------|--|
|                                      | %   | 1978                                 | 1992 | %                           | %  |
| National                             | 8.8   | 568                                  | 1526 | 7.3                         | 1.4  |
| More Regionally Controlled Provinces |   |                                      |      |                             |  |
| Jiangsu                              | 11.5  | 591                                  | 2322 | 10.3                        | 1.1  |
| Zhejiang                             | 12.9  | 496                                  | 2372 | 11.8                        | 1.0  |
| Guangdong                            | 12.8  | 547                                  | 2555 | 11.6                        | 1.0  |
| Average of above                     | 11.7  | 538                                  | 2256 | 10.8                        | 1.0  |

|                                     |     |     |      |     |     |
|-------------------------------------|-----|-----|------|-----|-----|
| More Centrally Controlled Provinces |     |     |      |     |     |
| Liaoning                            | 7.1 | 951 | 2314 | 6.6 | 0.4 |
| Jilin                               | 8.3 | 524 | 1590 | 8.3 | 0.1 |
| Heilongjiang                        | 5.8 | 835 | 1734 | 5.4 | 0.3 |
| Average of above                    | 7.1 | 770 | 2213 | 6.8 | 0.3 |
| Less Developed Rural Provinces      |     |     |      |     |     |
| Guizhou                             | 8.3 | 300 | 742  | 6.7 | 1.5 |
| Gansu                               | 7.6 | 234 | 538  | 6.1 | 1.4 |
| Qinhai                              | 5.8 | 140 | 255  | 4.4 | 1.4 |
| Average of above                    | 7.4 | 282 | 658  | 6.2 | 1.4 |

Note: At 1990 constant prices.

Source: 1. Statistical Yearbook of China 1992, 1993, 1994.  
2. Statistical Materials of China by Region (1993).  
3. China Population Statistics Yearbook, 1994.

Although both PRC and EEFSU were centrally planned economies, the Chinese economy was organised differently. The centrally planned economies in EEFSU were organised according to the principle of functional specialisation (Qian and Xu, 1993). Every state-owned firm there was under the control of one ministry which specialised in administering one type of product or service produced by such SOEs. For example, the automobile ministry controlled all the firms in the automobile industry. In contrast, the Chinese economy is organised into a multi-layer-multi-regional form (M-form), (Qian and Xu, 1993). The Ministries of the Central Government controlled only a small proportion of SOEs. Most Chinese SOEs are under the control of regional governments. Each regional government's functions are further divided along geographic lines and functional specialisation lines. For example, provincial governments control county governments and provincial level SOEs in different industries; county governments control township governments and some county level SOEs. This structure is duplicated from the centre to the bottom level of the hierarchy of the Chinese economy.

### **Different Structures in the Planned Economies of EEFSU and PRC**

In the EEFSU, there was extraordinary industrial concentration. The strong interdependence between enterprises across different regions made comprehensive planning and administrative coordination between ministries at the top level of the government crucial for the normal operation of the economy in the absence of markets. For example, in the late 1970s there were 62 ministries under the Gosplan in the Soviet Union responsible for 48,000 plan "positions" — 12 million products planned and coordinated by the Gosplan (Nove, 1983).

The Chinese government in its first five year plan (1954-1958) sought to copy the Soviet model of a centrally-planned system in full. In this process, the power of regional governments was weakened and central ministries were established. Planning was then formulated at the centre, by the State Council and Ministries; and the major function of local governments was to implement the central plan. In the late 1950s,

however, at the same time as breaking from the Soviet Union politically, Chinese planning procedures were changed towards a regionally based system and more emphasis was put on local plans. When Chinese reform started in the late 1970s, the central government controlled less than one-half of state-owned sector industrial output. For example, in the automobile industry, most of the 58 SOEs making automobiles were controlled by the local governments (Wang and Chen, 1991). Consistent with this, the number of products directly under the central plan in China was much smaller, only 791 in 1979 (Zhu, 1985), and was never more than one thousand. With a much reduced work load, the number of ministries at the centre could be much smaller, less than 30.

The transformation of the organisational structure of the Chinese economy into an M-form started from the late 1950s.<sup>6</sup> In the mid-1960s regional governments were already much more powerful and important than ministries (as contrasted with their counterparts in the EEFSU). In the “Cultural Revolution” (1966-1976), the transformation of the organisational structure was pushed further.<sup>7</sup>

### **M-Form and U-Form Organisations**

M-form and U-form organisations were first discussed as organisational forms of multi-product modern corporations (Chandler, 1962, 1977, 1990, and Williamson, 1975, 1985). In corporations, M-form stands for multi-divisional form and U-form stands for unitary structure, of functionally departmentalised structure. In the multi-divisional modern corporation (the M-form firm) headquarters controls divisions. Each of the divisions is responsible for one brand of final product (eg Oldsmobile division of General Motors) or to the business in one region (eg a regional division of Sears). Complementary tasks for finishing a brand product are under the control of the division. In contrast, in a U-form organisation, headquarters controls functional departments, such as engineering, manufacturing, sales, etc. Each department under the U-form is specialised in one function and these functions are often complementary, such as manufacturing and sales. Headquarters’ involvement is necessary for coordinating complementary functions in the departments. The M-form firm emerged in the 1920s, and has been the prevailing organisational form of large businesses ever since.

Organisational structures of centralised economies can also be characterised by using the M-form and U-form concept (Qian and Xu, 1993). An M-form organisation groups complementary tasks together in one unit (eg division, regional government). A U-form organisation groups similar tasks together in one unit (eg department, ministry). The organisational structures of the EEFSU were of a unitary form - each ministry is functionally specialised; in contrast, the Chinese hierarchy has been of a multi-layer-multi-regional form mainly based on a territorial principle - each regional government coordinates functions within the region.

In the early 1970s, more than 98% of centrally controlled SOEs were transferred to local governments, including large and very large scale firms. The number of SOEs under direct control of ministries decreased from 10,533 in 1965 to 142 in 1970. Most ministries lost their power to control state firms altogether.<sup>8</sup> For example, all SOEs directly controlled by the ministries of metallurgy, coal, the first machinery industry (all non-defence production of automobile, machine tools, electrical machinery), and commerce were transferred to local governments. As a result, as discussed further in Section 3 below, all government revenues came under the local governments’ control

except import duties, tariffs and profits from a small number of centrally controlled SOEs. Correspondingly, local governments became responsible for most government expenditures, including investment. In the mid-1970s about 60% of fixed asset investment in the state sector nationwide was made by local government. The product planning/allocation system was also transformed onto a region-based system under which the central government took care only of the residual balance of the supply and demand in each region, including raw materials and heavy machinery, such as cement, coal, timber, iron and steel, automobiles, tyres.

### **Economies of Scale and Duplication**

In the Chinese M-form economy regions are relatively self-contained and self-sufficient in terms of functions and production. Accordingly, the size of enterprises generally is small, and industries are less concentrated, see Table 2.2.

**Table 2.2: Comparison of Size of Enterprises in China, EEFSU, and the West, 1988 (Employment/Enterprise)**

|                  | Manufacturing | Food Products | Wearing Apparel |
|------------------|---------------|---------------|-----------------|
| Czechoslovakia   | 2,930         | 1,609         | 6,600           |
| The Soviet Union | 806           | 290           | 402             |
| Hungary          | 460           | 925           | 307             |
| Yugoslavia       | 311           | 243           | 402             |
| China            | 145           | 75            | 80              |
| Italy            | 96            | 71            | 71              |

Sources: Qian and Xu, 1993.

By the same token, there have been many duplications of similar types of firms, see Table 2.3.

**Table 2.3: Duplication in the Automobile Industry**

|  | 1953-1967 | 1968-1982 | 1983-1987 |
|--|-----------|-----------|-----------|
| Number of general-purpose automobile firms | 22        | 58        | 116       |
| Number of special-purpose automobile firms | 68        | 202       | 347       |
| Total annual output (automobiles)          | 33,780*   | 203,945** | 472,538   |

Notes:           \*average of 1966, 1967, 1968;  
                 \*\*average of 1981, 1982, 1983.

Sources:       Wang and Chen (1991).

Such duplication assists the Chinese reform process for the following reasons. First, duplication is necessary for creating a competitive environment within the state sector. Second, it facilitates technology diffusion across firms and regions. Third, it increases the reliability of supply in the uncertain conditions created by the reform process itself and thus reduces vulnerability.

Obviously, there are also costs associated with this, notably the loss of scale economies. The best example is the Chinese automobile industry; there were more than 100 independent firms producing automobiles in the 1980s. Most produced only several thousand or even fewer automobiles per year, which is much too low from an efficiency point of view. But, compared with EEFSU, the Chinese economy has gained more than it has lost from such duplication.

