



**DIFFERENT PATHS
TO A MARKET ECONOMY**
China and European Economies in Transition

EDITED BY
OLIVIER BOUIN, FABRIZIO CORICELLI
AND
FRANÇOISE LEMOINE



DEVELOPEMENT CENTRE SEMINARS

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CENTRE D'ÉTUDES PROSPECTIVES ET D'INFORMATIONS INTERNATIONALES
CENTRE FOR ECONOMIC POLICY RESEARCH
DEVELOPMENT CENTRE
OF THE ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

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Foreword

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CEPR is a registered educational charity. Institutional (core) finance for the Centre is provided by major grants from the Economic and Social Research Council, under which an ESRC Resource Centre operates within CEPR; the Esmée Fairbairn Charitable Trust; the Bank of England; the European Monetary Institute and the Bank for International Settlements; 21 national central banks and 37 companies. None of these organisations gives prior review to the Centre's publications, nor do they necessarily endorse the views expressed therein.

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Preface

This book is a follow-up to a conference organised by the Centre for Economic Policy Research (CEPR), the Centre d'Études Prospectives et d'Informations Internationales (CEPII) and the OECD Development Centre in Budapest in October 1995.

Its main purpose is to analyse and compare the transition to a market economy in China and in Central and Eastern Europe. To focus the discussion, three principal topics have been chosen:

- i)* Public finance and budgetary policy.
- ii)* Foreign trade and trade policy.
- iii)* Conditions of financial intermediation and their effect on companies.

The papers include contributions from several experts on economies in transition. They analyse the reforms undertaken in different countries and the results obtained.

The experiences of transition in China and Central and Eastern Europe are placed alongside each other. The editors aim to describe the great diversity of approaches, not just between China and Central and Eastern Europe but also among the European countries in question. The papers also show the specific nature of the economic and financial structures which are emerging in different national contexts.

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February 1998

Overview

More and more countries have begun the transition to a market economy in recent years. Central and Eastern Europe started after the political upheavals of late 1989. Most of the former Soviet republics embarked on broad economic reforms in the early 1990s. The Chinese reforms, begun at the end of the 1970s, quickened considerably from 1992-93 and now aim to create a socialist market economy. Vietnam and Mongolia have also launched reforms to strengthen the market element in their economies.

The variety of methods used and the results so far merit a comparative analysis to draw economic policy lessons from these diverse experiences of transition. Yet comparative analysis of transition processes and their results runs into three problems. First, the uniqueness of economic situations at the start of the transition limits the lessons which can be drawn from reforms in different countries. The points of departure differ greatly: in levels of economic development, complexity of industrial and financial structures and macroeconomic conditions. The debates about the “non-comparability” of the Russian and Chinese transition experiences reflect how this heterogeneity seems to rule out any comparison between the different paths to a market economy.

Second, the ultimate aim of economic reform is not always the same in each country. The main difference centres on the will to install a true market economy. Attempts to revamp the socialist systems of Central and Eastern Europe in the 1980s are thus not directly comparable to the economic transition processes which followed the 1989 political upheavals. China’s strategy of encouraging a socialist market economy differs from that of the European countries, which are in transition to capitalism.

Third, the political environment is essential to explaining the progress of the reforms. Debates about “windows of opportunity” and the economic and political “virtues” of gradualism have shown its importance. In a democracy, public support is indispensable. Most officials of democratic reformist governments stress the supremely political nature of economic transition processes. Some even say it is a political process first and foremost. Working out a timetable for application of the initial economic

reforms is therefore closely tied to the results they produce and the political support they generate for the reform process. Big differences can arise in the pace and sequence of the reforms, depending on the need to increase or maintain popular support.

Despite these limitations, comparative analysis yields plenty of lessons. It enables better understanding of the transition processes in different countries. Trade reform, reorganising the state sector, monetary reform, transforming financial intermediation and management of public finance represent some of the topics whose comparative analysis is likely to produce conclusions important for the enactment of policies of transition to a market economy. These topics fall into three categories:

- i)* Public finance and budgetary policy.
- ii)* Foreign trade and trade policy.
- iii)* Conditions of financial intermediation and their effect on companies.

Three conclusions have emerged from the comparative analysis in this book of the transition processes towards market economies in China and Central and Eastern Europe.

- i)* The state of public finance has been greatly affected by the transitions. In both China and most of the Central and Eastern European countries, economic reform produced a substantial drop in central government revenue. Besides considerable cuts in budget expenditure, the responses to this problem vary with each country. In China, increased extra-budgetary revenue has avoided a serious public finance crisis. This entails a large opportunity cost which throws its long-term validity into question. According to Bert Hofman, a big part of extra-budgetary or “quasi-fiscal” revenue is generated by the credit policy of Chinese state banks, led by the People’s Bank of China. The weakening of the Chinese banking system — due to very high company debts and the worsening of their financial situation — seems largely the disquieting result of the quasi-fiscal activities of the monetary institutions. In Central and Eastern Europe, budgetary and macroeconomic limitations are closely tied to the pace and sequence of the reforms decided by governments. Fabrizio Coricelli notes that the impact of the reforms on social expenditure, and especially on the level of employment, is essential not only to understanding the evolution of public finance but also the burden of the readjustment in the first years of the transition period.
- ii)* China and the countries of Central and Eastern Europe have undertaken major trade policy reforms. As Françoise Lemoine points out, these reforms have produced spectacular increases in exports. Their pace and content differ markedly however. In Central and Eastern Europe, reform of import policy has quickly become part of the programme of liberalising foreign trade. By making it easier to import Western goods, trade liberalisation has helped decisively to step up competition in domestic markets. It has also strengthened the credibility of policies aimed at deep-rooted and irreversible economic change. Trade liberalisation has thus played an important part in the adoption by public and

private sector companies of adjustment and restructuring measures. On the other hand, Kiichiro Fukasaku and Henri-Bernard Solignac Lecomte note that so far import policy in China has been liberalised only very gradually and partially. The growth of foreign competition in domestic markets has thus been gradual. Despite recent advances, import liberalisation remains a crucial part of trade policy reform. It should have a sizeable effect on production facilities, especially state firms, and will be a crucial step towards a true market economy in China.

- iii)* The restoration of effective financial intermediation is essential to speed up the restructuring and modernisation of firms in transition economies. In just a few years, conditions of financial intermediation have changed considerably in China and Central and Eastern Europe. In both areas, it has profoundly altered the financial structure of firms. Olivier Bouin notes how progress in restoring financial discipline in the economy varies widely. The countries of Central and Eastern Europe seem to have taken a decisive step to credible and lasting budgetary constraint. A new regulatory framework, application of restrictive monetary policy and laws on bankruptcy have helped produce a much more rigorous financial environment. Francesca Cornelli, Richard Portes and Mark Schaffer note that during this period of financial reform the banks played only a small part in company finance. Despite recent reforms, the Chinese authorities cannot profit from having imposed such drastic budget constraints. The gradualness of financial sector reform in China has resulted in sharply segmented markets, increased the cost of economic transactions and discouraged firms from adjusting effectively to the new economic environment. Wing-Thye Woo thinks that the recapitalisation of the banking system and greater autonomy, possibly by privatising state banks, would radically change the workings of the banking system and so improve capital allocation in the Chinese economy.

PART ONE

FISCAL POLICY AND THE FISCAL SYSTEM

Fiscal Decline and Quasi-Fiscal Response: China's Fiscal Policy and System 1978-94

*Bert Hofman**

Introduction and Overview

China's fiscal system has come under stress in the reform period since 1978. The reforms began a major shift of the tax base away from the sources traditionally tapped by the tax system, and government revenues fell from more than 34 per cent of GNP in 1978 to less than 13 per cent in 1994. Tax buoyancy was undermined by loose collection and tax exemptions induced by inter-governmental fiscal contracts and facilitated by the decentralised tax administration system. The reduced budgetary resources were handled by a budget system still geared towards financing the State Plan, and a proliferation of extra- and off-budget funds increasingly undermined the macro- and microeconomic functions of the budget. While budget deficits remained small, the consolidated government deficit became larger, and increasingly fed inflation.

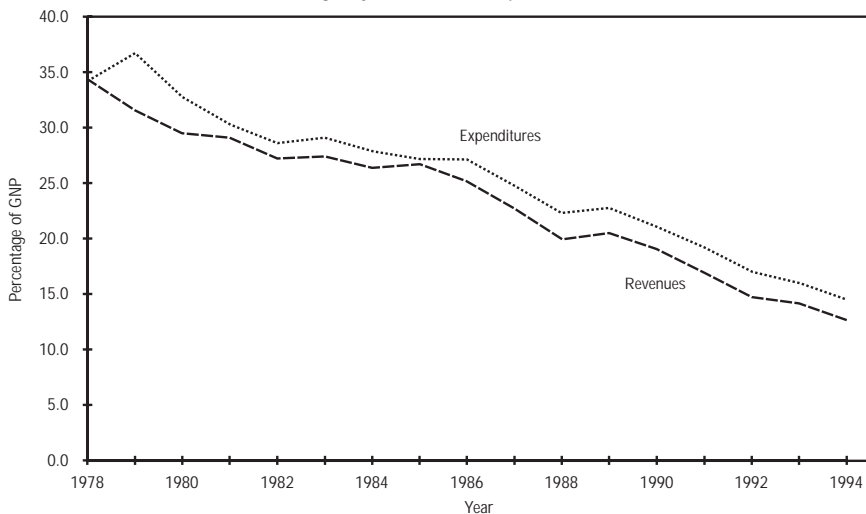
Against this backdrop, China's authorities have recently introduced sweeping reforms of their fiscal policies and practices. The reforms were endorsed in the "Decision of the Third Plenary Session of the Fourteenth Central Committee of the Communist Party of China" in November 1993, and implementation began in 1994.

This paper discusses why, despite the dramatic reduction in budgetary revenues, government did not break down. It argues that this result arose mainly from the quasi-fiscal activities of the banking system, and quantifies the size of the consolidated government deficit and the resource transfers implicit in the quasi-fiscal activities of the central bank and the state banks. The paper concludes by assessing whether these quasi-fiscal activities are sustainable, and what further fiscal reforms are needed to reduce government dependence on these activities.

Broad Trends

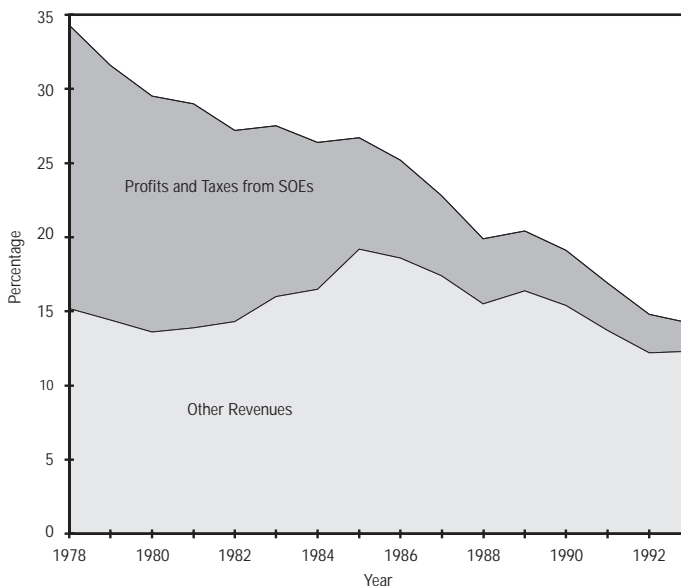
The decline in government budgetary revenues over the reform period since 1978 has been dramatic (Figure 1 and Annex II)¹. The bulk of the tax ratio decline can be ascribed to reduced contributions of state-owned enterprises (SOEs) (Figure 2)². In the early phases of reform (see Annex I), the decline in government revenues was the aim of reforms that granted more independence to state-owned enterprises, which were no longer obliged to submit all their profits to the budget. After 1984, increased competition from non-state enterprises reduced monopoly rents of SOEs, thus reducing buoyancy of the enterprise income tax and profit remittances to the budget³. Since 1988, the buoyancy of the tax system has been undermined by the contracting of profits and taxes between government and SOEs, and the practice of debt repayment deduction from taxes. Only since the late 1980s, when tax contracting extended increasingly to turnover taxes, did the rest of the tax structure become less buoyant and the decline in government revenues to GDP accelerate.

Figure 1. The Decline of Government?
Budgetary Revenues and Expenditures, 1978-94



In part, the revenue decline since 1988 arose from incentives to local governments to give tax exemption to locally-owned firms. Their fiscal contracts with central government gave them a high retention rate on revenues collected (see Annex II). It paid even more for local governments, however, to exempt local enterprises altogether from (central or shared) taxes and recover the increased enterprise surpluses by other means, such as budgetary levies (see below). Local governments could do so because they effectively controlled the tax administration, which was legally under “dual leadership” from central and local governments but in fact increasingly operated as an arm of local government.

Figure 2. Structure of Revenues, Percentage of GDP, 1978-93



The tax system suffered not only from lack of buoyancy but from substantial complexity. Despite reforms, by 1993 China had 33 taxes, a multitude of rates for every tax, and high marginal statutory tax rates on enterprise income, which varied with ownership. The standard SOE income tax was 55 per cent, rising to an effective 75 per cent if levies on retained earnings were included. The standard rate for non-state enterprises and foreign-funded firms was lower (33 per cent). The turnover taxes (mainly business tax, value added tax (VAT), and product tax) had very many rates, in part to compensate for the incomplete price reforms, and in part to penalise “undesirable” consumption. The VAT, introduced in 1984, was gradually extended to more products and sectors, and by 1993 had become the main revenue source (Annex III).

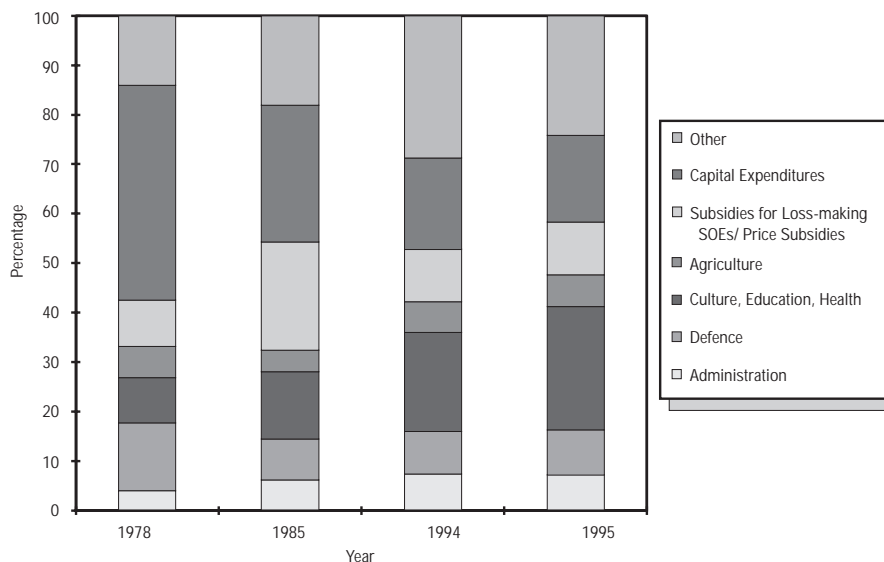
Government budgetary expenditures and net lending fell as government revenues shrank and are now significantly below that of comparator countries (Table 1). The structure of China’s budgetary expenditures changed considerably over the reform period, reflecting reforms in the economy as a whole (Figure 3 and Annex IV). The separation of enterprises from the budget caused a strong decline in capital construction expenditures. Price reforms caused subsidies to rise: those for daily living expenses rose fast until the mid-1980s, due to the impact of rapid consumer price reforms. After 1985, SOE subsidies increased in part to reduce the impact of producer price reforms. The increased focus on traditional public tasks such as “Culture, Education and Health” raised their share of the budget, although in terms of GDP these expenditures stagnated at 3 per cent. Finally, rising wage levels in the economy as a whole, and government’s role as employer of last resort increased the costs of administration.