#### **Expansion of Small State-Owned Industrial Firms in the Early 1970s**

The best example of government policies encouraging duplication among regional industrial firms is the so-called “five small industry” policy. The five small industries are small steel and iron, machinery, fertilizer, coal mining and cement. It was the central government’s policy in the early 1970s to develop these in each region to make each region relatively self-sufficient. Moreover, the five were regarded as the basis for agricultural mechanisation in each region. In the first five years of the 1970s, 8 bn yuan was allocated to regional governments for setting up county-run small industrial firms. These small firms also obtained preferential treatment in taxation and bank loans. Most of the profits of these small SOEs were reinvested in these firms. In 1970, almost all the counties in China established SOEs in producing agricultural machinery; 300 counties established steel plants, more than 20 provinces established tractor plants and motor plants. In 1975, these small regional SOEs produced 58.8% of China’s total cement output, 69% of fertilizer, 37.1% of coal and 6.8% of steel, (Wang, 1986, pp.356-359)

#### **Coordination**

The second feature associated with the Chinese M-form structure is its mechanism for coordination. Unlike the EEFSU, where the centre played the critical role in coordinating the economy, regional governments in China have had considerable responsibility for regional economic coordination.

Such decentralisation has had important benefits. First, local information is better, since local governments are closer to sites. Second, communication and information processing between the centre and the regions is greatly facilitated. So, in China a small task force can cope with the exercise of making central plans and collecting aggregate statistics; in comparison, in the FSU, a large body of officials is needed, see Table 2.4.

**Table 2.4: Number of Staff in Planning and Statistics Agencies in China and in the FSU, Selected Years**

|                    | FSU           | China          |
|--------------------|---------------|----------------|
| Statistical Agency | 41,000 (1987) | 46 (1976)      |
|                    | 41,000 (1987) | 280 (1981)     |
| Planning Agency    | 2,560 (1986)  | 50 (early 70s) |

Source: Huang, (1994).

Third, regionally based coordination makes economy-wide coordination failure less likely when there are external shocks. In contrast to the U-form, which is fragile to shocks, the M-Form structure localizes the effects of such shocks. This also makes it easier to introduce institutional changes on an experimental scale, without causing disruption to the rest of the economy. Such benefits are particularly crucial when the centre's functions are disrupted. A good example is the sustainability of the Chinese economy during the "Cultural Revolution". During that period, the Chinese central government almost completely lost its ability to coordinate the economy, and economies in some regions collapsed due to factional conflicts. However, the national economy did not. Chinese national income merely declined for two years — by 7.2% in 1967 and 6.5% in 1968. The economy recovered quickly thereafter even though the central government did not recover its coordination function. In sharp contrast, during their transition, the EEFSU economies apparently suffered dramatic and persistent declines in measured output by 30% or more, over a period of four, or more, years.

### **Incentives**

Chinese local governments were given greater incentives (together with autonomous power) to introduce reforms<sup>9</sup> than their counterparts in EEFSU, prior to the transition in the latter. Regional competition in getting rich quicker was a slogan set by central government. When a region has a higher growth rate than others, the head of the region will enjoy greater power and be more likely to get promotion. Moreover, the central government encouraged regional governments to try their own approaches to speed up growth. The combination of these policies implies a 'tournament' competition among regional governments.<sup>10</sup>

An example is land reform. The famous 'household responsibility system' in agricultural reform was developed through the initiative of local governments. It was local government officers in Fengyang county, Anhui province, who took initiatives and risks in distributing land to rural households. This practice and its achievement was discovered later by the central government. Only then were similar nationwide reform measures approved.

Chinese local governments have now been enjoying their semi-autonomous power, and the incentives this provides for self-advancement, for more than twenty years. In contrast, where central coordination is critical for the operation of the economy, the implementation of the centre's instructions will have the highest priority. In this case the incentives of subordinates are primarily designed for implementing commands from above, and autonomous initiatives may well conflict with that priority.

### **The Role of the TVE Sector in the Success of the Chinese Reform**

The township-village enterprise (TVE) has been the most important engine driving the unprecedented growth of the Chinese economy during the last 15 years. Moreover, the development of the TVE is the most important feature distinguishing the Chinese transition path from those of the EEFSU.

A TVE is a collectively-owned communal enterprise located in a township or a village. Since most TVEs are in the industrial sector, they are often treated as synonymous with rural industrial firms. All the residents of the township or village that has established the TVE own the firm; the property rights of the TVE can only be exercised collectively through community representatives. If we have to make an analogy to a counterpart in the West, then the closest equivalent might perhaps be a combination of a municipally-owned enterprise and producer cooperatives. In their comparative studies of TVEs and other institutions throughout the world, Gelb and Svejnar (1990) also conclude that the institutions most similar to the Chinese TVE are producer cooperatives, including cooperatives in Eastern Europe, Mondragon enterprises in Spain, and labour managed firms in the former Yugoslavia. With some exceptions, such cooperatives have been comparatively unsuccessful in Western countries; we discuss subsequently some reasons why TVEs in contrast have succeeded so well in China.

The community is deeply involved in governing the TVE's operations (neither private; nor state owned). Regardless of the seemingly diffuse and unclear ownership structure, TVEs have been enormously successful. Their growth and performance are outstanding. This largely accounts for the difference between the growth rate for industry as a whole and that of the SOEs. The share of the TVE sector became second largest after the state sector from the mid-1980s, and the remaining gap shrank rapidly, (Table 1.8). It has also been much more efficient than the state sector, eg as measured by total factor productivity, (Table 1.9).

Their impact on the economy extends far beyond the TVE sector itself. Their activities generate much demand for intermediate products and capital goods predominantly produced in the state sector (eg steel, machine tools, automobiles, etc). At the same time, TVEs greatly intensify competition with SOEs in those industries where the state sector does not dominate, eg textiles, most light industries, conventional mechanical and electrical machinery, etc. Such competition has improved many SOEs' efficiency, but has also driven many others into large losses or even to the verge of bankruptcy.



Table 2.5 records some facts about TVEs, their growth rate, their share of total industrial production and the proportion of output of TVEs classified by originating sector.

**Table 2.5(a): Township and Village Enterprises (Number of firms, Employment, Growth rate, and Share in total industrial output)**

| Year | Number of Industrial TVEs (1000) | Employment of Industrial TVEs (million) | Annual Growth Rate of Industrial TVEs (%) | Share in Total Industrial Output (%) |
|------|----------------------------------|---|---|--------------------------------------|
| 1978 | 794                              | 17.34                                   | 10.58                                     | 9.09                                 |
| 1980 | 758                              | 19.42                                   | 19.24                                     | 9.88                                 |
| 1985 | 4930                             | 41.37                                   | 90.31                                     | 18.81                                |
| 1990 | 7220                             | 55.72                                   | 10.61                                     | 25.29                                |
| 1994 | 6986                             | 69.62                                   | 36.10                                     | 42.04                                |

Source: Statistical Yearbook of China, 1995.

**Table 2.5 (b): Share of Selected Industrial Products Produced by TVEs, 1990**

| Coal  | Cement | Cotton Cloth | Paper | Electric Fan | Canned Food |
|-------|--------|--------------|-------|--------------|-------------|
| 33.1% | 27.5%  | 21.4%        | 38.2% | 46.5%        | 39.1%       |

Source: Qian and Xu (1993).

**Table 2.5 (c): Proportion of Output of All TVEs by Originating Sector**

|      | Share (%) of Agricultural TVEs | Share (%) of Industrial TVEs | Share (%) of Constructional TVEs | Share (%) of Transportation TVEs | Share (%) of Other Service TVEs |
|------|--------------------------------|------------------------------|----------------------------------|----------------------------------|---------------------------------|
| 1978 | 7.31                           | 78.14                        | 7.06                             | 3.81                             | 3.67                            |
| 1985 | 2.15                           | 66.97                        | 11.36                            | 1.50                             | 17.68                           |
| 1990 | 1.68                           | 71.50                        | 11.26                            | 7.66                             | 7.91                            |
| 1994 | 1.35                           | 75.93                        | 9.57                             | 5.11                             | 8.04                            |

Source: Statistical Yearbook of China, 1990, 1995.