Table 1. General Government Expenditures, Selected Countries

	Government Expenditures as per cent of GNP	Central Government Expenditures as per cent of Total Expenditures
All Countries	39.1	72.3
Industrialised Countries	47.6	65.9
Developing Countries	31.7	77.8
China (budgetary, 1994)	14.1	40.2

Source: MOF and Levin (1991). Levin’s data are from a sample of 18 industrialised countries and 22 developing countries for which data on general government expenditures are available in the *International Finance Statistics*. These data are averages over three years ending 1987 or 1988.

Figure 3. Shifting Functions
Composition of Budgetary Expenditures, 1978-95



As expenditure fell along with revenues, budget deficits remained at a modest 2-2.5 per cent of GDP throughout the reform period, with the exception of the 5.3 per cent peak in 1979. The deficits were increasingly financed with bond issues, resumed in 1981 after a 20-year gap (Annex V). At first, the bonds were “administratively” placed — forced on lower levels of government and enterprises, which often in turn forced employees to take a share in the issues. Since the early 1990s however, the secondary market has developed fast and voluntary placement has become increasingly feasible. The part of the budget deficit not financed with bond issues was covered by the PBC. Except in 1979, however, PBC financing of the budget deficit was never more than two per cent of GDP (Annex V).

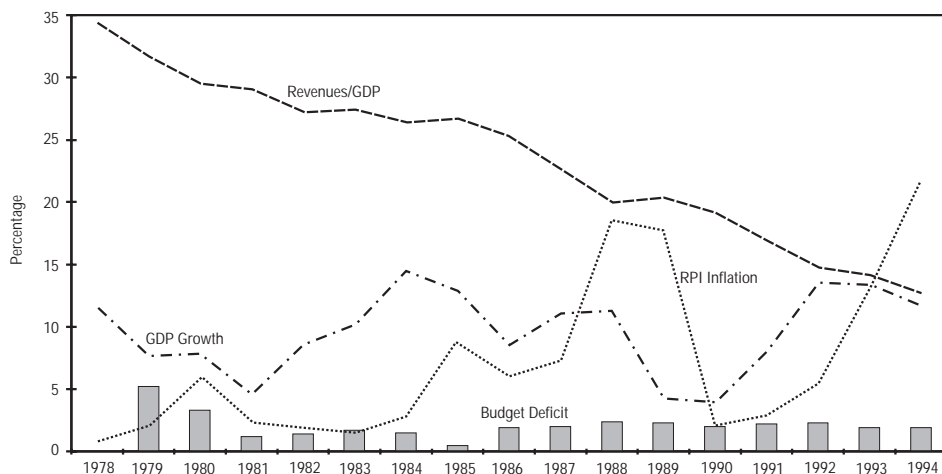
Since 1978, funds recorded as “extrabudgetary” have increased rapidly and by now amount to more than the budgetary funds. Only part of them can be considered government resources. The bulk are enterprise retained earnings and depreciation funds, which became increasingly controlled by enterprises themselves. *Fiscal extrabudgetary* funds are a set of non-budgetary levies and charges of government and administrative units. These funds have grown rapidly from 2.6 per cent of GDP in 1978 to 4.2 per cent of GDP in 1993 and now account for over 25 per cent of total budgetary funds. They are under the direct control of governments at various levels and have served to make up for part of the decline in budgetary resources. Fiscal extrabudgetary funds have largely been used by local governments to avoid sharing revenues with the central government. Adding these funds to the budgetary funds, however, does not change the conclusion on the steep decline in government revenues: overall government revenues still fell from 37 per cent of GDP to about 17 per cent in 1994.

Quasi-Fiscal Response, or Why Government Did Not Break Down?

Despite the dramatic fall in government revenues since 1978, China’s government did not break down, budget deficits did not rise to unsustainable levels, and China showed no other significant signs of fiscal distress. Increasing bottlenecks in infrastructure stemmed more from the exceptional growth of the economy than underfunding. Fiscal decline also seems unrelated to the repeated bouts of overheating and inflation China’s economy underwent during the reform period (Figure 4). The reason is that budgetary resources were more and more supplemented by other means: first by a plethora of extrabudgetary funds; and second, and increasingly more important, by quasi-fiscal activities of the central bank and the banking system. PBC Policy Lending and the Consolidated Government Deficit. With the decline in budgetary resources over the reform period since 1978, China’s government increasingly fell back on the financial system for financing policy expenditures, mainly investment outlays and social expenditures of SOEs. Much of the policy lending was directly or indirectly financed by the People’s Bank of China (PBC): the PBC lent to the state banks, which in turn lent to SOEs⁴. Such loans are conceptually equivalent to government net lending, and are usually dubbed *quasi-fiscal activities*. Thus, the net financing requirement of government was significantly larger than the budget deficit suggests.

The Consolidated Government Deficit (CGD) provides the best indicator for the *financing* requirements of government. The CGD is arrived at by consolidating the budgetary accounts with those of the central bank (Table 2). It is the sum of the budget deficit and PBC net lending for policy purposes. The distinction between normal central bank operation and policy-based activities is not easy to make, and in the end is a matter of judgment on the proper role of the central bank⁵. Discussions with the Chinese authorities revealed that 60 to 80 per cent of PBC lending to financial institutions is earmarked for financing policy loans. In addition, the PBC’s “Other Loans” form part of the PBC’s policy lending. The CGD is the sum of the budget deficit and these categories of PBC lending⁶. The low estimates presented assume a 60 per cent share of policy lending in PBC lending to financial institutions; the high estimates assume the share to be 80 per cent.

Figure 4. Selected Macroeconomic Variables, 1978-94



The CGD defined in this manner has averaged between 4.9 and 5.7 per cent of GDP over 1986-94 (Table 2). Thus, although the budget deficit as a share of GDP has remained relatively modest, the actual financing needs of the government have been much larger. Not only has the CGD been persistent, but it also saw big increases in 1988 and 1993, both years of sharply accelerating inflation. Driven by a sizeable escalation in central bank policy loans, the CGD rose to 5.5-6.4 per cent of GDP in 1988, and soared again in 1993 to reach 8-9.3 per cent of GDP. The sharp decline in 1994 may have contributed to the fall of inflation in 1995.

Central Bank Resource Transfer

Central Bank lending for policy purposes is both a policy financing item and a means to transfer real resources to other parts of the economy. Resources are transferred in two ways: *a*) a subsidised interest rate; and *b*) non-repayment of the loans. Ideally, one would estimate the implicit interest rate subsidies on the basis of the true opportunity costs of capital, which could be obtained by calculating the shadow price of capital. Although such estimates are made by the State Planning Commission, they are not readily available. This paper simply takes the inflation rate as the opportunity cost of capital, assuming a real opportunity cost of zero. This is most likely to lead to underestimation of the true implicit subsidies. Resource transfers through non-repayment are harder to determine than interest rate subsidies, because the crucial parameter of the repayment rate is not available on a systematic basis. Non-repayment seems to be pervasive, both for PBC lending to state banks and for state bank lending to enterprises. PBC sources estimate that about half of PBC loans to financial institutions are never paid back⁷, and thus effectively becomes grants. Assuming 50 per cent non-repayment, PBC stock subsidies averaged 2.5 per cent of GDP (Table 3). The bulk of this, 1.9 per cent of GDP, went to state banks while only minor subsidies were transferred to recipients of “Other” loans and to the budget.

Table 2. Components of the Consolidated Government Deficit, 1986-94
(per cent of GDP)

	1986	1987	1988	1989	1990	1991	1992	1993	1994	Average 1986-94
Budget deficit	1.9	2.2	2.4	2.3	2.1	2.4	2.3	1.9	1.9	2.2
PBC lending to financial system	4.4	0.3	4.3	5.1	5.2	3.8	3.4	7.4	1.9	4.0
of which policy loans										
a) Lower bound	2.6	0.2	2.6	3.1	3.1	2.3	2.0	4.4	1.2	2.4
b) Upper bound	3.5	0.3	3.4	4.1	4.2	3.0	2.7	5.9	1.6	3.2
PBC "Other Loans"	0.5	0.8	0.6	0.3	0.4	0.2	0.3	0.5	0.1	0.4
Consolidated government deficit										
a) Lower bound	5.0	3.2	5.5	5.6	5.7	4.9	4.7	6.8	3.2	4.9
b) Upper bound	5.9	3.2	6.4	6.7	6.6	5.6	5.3	8.2	3.6	5.7

Note: The numbers on PBC lending are derived from quarterly data. Data on the budget deficit are annual. Annual averages of quarterly PBC lending as a percentage of GDP have been added to the budget deficit as a per cent of GDP to arrive at the consolidated government deficit. PBC "Other" lending was added to the consolidated government deficit as defined in World Bank (1995). Figures may not add up due to rounding.

Source: World Bank (1995) and update by author. PBC, IMF, and World Bank Data.

Table 3. Resource Transfers Implicit in Central Bank Lending 1986-94
(per cent of GDP)

	1986	1987	1988	1989	1990	1991	1992	1993	1994	Average
Total Transfer	3.8	2.2	3.1	1.7	2.6	2.9	4.9	6.7	4.1	3.1
Through Interest Subsidy	0.7	1.1	0.4	-0.8	-0.7	0.5	2.3	1.9	0.7	0.7
Through Non-Repayment	3.1	1.1	2.7	2.5	3.3	2.4	2.6	4.0	0.7	2.5

Note: The interest transfer was calculated by multiplying the difference between the various PBC lending rates and inflation by the outstanding stocks of the various PBC lending categories. If for a lending category more than one interest rate was published, a weighted average of these rates was taken. It is assumed that government does not pay interest. Transfer through non-repayment was calculated by multiplying the default rate (50 per cent) with the change in stock in PBC lending. It is assumed that government does not pay back. All calculations are based on quarterly data. Numbers may not add up due to rounding.

Source: Author calculations, based on IMF and PBC data.

With the inflation rate as the opportunity cost of capital, implicit interest rate subsidies from the Central Bank to the rest of the economy have averaged 0.6 per cent of GDP (Table 3), with a peak of 2.3 per cent of GDP in 1992, a year of accelerating inflation. State banks have on average received a subsidy of 0.4 per cent of GDP, while the budget and “other” loans have shared the remainder more or less evenly. With an assumed real opportunity cost of capital of 3 per cent, total interest subsidies would increase to 1.5 per cent of GDP. The interest rate subsidy has been rising in the 1990s, amounting to 2.3 per cent of GDP in 1992, after which it dropped to 0.7 per cent in 1994. China’s level of implicit interest subsidies falls in line with those of the “advanced” and “intermediate reformers” in the former Soviet Union and Eastern Europe (Table 4). No comparable data are available on transfers through non-repayment. Unlike in China, however, high inflation in these countries made the interest subsidies far more important than the non-repayment subsidies, and the overall subsidies are likely to be as big as those presented for China.

Seignorage

PBC has financed its quasi-fiscal activities from the exceptional amount of seignorage it has been able to levy over the reform period (Table 5). Seignorage from currency alone was as high as 4.8 per cent of GDP in 1988 and 1992. The seignorage from reserve money creation — currency plus reserves of the banking system at the central bank — was a staggering 10.5 per cent of GDP in 1993. China has collected most of the seignorage in the form of an expansion of the real money base, but over 1992-94 the inflation tax was substantial, as people were less willing to hold the money issued.

Table 4. **Central Bank Implicit Subsidies for Selected Countries, 1992-93**
(per cent of GDP)

	1992	1993
Advanced Reformers		
Poland	0.0	0.0
Hungary	0.0	0.0
Czech Republic	0.3	0.8
Slovakia	0.3	1.7
Intermediate Reformers		
Bulgaria	1.3	0.8
Estonia	n.a.	0.2
Romania	5.9	3.9
Russia	11.3	1.7
Kazakhstan	32.7	n.a.
Slow Reformers		
Belarus	26.5	9.3
Turkmenistan	12.5	21.2
Uzbekistan	13.1	18.5

Note: Implicit subsidy is calculated as the difference between the central bank refinancing rate and the inflation rate times the amount of central bank loans outstanding. Calculations are done on a quarterly basis.
n.a. = not available.

Source: Gelb, A. *et al.* (1995).

Table 5. Seignorage 1986-95
(per cent of GDP)

	1986	1987	1988	1989	1990	1991	1992	1993	1994	Average 1986-94
Reserve money										
Gross seignorage	5.3	2.9	5.8	6.1	8.0	7.9	5.8	10.5	10.4	6.9
Inflation tax	1.7	2.6	1.9	1.6	1.7	2.6	4.5	4.4	4.1	2.8
Real expansion	3.7	0.3	3.9	4.5	6.4	5.4	1.3	6.0	6.2	4.1
Net seignorage	4.9	2.5	5.4	5.3	6.9	6.9	5.0	9.5	8.9	6.0
Currency										
Seignorage	2.2	1.8	4.8	1.3	-0.0	2.5	4.7	5.6	5.2	3.0
Inflation tax	0.7	1.1	0.9	0.8	0.7	1.0	1.7	2.0	1.9	1.2
Real expansion	1.5	0.7	3.9	0.5	-0.7	1.5	3.0	3.6	3.3	1.8

Note: Numbers are calculated from quarterly data. Gross seignorage is calculated as the expansion of money over GDP. Inflation tax is calculated as the money stock in the previous period times the inflation rate in the current period. The real expansion is calculated as the difference between seignorage and the inflation tax. Net seignorage is calculated by subtracting interest over bank reserves at the PBC from gross seignorage. Figures may not add up due to rounding.

Source: Author calculations, PBC, IMF, World Bank data.

Quasi-Fiscal Activities of State Banks

Like the Central Bank, the state banks have been involved in quasi-fiscal activities, in part on their own account, in part refinanced by the Central Bank. Interest rates on lending and deposits are all regulated, and have regularly turned negative in real terms, in particular for demand deposits for which real interest was negative for most of the reform period. This interest rate structure thus both taxed depositors and subsidised borrowers. Quantification of these taxes and subsidies is approximate, as only limited information on the maturity distribution of deposits and loans is available. Furthermore, China's government has, in times of high inflation (1989 and 1994-present), applied an inflation compensation for household term deposits maturing in over three years. Information on this is only scattered, and was not taken into account in the calculations below (Table 6). The figures in the table assume a zero real interest rate for the opportunity cost of capital and, for both loans and term deposits, an equal distribution over the maturities available.

The real resource transfers to banks caused by negative real interest rates is substantial, an average of 2.1 per cent of GDP over 1986-94 (Table 6). In years of accelerating inflation such as 1992 and 1993, the implicit taxation of deposits even reached 5.6 and 4.4 per cent of GDP. Most of the burden of this resource transfer falls on enterprises, with on average a tax of 1.5 per cent of GDP. This occurs because of their limited access to longer maturity deposits and the Chinese practice of requiring a minimum deposit (counterbalance) for enterprises that receive a loan. Interest rate subsidies from the state banks to borrowers have been modest, at 0.7 per cent of GDP on average over 1986-94 (Table 7). These subsidies have risen during years of accelerating

Table 6. Implicit Taxation on Deposits in the Banking System, 1986-94
(per cent of GDP)

	1986	1987	1988	1989	1990	1991	1992	1993	1994	Average 1986-94
Tax on enterprise sight deposits	0.94	1.70	0.99	0.52	0.51	1.16	2.60	2.36	2.62	1.46
Tax on enterprise term deposits	0.07	0.16	0.00	-0.08	-0.14	-0.04	0.26	0.16	0.06	0.05
Tax on household sight deposits	0.07	0.21	0.13	0.06	0.12	-0.16	0.63	0.73	0.66	0.26
Tax on household term deposits	-0.09	0.39	-0.17	-0.56	-1.54	-0.48	1.37	0.56	1.03	0.03
Tax on other deposits	0.34	0.61	0.18	-0.02	-0.05	0.23	0.75	0.59	0.07	0.31
Total tax on deposits	1.33	3.07	1.12	-0.09	-1.11	0.70	5.61	4.40	4.43	2.10

Table 7. Implicit Subsidies in China's State Banks, 1986-94

Interest Subsidies										
Type of Loans	1986	1987	1988	1989	1990	1991	1992	1993	1994	Average 1986-94
Industrial	0.25	0.92	-0.11	-0.50	-0.83	-0.21	1.26	0.91	0.69	0.25
Commercial	0.40	1.40	-0.17	-0.73	-1.10	-0.23	1.63	1.18	0.97	0.35
Construction	0.05	0.20	-0.02	-0.09	-0.14	-0.04	0.19	0.14	0.11	0.04
Agricultural loans	- 0.10	0.22	-0.05	-0.16	-0.21	-0.05	0.30	0.22		0.03
Fixed investment loans	- 0.13	0.18	-0.09	-0.28	-0.21	-0.17	0.66	0.40	0.54	0.09
Total interest subsidy	0.47	2.92	-0.45	-1.76	-2.48	-0.70	4.04	2.85	2.44	0.77
Subsidies implicit in default										
Industrial	1.08	0.52	0.57	0.89	1.04	0.70	0.67	0.75	-0.12	0.70
Commercial	0.84	0.61	0.82	0.84	1.10	0.85	0.55	0.98	0.65	0.81
Construction	0.20	0.17	0.05	0.13	0.08	0.04	0.15	0.09	0.01	0.10
Agricultural loans	0.31	0.22	0.19	0.10	0.16	0.17	0.20	0.17	-0.17	0.16
Fixed investment loans	0.51	0.38	0.38	0.23	0.46	0.73	0.63	0.73	1.51	0.59
Total default subsidy	2.94	1.90	2.01	2.21	2.84	2.49	2.20	2.72	1.88	2.37

Note: The inflation rate is used as opportunity costs, implying a real interest rate of zero. A default rate of 20 per cent is assumed. The implicit subsidy in default is assumed to accrue in the period in which the loan is extended.

Source: Author's calculations, PBC data (*Annual Reports and China Banking and Finance Almanacs*).

inflation, and topped 4 per cent of GDP in 1992. The biggest share of the subsidies was implicit in commercial working capital loans, followed by industrial working capital loans. Fixed investment loans received relatively modest subsidies. Subsidies through non-repayment were considerable over 1986-94, averaging 2.4 per cent of GDP⁸. The main beneficiaries of this type of subsidy were fixed investment loans.

Sustainability

Despite high consolidated government deficits and unusually large seignorage and resource transfers through the banking system, China has so far avoided very high inflation because the demand for liquid assets in China has seemed insatiable over the reform period. The velocity of money and quasi money fell from 1.57 in 1984 to 0.97 by the end of 1994, enabling a big expansion of the money supply without inflationary consequences⁹.

During the early stages of reform, forced savings and precautionary demand for money may have played a role in the decline of velocity, but financial deepening and increased demand for assets in the light of increased income were the dominant factors over the whole reform period (McKinnon, 1991). Monetisation of agriculture, marketisation of SOEs, and strong growth in the less integrated non-state sector increased the number of market transactions per unit of GNP. This fueled demand for money, while the relatively inefficient payment system needed a high level of liquid assets for transaction purposes. Also, until very recently, monetary assets such as cash and bank deposits were the only assets available to a population eager to save as incomes rose.

The end of this happy situation seems nigh, however. Financial liberalisation has led to a rapid increase in the supply of assets alternative to bank accounts. Stocks, enterprise bonds, land and foreign currency now offer ready alternatives for deposits in the banking system, and monetary expansion leaks away in exploding land prices and plunging swap market rates for the Renminbi. The velocity of narrow money has been rising since 1992, and even the velocity of broad money edged up in 1993 and 1994, since the 1992 low of 0.94¹⁰. The government has also opted for “commercialisation” of state banks, which will eventually preclude large resource transfers through the banking system. Finally, with the increasing integration of Hong Kong, China’s capital account is becoming more and more open, reducing further the scope for financial repression.

The message for China’s fiscal policy is that to prevent an increase in inflation, there must be much less reliance on seignorage, because of the likelihood of an increase in money velocity caused by asset diversification. The generous recourse of the government to the banking system for fiscal reasons needs drastic revision, the consolidated government deficit needs to be further reduced, and its financing needs to rely less on the PBC.

The year 1994 may have been a turning point in this respect. The loss of macroeconomic control by the government, associated with the decline of government and central government revenues, led to the sweeping reforms in financial and fiscal policies and institutions announced in November 1993 and implemented in 1994. The fiscal reforms aim to halt the decline of government revenue through tax and tax administration reforms, and gradual centralisation of revenues through rearrangement of intergovernmental fiscal relations. The Budget Law, which passed the National People's Congress (NPC) in March 1994, should lead to better control over expenditure.

The reforms aim for a major restructuring of the tax system, which reduces the number of taxes from over 30 to 18 and greatly improves the overall structure (Annex VI). The main reforms are: *a*) broadening the VAT to include parts of the Product Tax and Business Tax, reduction of the rates to two (17 per cent and 13 per cent) and a switch to the credit invoice method; *b*) unification of the Corporate Income Tax for all domestic enterprises, with a standard rate of 33 per cent, and the abolition of tax contracting and debt principal repayment deduction; *c*) abolition of the Energy and Transportation Tax and the Budget Adjustment Tax for SOEs; and *d*) unification of the Personal Income Tax. Various minor taxes are or will be merged or abolished, the Resource Tax expanded and a Securities Trading Tax introduced.

To implement the reforms and the new intergovernmental fiscal relations, the Chinese authorities have fundamentally reformed the tax administration by reorganising it into a National Tax System (NTS) and Local Tax System (LTS). From July 1, 1994, NTS has collected all central and shared taxes — the bulk of all taxes. The split of NTS and LTS has been enacted in all 30 provinces. NTS will retain about 350 000 personnel, the rest remaining in the local tax bureaux.

The reforms in intergovernmental fiscal relations will gradually increase the central government's share in budgetary revenues. The new system assigns most taxes to either central or local government. The VAT and the Securities Trading Tax (to be introduced) are shared between central and provincial government, with central shares of 75 and 50 per cent respectively. Offshore resource taxes accrue to central government and other resource taxes to provincial government. The central government revenue share will gradually increase to about 60 per cent of revenues, from about 40 per cent in 1993. Provinces are guaranteed the 1993 level of revenue, however, and the new system will be gradually phased in, starting with the increase in shared taxes over the 1993 level. The incremental revenue built at central government level will be distributed to provincial governments through a grant system. Until such a system is designed and approved, extra central revenues from the VAT and Consumption Tax are in part returned to the provinces, mainly on a derivation basis.

Finally, an organic budget law was passed by the March 1994 NPC, codifying the 1991 budget regulation system. The law specifies principles and practices for better allocation of public resources, and better expenditure control. It sets out the role and responsibilities of the actors in the budgetary process, and codifies the new tax assignment and sharing system as well as the separation of central and local budgets, which were already in place. The law allows borrowing only for construction

expenditures. Since 1993, the central budget has been compiled according to the “dual budget” method, which comprises a “regular” and a “construction” budget. The PBC Law excludes overdrafts from PBC, a practice already in place since the beginning of 1994. Local governments, as before, are not allowed to borrow.

Early results of these fiscal reforms were mixed during 1994. Overall budgetary revenues still declined in terms of GNP, but the ratio stabilized in the first half of 1995, albeit at a very low 12.5 per cent. The consolidated government deficit was cut sharply, and the new policy banks took over part of the policy lending from the state commercial bank. The tax revenues to finance the volume of resource transfers formerly obtained by financial repression are still lacking, however. Past policies are also reflected in the poor quality of bank portfolios and the clean-up of the banks has yet to begin. The Chinese authorities need to implement fiscal policies that would permanently reduce expenditures and increase revenues.

On the expenditure side, the prime candidate for reductions would be the explicit and implicit subsidies given to SOEs. Yet enterprise reforms are going slowly. SOEs are also the main implementing agents of the government’s public investment programme and, despite introduction of the “socialist market economy,” government involvement in the economy, notably its investment, is likely to remain substantial and overall public expenditures are unlikely to fall much further in the near future. Government subsidisation of market activities of SOEs could decline once SOE reforms take off, and subsidies could then be focused on activities closer to “public goods”.

On the revenue side, closing loopholes through improved tax administration could add another one or two per cent of GDP in revenue, but the current tax structure is unlikely to yield sufficient revenues to cover fully the resource transfer currently channeled through the financial system; further tax reforms must be expected. If international experience is any guide for China, tax structures in other countries may indicate where additional tax base can be found (Table 8).

Table 8. Composition of Central Government Tax Revenue in Selected Countries
(Per cent of total tax revenues)

	Personal Income Tax	Social Security Tax	Corporate Income Tax	VAT General Sales	Excise Taxes	Trade Taxes	Wealth and Property
Industrial countries	28	28	8	16	10	3	3
Developing countries	11	6	18	14	13	29	3
Asia	15	0	17	16	16	31	1
Europe	15	18	7	21	9	17	2
Western Hemisphere	8	12	14	14	18	21	3
China (Jan.-Sept. 1994)	1.5	n.a.	14	43	8	6	..

Note: n.a.= not applicable; ..= not available.

Source: R. Burgess and N. Stern (1993) and IMF.

Prime candidates for boosting revenue are increased application of the personal income tax (PIT), introduction of social security taxes and higher excises on polluting inputs. The PIT plays a very minor role in China, producing less than one per cent of GNP in revenue. The exemption level of Y800 a month is much higher than the minimum living expenditure usually exempted in other countries, and keeps most individuals outside the tax net. With wages increasingly market-determined and a monetisation of wage-earner subsidies now in the form of housing, education, and health care, it is likely a larger share of value added will accrue to labour. With the exemption level held nominally constant, more people would fall under the tax and revenues could gradually increase.

Social security taxes could finance government plans to introduce a minimum pension for all (urban) workers. A pay-as-you-go basic pension does not require a separate tax, but experience in other countries shows that payroll taxes for a generally-accepted purpose such as social security encounter less resistance than other taxes. Enforcement becomes easier when eligibility is linked to paid-in premiums, as the payee has an interest in regular payments. Most countries levy social security taxes as payroll taxes, so administrative requirements are much the same as for a widely applied personal income tax.

As environmental concerns become more important but are unlikely to be fully taken care of by environmental levies and charges, taxing pollutants becomes attractive. The concentrated distribution of the main pollutants (coal, petroleum) makes them easy to tax and the sheer quantity used in China makes the idea attractive. Taxing petroleum products at one yuan per liter more than the current 0.4 yuan would generate Y100 billion in extra revenues, provided no user was exempted.

Even if the reduction in the consolidated government deficit does not keep pace with the relative decline in money demand, the deficit can be made sustainable by changing sources of finance from non-interest bearing money to interest bearing debt. In fact, at 12 per cent of GDP, government debt seems extremely modest in China and, with eight to nine per cent real growth, only an even larger consolidated government deficit would not fulfill the Domar conditions. As long as domestic savings remain high, government can therefore float more state debt at attractive rates on the domestic market without jeopardizing sustainability. This is in fact what happened in 1994 and 1995. Government treasury bond issues increased substantially; the State Development Bank took over part of the policy lending from the state banks and financed it with the issue of bonds that should be considered state debt. If these sources of finance are to be non-inflationary, interest close to market rates will have to be paid, and the implicit taxation in the financing of the deficit will be reduced. If government chooses to keep up the same level of subsidies now financed by the central bank, it will need genuine tax revenues to substitute for inflation tax.

Notes and References

- * The opinions in this paper are personal and should not be attributed in any way to the World Bank. The author wishes to thank the Conference participants, and especially Roumen Avramov for useful comments.
1. This decline has been extensively discussed in the literature. See, among others, Wong (1992); Hofman (1993); World Bank (1993).
 2. The *nominal* contribution of SOEs has remained virtually the same since 1978.
 3. Since 1984, taxes and profits of SOEs were separated.
 4. The Chinese authorities offer no uniform definition of policy lending. Recent research suggests that policy loans have two characteristics. First, they are made in support of government economic and industrial policies, and to ensure funding for activities considered priority by government. Second, they may or may not meet commercial criteria for lending (rates of return, debt service coverage, etc). Policy-based loans include the following five categories of loans (Xu *et al.*, 1993): *i*) Loans for financially-viable ventures, but generally large scale and with long payback periods, such as power and transport infrastructure investment loans; *ii*) Fixed asset loans for the technological renovation of selected enterprises; *iii*) Loans to fund rural development and food security oriented programmes, mainly poverty alleviation and rural economic development credits; *iv*) Subsidised working capital loans to “priority” enterprises that are subdivided into three kinds: (a) strategic industries of national importance (the “pillar industries”), (b) export-oriented enterprises, and (c) structurally loss-making SOEs of great national or regional importance; and *v*) Subsidised loans for social sector development, such as for health and education.
 5. See Robinson and Stella (1993), *Amalgamating Central Bank and Fiscal Deficits*, in: Blejer and Cheasty (ed.), *How to Measure the Fiscal Deficit*, IMF, 1993.
 6. PBC lending to Government cancels out in the consolidation of PBC and budgetary accounts.
 7. This number refers to the lending to state banks. Lending to Government is usually rolled over on request from MOF, and also the repayment of PBC’s “Other” lending is likely to be worse than that to state banks. However, for the latter categories, a repayment of 50 per cent is assumed.

8. For the specialised banks, the non-repayment is hard to estimate without detailed portfolio reviews that are currently under way for selected branches. According to Dai Xianlong, PBC Governor, PBC estimates that about 13 to 20 per cent of all loans of State banks are bad (*Financial Times*, 24 October 1995). However, higher estimates also circulate in the discussion on enterprise reforms and the bad debt problem. The numbers quoted on bad debts in Chinese banks are comparable to those of Eastern European countries before recent bank restructuring (Dittus, 1994). For Viet Nam, the figure is likely to be well over 25 per cent of total loans (World Bank, 1994). For Bulgaria and Romania, non-performing loans of 44 and 36 per cent for total loans were reported for 1992 (Thorne, 1993). Here, it is assumed that 20 per cent of loans are in the end not paid back.
9. Some of the decline in velocity may be due to an increasing share of GDP not registered by the statistical system. This would be consistent with the casual evidence on tax evasion and migrant labour living off the gray economy.
10. Éric Girardin reported he found a unit income elasticity in the demand for money, once institutional factors related to monetisation had been taken into account.