### **Institutional Features of TVEs**

The phenomenal growth of TVEs was neither planned nor expected by the Chinese central government, as publicly acknowledged by Deng Xiaoping (Chen, 1989). Before 1984, TVEs were known as collectively-owned commune-brigade enterprises (CBEs); and these were initiated in 1958 when the people's communes were established. During the 1970s, CBEs developed alongside the increasing power of local governments; their share in GNP increased by about 1% annually. In 1976, at the end of the Cultural Revolution, employment in this sector had risen to 17.9 million, with about 5% of gross social product (GSP), or 11.2% of the national income (NI) (Xu, 1995).<sup>11</sup> In 1984, after the dissolution of the people's commune system, the CBEs were renamed township-village enterprises (TVEs).<sup>12</sup>

As products of often spontaneous initiatives by local people over vast areas, institutional arrangements in TVEs vary a lot. Here we outline some of the major variations. First, there are important differences between township enterprises (TEs) and village enterprises (VEs). A typical village will have a population of hundreds (no more than a couple of thousand at most). Most residents in a village have lived there for decades, and know each other well. Kinships are prevalent in village politics. Typical townships, on the other hand, have a population numbered in tens of thousands. Given this difference in community size, there are differences in closeness among the residents, who are the nominal owners of the firms, in methods of monitoring them, in ways of managing them.

In a typical case, these collective owners do not have clearly defined shares as the term is normally understood. Participation in the TVE is not a decision made by the residents voluntarily and independently. Instead, their participation is determined by their residency and mandated by the community government. That is, the ownership is linked with the residency of the community (township or village). Leaving and joining a community means giving up and gaining ownership of the assets of the community's firms. Residency is defined either by family ties, such as parental/marital relationship or other kinship, or by authorized migration. Official residency is enforced by the household registration system (similar to the propiska — the Russian internal passport system).

Unlike the pre-reform era, unauthorized migration now is not counted as illegal. But immigrants do not enjoy nominal ownership as official (or recognized) residents of the community. In this aspect, the TVEs are different from a typical producer co-operative, where all the workers enjoy ownership equally. Immigrant labourers are

becoming an underclass group in all developed regions. This may become a serious social problem,<sup>13</sup> since in all the developed regions with great concentrations of TVEs, immigrant workers play important roles. On the other hand such migrant labour allows for greater wage and labour force flexibility, thereby enabling better adjustment to shocks.

Second, TVEs are organized differently in different regions. Amongst the most successful, there are three well-recognized models: from Sunan (southern Jiangsu province, the Yangtse delta); Guangdong; and Wenzhou (in southern Zhejiang province). These three regions cover a vast area with a population of about 200 million, where most workers are in non-agriculture sectors and include a large number of immigrants from other regions in China. In Sunan community governments maintain a strong influence over the TVEs. TVEs started to be developed in Sunan on a large scale from the 1970s and since the early 1980s have employed most of the labour force. About half of the richest townships and villages in China are concentrated in this region. Close to Shanghai, its TVEs produce all types of products, including automobile parts, machine tools, radios, printing, textile products, plastic products, and even jewellery. The superiority of the Sunan model went unchallenged until the late 1980s when the Wenzhou model and Guangdong model appeared.

A key feature of the Wenzhou model is the important role of private ownership. Although privately-owned firms are not typical TVEs, the Wenzhou model is nonetheless frequently mentioned as a special type of TVE. Greater Wenzhou, a region with a population of some 300,000, did not really develop TVEs until the mid-1980s when private firms started to grow rapidly. Now Wenzhou's economy is dominated by the private sector and the per capita GDP is among the highest in China. The Guangdong model, which refers to the TVEs in the Zhujiang delta area (southern Guangdong) is closer to the Sunan model, but with more joint ventures with foreign capital, more direct trade with Hong Kong and more private firms. Its enterprises are prominent in high technology sectors, such as the pharmaceutical and electronics industries. The largest Chinese air conditioner, refrigerator, automatic rice cooker, electric fan producers are TVEs in this region. One of the authors visited some TVEs there and was very impressed by their scale (with eight thousand employees in one firm) and modern production technologies and management. A considerable fraction of the richest townships and villages in China are here.

It is always dangerous to predict the future, especially of a process still in transition. Nevertheless TVEs have operated successfully for a quarter of a century already, and we expect them to continue to play a major role in the PRC economy. But the scale of the (more successful) TVEs is likely to expand, and their ownership structure may become more akin to capitalist firms as an increasing proportion of migrant workers become employed. Some successful TVEs will transmute into nationwide large corporations.

Not only did TVEs outperform the state sector, but their record in PRC has also been much better than that of Western cooperatives. This was in part due to weaker competition in PRC, than from Western private firms, but it was also due to such factors as more flexible labour arrangements, a stronger urge to save, invest and grow, and the informal institutional arrangements, outlined in the next section.

## **What Has Helped the Development of the TVE?**

### **i. The M-form structure**

Under the Chinese M-form structure, local firms, including SOEs, constitute a relatively self-contained regional economic network. This regional network fosters development of the TVEs for the following reasons.<sup>14</sup>

First, non-specialized regional economies and the decentralized planning system gave TVEs the opportunity to grow without much disturbance to the existing system. There are broad ranges of products which the TVEs can produce to meet local demand, and often sufficient local products to supply to TVEs as inputs. Close links between TVEs (or their predecessors, the CBEs) and local SOEs were started in the 1970s (before the reform) when the central government promoted the small industrial SOEs at the county level, and implemented the plan of mechanization of agriculture through regional initiatives. This often facilitated technology transfer from SOEs to TVEs. The philosophy was to modernize without destroying the country's (rural) base, thereby avoiding the extreme urbanisation of many LDCs.

Second, the M-form structure provides strong incentives to regional governments to support the development of TVEs, eg for fiscal reasons. Third, the banking system in the M-form structure gives regional branches autonomous power to lend to TVEs, as long as they keep an overall balance between deposits and lending within their region.

### **ii. Informal Institutions in TVEs**

Another factor greatly helping TVEs is the existence of informal institutions. These include implicit contracts, both in inter-firm transactions and in internal relationships, as well as other informal financial, employment and trading arrangements. These institutions are popular as substitutes for formal rules, contracts and ownerships. Their function is particularly important when market imperfections are severe.

Some examples of the areas in which informal institutions have helped TVEs are as follows. First, fund raising. TVEs which are in the same community, or several TVEs which have good long-term relationships, provide mutual guarantees among themselves to assist each other with getting bank loans. In Wenzhou, a popular informal financial institution among private business is 'zuohui (forming an informal credit union)'. Members of a 'hui (credit union)' know each other well and there are no written contracts among them. They put funds together periodically and draw funds out among members based on a revolving principle and mutually agreed priority projects (rather like the earlier 19th century British building societies).

Second, TVEs are often integrated within industry groups. Member firms of each group are related in producing one type of final product, such as automobiles, diesel engines, computers, etc. These groups coordinate and stabilize long term relationships between member firms in sales and purchases, promote the reputation of the group, and help member firms in raising funds. Typically member firms of an industry group are regional firms with different ownership structures (this is related to the M-form structure). The relationship within such a group is often informal with no binding legal contracts. Long term reputation is what matters.

Third, TVEs often operate without formal employment contracts, which can help to provide flexibility. For example, when a TVE is hit by a temporary adverse shock to supply or demand, a common practice is to shut the firm down temporarily to reduce cost. At such times, the TVE pays only a subsistence wage to its employees,

usually about one eighth of normal. This practice is usually not specified in written employment contracts.

The effectiveness and scope of informal institutions varies with circumstances. For example, informal relationships are more important and more widespread in village than in township enterprises, because of the closer relationships involved.

The transition from a centralized system to a market system ultimately involves the creation of formal institutions, such as legal and contractual systems and property rights, etc, that are both complex and complementary. When informal institutions emerge, as substitutes for such previously non-existent formal institutions, the transition can subsequently be made easier and smoother.

### **Formal and Informal Property Rights**

A TVE is best described as a vaguely-defined cooperative, essentially a communal organization without a well-defined ownership structure (Weitzman and Xu, 1994). The extraordinary success of the TVEs present a severe challenge for traditional property rights theory: Why have vaguely-defined cooperatives performed so well? Is this not in contradiction with the basic precepts of property rights theory?

Weitzman and Xu argue that if people were previously non-cooperative and there is no other way to make people work cooperatively, then ownership becomes the major device to resolve conflicts, or to enforce cooperation in an economic organization. However, if there are informal institutions, such as mentioned above, or other mechanisms which do not rely on formal contracts and/or property rights, then the significance of ownership to solve conflicts in economic organizations may vary. One possible mechanism for enforcing an informal relationship is through long-term reputation.

### **Major Differences between TVEs and SOEs**

Compared with SOEs, the crucial feature of TVEs is that government, whether central or regional, has no financial responsibility for them. TVEs have to finance themselves, a hard budget constraint. Major sources of financing of TVEs include funds derived from the collective assets of the community, funds raised from individuals and borrowing from the state bank(s). Such community collective assets are different from state assets being subject neither to state intervention nor protection, eg by direct subsidy or cheap bank loan.

In the TVE sector there are no guaranteed positions for either managers, or workers (though local resident workers have the priority for keeping their jobs when there are lay-offs). Persistently loss-making TVEs must either go bankrupt or be taken over, (in the latter case typically within the same community). In 1989 and 1990, the 'recession period' of the Chinese economy, hundreds of thousands of TVEs went bankrupt.