Major Fiscal Reforms

(December 1978-May 1995)

1978	December 22	The 3rd Plenary of the 11th Congress of the Communist Party of China (CPC) adopted a resolution denouncing the “Cultural Revolution” and formulating the general principles for reform and opening up, such as the decision to shift the CPC’s focus from “class struggle” to economic development, and the call for “emancipation of mind” and “seeking truth from facts”.
1979	July 15	The CPC Central Committee and the State Council took the Decision on the Reports for the Adoption of Special Policies and Flexible Measures in External Economic Activities by Guangdong and Fujian Provincial Party Committees, respectively, delegating autonomy in external economic activities to the two provinces.
1980	February 2	The State Council issued the Provisional Regulations on the Introduction of a Fiscal Management System by which the Scope of Revenue and Expenditure is Defined between Central and Local Governments, decentralising the previous centralised budget system and increasing autonomy and responsibility of local governments for budget management.
	September 10	The 3rd Session of the 5th NPC approved the Law on Individual Income Tax, introducing the private income tax.
1982	January 1	The CPC Central Committee issued Document No. 1 to circulate the decision of the National Rural Work Conference. It was the first of five “number one documents” (1982-86) on the CPC’s rural policy based on endorsement and implementation of the Household Responsibility System.
1983	April 27	The State Council issued a circular on the Provisional Measures of “Tax-for-Profits” Reform of State Enterprises, abandoned the practice to deliver all enterprise profits to the government, and enlarged enterprise autonomy.
1984	September 18	The State Council issued the Provisional Measures for the 2nd Stage of “Tax-for-Profit” Reform in State Enterprises.
1985	January 1	The CPC Central Committee and the State Council issued the 10 Policies on the Invigorating of Rural Economy, starting to reform the unified purchasing system of agricultural products, and to provide credit and tax incentives to TVEs.
1989	March 21	SRC and MOF jointly issued an Experiment Program on the Separation of Tax from Profit in SOEs.
1991	January	The State Tax Administration issued the new tax policy for individual/private firms, allowing tax deductibility of retained forex earnings, tax holidays for export processing imports, and tax exemption for firms with more than half overseas Chinese investment.
	March	The 4th Session of the 7th NPC adopted the new Income Tax Law for Foreign-Funded Enterprises, lowering income tax from 33 to 15 per cent for foreign joint ventures, especially for those operating in coastal as well as inland poor areas, or whose line of business was in line with the state industrial policy.

Annex I. (concluded)

April	The State Council issued a Circular on the Increases in Prices for Grain and Edible Oil at State Grain Shops. The selling prices of those foodstuffs were adjusted upward to reduce state subsidies, while compensations were provided for urban wage-earners.
June	The State Council approved the Report on the Experiment of the Tax-Sharing System, allowing experiments in nine provinces/municipalities of the tax-sharing system.
June	The Provisional Regulation of Joint Stock Companies was published. Later, a series of documents on experiments in joint-stock enterprises (JSE) was issued, covering JSE's standardisation, accounting system, financial management, taxation and auditing, labour and wage system, etc.
July	The State Council issued the Regulations on the Transformation of the Management Mechanisms of State-Owned Industrial Enterprises, and reconfirmed the established principles for the SOE reform, including enterprise autonomy in production, investment and recruitment, enterprise accountability for profits and losses, and enterprise merger, closedown and bankruptcy.
1993 July	“16-point Programme” announced by the Central Committee of the CPC, comprising monetary, fiscal, and investment management measures to counter overheating. Closure of numerous illegal “economic zones” and abolition of various tax concessions.
July	New accounting law comes into force, introducing an accounting system more in line with general accounting principles.
November	The 3rd Plenum of the Central Committee of the 14th Party Congress publishes its Decision on Issues Concerning the Establishment of a Socialist Market Economy. The decision outlines the macroeconomic management measures needed to improve the economic management system. Reforms in fiscal, financial and enterprise areas are announced.
1994 January	New tax system becomes effective. New regulations on VAT (move to credit invoicing; reduction in rates to two), business tax, consumption tax; enterprise income tax becomes effective, unified for all domestic enterprises. Revised Personal Income Tax Law, applicable to Chinese and foreign residents, becomes effective.
January	New intergovernmental fiscal arrangements become effective, combining tax assignment with tax sharing. Central taxes include: consumption tax; EIT on central enterprises; business tax on financial enterprises; resource taxes on offshore resources. Shared taxes are: VAT (75 per cent to central government); and securities trading tax (50 per cent). Revenue of other taxes accrues to local government.
March	Budget Law passed by the NPC, codifying the tax-sharing system and the dual budget system, prohibits deficits except for capital construction in the central budget. Effective January 1, 1995.
July 1	Split-up of tax administration into National Tax Service and Local Tax Service.
1995 March 17	Establishment of the State Development Bank to take on much of the policy lending for basic industries and infrastructure.
March 18	Law on the People's Bank of China adopted by the NPC. Law describes goal of monetary policy “to maintain the stability of the value of the currency and thereby promote economic growth.”

Tax Assignment and Tax Sharing in China, 1985-93

By law, there are three categories of revenues: fixed central government revenues, fixed local government revenues, and shared revenues. The following are levies and revenues which “belong” to the central government: the income and adjustment tax on all central government enterprises; the business tax on railroads, bank headquarters and insurance company headquarters; the profit remittances of all enterprises owned by the military; the special tax on fuel oil; income taxes, sales taxes and royalties from offshore oil activities of foreign companies and joint ventures; income from treasury bonds; the surcharge for the energy and transportation fund; and all customs taxes and duties. Of these, only the customs duties and taxes are collected directly by the central government. The rest are collected by local tax authorities and then turned over to the central government.

Revenues collected from a few taxes are assigned fully to local governments. The definition of the rates, and the base for these taxes, is not under local government control, however. They comprise: the income tax and adjustment tax on locally-owned SOEs and collective enterprises; the rural market trading tax; the Urban Maintenance and Construction Tax (UMCT); the housing tax; and the vehicle utilisation tax. The taxes (revenues) designated for sharing between the central and local governments include all sales taxes (value-added, business and product); natural resource taxes; the construction tax; the salt tax; the individual income tax; the wage bonus tax; the industrial and commercial tax; and the income tax on foreign and joint venture enterprises.

Before 1988, revenues from the taxes listed above were shared between the central and local governments according to tax-sharing contracts based on formulae that differed from region to region and changed several times. These formulae had a common guiding principle: that local governments should retain enough revenue to cover a “basic level” of services and turn the remainder over to the centre. The formulae differed in detail according to varying interpretations of what expenditures were considered sufficient to cover a “basic level” of services, and by how much these expenditures should grow each year. The provinces generally fell into one of three categories: those allowed to retain only a fixed percentage of their tax collections; those entitled not only to keep all the taxes collected, but also to receive an additional subsidy from the centre; and those allowed to retain all the taxes collected net of a fixed lump-sum transfer to the central government.

The system was changed in 1988 to a much more negotiated approach. Each province was allowed, at a minimum, to retain revenues sufficient to cover its 1987 level of “basic expenditures” and also to retain a proportion of the incremental revenues above the 1987 level according to a negotiated contract with the centre. There were six different types of contracts, which in effect accorded the provinces a rising marginal retention rate. As a result, the share of the central government in total tax revenues has fallen more sharply since 1988.

Annex III. Budget Revenues in China, 1978-94
(per cent of GDP)

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994*
Total Revenues	34.4	31.6	29.4	29.0	27.2	27.4	26.4	26.7	25.2	2.7	19.9	20.4	19.1	16.9	14.7	14.1	12.7
Tax Revenue	33.6	30.7	28.7	28.4	26.3	26.4	25.2	25.6	23.2	20.5	18.3	18.9	16.9	15.3	13.0	13.1	
Taxes on income and profits	21.5	19.2	17.5	16.7	14.4	13.5	12.1	8.6	7.6	6.3	5.4	5.0	4.6	3.8	3.0	2.3	
Enterprises income tax	20.6	18.4	16.9	16.1	13.8	12.5	11.2	8.1	7.1	5.9	4.8	4.4	4.0	3.4	2.7	2.0	
State enterprises	19.1	17.2	15.9	15.1	12.9	11.5	10.3	7.0	6.1	5.0	4.1	3.6	3.3	2.9	2.3	1.7	
Collectives	1.5	1.1	1.0	0.9	0.9	1.0	0.9	1.2	1.0	0.9	0.7	0.7	0.7	0.5	0.4	0.3	
Joint ventures	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Personal income tax (other)	0.0	0.1	0.0	0.1	0.1	0.4	0.4	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	
Agricultural income tax	0.9	0.7	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.4	0.5	0.5	0.5	0.4	0.3	0.3	
Taxes on goods and services	11.3	10.9	10.4	10.5	10.7	9.8	9.8	11.3	10.8	9.8	9.3	9.9	8.8	8.1	7.7	8.4	
General sales taxes	11.0	10.6	10.2	10.3	10.5	9.6	9.6	11.1	10.7	9.7	9.0	9.1	8.1	7.4	7.7	8.4	
Product tax	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.9	5.6	4.8	3.4	3.3	3.1	2.9	2.6	2.4	
Value added tax	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	2.4	2.2	2.7	2.7	2.2	1.9	2.6	3.2	
Business tax	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	2.7	2.7	2.8	3.0	2.8	2.6	2.5	2.8	
Urban maintenance and development tax	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.0	0.0	
Real estate tax	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.2	0.0	0.0	
Special tax on oil	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	
Salt tax	0.3	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	
Customs tax	0.8	0.7	0.8	1.1	0.9	0.9	1.5	2.4	1.6	1.3	1.1	1.1	0.9	0.9	0.8	0.8	
Other taxes	0.0	0.0	0.0	0.0	0.3	2.2	1.9	3.3	3.2	3.2	2.5	2.8	2.6	2.6	1.4	1.7	
<i>of which: Construction tax</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.2	0.3	0.2	0.2	0.2	0.1	0.1	0.1	
Non-tax revenue	0.8	0.9	0.8	0.7	0.8	1.0	1.1	1.1	2.0	2.2	1.6	1.5	2.2	1.6	1.8	1.0	
Gross profit remittances from SOE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.4	0.4	0.4	0.4	0.4	0.3	0.2	0.1	
Depreciation funds	0.7	0.6	0.6	0.5	0.5	0.5	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Other	0.1	0.3	0.2	0.1	0.3	0.6	0.8	0.6	1.6	1.8	1.3	1.1	1.8	1.3	1.5	0.8	

* 1994 breakdown not available at time of writing.

Source: IMF, Staff Estimates.

Annex IV. Developments in Government Expenditure in China, 1978-94
(per cent of GNP)

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994*
Total expenditure and net lending	34.1	36.7	32.7	30.3	28.6	29.1	27.9	27.2	27.2	24.8	22.3	22.7	21.1	19.1	17.0	16.0	14.5
Current expenditure	19.3	21.6	22.1	22.4	21.8	21.8	19.8	19.6	19.4	18.1	16.9	18.0	16.5	15.1	13.6	12.4	
Administration	1.4	1.4	1.5	1.5	1.6	1.8	2.0	1.7	1.7	1.6	1.7	1.8	1.8	1.6	1.6	1.6	
Defence	4.7	5.6	4.3	3.5	3.4	3.0	2.6	2.2	2.1	1.9	1.5	1.6	1.6	1.5	1.4	1.2	
Culture, education, public health	3.1	3.3	3.5	3.6	3.8	3.8	3.8	3.7	3.9	3.6	3.5	3.5	3.3	3.3	3.0	2.8	
Economic services	5.0	4.7	4.3	3.5	3.4	3.2	2.9	2.6	2.6	2.3	2.1	2.2	2.0	2.1	1.8	1.7	
Geological survey	0.6	0.6	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.2	0.2	0.2	0.4	0.2	0.1	
Agriculture	1.4	1.6	1.8	1.6	1.5	1.5	1.4	1.2	1.3	1.2	1.1	1.2	1.2	1.1	1.0	0.9	
Operating expenditure for industry	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.2	0.2	0.2	
Development of new products	0.7	0.7	0.6	0.5	0.5	0.6	0.6	0.5	0.5	0.5	0.4	0.4	0.3	0.3	0.3	0.3	
Working capital for SOE	1.9	1.3	0.8	0.5	0.5	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	
Social welfare relief	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.3	0.3	0.2	0.2	
Subsidies	3.2	4.9	6.1	7.7	7.2	7.3	5.9	5.9	6.0	5.9	5.4	6.1	5.2	4.1	2.9	2.1	
Daily living necessities	2.2	3.5	4.9	6.4	5.8	5.3	4.5	3.7	2.7	2.6	2.3	2.3	2.1	1.7	1.2	0.9	
Agricultural inputs	0.0	0.5	0.4	0.5	0.4	0.2	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Operating losses of SOE	1.0	0.9	0.8	0.9	1.0	1.8	1.2	2.1	3.4	3.3	3.2	3.7	3.1	2.3	1.7	1.2	
Interest payments	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.2	0.4	0.5	0.3	
Other	1.9	1.7	2.4	2.6	2.4	2.6	2.7	3.5	3.1	2.6	2.2	2.5	2.1	1.9	2.2	2.5	
Capital expenditure	14.9	15.2	10.6	7.8	6.8	7.3	8.0	7.5	7.8	6.7	5.4	4.7	4.6	4.0	3.4	3.6	
Capital construction	12.6	12.9	9.4	6.9	6.0	6.6	7.0	6.8	6.9	6.0	4.7	4.2	4.1	3.5	2.9	2.6	
Development of the productive capacity of existing enterprises	2.3	2.3	1.2	0.9	0.8	0.7	1.0	0.7	0.8	0.7	0.7	0.5	0.5	0.5	0.5	0.9	

* 1994 breakdown not available at time of writing.

Source: IMF

Annex V. Budget and Its Financing in China, 1978-93

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
	(billion yuan)															
Revenue	123.3	126.3	131.6	138.6	141.2	159.4	183.5	228.3	244.6	256.9	280.3	326.4	355.0	367.2	392.8	481.0
Expenditure	122.5	146.9	146.2	144.4	148.3	169.0	193.9	232.4	263.3	280.0	313.7	363.8	391.7	415.2	453.9	546.0
Deficit	0.8	-20.6	-14.6	-5.8	-7.1	-9.6	-10.4	-4.1	-18.7	-23.1	-33.4	-37.4	-36.7	-48.0	-61.1	-65.0
Financing	-0.8	20.6	14.6	5.8	7.1	9.6	10.5	4.1	18.7	23.1	33.5	37.3	36.8	48.1	61.1	64.9
Domestic	-1.0	17.0	12.4	2.6	7.3	8.5	8.7	4.0	13.4	16.3	22.0	26.0	23.7	38.1	46.0	36.8
Monetary System	-1.0	17.0	12.4	-2.3	2.9	4.3	4.5	-2.1	12.7	6.9	11.5	-5.0	23.7	25.2	61.4	32.1
Nonbank	0.0	0.0	0.0	4.9	4.4	4.2	4.2	6.1	0.7	9.4	10.5	31.0	0.0	12.9	-15.4	4.7
Foreign	0.2	3.6	2.2	3.2	-0.2	1.1	1.8	0.1	5.3	6.8	11.5	11.3	13.1	10.0	15.1	28.1
Gross foreign borrowing	0.2	3.6	4.3	7.3	4.0	3.8	n.a.	2.9	7.6	10.6	13.9	14.4	17.8	18.0	20.9	35.8
Amortisation	n.a.	n.a.	-2.1	-4.1	-4.2	-2.7	n.a.	-2.8	-2.3	-3.8	-2.5	-3.1	-4.7	-8.0	-5.8	-7.7
	(as per cent of GDP)															
Revenue	34.4	31.6	29.4	29.0	27.2	27.4	26.4	26.7	25.2	22.7	19.9	20.4	19.1	16.9	14.7	14.1
Expenditure	34.1	36.7	32.7	30.3	28.6	29.1	27.9	27.2	27.2	24.8	22.3	22.7	21.1	19.1	17.0	16.0
Deficit	0.2	-5.2	-3.3	-1.2	-1.4	-1.7	-1.5	-0.5	-1.9	-2.0	-2.4	-2.3	-2.0	-2.2	-2.3	-1.9
Financing	-0.2	5.2	3.3	1.2	1.4	1.7	1.5	0.5	1.9	2.0	2.4	2.3	2.0	2.2	2.3	1.9
Domestic	-0.3	4.3	2.8	0.5	1.4	1.5	1.2	0.5	1.4	1.4	1.6	1.6	1.3	1.8	1.7	1.1
Monetary System	-0.3	4.3	2.8	-0.5	0.6	0.7	0.6	-0.2	1.3	0.6	0.8	-0.3	1.3	1.2	2.3	0.9
Nonbank	0.0	0.0	0.0	1.0	0.8	0.7	0.6	0.7	0.1	0.8	0.7	1.9	0.0	0.6	-0.6	0.1
Foreign	0.1	0.9	0.5	0.7	0.0	0.2	0.3	0.0	0.5	0.6	0.8	0.7	0.7	0.5	0.6	0.8

n.a. not available

Source: IMF.