### **3. Major Problems in the Chinese Economic System**

In spite of the success of the Chinese economy, serious problems remain. If these are not resolved, growth may be checked or even reversed. Here we list some of the most serious problems.

#### **Enforcing the Bankruptcy Law**

Facing tough competition, eg after price reforms, an increasing number of SOEs are making losses. According to official data, in the first nine months of 1995 the SOEs lost Yn 41.7 bn (£3.2 bn), up 18.8% on the same period of 1994. Moreover, triangular debt, (long chains of unpaid and overdue debts between enterprises), swelled to Yn 750 bn at the end of August, up from Yn 630 bn at the start of the year (Financial Times, p.6, 20/10/95). A conservative estimate is that if the bankruptcy law was vigorously enforced, then about 10% of SOEs, ie about 11,000 SOEs would go bankrupt. Meanwhile the government has met much of the cost of such losses by direct subsidies (see Table 3.1), which has used up a sizeable proportion of its total revenues.<sup>15</sup>

**Table 3.1: Fiscal Subsidies to Loss-Making Enterprises**

| Year | Subsidies to Loss-Making Enterprises (Yuan bn) | As % of Government Fiscal Revenue | As % of GDP |
|------|--|-----------------------------------|-------------|
| 1986 | 32.48  | 14.37                             | 3.18        |
| 1987 | 37.64  | 15.89                             | 3.15        |
| 1988 | 44.65  | 16.99                             | 2.99        |
| 1989 | 59.89  | 20.32                             | 3.54        |
| 1990 | 57.89  | 17.48                             | 3.12        |
| 1991 | 51.02  | 14.13                             | 2.36        |
| 1992 | 44.50  | 10.76                             | 1.67        |
| 1993 | 41.13  | 8.08                              | 1.19        |
| 1994 | 36.62  | 7.02                              | 0.81        |

Source: Statistical Yearbook of China, 1995.

However, most potentially bankrupt SOEs continue to operate and to accumulate losses. The Chinese government has identified the enforcement of bankruptcy, particularly in the state sector, as a central issue in the current reform. Although a bankruptcy law was passed by the People's Congress in 1986, its implementation has never gone beyond the experimental stage. An official investigation in 1993 in five provinces, which account for more than one quarter of the total number of SOEs, (and more than one third of the losses in the state sector), found that since the Bankruptcy Law was officially implemented, 948 bankruptcy cases had come before the courts, of which about 80% occurred between 1991 and 1993. Most of those bankrupt SOEs had more than 1,000 employees; the largest had 3,000.

There are many obstacles preventing full implementation of the bankruptcy law. First there are financial problems. Creditors prefer not to let SOEs go bankrupt, since if they let the firm keep running, the state may help and the loss may not materialize. According to an estimate made by four Chinese specialized banks, nearly Yn 400 bn, or about 16.7% of China's Yn 2,400 bn loans to the state sector were non-performing

(Joint Enterprises Bankruptcy Investigation Group, 1993). Such losses have been handled through the postponement of repayment of debts (47%), government subsidies (7%), renegotiation of contracts with the government (5%), use of previously accumulated profits (36%), others (5%). Once a SOE goes bankrupt, the creditors will face a crystallised loss. Indeed, according to this study, in almost all the bankruptcy cases it was the debtors, not the creditors, who applied for bankruptcy.

A second problem is that many profitable SOEs served as guarantors for other SOEs to get bank loans, or else government agencies served as guarantors for enterprises under their control. As a result, the bankruptcy of loss making SOEs may trigger a chain reaction.

Finally, a formidable barrier against enforcing bankruptcy law is the lack, in China as in Russia, of a social safety net for redundant workers. Consequently, at present, before an enterprise declares bankruptcy, the government tries to arrange a take-over by another SOE. Until this is tried, no bankruptcy application can be handled by a court. If no willing SOE is found, the proceedings may simply drag on. Political concern over unemployment caused by bankruptcy is paramount among Chinese government officials. Zhu Rongji, Deputy Prime Minister responsible for economic reform (the tsar of the Chinese economy, according to the Western media), admitted this to visiting Western economists<sup>16</sup> and joked that “If any of you are able to solve our bankruptcy problem without causing workers to go on the street, I would apply for a Nobel Prize for you.”

### **Political Stability**

Amongst all the problems facing Chinese reform, the most serious concerns uncertainty about the future political stability of the regime. There are many factors making the future of the system uncertain. The most immediate is the hand-over of power after Deng, which may take many years to accomplish. Second, corruption among government officials generates great popular resentment, threatens the legitimacy of the government and could even trigger upheaval. The 1989 Tian-an-men pro-democracy demonstrations were partly caused by popular detestation of such wide-spread corruption. Third, as discussed above, the worsening performance of the state sector could lead to massive unemployment in future. Finally, the possibility of loss of control of the centre over regions remains a threat. This tends to restrict the central government’s capacity to improve monetary and fiscal policies, and to coordinate inter-regional activities. This, in turn, has limited central government’s ability to prevent worsening inequality, both across regions and across households, accompanying the transitional process, see Howes (1993), Hussain, Lanjouw and Stern (1994), and Putterman (1993).

### **Fiscal and Monetary Problems**

One of the (relatively few) merits of the previous central planning system was that it made the control of nominal magnitudes — the government’s borrowing requirement, the money supply and inflation — relatively easy. In aggregate, the controlled price level of outputs could be adjusted relative to the controlled level of payments to factor inputs, so as to generate sufficient surpluses (savings) in the SOEs to meet both the expenditures of central, regional and local governments and the planned investments of the SOEs. The banking system, usually comprising a single combined central/‘commercial’ monobank, acted simply as an accounting ‘score-

keeper' to record whether the SOE's actual surpluses and investments met their targets. Individual workers, farmers and bureaucrats were paid in cash and usually had only a strictly limited outlet for savings in the shape of savings deposits. Hoarding or dishoarding of such assets could cause disturbances to nominal magnitudes, but this could be observed and fairly readily offset. In this context government expenditures, albeit a large proportion of GDP, could be fully matched by revenues, and the growth of the money supply held roughly in line with the planned growth of real output — although the shortage of quality goods that people wanted to buy often resulted in a monetary overhang and repressed inflation.

This mechanism for controlling nominal magnitudes eroded once prices were freed from the late 1970s onwards and competition encouraged. With economic inefficiency and/or the low quality of their products exposed by competition from the non-state sector and from imports, the surpluses of the SOEs melted away, and to an increasing extent were replaced by losses. This happened in China, as in the other economies in transition, (McKinnon, 1993).

Since the central government had relied on such surpluses as its revenue base, this led to a swift erosion of revenue as a % of GDP, as severe in China as elsewhere in EEFSU, (Table 3.2).

**Table 3.2: Decline in Fiscal Revenues of Economies in Transition  
(Fiscal Revenues as % of GDP)**

| Year | China | USSR/Russia | Poland | Hungary |
|------|-------|-------------|--------|---------|
| 1978 | 30.93 | 47.1        | n.a.   | 60.9    |
| 1984 | 19.87 | 49.6        | 43.7   | 54.7    |
| 1987 | 18.39 | 52.8        | 38.8   | 53.2    |
| 1990 | 15.85 | 47.2        | 33.8   | 30.8    |
| 1991 | 14.57 | 35.1        | 25.7   | 28.8    |
| 1992 | 13.08 | 16.4        | 27.0   | 27.0    |
| 1993 | 12.60 | 13.9        | 29.5   | 32.0    |
| 1994 | 11.59 | 14.0        | 31.3   | 27.6    |

Notes and Source:

China, Statistical Yearbook of China (1995) and Annual Report of the People's Bank of China. Fiscal revenue includes fiscal revenues of the central government and all regional governments, including taxes, revenues from enterprises, other revenues and subsidies to loss-making enterprises.



Russia, Data for 1978-1991 from Sachs and Woo (1994), Table 9, p.126; Data for 1992-1994 from A Guide to Russian Debt Markets, CS First Boston, December 1995.

Poland, Data for 1984-87 calculated from International Financial Statistics, various years; Data for 1990-92, from Ebrill et al (1994); Data for 1993-94 calculated from Economic Commission for Europe (1995) and BIS (1995).

Hungary, Data for 1978-1987 from Sachs and Woo (1994), Table 9, p.126; Data for 1990-1994 from the annual reports of the National Bank of Hungary, Economic Commission for Europe (1995) for revenue and BIS (1995) for GDP data.

Another problem relates to the regional decentralization of the fiscal system. This is based not on types of taxes and expenditures, but on the level of administrative control. The central government collects taxes only from centrally controlled entities. Each regional government is responsible for collecting tax revenues within its region. Then the regional government turns over a proportion of that revenue to the central government. Every year the central government has to negotiate with regional governments for the division of regional tax revenues. This system has greatly weakened the central government's control over fiscal policy and revenue. In the last decade, both in terms of the ratio to GDP and in terms of its share of total fiscal revenue, the central government's fiscal position has deteriorated.<sup>17</sup> Given both this deterioration, and the perceived need to continuing subsidizing the loss-making SOEs, expenditures on education, scientific research, inter-provincial highways, railways, etc, have been held back, in order to keep the overall fiscal deficit within reasonable limits (Tables 3.3 and 3.4). Both the expenditures and revenue of the Central Government have fallen, as a % of GDP, by about a third in the last decade, Table 3.3.

**Table 3.3: Central and Local Government Expenditures and Revenues as a % of GNP**

|      | Expenditures |         |       | Revenue |         |       |
|------|--------------|---------|-------|---------|---------|-------|
|      | Total        | Central | Local | Total   | Central | Local |
| 1980 | 26.8         | 14.4    | 12.4  | 24.3    | 4.7     | 19.3  |
| 1985 | 21.6         | 9.8     | 11.8  | 21.8    | 8.3     | 13.5  |
| 1990 | 19.6         | 7.8     | 11.8  | 18.7    | 7.7     | 11.0  |
| 1992 | 18.1         | 7.5     | 10.6  | 17.0    | 6.8     | 10.3  |
| 1993 | 16.8         | 6.2     | 10.6  | 16.2    | 5.4     | 10.8  |
| 1994 | 11.8         | 6.5     | 5.1   | 12.9    | 3.9     | 9.0   |

Source: Statistical Yearbook of China 1995.

Note: 1. Definitions of fiscal revenue in China are not always identical to those used in Western countries. But the broad trends shown above are, we believe, reliable.

2. Before 1993, revenues of each year includes borrowing from domestic and abroad. Expenditures before 1993 includes repayment of principal and interest of borrowing from domestic and abroads.

A further serious consequence of the decline of the central government's fiscal position has been a great increase in inequality across regions. By the early 1990s, regional inequality in China was claimed by some scholars to be among the worst in the world<sup>18</sup> (Wang, 1995).

This trend could be politically threatening. Recent government statements have announced measures, eg reallocations of funds and tax privileges, to try to reverse it.

In order to counter the shortcomings of the central government's fiscal position, a programme of measures was introduced in January 1994. This created a national tax administration; introduced a value-added tax; unified the taxation of enterprises and of personal incomes; and established a transparent division of revenue between central and local government, which was expected to raise the central government's share to about 60%. However, the ratio of total fiscal revenue to GDP reportedly fell further in 1994, though now stabilising in the first three quarters of 1995 (Wolf, *Financial Times*, 20/11/95). Many problems remain, eg of evasion and fraud, and of administration. The greater part (58%) of all revenue now comes from VAT, but tax increases here would have an adverse effect on inflation. Only a tiny proportion comes from personal income tax, with fewer than 2% of individuals liable. As China's prosperity increases, higher personal taxes are surely necessary; but as other governments have discovered, they are not popular.

This shortage of tax revenue makes it more difficult for the central government to establish a nation-wide social safety net, without which it will be much harder for the authorities to reform and remove the soft budget constraint from SOEs, who currently provide such services as health care, education and housing to their employees. Regional governments may have to play a larger role. These issues are broadly similar to those encountered elsewhere in the FSU.

Despite holding back desirable expenditures, eg on education, the weakness of fiscal revenues has led the government to run overall deficits in recent years, albeit nothing like as large as in many other countries in EEFSU. The central government's deficit stood at 1.28% of GDP at end 1994.

**Table 3.4: Government Balances as % of GDP**

| %       | Current Budget Balance |      |      |       |      | Overall Surplus/Deficit |      |      |       |      |
|---------|------------------------|------|------|-------|------|-------------------------|------|------|-------|------|
|         | 1985                   | 1990 | 1991 | 1992  | 1993 | 1985                    | 1990 | 1991 | 1992  | 1993 |
| Russia  | n.a.                   | n.a. | n.a. | -21.6 | -5.1 | n.a.                    | n.a. | n.a. | -25.8 | -8.3 |
| Poland  | n.a.                   | 6.1  | -4.6 | -5.1  | 0.4  | n.a.                    | 2.5  | -6.6 | -7.6  | -1.9 |
| Hungary | 6.5                    | 5.1  | 3.9  | 1.6   | -1.1 | -1.1                    | 0.5  | -2.3 | -5.6  | -6.4 |

|       |     |     |     |     |     |      |      |      |      |      |
|-------|-----|-----|-----|-----|-----|------|------|------|------|------|
| China | 7.1 | 2.5 | 1.9 | 1.2 | 2.2 | -0.5 | -2.1 | -2.4 | -2.5 | -2.1 |
|-------|-----|-----|-----|-----|-----|------|------|------|------|------|

Source: Trends in developing economies, 1994, 1992.

The central government has recently attempted to finance its continuing deficit in a non-monetary fashion by encouraging the development of a government bond market. This started in 1981 when 4.87 yuan bn were issued. By the end of 1993, 166 yuan bn were outstanding 4.8% of GDP. In 1994, the authorities expanded their use of this market, issuing about 100 yuan bn. They are likely to make even further use of the bond market in future, in order to avoid recourse to monetary financing from the central bank, the People's Bank of China.

The government's deficits are calculated exclusive of the losses of loss-making SOEs. Since the authorities have not been willing, for the most part, to close them, such SOEs are on a soft budget constraint. They meet both their operating losses and their new investment expenditures by borrowing from the banking system.

Meanwhile the banking system has also been adjusting in this transition period. The first stage, around the mid-1980s, was to give the four huge 'commercial' banks, the Industrial and Commercial Bank of China (ICBC), the Agricultural Bank of China (ABC), the People's Construction Bank of China (PCBC), and the Bank of China (the export/import bank) more independence from the People's Bank of China, and some greater latitude for competition. But they too remained SOEs with a soft budget, which they needed for survival. As central elements in the central planning system, their asset portfolio had consisted largely of loans to SOEs. With a large proportion of such SOEs becoming loss-making, the related loans became non-performing. As noted earlier, many SOEs, without a credible bankruptcy threat, have tried to invest and grow their way out of their current problems.

Moreover, that same lack of a hard budget constraint meant that the SOE's behaviour was relatively impervious to increases in interest rates. So the capitalist technique of varying interest rates to (bank) borrowers to control credit expansion, investment booms, monetary increases and inflation was not seen as practicable in China. Instead, the control method was quantitative credit restriction. Such methods, however, provide room for political pressure, favouritism and corruption. In general the massive SOEs had much more political pull than the nascent cooperatives and TVEs, so that such quantitative methods reinforced a misallocation of capital and perpetuated a system in which the least efficient sector of the economy, the SOEs, did most of the investment.

In part, the problems for borrowers other than SOEs of obtaining credit, especially during periods of restriction, have been mitigated by the development of a dual track system in banking, with a very rapid growth of rural and urban credit cooperatives, as well as other non-bank financial institutions (insurance companies, investment and trust institutions, etc), which have been able to some extent to avoid, or evade, the centrally-imposed quantitative credit controls. So, the efficacy of such quantitative controls is being eroded. Moreover, in so far as the credit controls are redirected to bite at the SOEs, this has typically just led to a countervailing expansion of inter-company debt (unpaid bills), the notorious triangular debt, again as in EEFSU.

The continuing problems of fiscal deficit at the centre, and loss-making SOEs financed by bank loans, in a system where direct credit controls are becoming less

effective raise dangers of loss of monetary/financial control and worsening inflation. The authorities are fully aware of this. They are beginning very tentatively to harden SOEs budgets. 'Last year [1994], 156 enterprises in 18 major cities were earmarked for bankruptcy in the course of 1995... However the number of redundancies involved has been quite small, with only 11,000 workers losing their jobs but nearly all of them finding alternative employment. Since 1988, after a bankruptcy law was enacted, 1,400 enterprises have been liquidated but only 300 of these belonged to the state.'<sup>19</sup> (Salomon Brothers, 7 August 1995). But the political punch of the SOEs and concern over unemployment and social cohesion has made progress on this front glacially slow.

Meanwhile the authorities have been pressing on with reforms to the laws and constitution of both the central bank (Law of the People's Bank of China, adopted March 18th, 1995) and the commercial banks (Commercial Banking Law, adopted May 10, 1995). The latter is intended to provide a basis for the (four main) commercial banks to become competitive, profit-maximising entities. But they cannot become so while they are stuck with so many bad loans. At one stage in 1994 it was mooted that a new group of banks, called state policy banks, would be established, which would not only extend longer-term 'policy loans', but might also take over the deadweight of existing bad or non-performing loans from the state commercial banks (Li and Ma, 1994). While these development banks have been set up, their executives, not surprisingly, have refused to become a dumping ground for existing bad loans. In any case removing existing bad loans from the commercial banks will not solve their problems unless they can prevent a build-up of further bad loans in future, which cannot be assured under the present system.