Annex VI. Changes in Tax Structure in China, 1994

A. Status of / Modifications to Existing Taxes

Adjustment Tax on SOEs. Abolished.

Agriculture Tax. Remains.

Animal Husbandry and Trading Tax. Merged into the VAT structure.

Banquet Tax. Remains, but the choice of whether to levy this tax to be given to the provinces.

Business Tax. The business tax on the wholesale and retail sectors merged with the VAT; the rest remains.

Collective Income Tax. Became part of the new income tax on domestic enterprises.

Consolidated Industrial/Commercial Tax. Abolished.

Energy and Transportation Tax. Abolished for SOEs, but remains for collectives, TVEs.

Housing Tax. Remains.

Income Tax on Private Firms. Became part of the new income tax on domestic enterprises.

Income Tax on Self-Employed Individuals. Became part of the new personal income tax.

Income tax on Joint Ventures and Foreign-owned Companies. Remains for now but to be merged eventually with income tax on domestic enterprises.

Investment Orientation Adjustment Tax on Fixed Assets. Remains as at present.

License Tax for Vehicles and Ships (domestic). Merged with the **Vehicle/Ship Tax** (see below) into a general tax on vehicles and ships.

Market Trading Tax. Merged into the VAT structure.

Personal Income Adjustment Tax. Became part of the new personal income tax.

Personal Income Tax on Foreigners. Merged into new personal income tax.

Product Tax. Eliminated and merged with the VAT consumption tax.

Resources Tax. This covered mostly crude oil, natural gas and iron ore. Extended to cover a larger range of nonmetal and mineral resources.

Salary Adjustment Tax for State-Operated Enterprises. Abolished.

Salt Tax. Merged with the resource tax.

Slaughter Tax. Remains, but the choice of whether to levy it to be given to the provinces.

SE Income Tax. Became part of the new income tax on domestic enterprises.

Special Tax on Burning Oil. Abolished.

Special Excise Tax. Abolished.

Stamp Tax. Remains.

Urban Land Use Tax. Remains, but with rates to be fixed by local governments within a centrally determined range.

Urban Real Estate Tax. Remains.

Urban Maintenance and Construction Tax. Remains.

VAT. Broadened to absorb a part of the existing business tax and most of the product tax; switch to credit invoice method; reduction to three rates (17, 13 and 0 per cent for exports).

Vehicle/Ship Tax (domestic). Remains.

Wage Bonus Tax. Abolished.

B. New Taxes

Consumption Tax. Excise tax introduced on a limited number of goods.

Land Value Increment Tax. Introduced as a progressive capital gains tax on land.

Inheritance and Gift Tax. To be introduced, but no timetable yet.

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Fiscal Constraints and the Speed of Transition in the CEECs

*Fabrizio Coricelli**

Fiscal accounts are clearly central to the transition to a market economy. The role of the public sector changes radically in the shift from an economy dominated by the state to one based on private property and, eventually, a dominant role of the private sector. The size of the government is bound to decline. There is much less agreement on how rapidly the state sector should decline, on the size of government to aim for or on the distribution of different government activities, on both the expenditure and the revenue sides. The experience of market economies is too varied to be a guide.

No consensus exists as well on the time path of budget deficits during transition. If transition is a temporary period of hardship leading to higher growth and a higher standard of living, the best policy would be to increase public debt to smooth consumption and invest in restructuring the economy. The smoothing of consumption should take place across generations. Older generations will not benefit from improvements in the future, so fairness demands a transfer from younger to older generations.

Transition is not simple. Countries began the process saddled with large macroeconomic imbalances, a large foreign debt and high inflation. Underdevelopment of financial markets implied that budget deficits had to be financed mainly by money creation, with a big impact on inflation. Policy makers thus had to balance the needs of transition, restructuring the economy and intergenerational equity with macroeconomic constraints. Constraints, however, are not always fully exogenous. They often arise from policy decisions or agreements with international institutions like the International Monetary Fund. It is crucial to assess properly the meaning of budget deficits in order to set targets in line with the overall reform process. During transition, budget deficits do not reflect just short-term economic developments and discretionary fiscal policy. Budgetary developments are fundamentally intertwined with the nature and speed of restructuring the economy. This reduces the informational role of the budget. Budget deficits may result from strong commitment towards fast and far-reaching market reforms, rather than from a populist attitude or maintenance of the *status quo* through large subsidies (Kornai, 1992 and Tanzi, 1993).

This paper highlights the interplay of fiscal variables and the restructuring process, viewed as the reallocation of resources from state to private enterprises. It looks at structural factors behind the behaviour of the deficit, notably a weak correlation between output behaviour and the budget. The pace of restructuring, unemployment, and the relative dynamics of state and private firms probably had an impact on the budget independently of the behaviour of aggregate output. In the relationship between speed of transition and fiscal accounts, public transfers to potential losers from transition in “fast reformer” countries play an important role. The analysis confirms some of the views of Dewatripont and Roland (1992*a,b*), who stressed the importance of compensation in fast reforming countries. Empirical evidence also seems to confirm the view of Chadha and Coricelli (1994) about the increasing fiscal cost of transition and the possibly perverse incentives for governments to slow down transition because of fiscal constraints. These authors found that after the initial stages of transition, a way to improve the budget deficit is to support state firms, thus slowing down transition.

A classification recently suggested by the EBRD and the World Bank divides the CEECs into “fast” and “slow” reformers. This paper argues that fast reformers could succeed by compensating affected groups of the population and had the means to finance the budget deficit, either in the domestic market or through foreign borrowing. Along with pressures from increasing income inequality and lobbying from interest groups (e.g. pensioners) fiscal constraints probably played a major role in the reform cycle in many CEECs, especially in determining the asymmetry between economic and political cycles. Examples of change in the speed of reforms appear in delays in privatisation. The widespread electoral success of parties with roots in the fallen communist regimes reflect pressures for changing the pace of reforms. Budget deficits and their dynamics have only a weak link with aggregate output behaviour. Revenues and expenditures behave differently in “fast” and “slow” reformer countries; the key difference lies in the combination of higher reduction in subsidies and higher social expenditures in “fast” reforming countries. The resultant increase in expenditure furnished the main cause of fiscal pressures, while the feared revenue collapse did not materialise.

Fiscal Accounts and Speed of Reform: An Analytical Framework

The movement to a market economy is in the long run bound to reduce the “size” of the government through a contraction of both expenditures and revenues, but the transition is likely to affect revenues and expenditures unequally, with emergent fiscal imbalances. On the revenue side, the decline of the traditional base for tax revenue — state enterprises — produces a fall in revenues. On the expenditure side, social expenditures associated with growing unemployment and with transfer from enterprises to the government of many “social” activities produce upward pressure on total expenditure.

These forces can be embedded in a framework of transition, seen as a process of restructuring, with large shifts of factors of production among sectors. Polarisation of the economy into state and private sectors is a useful simplification. Several models of transition have been suggested (Aghion and Blanchard, 1993, Chadha and Coricelli, 1994). They incorporate unemployment as both a by-product and an active force in the transition process.

A main result of Chadha and Coricelli (1994) is that unemployment moves along a hump-shaped path during the transition. It increases initially and keeps rising during transition even after the economy has begun to grow. High unemployment accompanies transition for a long period, during which it can be positively related to the growth of the economy. Restructuring — the reallocation of factors from declining state firms to expanding private firms — is the main cause. The extent of unemployment and its persistence depend on the initial state of the economies. The better an economy is equipped with physical and human capital to spur growth of private firms, the lower and shorter-lived the unemployment. Economic policies play an important part as well. Those that contain the increase of unemployment are likely to slow down the restructuring of the economy.

Restructuring, and the attendant unemployment, have sizeable effects on the budget. The fiscal side of these models can be summarised as follows. Assume unemployment benefits per unemployed person are constant and equal to b and that unemployment benefits are the only expenditure for the government. Thus,

$$G = bU$$

Revenues are obtained by taxing output of state and private firms:

$$T = t_s f(E_s) + t_p f(E_p)$$

The budget deficit is thus:

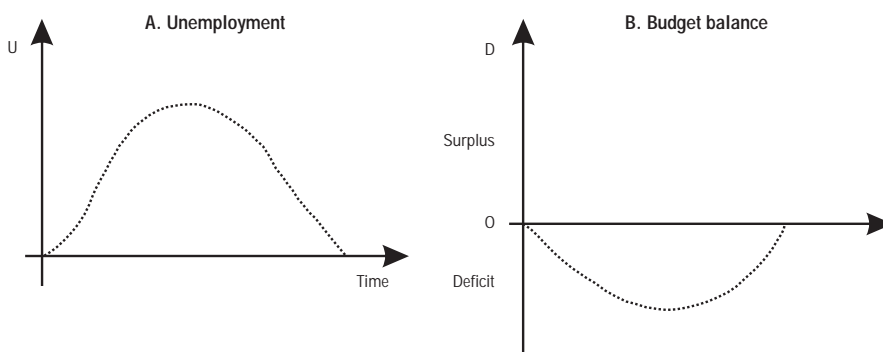
$$D = bU - [t_s f(E_s) + t_p f(E_p)]$$

For given tax rates, the budget deficit deteriorates during the initial phases as unemployment increases. The deterioration is greater if tax rates differ and are higher on state firms, as in economies in transition. Figure 1 illustrates the behaviour of the budget and unemployment over time. The budget deficit is bound to deteriorate during transition as a by-product of the reallocation of resources from state to private sectors.

The behaviour of unemployment and the budget depend crucially on the speed at which the state sector declines, relative to the speed the private sector expands. Aghion and Blanchard (1993) focused on the effects of budget constraints on private sector growth. They stressed the presence of a “fiscal externality” which can lead to multiple equilibria, one with high unemployment and no private sector growth and one with low unemployment and expansion of the private sector. In their models, the growth of the private sector (private sector hiring) is an increasing function of

unemployment. This can be due to easier matching between job seekers and job offers or to a downward pressure of unemployment on wages leading to greater hiring in the private sector. Through the fiscal channel, however, unemployment may harm the growth of the private sector, which bears the cost of unemployment through higher taxes. The presence of these conflicting forces can lead to two equilibria. If private sector growth is rapid, the tax burden to finance unemployment expenditures is low and does not hamper it. If growth is slow, the burden of unemployment is high and tax pressure is an obstacle. Private firms are likely to be forward-looking in their investment and hiring decisions. What matters for them is the present value of the taxes paid over the duration of their activity.

Figure 1. Exogenous Employment Dynamics in State and Private Sectors



The Aghion and Blanchard model can be extended to analyse the implications of deficit financing for the dynamics of unemployment and restructuring. When b is unemployment benefits, z the tax rate on employment, U the unemployment rate and d the budget deficit, the following budget identity holds:

$$bU = z(1-U) + d,$$

Aghion and Blanchard analysed the case with $d=0$. It is easy to show that a positive d (a budget deficit) increases the feasible rate of closure of the state sector (Coricelli, 1996). So a budget deficit permits faster restructuring of the economy. In other words, a too tight budget constraint implies slower restructuring¹.

In Chadha and Coricelli (1994), as in Aghion and Blanchard (1993), the success of restructuring is not inevitable. There is, however, a threshold combination of unemployment and technological capabilities — human or physical capital — which separates a region of successful restructuring from one of failed restructuring. For a given initial endowment of technological capabilities, there is a threshold level of unemployment if restructuring is to succeed. The model yields a non-monotonic relation between unemployment and the stock of capital invested in the private sector. Unemployment continues to grow during the transition before declining. This decline begins well after economic output has begun to increase.

Although a robust test of the theory is hardly feasible, evidence on the entire sample of 18 Central and Eastern European countries, excluding those involved in wars, seems to match the main predictions of the model. Tables 1, 2a and 2b show results of simple regressions on the non-linear relationship between unemployment, output changes and private sector development. Table 1 shows that the effect of output changes on unemployment can be described by a quadratic function that depicts a bell-shaped relationship between unemployment and growth. Table 2a suggests that the effects on output growth of development of the private sector have different signs depending on the stage of private sector development. When the private sector is still small, its growth coincides with an aggregate contraction in output. Later, when the sector has reached a certain size, its growth is associated with an aggregate growth of the economy. Table 2b confirms this by specifying a quadratic relationship between output changes and private sector development.

Table 1. Unemployment and Output Change (1989-94)
(OLS regression, all countries except countries at war)

Dependent variable. Unemployment rate		
Variable	Coefficient	T-statistics
Constant	7.79	9.42
GDP change	0.47	3.70
GDP change squared	-0.01	-1.88
R-squared	0.19	

Table 2a. Private Sector Development and Output Change
(OLS regression, all countries 1989-94)

i) Low level of development of private sector

Variable	Coefficient	T-statistics
Constant	-4.80	-2.60
Private sector	-17.08	-2.39

ii) High level of development of private sector

Variable	Coefficient	T-statistics
Constant	-35.85	-3.33
Private sector	44.26	2.93

Table 2b. Private Sector Development and Unemployment
(OLS regression, all countries 1989-94)

Variable	Coefficient	T-statistics
Constant	19.44	2.66
Private sector	78.79	3.45
Private sector squared	-22.23	-2.74

These non-linearities have important implications for the budget. If the government faces strict borrowing constraints and/or a ceiling on the budget deficit — as part of the stabilisation package, for instance — it has the incentive to adopt policies that reduce unemployment. This implies a slow-down of restructuring which may jeopardise its success. The model assumes that only the state sector is taxed.

In terms of fiscal accounts, the model implies two possible paths for unemployment and the budget. One leads to successful restructuring, with the economy eventually specialising in the private sector. The other implies a failed restructuring. The private sector does not take off and the economy remains dominated by the state sector. A critical level of capital stock in the private sector separates the two paths and the behaviour of the budget deficit differs along the two. With failed restructuring, the budget balance improves over time. With successful restructuring, the budget deteriorates before improving, thus mirroring the behaviour of unemployment.

The model provides analytical foundations for the warning by Tanzi (1993) and Kornai (1992) about the low informational value of budget deficits in transition economies. As in the Aghion and Blanchard model, a loosening of budget constraint increases the likelihood of successful restructuring. A crucial difference with Aghion and Blanchard is that less restrictive budget constraints lead to higher unemployment and an endogenous increase in the speed of restructuring. The source of the difference is that in the Chadha and Coricelli model, a loosening of budget constraint allows higher tax pressure on state firms, rather than a reduction of taxes, as in Aghion and Blanchard². The higher tax pressure increases the speed of reallocation of labour from state to private firms. This result is only one of the two possible outcomes in the model. It arises when unemployment is sufficiently high and thus has important budgetary implications. For low levels of unemployment, a loosening of budget constraint is consistent with lower taxation of state firms. Interpreting the results from the perspective of tighter budget constraint, the model explains the slowdown of restructuring observed in several countries a few years into the transition process. Such a slowdown can be rationalised as a response to fiscal constraints that become tighter as transition progresses and induce governments to reduce fiscal pressure on state firms.

Fiscal Accounts and Speed of Reform: Stylised Facts

The economic transformation in Central and Eastern Europe has been associated with a deterioration of fiscal accounts (Table 3). This did not occur during the first year of reforms, despite output declining more sharply at the start of reforms. Given that reforms have been associated with a jump in inflation, there is no correlation between budget deficits and high inflation. In Poland and former Czechoslovakia, high inflation coincided with budget surpluses, suggesting the presence of a “reverse

Tanzi effect.” In both countries, it was mainly due to taxation of paper profits as inflation boosted the nominal value of inventories. In Poland, for example, profit taxes jumped to 15.2 per cent of GDP in 1990, from 8.5 per cent in 1989, and then declined to an average of four per cent during 1991-93 (IMF, 1994*b*, Schaffer 1995). Factors other than short-term aggregate output behaviour probably affected the budget deficit. Perhaps the dynamics of the budget are related to the pace of restructuring of the economy, summarised by the asymmetric dynamics of declining state firms and growing private sectors.

Table 3. **Budget Balance in Central-Eastern Europe, 1989-95**
(per cent of GDP)

	1989	1990	1991	1992	1993	1994	1995
Slovenia	0.3	-0.3	2.6	0.3	0.3	-0.2	-0.9
Bulgaria	-1.4	-12.8	-14.7	-15.0	-15.7	-6.6	-6.7
Romania	8.4	1.1	0.6	-4.6	-0.2	-1.0	-2.8
Poland	-7.5	3.0	-6.5	-6.8	-2.9	-2.5	-2.2
Hungary	-1.4	0.5	-2.2	-5.6	-6.4	-8.3	-6.8
Czech Republic	-2.8	0.1	-2.0	-3.3	0.5	1.3	1.0
Slovakia	-2.4	0.1	-2.0	-12.8	-7.6	-1.4	0.0

The Low Informational Role of Budget Deficits During Transition

Finding evidence on the relation between budgets and pace of restructuring is not easy. The definition of speed of transition is not independent of fiscal variables. For instance, one can define the speed of restructuring in relation to the speed at which subsidies to state enterprises are dismantled. Despite these methodological difficulties, there are several stylised facts indicating the dependence of fiscal accounts on the pace of reforms.

Table 4 shows the results of a simple panel regression on the behaviour of the budget balance during the period 1989-94 for seven countries of Central and Eastern Europe (Bulgaria, Czech Republic, Hungary, Poland, Romania, Slovakia and Slovenia). As well as country dummies, which control for country-specific effects, four explanatory variables were included: the change in GDP, as a proxy for the state of the economy; the exchange rate regime at the start of reform, to control for the possible disciplining role on fiscal policy exerted by fixed exchange rates; the rate of unemployment; and the liberalisation index computed by the World Bank (World Bank, 1996). The last two variables capture the pace of reform and restructuring. Results indicate that the behaviour of budget deficits during 1989-94 was significantly correlated with changes in the unemployment level rather than with output. The correlation with the behaviour of GDP was very weak, although of the expected negative sign.

Table 4. Budget Deficits, Liberalisation and Restructuring in CEEs, 1989-95

OLS regression (fixed effects)

Dependent variable: Budget deficit		
Observations: 49		
Variable	Coefficient	T-statistics
GDP	0.12	1.10
UR	-0.42	-2.04 (*)
LIB	1.77	0.45
Exchange rate regime	3.26	1.62
Constant	0.17	0.09
Adj. R ²	0.54	

This suggests that: *i*) the fiscal implications of unemployment go beyond the simple relation between the budget and short-term movements in GDP; and *ii*) fiscal pressure is likely to continue even during the recovery phase of transition economies, partly because of the asymmetric dynamics of unemployment and output. Unemployment might be considered a summary indicator of the role of restructuring in the economy. According to the Chadha and Coricelli (1994) model, discrepancies between unemployment and GDP behaviour may signal the presence of restructuring in the economy. The liberalisation index and the exchange rate regime have no statistically significant impact on the budget's behaviour.

Using the EBRD classification of countries on the basis of the speed of reform, Table 5 shows an interesting difference between "fast" and "slow" reformers³ "Fast" reformers display a significantly higher ratio of unemployment to GDP growth. This could be a sign of the positive correlation between unemployment and structural change during the transition. The presence of the Czech Republic in the fast reformers group is an important exception, however, and a summary measure of speed of reforms may be misleading. The speed of privatisation appears largely independent of the speed of reforms in other areas, especially macroeconomic policy.

Table 5. Ratio of Unemployment to GDP Growth

	1989	1990	1991	1992	1993
Slow reformers	0	-0.1	-0.6	-0.5	-1.2
without Russia	0	-0.1	-0.6	-1.2	-8.3
Fast reformers	0.1	-0.7	-0.7	-2.3	-15.8

High unemployment seems to conflict with speed of privatisation. In the Czech Republic, where privatisation has gone fastest, unemployment has been lowest. The Czech and Slovak republics clearly illustrate the negative relation between unemployment and speed of privatisation. After the split at the end of 1992, both countries had the same privatisation policies. Then pressures to slow down privatisation mounted in Slovakia, and by the end of 1994 the Slovak government adopted a shift in strategy, implying a slowdown. Contrasting the main economic indicators of the two republics, sharply higher unemployment in Slovakia appears as the most important difference.

Revenues, Expenditures and Speed of Reform

While there could be several channels through which unemployment and speed of privatisation interact, the fiscal channel likely is an important one. Initial expectations saw the risk of fiscal crisis largely in the likely collapse of tax revenues associated with a shrinking state-enterprise sector, the traditional tax base (McKinnon, 1991). Yet the main budget pressures came from growing social expenditures (Barbone and Marchetti, 1994). Among them, the largest weight is pension expenditures, leading some observers to talk of “pensioners’ power” threatening the reform process.

Expenditures

Social security expenditures increased more in “fast” than in “slow” reforming countries (Table 6). Subsidies fell much more in the fast reformer group. Total expenditures fell by roughly the same proportion in the two groups. So while fast reformers have absorbed in higher social security expenditures the impact of the cut in subsidies, slow reformers have opted for maintenance of higher subsidies that in the short run may have moderated social expenditures. Another interpretation is that, given an overall budget constraint, slow reformers had less room for social expenditures. This may have helped slow restructuring, because of the unattractiveness of being unemployed or out of the labour force.

Table 6. **Changes in Government Expenditures from 1989 to 1993**
(per cent of GDP)

<i>Slow reformers without Russia</i>	
Social security benefits	2.40
Subsidies	-5.45
Capital expenditure	-8.45
Total expenditure	-10.95
<i>Fast reformers</i>	
Social security benefits	4.00
Subsidies	-14.50
Capital expenditure	-2.42
Total expenditure	-10.75

Within social expenditures, the main pressures on public outlays arose from pensions and other social benefits rather than unemployment benefits; but the main source of increased pension expenditure has been the increase in the number of pensioners leaving employment before the natural retirement age⁴. The increase in expenditure for pensions reflected mainly the adjustment in the labour market. Expenditures for social benefits were also largely determined by transfers to those unemployed who had exhausted their entitlement to unemployment benefits.

Social expenditures increased much more in fast-reforming countries. Fast reformers showed a sharp increase in pension expenditures that cannot be explained by demographic factors. One possible explanation could be tied to the electoral power of pensioners. Another, possibly complementary, interpretation links pension expenditures to the overall transition process and especially to labour market dynamics.

Pensions raise important intertemporal issues. Given that transition implies a temporary fall in real incomes, fairness would call for an income transfer to people — pensioners and older generations — who will not benefit from the future fruits of the transition. For older workers there might be a substitutability between wage demands and pensions. Social benefits should therefore be assessed in a general framework that takes into account effects on wages and the support for reforms. An important determinant of the increase in pensions is the increase in the number of pensioners because labour shedding initially took the form of early retirement. These expenditures could be seen as a byproduct of the restructuring of employment.

The increased number of pensioners implied that real pensions per capita actually fell. Real pensions declined significantly in Hungary and the former Czechoslovakia, and much less in Poland. The average pension is low in these countries, often not even ensuring an income above the poverty line and thus failing to achieve a important aim of state-run pension systems (World Bank, 1994b).

The chief reason for using pensions as the main social stabiliser, redistributing income to groups adversely affected by reforms, has probably been an institutional inertia that led to the maintenance of parts of the old system of universal social protection. The financial viability of pension schemes in countries like Hungary and Poland is dubious. Social security contributions to be paid by enterprises are projected — with an unchanged pension system — to grow in Hungary to about 38 per cent by the year 2019, from 34 per cent in 1994 (World Bank, 1994a). This high burden pushes workers into the informal sector, reducing the tax base and generating a vicious circle of higher burden on the formal sector.

Despite the fall in unit labour costs between 1989 and 1992, social security contributions increased in relation to GDP in both Poland and Hungary. The level in Hungary is comparable to those in Northern European countries, which traditionally have a very high wedge between wages and labour costs. Maintenance of these levels is also likely to encourage an underground economy that, for countries with very high debt-to-GDP-ratios, may prove a serious problem in the medium run. High social security contributions probably helped the mushrooming of the second economy in these countries. In this way, the fiscal channel may well help to explain the puzzling phenomenon of fast growth of new private sectors in countries where privatisation has been fairly slow (Poland and Hungary).

Revenues

In 1993, distribution of revenues in different tax and non-tax sources was similar in the two groups of countries (fast and slow reformers). Clear differences emerge, however, if the changes in tax items that took place after reforms are considered. In the period 1989-93, profit tax revenues collapsed in the slow reformer group but not in the fast reformer group (Table 7). Pressure on the tax-paying firms, mainly state enterprises, has been much higher in the fast reformer group. If the tax pressure is combined with the larger contraction in subsidies, the overall pressure is clearly much higher in fast reforming countries. This is a key feature of faster reform.

Table 7. **Changes in Government Revenues, 1989-93**
(per cent of GDP)

<i>Slow reformers without Russia</i>	
Profit tax	-10.70
Wage tax	0.70
Social security	0.60
<i>Total revenue</i>	<i>-21.30</i>
<i>Fast reformers</i>	
Profit tax	-4.57
Wage tax	0.60
Social security	0.27
<i>Total revenue</i>	<i>-10.95</i>

Even within the group of fast reformers there were major differences. The Czech Republic (and Slovakia) has shown a different pattern of revenue behaviour, linked to a different pattern of expenditure behaviour. Albeit from very high levels, both expenditures and revenues declined after reforms. The drop in subsidies has been accompanied by a fall in tax revenue. In the Czech Republic, there was no explosion of social expenditure, so the cut in subsidies could be translated into a fall in the tax burden. This has been largely due to discretionary policy changes, implemented especially in the first two years of transition, when the Czech and Slovak republics were still part of Czechoslovakia (IMF, 1994a).

Taxation of the private sector has been elusive. In Poland, for which data are available for the recorded private sector, the contribution of the private sector to tax revenues was much smaller than its contribution to output. In 1993, for instance, the private sector accounted for 24 per cent of the sum of profit, dividend and excess wage tax, while its share in total sales was 48 per cent. In industry, the private sector share in the same set of taxes was 12 per cent, while its share in total sales was 32 per cent⁵.

An important phenomenon in several transition economies has been the growth of tax arrears, or payments deferred, often indefinitely. It has reached significant size, estimated in flow terms at two to three per cent of GDP in countries like Hungary, Poland and Slovakia. Microeconomic data show the arrears concentrated in state firms in financial difficulty. Tax arrears could be seen as a kind of subsidy to them and perhaps the channel through which they have postponed closure or downsizing. That these arrears have developed particularly in recent years confirms the view that fiscal pressure was loosened, slowing the pace of restructuring in countries with high unemployment and attendant high social expenditures. Tax arrears grew more in countries in which tax pressure, net of subsidies, was stronger (Hungary and Poland). Firms with the biggest tax arrears did not fall into arrears in payments to other enterprises or banks (Schaffer, 1995). This suggests they counted on the government not starting bankruptcy proceedings against them, while firms or banks would have.

In conclusion, “fast” reformers began the transition putting strong pressure on state firms by drastically reducing subsidies and in most cases raising effective taxation. The relevant measure of fiscal pressure on state-owned firms is the taxation net of subsidies (Barbone and Marchetti, 1994). As transition progressed and unemployment increased, there was pressure for slowing down transition in high unemployment countries. The loosening of the fiscal pressure came about through the tolerated growth of tax arrears, and, in the case of Poland, the reduction of dividend tax and excess wage tax.

Notes and References

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1. Similar results obtain in the case of endogenous restructuring (see Aghion and Blanchard, 1993, pp. 14-16). An interesting difference is that here the transition may fail because of a too slow restructuring implied by the deficit financing.
2. At sufficiently high rates of unemployment, the budget deteriorates as taxes on state firms increase, because higher taxes imply higher unemployment and thus higher expenditures on unemployment benefits.
3. The Czech Republic, Hungary, Poland and Slovakia belong to the fast reformer group, while Bulgaria and Romania belong to the slow group. The classification is crude, so should be taken as merely indicative. The classification is based on indicators in three areas: *i*) enterprise restructuring and privatisation; *ii*) market reform: price liberalisation, competition both internal and external; *iii*) financial sector reform (see EBRD, 1994, p. 11).
4. In Poland, for instance, the number of new pensions increased sharply in 1990 and 1991, from 437 000 in 1989 to 653 000 in 1990 and 912 000 in 1991, while people reaching retirement age was roughly constant at the level of 1989 (133 000 in 1989, 144 000 in 1990 and 138 000 in 1991) (Coricelli *et al.*, 1995).
5. Data are from a three digit level data set from the Polish statistical office. As branches with fewer than three firms are excluded, the sample does not capture the whole economy.

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A Comment

*Mark Schaffer**

Hofman's paper analyses in detail what has happened to fiscal expenditures and revenues in China since the start of the reforms in 1978. He gives a very complete picture, covering not just budgetary revenues and expenditures but also estimates of quasi-fiscal activities such as interest rate subsidies and subsidies *via* non-repayment of loans made by state banks and seignorage.

His starting point is the striking fall of both budgetary revenues and expenditures in the reform period, from 35 per cent of GDP in 1978 to 15 per cent in 1994. What explains this decline in expenditure relative to GDP in China? The drops in capital expenditure (down 11.3 percentage points of GDP between 1978 and 1993), budgetary expenditures on defence (3.5 percentage points) and economic services (3.3 percentage points) account for all of it. Subsidies increased initially during reform but by 1992-93 had returned to their 1978 levels (about 2 or 3 per cent of GDP). Spending on education, health, and culture remained at about 3 per cent of GDP throughout the reform period. (See Figures 1 and 3 and Annex II in the paper.)

Hofman provides the ingredients with which we can start formulating a consistent overall picture of the expenditure decline. Drawing on some other work by Hofman and his colleagues at the World Bank, I will try to explain the decline and bring out some policy implications.

The decline in government expenditure on capital investment is striking. It took place during an investment boom. Gross domestic fixed investment as a percentage of GDP (current prices) increased from 27 per cent in 1978 to 37 per cent in 1993 (World Bank, 1995), when GDP itself was growing rapidly. Over-investment has been a main worry of policy makers and advisers in China in recent years. According to the World Bank (1995), decentralisation has brought state-owned enterprises (SOEs) increasingly under the influence of local governments that have promoted the investment activities of "their" enterprises. The result is what the Bank calls "local government-led investment hunger" (World Bank, 1995).