Although there has not been significant monetary financing of central government in recent years, the erosion of its tax base, and the need for the central government to take over and extend the social safety net from its current (limited) provision by SOEs, makes the fiscal position fragile. Meanwhile a combination of good prospects for growth, soft budgets for SOEs, and a hope that enterprises can grow out of their problems has led to enormously high investment ratios and an insatiable desire for bank credit, much of which is largely impervious to interest rate adjustments. This is aided and abetted by local government, which encourages its SOEs to invest as a way of expanding its overall tax base, income and power. China must be one of the few countries which regards its investment ratio as too large, and looks for policy measures to reduce it. "Secondly, more and stronger efforts are needed to continue to control the total size of fixed asset investment. Currently, the size of the social fixed asset investment is still too large... it is hard to bring down investment rate to the appropriate level around 30 percent", China Financial Outlook, 1995.

This puts enormous upwards pressure on domestic credit expansion, which has been reinforced in the last year or so (1994 and 1995) by a huge expansion in foreign exchange reserves, which was not sterilized by extra bond sales, (see Section 4). This has led to continuing extremely fast growth in the monetary aggregates.

With monetary growth (M2) averaging about 25% p.a. recently, and real growth approaching 10% p.a., one might have expected inflation to have been around 15% p.a. In fact, it has usually been lower than this in most recent years, (Table 3.5):-

**Table 3.5: Annual % Growth in the MonetaryAggregates**

### and Prices (RPI)

|     | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 |
|-----|------|------|------|------|------|------|------|------|------|------|------|
| M1  | 21.4 | 32.7 | 18.3 | 26.4 | 24.7 | 7.8  | 13.4 | 25.5 | 31.6 | 27.9 | 26.2 |
| M2  | 21.4 | 40.4 | 89.2 | 30.7 | 25.8 | 16.3 | 26.2 | 29.1 | 28.8 | 25.7 | 41.8 |
| RPI | 2.8  | 8.8  | 6.0  | 7.3  | 18.5 | 17.8 | 2.1  | 2.9  | 5.4  | 13.2 | 23.4 |

Sources: International Financial Statistical Yearbook.  
The People's Bank of China, Annual Report 1994.

During this period price controls have been progressively removed, though with occasional backsliding when the authorities try to counter inflationary peaks (sometimes reflecting adverse agricultural supply shocks) with temporary controls on certain staple products. This will no doubt have affected the time path of the index. Nevertheless prices have grown more slowly on average during these years than might have been expected, given the rapid rate of monetary expansion.

This outcome is, as an identity, due to a fall in velocity, as the Chinese have been prepared to raise their ratio of money holdings to income, a major component of an impressively high savings ratio. This fall in velocity in China is in sharp contrast to its rapid rise in most of EEFSU, where a flight from money has exacerbated inflationary problems. To some significant extent this fall in velocity has been aided by the authorities' willingness to raise interest rates on bank deposits as inflation increases, so that they have normally offered a positive real return. With interest rates on deposits being varied more flexibly than those on bank loans, in some part out of concern for the loss-making SOEs, the spread between bank loan and deposit rates in China has at times been negative in recent years, a measure of how far the Chinese 'commercial' banks and monetary control system are from the capitalist norm.

Many countries in transition in EEFSU have found their economic and political problems greatly exacerbated by massive inflation. Although China's inflation has been high, the PRC has managed, more or less, to avoid levels that cause really severe problems. This, however, has been assisted by a fall in velocity which can hardly be expected to go much further, since the money/income ratio has reached levels normal in more developed countries. Unless China can solve the problem of controlling excess credit demand (especially from the inefficient SOEs), and/or generate a countervailing central government budget surplus, there will be a continuing threat of monetary indiscipline and high inflation.

**Table 3.6: Monetary Growth and Inflation Rate**

|         | Monetary Growth |      |      |       | Inflation |       |       |       | M2/GNP<br>End 1993 |
|---------|-----------------|------|------|-------|-----------|-------|-------|-------|--------------------|
|         | 1990            | 1991 | 1992 | 1993  | 1990      | 1991  | 1992  | 1993  |                    |
| China   | 28              | 26.5 | 31.3 | 24    | 2.1       | 2.9   | 5.4   | 13.2  | 1.0                |
| Russia* | n.a.            | n.a. | n.a. | n.a.  | n.a.      | 132.3 | 1634  | 919.4 | 0.79**             |
| Poland  | 384.3           | 67.5 | 49.7 | 42.6  | 555       | 76.7  | 45.3  | 36.9  | 0.36**             |
| Hungary | n.a.            | 28.2 | n.a. | n.a.  | 29        | 34.2  | 23.0  | 70.9  | 0.57***            |
| Romania | 18.6            | 35.2 | 99.2 | 128.7 | 4.2       | 188.7 | 233.2 | 230.5 | 0.25               |

Note: \* Russia's inflation data are implicit GDP deflators, while the other countries' are consumer price indices.  
 \*\* 1992.  
 \*\*\* 1991.

Source: 1. Statistical Yearbook of China 1994.  
 2. International Financial Statistical Yearbook 1994.  
 3. Trends in developing economies 1994.  
 4. Statistical Handbook 1993, States of the Former USSR, the World Bank.

#### 4. External Relationships

Shortly after the end of the Cultural Revolution and the death of Mao Zedong in 1976, the new leadership took the strategic decision that they would gradually open the Chinese economy towards integration with the world economy. At that time, in 1978, exports were small both absolutely (less than \$100 mn) and as a proportion of GDP (4.67%).

Thereafter exports increased rapidly (measured in constant US 1990 \$ prices), and largely shifted from primary products to manufactures. The main trading partners are shown in Table 4.1. After an initial burst of export expansion in 1978-81, when growth averaged about 22.2% annually, there was a hiatus in 1982-1985, followed by a resumption of rapid expansion from 1986 to date, with growth averaging about 20.7% annually. On average, imports grew at much the same rate, so that there has been no trend in the balance of trade. The path of imports has, however, been even more variable than that of exports, shooting up during the more expansionary years, twice rising by over 50% in a year (1978 and 1985), but, per contra, twice falling during years of credit restrictions and cutbacks in 1982 and 1990.

**Table 4.1 China: Exports and Imports, Destinations (1994)**  
 US\$ bn

|                   | Import (From) | Export (To) | Total |
|-------------------|---------------|-------------|-------|
| Japan             | 26.32         | 21.57       | 47.89 |
| Hong Kong         | 9.46          | 32.36       | 41.82 |
| Taiwan            | 14.08         | 2.24        | 14.39 |
| Republic of Korea | 7.32          | 4.40        | 11.72 |
| Singapore         | 2.48          | 2.56        | 5.04  |
| Germany           | 7.16          | 4.76        | 11.92 |
| UK                | 1.77          | 2.41        | 4.18  |
| France            | 1.94          | 1.42        | 3.36  |
| Italy             | 3.07          | 1.59        | 4.66  |
| Netherlands       | 0.71          | 2.27        | 2.98  |
| Switzerland       | 0.99          | 0.36        | 1.35  |
| Russia            | 3.50          | 1.58        | 5.08  |
| Canada            | 1.83          | 1.40        | 3.23  |
| USA               | 13.97         | 21.46       | 35.45 |
| Australia         | 2.45          | 1.49        | 3.94  |

Source: Statistical Yearbook of China, 1995: Note that Hong Kong acts as an entrepot, or gateway, for trade flows with unspecified third parties.

Until the last couple of years, China's reported foreign exchange reserves had been quite meagre. In the last two years, however, such revenues have grown rapidly expending \$19.4 bn at end 1992 to \$69.8 bn at end October 1995.

**Table 4.2: Balance of Payments of China  
US\$ Bn (Current Value)**

|  | 1991 | 1992 | 1993 | 1994 |
|--|------|------|------|------|
|  |      |      |      |      |

|                 |       |        |        |        |
|-----------------|-------|--------|--------|--------|
| Exports (fob)   | 58.92 | 69.57  | 75.66  | 102.56 |
| Imports (fob)   | 50.18 | 64.39  | 86.31  | 95.27  |
| Trade Balance   | 8.74  | 5.18   | -10.66 | 7.29   |
| Current Account | 13.27 | 6.40   | 11.90  | 7.66   |
| Capital Account | 8.0   | - 0.25 | 23.47  | 32.64  |
| Reserves        | 21.72 | 19.44  | 21.20  | 51.60  |

Sources: Statistical Yearbook of China, 1994, 1995.