Enterprises have borrowed from the banks on a large scale to pay for these investment expenditures. Capital investment in enterprises directed by central government and financed *via* the government budget has increasingly been replaced by investment promoted by local governments and financed with debt taken on by enterprises. The decline in government expenditure on “economic services” forms part of the same story. Most of it is concentrated in a decline in “working capital for enterprises” that has been replaced by bank credit. This switch from budgetary to debt financing of investment has greatly increased the indebtedness of the enterprise sector. The debt/asset ratio in the sector is currently about 70 per cent, compared to about 30-40 per cent in the leading transition countries of Central and Eastern Europe (see my contribution to this volume with Cornelli and Portes).

The connection to the financial deepening of this period is also clear; the main counterpart to increasing broad money was increasing credit to enterprises. The switch from government budget financing to enterprise debt financing of investment also appears in the expanded government accounts in Hofman’s Table 2 as enterprise subsidies, which are interest subsidies and the implicit subsidies to cover the (as yet unrealised) defaults of enterprises on their loans.

How does this relate to the problem of how to reduce the government budget deficit? The government could toughen up the banking system, getting state banks to make loans on commercial criteria rather than following (local or central) government pressure or directives, and allowing them to pursue into bankruptcy firms which default on loans. Given the political pressures on banks to make loans to support politically-favoured investments and prop up loss-making firms, success is probably a long way off, and this should perhaps be seen as a medium-term programme. The effect of these measures on the government deficit would be to reduce enterprise subsidies *via* the banking system (in particular, the default subsidy). They would also help curb excessive investment. To the extent that firms have been financing public investment projects through their own debt, such investments should be moved back into the government budget. They naturally belong there, and it should be easier to monitor and control investment expenditures if they are part of the government budget than if they are the responsibility of firms.

Hofman suggests the government should move from seignorage to debt financing of the government deficit. If we take his figure of 20 per cent for the default rate on loans, the stock of loans which will not be repaid by enterprises stood at close to 20 per cent of GDP in 1993. This bad debt problem in the enterprise sector is likely to call for a massive recapitalisation of the banks which, if done by giving them government bonds (as in several transition countries in Central and Eastern Europe), would mean in effect moving from implicit to explicit financing *via* government debt.

The fiscal developments in the transition countries of Central and Eastern Europe (CEEC) and the former Soviet Union (FSU) described by Coricelli in his paper differ from those in China. Capital expenditures by governments have fallen since the start of transition in 1989, but in most countries the decline has been smaller than in China. The considerable variation among countries (Table 6 in the paper) probably arose

because of the partial “market socialist” reforms in some of these countries before 1989 which involved moves from budgetary to bank financing of investment in enterprises. Some of the fall in government expenditure on capital investment had already taken place before transition started.

Coricelli points out that the key feature of the fiscal crisis in the CEECs is the growth of social security spending. He presents models which relate unemployment benefit in particular to the speed of enterprise restructuring, fiscal pressure and the budget deficit. These models are intended to illustrate developments in transition countries and characterise or offer explanations for stylised facts. Coricelli, in this paper and others (e.g. Chadha *et al.*, 1994), has pioneered models of transition economies in which the economy is stylised as having two sectors, a (stagnating) state sector and a (dynamic) private sector. I think these models are very successful, because they are “realistic” — simplifying the economy into two sectors captures a key feature of transition economies — and they make us think further about the nature of transition. As the literature to which Coricelli is contributing is still developing, I will make two general comments about his approach.

First, the emphasis in the models is on unemployment, both in the links to enterprise restructuring and to the government budget. The first set of links is clearly important, but the emphasis put on the latter could be questioned. As Coricelli notes, the key social security expenditure item which has contributed to the fiscal crises in the CEEC countries is pensions; the contribution of expenditure on unemployment benefit has been relatively minor. Coricelli says pensions raise important intertemporal and political issues. It would be interesting to model these issues, looking at the relationship between, for example, the individual decision of whether to retire or continue in employment, the (partly political) government decision of what level to set the state pension at, the level of taxation needed to finance pensions, the responses of firms, etc.

Second, the two-sector modelling in the paper sees the initial phase of transition as featuring labour shedding in the state sector faster than the private sector is able to absorb it; the difference between the two is the addition to unemployment. The model assumes that the private sector expands its employment by drawing on the general labour force. Empirical evidence from transition countries, however, shows that the unemployed are less likely to be taken on by the private sector than workers currently employed in the state sector. This is important enough to be worth adopting in the models.

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PART TWO

TRADE POLICY AND TRADE PATTERNS

Economic Transition and Trade Policy Reform: Lessons From China

Kiichiro Fukasaku and Henri-Bernard Solignac Lecomte**

Economic transition involves institution building and policy reforms to establish effective macroeconomic management and resource allocation based on market mechanisms. “Gradualist” and “big-bang” proponents argue about how best to achieve that¹. The former say a step-by-step approach would work better than a “big-bang” because the cost of adjustment is so large that implementation of a comprehensive reform would spark strong political resistance, and because the information needed to make such reform feasible would never be fully available. On the other hand, the step-by-step approach includes the risk of sliding towards a piecemeal reform that might fail.

The Chinese experience since late 1978 is often called a successful case of “gradualism,” compared with reform and growth experiences in the Central and Eastern European Countries (CEECs). Chinese “gradualism”, however, stems from political constraints on policy makers under a communist regime rather than from a clear economic policy option. A critical feature of China’s transition strategy is a fundamental shift in trade and industrialisation policies in the 1980s. As in several Southeast Asian economies, developments in China since the mid-1980s are a successful example of outward-oriented development strategies. Although a big country in population and area, China is following trade patterns similar to those in other East Asian economies. Its export successes can be understood only in the context of industrial restructuring in Japan and other labour-scarce economies in the region.

Trade policy reform is part and parcel of China’s transition to a market economy. Liberalisation and rationalisation of its import regime are moving much slower than liberalisation and decentralisation of exports. Lack of firm commitment to import liberalisation makes it difficult to integrate the economy fully into the international trading system. The appeal of gradualism has been tarnished by China’s failed attempt to resume its status as a GATT contracting party and become a founding member of the WTO.

Trade Policy Reform and Trade Patterns²

China's economic transition was set in motion at the landmark Third Plenary Session of the 11th Central Committee of the Chinese Communist Party (CCP) in December 1978³. The two main aims were to decentralise the economy (relying more on market forces in making decisions), and to open and bring it further into the world market. The transition process began without any overall blueprint or timetable. The government took a gradual and pragmatic approach, perhaps best described as "feeling for stones to cross a river". This led Chinese reformers to experiment and when they were successful the government endorsed such policy changes. At first, gradualism allowed reformist members of the CCP to find pragmatic solutions to politically sensitive issues that might have provoked resistance from conservative members. One example was the creation of Special Economic Zones (SEZs) where local authorities and firms were allowed to experiment with capitalist practices that could not, for political reasons, immediately be applied elsewhere⁴.

Decentralising Trade Controls

Before the 1978 reform, foreign trade in China was just something that filled gaps in supply and demand under national plans. There was no need for a trade policy as such. Tariffs were purely to raise revenue. As decentralisation of export activities progressed and imports took place increasingly outside the confines of mandatory planning, trade policy began to play a greater part in economic transition as far as development strategies were concerned⁵.

The initial focus of China's trade policy was on *internal* development, with emphasis on import-substituting industries and farming, which employed about 70 per cent of the labour force in the late 1970s. The exchange rate was also heavily overvalued. Although the ban on foreign direct investment (FDI) was lifted in 1979, the authorities remained cautious. As a result, the trade regime was very inward-looking at the start of economic reform. Only since the mid-1980s has trade policy shifted fundamentally towards export production. This corresponds to China's *de facto* adoption of the coastal development strategy, active encouragement of FDI through fiscal incentives and large real devaluations of the Chinese yuan *vis-à-vis* major East Asian economies⁶. This outward-looking orientation has not changed despite the temporary political and economic setback after the Tiananmen Square incident of 4 June 1989.

The laws and regulations of China's trade regime have changed constantly since 1978; but the core of the trade policy reform is decentralising trade controls. This notably involves less mandatory planning in foreign trade. On the export side, mandatory planning sets quantity targets for individual export producers and supplies them with the necessary inputs under the materials allocation system. In 1988, 112 export commodities were covered by mandatory plans (Lardy, 1992), but this was

reduced to 16 by 1993 (Fukasaku and Wall, 1994). Exports covered by mandatory planning fell from 100 per cent in 1978 to 45 per cent in 1988 and about 15 per cent in 1992 (World Bank, 1993).

On the import side, “unified management” was introduced in 1984 to control trade in seven key commodities — steel, chemical fertilisers, rubber, timber, tobacco, grain, and polyester and other synthetic fibres. At that time, they accounted for 40 per cent of China’s imports, down from more than 90 per cent at the beginning of the 1980s (World Bank, 1988). Mandatory planning was further reduced and by 1993, less than 20 per cent of all imports were thus controlled (Tseng, *et al.*, 1994).

Another key aspect of decentralising foreign trade is the rapid growth of local foreign trade corporations (FTCs) independent of the central government. Starting in Guangdong province in early 1978, many local FTCs began during 1979 to trade on their own. This was officially sanctioned and legislation soon authorised entities other than the 12 national FTCs to conduct foreign trade. Central ministries and departments and provincial and municipal governments set up their own FTCs, some of them domestic joint ventures involving production units and trade corporations. By the mid-1980s, over 800 FTCs had been authorised and by the end of the decade more than 5 000 were operating. Large state-owned firms, initially those with more than \$750 000 worth of exports, were also given the right to export on their own, like foreign-funded companies (Fukasaku and Wall, 1994).

The smaller proportion of trade covered by mandatory planning and the growth of local FTCs does *not* mean that a significant proportion of China’s trade is now market-determined. “Guidance planning” allows the government to intervene in the activities of national and local FTCs through licensing and foreign exchange allocations. The principle of independent accounting and responsibility of FTCs for profits and losses from trade is not fully accepted. To end unlimited financial commitments by the central government to trade activities, the “contract responsibility system” was introduced for national FTCs in 1988 and for provincial FTCs in 1991. The contracts set targets for foreign exchange earnings, remittances of foreign exchange from national and provincial FTCs to the central government, and for the balance of profits and losses from trade. The last target suggests there is still some leeway for the central government to subsidise trade losses, although direct subsidies for exports have been banned since 1991.

Outward Orientation and Trade Patterns

China’s trade policy reform has dramatically changed the country’s economic links with the outside world. As Table 1 shows, its share of world merchandise trade more than tripled between 1978 and 1994 and the degree of trade openness (defined as the average value of merchandise exports and imports divided by nominal GDP) rose appreciably⁷.

Table 1. Openness of the Chinese Economy, 1970-94

Chinese Total Trade (= Exports+Imports)/2

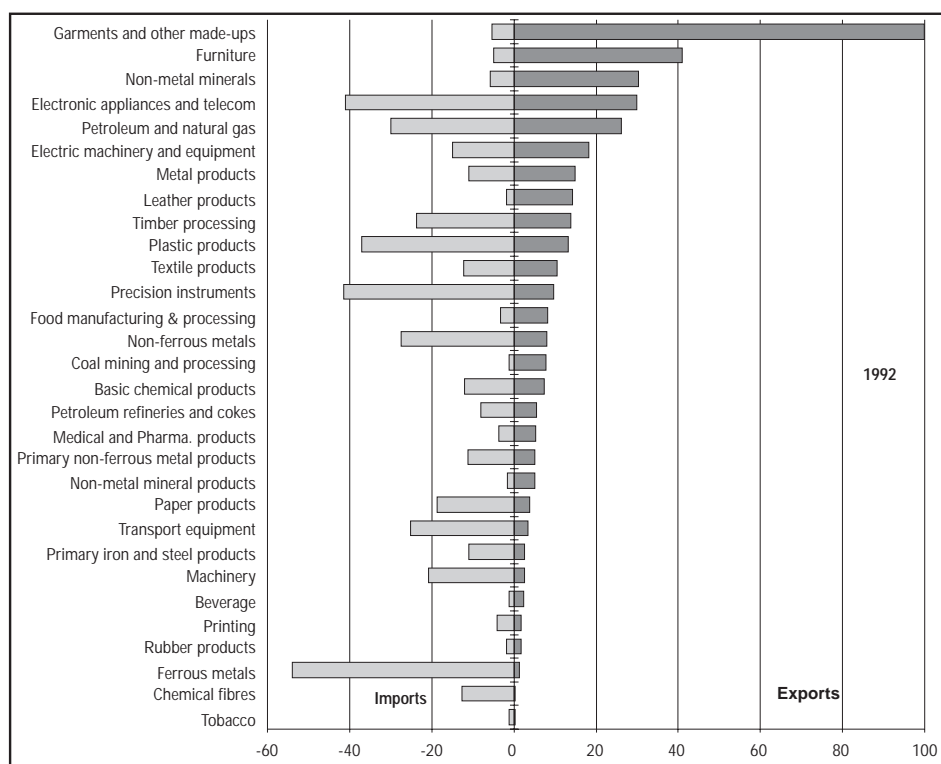
Year	Per cent of World Trade	Per cent of GDP
1970	1.16	-
1975	1.37	-
1977	1.01	-
1978	1.22	4.73
1980	1.43	6.10
1982	1.78	7.17
1984	2.08	8.25
1986	2.58	12.70
1988	2.13	13.00
1990	2.49	14.81
1992	3.09	17.28
1993	3.69	17.03
1994	3.85	22.13

Sources: IMF; Statistical Survey of China

Trade policy reform has also significantly changed China's trade patterns. As the reforms progress and market forces play a greater part in resource allocation, the trade pattern is more governed by comparative advantage. Most dramatic is the change in composition of exports. The share of manufactured goods (SITC 5-8) in total merchandise exports increased from about half in 1980 to 80 per cent in 1992⁸. Figure 1 compares the degree of trade openness by industry between 1987 and 1992⁹ (as defined by the share of merchandise exports and imports), to gross output. It shows that in only five years China increased specialisation in a fairly narrow range of exports, mainly labour-intensive products (garments and other made-ups, furniture and leather goods), along with some natural items (non-metal minerals, coal and food products). Although China began exporting "new" products — such as electronic appliances and telecommunications equipment, electrical machinery and equipment, metal and plastic items and precision instruments — imports of parts and components needed to produce them rose too. High economic growth made China a net importer of petroleum and natural gas by 1992.

A major cause of this dramatic trade increase is the transformation of a highly centralised trade regime into a more decentralised one, with more local firms getting involved in foreign trade independently of the plan set by the central government. De M n il (1995) argues that, while the trade regime *per se* has remained quite restrictive, "broad exemptions from central regulations and controls liberally granted by local authorities ... were the main secret of China's trade success" (p. 28). Nevertheless, while on the supply side these piecemeal reforms have reduced administrative constraints on exports, this does not explain why on the demand side China has performed so well in the world market. Locational advantage is a poor explanation,

Figure 1. Openness of Chinese Industries: Percentage of Exports (Imports) to Gross Output, by Industry



since China is not a neighbour of its major export markets¹⁰. More likely, liberalisation and decentralisation of trade controls have brought into play the country’s strong comparative advantage in activities requiring intensive use of low-skilled labour. Even so, the rise in China’s exports came as most of its competitors — NIEs and ASEAN-4 — had already made significant progress in exporting to OECD countries. The question remains of how China’s opening meshes with trade developments in the region during the 1970s and 1980s.

Trade developments in East Asia are best described as multiple “catching-up” processes within a cluster of the region’s economies at different stages of industrialisation and development. More advanced economies in the region respond to the ones just behind them by moving up the ladder of comparative advantage to export more capital-intensive and/or more technologically sophisticated products, leaving room for imports of relatively unskilled labour-intensive, standardised products. Led by Japan, the region’s strongest economy, followed by Chinese Taipei, Hong Kong, Republic of Korea, Singapore and other ASEAN countries, the East Asian economies tend to advance together through trade expansion based on shifting comparative advantage over time¹¹.