With other external flows — invisibles, and the capital account — being quite small, though usually positive, until the 1990s, the authorities were forced to ensure that imports remained in line with exports. In any case foreign trade was closely managed through a limited number of foreign trade corporations (FTCs), whose plans were submitted to and agreed by the government, and whose profits and losses were passed through to the central authorities. The FTCs had to surrender all foreign exchange earnings to, and purchase all foreign exchange requirements from, the government at the official renminbi<sup>20</sup> exchange rate. So, at this time, the exchange rate served little economic function; it was only a price for budgetary allocations under the centralised plan for foreign trade (see Huang and Wong, March 1995).

Following the decision to open the economy, and to increase the role of market forces and reduce the burden of state subsidies on foreign trade losses (since the RMB was artificially overvalued), China began to decentralize its foreign trade and foreign exchange systems in 1979. Subsidies for the FTCs were reduced, and by the mid-1980s anybody, or any enterprise, was allowed to export. Exporters were allowed to retain a (variable) proportion of foreign exchange proceeds while surrendering the remainder to central government. This system led to the development in 1986 of foreign exchange adjustment centres, (FEACs, or swap centres as they were called). Within FEACs, enterprises whose foreign exchange retentions were greater than they needed were able to sell any excess to other enterprises allowed to enter the market. The official RMB rate still governed transactions under the foreign trade plan and most capital transactions. But an increasing proportion of current account transactions (80% according to Huang and Wong) was diverted into the swap market. The swap market exchange rate was determined by demand and supply, but neither was totally free. Supply was affected by the retention quota, whereas demand was even more administratively determined, since no one was officially allowed to obtain foreign exchange without the permission of the State Foreign Exchange Administration Bureau, a subsidiary of the People's Bank. Even so, movements of the exchange rate in the swap market did appear to be influenced by fundamental factors, such as inflationary expectations, trade flows and financial conditions. So, between 1986 and 1994, China had a dual exchange rate system, with a fixed, and artificially high, official value for the RMB, and a lower, time varying rate in the still heavily administered swap market, though this latter remained inefficiently segmented between separate regional centres.

As noted by Huang and Wong, pages 4 and 5:-



“On January 1, 1994, China unified its official and swap market exchange rates. The official exchange rate was depreciated from RMB 5.8 to US\$1 at end of 1993 to RMB 8.7 to US\$1 which was the swap rate in Shanghai at that time. The system of FEACs was replaced by a national interbank foreign exchange market. The market is a network of designated foreign exchange banks (DFEB) in 26 major cities, with its headquarters in Shanghai. The retention system was abolished and Chinese enterprises are required to sell all their foreign exchange earnings to and purchase foreign exchange from the DFEBs at the exchange rate quoted by the banks. The exchange rate now is determined in the following way. At the beginning of each trading day, the PBoC publishes the middle rate of the previous trading day. The DFEBs quote their own rates within a range of this rate set by the PBoC. To ensure competitive operation of the market, the foreign exchange balances of the DFEBs must fall within a certain percentage of their foreign exchange assets. Any surplus or shortfall must be eliminated by trading with other DFEBs or the PBoC (Asiamoney, 1994).

The new system has certainly improved the efficiency of foreign exchange allocation since foreign exchange is traded at the unified rate. The elimination of the retention system has made hoarding of foreign exchange by FTCs for speculative purposes no longer possible. On the other hand, the central government’s control over foreign exchange resources is strengthened. Chinese enterprises no longer have the proprietary right to their foreign exchange earnings. Meanwhile, despite the “abolishment” of the priority list, purchases of foreign exchange from the DFEBs are still subject to approval and presentation of valid documents. The new system has essentially reduced the availability of foreign exchange outside the control of the central government.”

The unification not only encouraged exports, by removing the effective tax implied by the surrender of a portion of earnings at an artificially high rate, but also removed an impediment to capital inflows. The official rate was perceived as artificially high, and likely to be devalued. This deterred capital inflows despite the other attractions of PRC as a potentially enormous emerging market. So the change in the exchange rate regime at the start of 1994 contributed to the recent massive upsurge in capital inflows, largely foreign direct investment (data for fdi in 1994 are shown below in Table 4.3).

So long as such enormous, but volatile, capital flows continue, the People’s Bank will have a difficult job of managing the RMB, while simultaneously seeking to curb domestic inflationary pressures, which are threatening to make Chinese exports increasingly less competitive, again a common problem among countries in transition.

**Table 4.3: Foreign Direct Investment in China, 1994  
Gross Inflows \$ bn**

|                 |       |
|-----------------|-------|
| Hong Kong/Macao | 20.2  |
| Taiwan          | 3.29  |
| USA             | 2.49  |
| Japan           | 2.48  |
| Singapore       | 1.18  |
| South Korea     | 0.72  |
| UK              | 0.69  |
| Germany         | 0.26  |
| Thailand        | 0.23  |
| Total           | 31.54 |

Source: W. Munchau, Financial Times, 27 July 1995.

Most reports in the Western Press on such capital inflows refer to huge prospective deals between major multi-nationals and their prospective domestic partners in China. These projects are driven, it is said, largely by the desire of the multi-nationals to gain a foothold in what shortly may become the world's largest single market. Rumours suggest that few projects have yet proven very profitable for the Western partner.

Such Western investment in China has hitherto been dwarfed by the inflows from the ethnic Chinese outside China itself, especially from Hong Kong and Taiwan, but also elsewhere in South East Asia, eg Singapore. Much of the previously sizeable manufacturing sector of Hong Kong has been relocated in Guangdong province, and Taiwanese entrepreneurs have played a large role in the expansion in the coastal provinces of Jiangsu, Shanghai, Zhejiang, Fujian, and Guangdong.

The volume of such capital flows has been artificially exaggerated, since certain internal regulations, eg on luxury imports such as cars, make it attractive for domestic entrepreneurs to establish joint ventures with non-residents. So, some Chinese capital is routed via Hong Kong and Taiwan, eg via under invoicing of exports, to return to the mainland in the guise of foreign capital participation.

Even so, the involvement of non-resident Chinese in China's growth has become very large, though geographically patchy. Besides capital flows, this has involved large transfers of technological know-how, and, just as important, of entrepreneurial and market skills of various kinds. It is impossible to quantify the contribution of the non-resident Chinese in general, and of Hong Kong in particular, to China's successful growth record, but it has been substantial. There is no parallel in the EEFSSU — East Germany's reabsorption being a different process.

The scale of capital inflow into China recently has been such that the People's Bank has been forced to face strong upward pressure on the RMB, despite an inflation rate well in excess of that among Western countries. It has met this pressure in part by allowing some appreciation in the nominal rate, from 8.7 yuan per 1 US\$ on January

1, 1994 to 8.32 yuan in December 1995; and in part by accumulating a large foreign exchange reserve. Indeed so comfortable has their external position become that the authorities have been able in 1995 to contemplate large imports of food and raw materials, eg cotton and wool, as a way of containing inflationary pressures. In the longer term, China might become a large net importer of primary products and services and an increasingly large net exporter of manufactures.

The comfortable external position also has allowed China to announce at the APEC forum in Osaka (de Jonquières, *Financial Times*, November 20th, 1995) sweeping liberalizations of trade and foreign investment regulations in 1996, including a 30% cut in tariffs, steps towards currency convertibility, elimination of many import quotas and controls, and an easing of restrictions on operations by joint ventures with foreign shareholders. This package was viewed as an important step towards China's membership of the World Trade Organization (WTO).

## 5. Conclusions

The Cultural Revolution was brutal and destructive. But it did have one entirely unintentional effect that was indirectly beneficial to China's long term growth. This was by further weakening the powers of the central bureaucracy, thereby limiting the development of a centralised and functionally specialised (U form) EEFSU style economic planning system. Power and control remained with the Party and the State, but was diffused and dispersed much more widely, regionally and locally. This enabled initiatives to be taken at lower (political) levels to establish institutions, both in agriculture and industry (TVEs), which were too small and too local to get (much) state protection. Moreover, even in the case of regionally controlled SOEs, 'tournament rivalry' between regions, provinces, etc, and between SOEs and TVEs injected considerable competition into the system.

Thus what China has had over the last few decades, in considerable contrast to EEFSU, was competition, increased scope for individual initiative, notably in agriculture, and for an increasing share of the economy, in particular the TVE sector, a hard budget constraint. It is only in the last few years, however, that joint ventures, and other forms of (private) ownership, have come to play a significant role in industrial output. The PRC still lacks the infrastructure of legal, accounting and information systems necessary for the support of private ownership, and remains without a proper hard budget constraint in the state sector.

Does the success of China's economic development in recent decades imply that the key factors for growth are incentives, competition and a hard budget constraint? Does the fuzziness of the ownership arrangements, especially in the TVE sector, and the lack of a legal infrastructure, not then matter so much? Or is China's path unique and sui generis? In any case, will the continuing growth of TVEs, and the now rising involvement of joint ventures (especially with firms from Hong Kong and Taiwan) and even of purely privately owned firms, create an irreversible dynamic towards the adoption of the institutional infrastructure of a market economy?

Probably the latter will occur. But in the meantime China still faces severe problems. In common with EEFSU countries, China has not managed to rid itself of the albatross of loss-making SOEs, and the associated problems that this has caused for monetary and fiscal policies, and hence inflation. While China has suffered less, because the rest of the economy has managed to grow around the SOEs, a successful

transition to a full market economy can hardly be managed until a solution to this problem is found.

One crucial aspect of the SOE nexus is that they provide a social safety net for their work force. If that safety net was otherwise provided, in part surely by government, it would both reduce the cost burden of the SOEs, and make it easier to impose a hard budget constraint on them. In the longer term, of course, some form of social safety net should be made available to everyone, but in the short run the major practical problems, both political and economic, relate to the SOEs. It may seem paradoxical that the transition to a market economy requires a shift of functions, in the form of the social safety net, from firms back to governments! But if such social expenditures are to revert to government, that will require a stronger fiscal basis. That, in turn, leads on to the question of whether the balance of power between regional and central government is now optimal. Because the central planning regime, as practiced in EEFSU, was so inherently flawed, the comparatively greater strength of regional government in China has been beneficial. It limited the full-scale adoption of central planning, and even introduced some much-needed competition and local initiative, via the M-form structure. But now that China has embarked on the path towards a market economy, is the comparative weakness of the central government, vis a vis the regions, still optimal? In all other developed industrial economies the central government is much the more powerful.

Of course, one is not comparing like with like, since the other industrial countries are democracies and China remains a single Party state. Undoubtedly the greatest question mark over the future of China relates to its political evolution and stability. But that all-embracing issue is outside both our remit and our competence.

## ENDNOTES

1. A typical TVE is a collectively-owned community cooperative. Although sometimes a broader definition of TVE is used which does include a small proportion of privately owned firms, only collective firms are included under the heading, TVE, in the official statistics. We have more detailed discussions on them in Section 2.

2. The availability of labour, emphasized by Sachs and Woo (1994) in their comparison between China and the EEFSU, is a necessary condition for the development of the nonstate sector. However, institutions are also required to organize the labour force effectively. Our paper emphasizes such institutional aspects. Meanwhile a significant proportion of Chinese state sector employees, and/or their close family relations, work in the nonstate sector to earn better salaries while keeping their state sector job for security reasons. If the EEFSU economies had similar institutional arrangements much of the unemployed former state sector employees might be able to work in nonstate sectors.

3. The comparative rise of the TVE sector and decline of the state sector has been institutionally determined, and not so much influenced by the industrial sector in which they worked, eg light vs. heavy industry. The state sector shrunk most in those sectors where competition with TVEs was strongest, eg textiles, truck and car parts. Indeed, the growth of TVEs increased demand for heavy industrial products from the state sector.

4. In this paper, we use the terms 'regional government' and 'local government' synonymously. Regional governments include governments at the levels of province, municipality, prefecture, county, township, and village.

5. The main Provinces and Municipalities of the PRC are as follows:-

**Coastal Provinces** (fast developing provinces): Beijing Municipality; Fujian; Guangdong; Guangxi; Hainan; Jiangsu; Shandong; Shanghai Municipality; Tianjin Municipality; Zhejiang.

**Northeast Provinces** (early industrialized Provinces under central control): Heilongjiang; Jilin; Liaoning (it is also a coastal province geographically).

**Central Provinces** (average development): Anhui; Hebei; Henan; Hubei; Hunan; Jianxi; Shanxi; Sichuan.

**Remote Provinces** (backwards): Gansu; Guizhou; Inner Mongolia; Ningxia; Qinghai; Shaanxi; Xinjiang; Tibet; Yunnan.

6. It is true that China has always been more decentralized than most other unitary nation states; but the M-form organisation in recent years is not only fundamentally different from the organisation of the Chinese system under imperial rule and the Kuomintang, but also acted as an antidote to excessive and failing Soviet type of central planning.

7. This institutional change during the “Cultural Revolution” was politically motivated, which is beyond the scope of this paper.

8. The relative roles and powers of the central, regional and local authorities has fluctuated over the years, eg from one five-year plan to the next. For details, see Zhou (1984).

9. A thorough study of incentives in different organizational forms is provided by Maskin, Qian, and Xu (1995). They argue that, because the regions are self-contained with delegated authority, and because many different regions engage in similar activities, aggregate indicators like the growth in revenue or output tend to reflect the true performance of the regional government. Therefore, ‘tournament’ or ‘yardstick’ competition between regions is a powerful tool for providing incentives. In China, regional governments often take great pride in being ranked in first place in a competition among neighbouring regions. The public and the media also attach great importance to such a ranking.

10. The central government’s regional policies are not uniform, thereby making regional competition less fair. But given that competition occurs mainly among similar regions, eg coastal mainly compete with coastal and interior with interior, any resulting troubles are limited.

Another factor which may affect competition is the price system. Chinese price reform at the end of the 1970s and in the early 1980s started from the dual price system, particularly for SOE outputs. Prices were set by responsible government agents for the SOE outputs within the planning quota, and were set by markets for outputs beyond the quota. But only some hundreds of products were rigorously priced under this dual price system. So, for most products, either there were, more or less, nation-wide official prices, or there were market prices. Next, the role of official prices declined rapidly once the dual price system was introduced in the early 1980s. By the early 1990s, official prices for most products were merged with market prices, ie dual prices disappeared. Even where official prices still functioned, the proportion of products traded under these prices became so small that the dual price system is not an important factor any more.

11. GDP statistics are not available before 1978. In general, GSP is about double GDP, and NI about 10% lower than GDP.

12. For more detailed discussion of the historical background and institutional features of TVEs, see Xu (1995) and Byrd and Lin (1990).

13. Wang Dayong (1995) writes:

“Unfortunately, China’s economic development and the urbanisation process are not stable. During periods of fast expansion of economic activity and fixed investment, new employment opportunities sprang up and attracted too many farmers to leave their homeland and their farm work. Nevertheless, their employment was just temporary. After the boom, the recession was coming. Some temporarily employed former peasants lost their jobs, which then caused social problems of unemployment.

There is nearly no social guarantee to the former peasants who left their farm for new jobs. Once they lost their jobs, they have no other option except to return back to their farm work. It does not change their position as unemployed for the too small farm land per capita does not need them to work on it...

In 1989 and 1990, workers in the rural enterprises decreased by about 2.8 million, and a large number of the peasants-workers who worked for cities’ reconstruction lost their jobs too. Many social problems were caused by this kind of unemployment in the two years and after.”

14. An econometric study of several hundred local regions in China finds that the size of the state sector is positively correlated with the growth of the TVE sector in the early stage of reform (Wei and Lian, 1994).

15. Starting from the mid 1980s, loans from the state banks have gradually replaced direct subsidies as the major instruments to bail-out loss making SOEs. That is why in Table 3.1, subsidies are declining particularly in the early 1990s.

16. One of the authors was at this meeting in Diaoyutai State Guesthouse, Beijing, in August 1994.

17. The ratio of central to local revenues, and to GNP, reached a low at the end of the 1970s as a consequence of the Cultural Revolution. They then rose again until the mid 1980s, since when they have again been on a declining path.

18. Regional inequality may be compared using the following metric:-

$$V_w = \sqrt{\frac{\sum_i^N (X_i - \bar{X})^2 \frac{P_i}{P}}{\bar{X}}}$$

where  $X_i$

= GNP per capita of region  $i$   
 $X$  = National GNP per capita  
 $P_i$  = Population of region  $i$   
 $P$  = Total population

Using this metric Wang calculates  $V_w$  of the PRC in 1991 to be 46.3 when using data from all 30 provinces, as listed earlier in endnote 5, and 33.6 when excluding the three main cities, Beijing, Shanghai and Tianjin. These figures may be compared with the figure of 39 for Brazil in 1969, a country with well-known problems of regional inequality. Typical values for regional inequality in the 1950s for Western countries were: USA, 21.8; UK 7.4; Canada, 19.9; Italy, 36.3; Holland, 12.3; France, 28.9; Australia, 5.8. All the data are taken from Wang (1995).

19. This figure of 300 bankrupt SOEs may be an understatement. But the problem reported here is well recognized.

20. The yuan is the currency unit, like the £ in UK. Renminbi is the generic name of the currency, like sterling in UK.



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