How does China fit into this pattern of trade development in East Asia? To answer this, we extended the method used by Rana (1990) and Fukasaku (1992) to include China in the analysis of shifting comparative advantage in East Asia. Using the “Comparative Advantage Indicator” (CAI) developed by CEPII/CHELEM (see Annex 1), we first calculated changes in revealed comparative advantage between 1970 and 1992 (the latest year for the trade database provided by CEPII/CHELEM) for 33 industry groups (Annex 2) in China and in each of eight East Asian economies. The latter are 4 NIEs (Chinese Taipei, Hong Kong, Republic of Korea and Singapore) and 4 ASEAN countries (Indonesia, Malaysia, Philippines and Thailand). Then we estimated Spearman’s correlation coefficients for each pair of economies (say, China and Republic of Korea) to see whether changes in CAI between the two economies were statistically correlated. A *negative* correlation would imply China gained export competitiveness in those industries where Korea was losing it. A *positive* correlation would indicate that the pattern of revealed comparative advantage in both economies changed in the same direction — that these economies tend to compete within the same range of industry groups. The results in Table 2 suggest China’s trade pattern is complementary to the NIEs (except Singapore) but competes with ASEAN countries (except Malaysia)¹². Trade developments in China seem to fit nicely into the “catching-up” model in East Asia.

Table 2. Significant Correlations of Changes in Comparative Advantage Vectors for China and Selected Asian Economies, 1970-92

All activities	1970-92
<i>China and NIEs</i>	
China - Hong Kong	- 0.87 **
China - Singapore	-
China - South Korea	- 0.63 **
China - Chinese Taipei	- 0.39 *
<i>China and ASEAN-4</i>	
China - Indonesia	+ 0.39 *
China - Malaysia	-
China - Philippines	+ 0.44 **
China - Thailand	+ 0.50 **

** Significant at the 1 per cent level

* Significant at the 5 per cent level

Assessing China's Import Regime

The thrust of China's trade policy reform since the mid-1980s has been the promotion of exports through liberalisation and decentralisation of export activities, while imports remain controlled by extensive non-tariff measures (NTMs). These include a mandatory import plan, channeling imports (allowing them in only through designated FTCs), import licensing and import controls, measures which largely overlap¹³. While mandatory planning had been cut back to less than 20 per cent of total imports by 1993, import licensing was still in force for 53 product categories, accounting for 30 per cent of all imports in 1993 (Tseng, *et al.* 1994). Meanwhile, tariffs were used more and more for protection. Where import-substituting industries were high cost but insufficient to satisfy the home market, tariffs were used to raise the price of imports to domestic levels. Tariffs were as high as 140 per cent on least essential products such as tobacco products (see below).

Table 3 summarises China's tariff rates (unweighted), effective rates of protection (ERP) and NTM coverage by major industry group for 1987 and 1993. There are 33 groups (extraction and manufacturing industries) which together accounted for more than 90 per cent of China's merchandise imports in 1993. Data for tariffs and NTMs are from UNCTAD and the ERP was calculated for both years based on the 1987 Input-Output Table.

Tariff data must be handled with great caution, because exemptions and rebates have been much used as an important instrument in China's "export push". For example, exemptions are granted for imports used to produce exports; for import of capital goods by firms considered to be raising the country's level of technology; for raw materials and intermediate and capital goods imported into the SEZs and ETDZs (Economic and Technological Development Zones); and for those imported by Sino-foreign joint ventures and co-operative enterprises. Tariffs are also reduced by half for consumers in the SEZs. Actual tariff revenue collected, relative to total imports, was only 5.6 per cent in 1992, compared with other developing countries such as India (51.2 per cent in 1986) and Pakistan (30.8 per cent in 1990)¹⁴. Chinese exports associated with import duty concessions were more than 60 per cent of all manufactured exports in 1991 (World Bank 1993).

Table 3 nevertheless shows several salient features of China's import regime:

- The 1993 tariff structure is *not* very different from 1987, despite sizeable tariff reductions in 1992 and 1993. In fact, tariffs were raised between 1986 and 1991, before being lowered in subsequent years (World Bank, 1994; and Tseng, *et al.*, 1994).

Table 3. China's Import Tariffs, Effective Rates of Protection and Non-Tariff Measures, 1987 and 1993

Industries		Nominal tariffs		ERP		NTM frequency		Tariff revenues	Imports	
		(%)		(%)		(% of product lines)		(% of import value)	(% of total)	
		1987	1993	1987	1993	1987	1993	1987	1987	1993
Extraction (5):	Petroleum and natural gas	18.1	17.4	16.0	15.2	0.0	12.0	n.a.	3.9	4.4
	Ferrous metals	5.0	2.1	-2.0	-5.6	0.0	50.0	0.0	0.7	0.9
	Non-ferrous metals	n.a.	6.6	n.a.	-0.8	n.a.	0.0	n.a.	1.0	0.5
	Non-metal minerals	15.8	16.4	10.8	11.5	0.0	0.0	27.8	0.3	0.2
	Coal mining and processing	27.8	23.8	24.1	18.4	10.8	0.0	n.a.	0.6	0.1
Manufacturing (28):	Transport equipment	n.a.	37.1	n.a.	43.8	n.a.	24.0	n.a.	7.1	12.0
	Electronic appliances and telecom	47.8	39.9	51.9	41.5	0.0	17.0	7.0	9.3	11.4
	Primary iron and steel products	14.9	14.7	8.2	7.8	0.0	70.0	7.0	10.2	9.1
	Ordinary machinery	27.8	26.4	28.4	25.4	1.1	6.0	7.7	9.8	9.0
	Specialised machinery	20.9	24.9	14.7	22.6	1.2	2.0	n.a.	8.2	8.6
	Textile products	75.6	57.4	168.7	80.4	11.0	7.0	1.7	5.6	8.6
	Electrical machinery and equipment	39.4	41.0	57.9	63.1	3.7	5.0	7.1	4.9	5.2
	Basic chemical products	n.a.	25.6	n.a.	22.2	n.a.	1.0	7.4	7.9	4.5
	Plastic products	42.5	47.3	63.5	81.5	0.0	0.0	3.0	5.2	4.3
	Other manufactures	56.2	51.5	80.9	69.0	2.1	5.0	4.8	4.0	3.7
	Petroleum refineries and cokes	n.a.	56.4	n.a.	134.0	n.a.	0.0	4.4	2.7	2.8
	Metal products	44.0	34.3	80.6	49.5	0.0	13.0	8.8	2.6	2.5
	Primary non-ferrous metal products	16.5	15.8	15.7	14.0	5.7	0.0	3.3	1.6	2.1

Table 3 (concluded)

Industries	Nominal tariffs		ERP		NTM frequency		Tariff revenues	Imports	
	(%)		(%)		(% of product lines)		(% of import value)	(% of total)	
	1987	1993	1987	1993	1987	1993	1987	1987	1993
Paper products	39.2	29.7	53.4	29.2	0.0	8.0	3.3	3.0	1.8
Precision instruments	n.a.	16.7	n.a.	10.6	n.a.	0.0	7.4	2.5	1.7
Timber processing	44.5	36.7	54.3	39.2	0.0	27.0	11.4	1.0	1.1
Chemical fibres	36.2	34.4	41.8	37.6	0.0	43.0	6.2	1.7	1.1
Garments and other made-ups	89.6	83.0	207.3	167.2	11.7	6.0	3.9	0.8	0.9
Grain processing	n.a.	33.0	n.a.	156.6	n.a.	0.0	14.3	1.1	0.8
Non-metal mineral products	49.6	43.1	66.3	52.6	8.0	0.0	11.4	0.8	0.5
Medical and pharmaceutical products	18.1	17.5	5.6	4.4	85.5	0.0	16.5	0.6	0.4
Food manufacturing	n.a.	53.2	n.a.	112.6	n.a.	3.0	n.a.	1.0	0.3
Printing	n.a.	17.8	n.a.	5.7	n.a.	0.0	1.8	0.4	0.3
Tobacco	87.5	145.0	102.5	209.2	0.0	50.0	89.3	0.7	0.3
Beverages	119.7	102.1	2 509.0	705.2	0.0	5.0	74.4	0.2	0.3
Leather products	n.a.	59.3	n.a.	90.5	n.a.	0.0	0.7	0.3	0.2
Furniture	72.9	72.6	155.8	154.3	0.0	0.0	13.7	0.3	0.2
Rubber products	37.8	29.5	35.3	17.8	6.3	32.0	9.8	0.2	0.2
Total								100.0	100.0
Share of industrial products in total imports								88.9	96.3

n.a. not available.

Sources: UNCTAD, Trade Database (1994), UNCTAD, *Handbook of Trade Control Measures of Developing Countries* (1989), China Input/Output Table (1987), CHELEM Trade Database (1993).

- Tariffs are usually higher for finished consumer goods than for intermediate goods and raw materials, so the ERP in the former group tends to be much higher than nominal rates would indicate. This is particularly so in China's leading *export* sectors, such as garments and other made-ups, furniture, and leather products, although actual rates of collection are very low.
- The use of NTMs (in 1993) is concentrated in key industries supplying basic materials and intermediate products for other domestic industries (such as ferrous metals, iron and steel, chemical fibres and rubber products). Between 1987 and 1992, NTMs were introduced in new industries (ferrous metals, primary iron and steel, chemical fibres and tobacco). NTMs were increased in many others. A notable exception was in medical and pharmaceutical products, which were removed from the list of NTMs. In some manufacturing sectors (transport equipment, chemical fibres, timber processing and tobacco), high tariffs co-exist with extensive use of NTMs.
- China's manufactured imports concentrate in capital goods and intermediate products. In 1993, nine out of the 10 leading importers were these industries, accounting for nearly 70 per cent of total manufactured imports. Nominal tariffs on these industries ranged from 14.7 per cent (primary iron and steel) to 57.4 per cent (textiles). However, actual revenue collected (in 1987) was significantly lower than the nominal tariffs, indicating that importers of capital goods and intermediate products were the main beneficiaries of government exemptions and rebates.

How protectionist is China's import regime, compared with other Asian developing economies? Table 4 contains the latest tariff rates and quantitative restrictions (QRs) in 11 developing economies in Asia, divided into two groups. In the first (Chinese Taipei, Indonesia, Korea, Malaysia, Philippines, Sri Lanka and Thailand), tariffs have been reduced to moderate levels, and QRs are rare. The tariffs reflect big cuts made unilaterally during the Uruguay Round (UR). In developing countries such as Indonesia, Sri Lanka and Thailand, average tariffs are already lower than post-UR average bound tariffs, but the UR tariff bindings "lock in" previous tariff liberalisation. In East Asia (except the Philippines), average tariff rates had dropped to relatively low levels (10 to 15 per cent) by the early 1990s¹⁵. Yet significant "peaks" in tariff structure remain and the dispersion of tariff rates is large (Dean, *et al.*, 1994; and Imada-Iboshi, *et al.*, 1994). In the second group (Bangladesh, China, Pakistan, India and Vietnam), tariffs are kept high to very high (except in Vietnam) and QRs are still important barriers to trade. Despite recent efforts to reduce and rationalise tariffs and NTMs, China's import regime is one of the most protectionist in Asia, along with those of India and Pakistan.

**Table 4. Tariff Rates and Quantitative Restrictions (QRs)
in Selected Asian Developing Economies**

		All products			
		Average Tariff	Tariff	QRs	
	Year	Rates (%)	Range (%)	(%)	
Indonesia	(a)	1987	18.1 (18.2)	0/58	91.4
		1992	17.0 (12.6)	0/40	1.9
Korea, Rep.	(a)	1987	22.9 (20.2)	8.1/32.5	8.8
		1992	11.1 (10.0)	3.0/22.3	2.6
Malaysia	(a)	1987	13.6 (14.7)	0/49.3	3.7
		1992	12.8 (11.2)	0.9/45.0	2.1
Philippines	(b)	1985	27.6 (18.3)	0/100	~100 ('83)
		1992/91	24.3 (17.9)	0/100	<5
	(c)	1993	23.5	3/30 (by 1995)	
Sri Lanka	(a)	1987	27.3 (23.6)	0/78.3	8.6
		1993	26.1 (23.7)	0/58.4	3.8
Thailand	(b)	1986	13		
		1990	11.4		<5 ('88)
Bangladesh	(b)	1986	94	2.5/508.5	39.5
		1993	50.0 (31.0)	7.5/100	10.0
China	(b)	1986/87	38.1 (29)		
		1992	43 (32)	0/143	70
	(d)	1993	36.4		<50
Pakistan	(a)	1984	78 (59.7)	0/150.1	79.7
		1992	61.1 (56.2)	0/90	14.5
India	(a)	1987	98.8 (90)	0/160.8	73.2
		1992	53.0 (42.6)	0/65	58.8
	(e)	1994	55 (33)		
Vietnam	(b)	1991	11	0/150	100

Notes and Sources:

- a. UNCTAD, Trade Control Measures Database; Tariff rates: Unweighted average (Import-weighted average); Tariff range: the lowest/highest tariff rates within each CCCN heading; QRs: Unweighted average of QR incidence within each CCCN heading.
- b. Dean *et al.* (1994). China's QR rates: Percentage of imports covered by licensing, etc. (import weighted).
- c. Imada Iboshi *et al.* (1994).
- d. Tseng, *et al.* (1994).
- e. Ahluwalia (1995).

Import Liberalisation: Unfinished Business

This analysis of China's import regime suggests there is much room for improvement in trade policy. Continued efforts to liberalise and rationalise the import regime are necessary for China's successful transition to a market economy in coming years. There is significant policy overlap between tariffs and NTMs. The extensive use of NTMs, which are discretionary, makes market access less certain and reduces transparency and predictability in making trade policy. The current system of high tariffs combined with exemptions and rebates distorts resource allocation and is subject to abuse. The agenda for trade policy reform includes:

- Extension of trading rights to all firms;
- Tarification of non-tariff measures;
- Continued reduction in tariffs with a pre-announced timetable;
- Rationalisation of tariff exemptions and rebates; and
- Ending discriminatory policies promoting trade and investment in Special Economic Zones and other development areas.

China is seeking to rejoin the GATT/WTO. A founding member of the GATT, it withdrew in 1949 when the CCP came to power. In 1986 the government applied for admission (or re-admission) to the GATT and the Working Party on China's Status as a Contracting Party was set up in March 1987. China also participated in the Uruguay Round of multilateral trade negotiations. Although negotiations were suspended after the Tiananmen Square incident in June 1989, they resumed in late 1992 and became very intense during 1993-94, because China wanted to become a founding member of the WTO. In this context, the government took new steps to liberalise trade¹⁶.

The Third Plenary Session of the 14th Central Committee of the CCP in November 1993 set the goal of establishing a "socialist market economy." The Committee said "the establishment of this [socialist market economic] structure aims at enabling the market to play the fundamental role in resource allocations under macroeconomic control by the state" (*China Daily*, Supplement, 17 November 1993). Adopting the five main planks of that goal would imply continuing and extending the "opening up" process. One plank is establishing "a nation-wide integrated and open market system to closely combine the urban market with the rural market and link the domestic market with the international market, so as to optimise the allocation of resources" (*ibid.*)¹⁷. The Central Committee decision also pointed to "multi-directional opening" of the Chinese economy and further reform of foreign trade and investment regimes.

Adopting the goal of a "socialist market economy" was quickly followed by new policies during 1994. The dual exchange rates were unified, a new foreign trade law promulgated, the tax system restructured, and the financial sector opened wider to foreign banks. The first two measures help reduce distortions in resource allocation and make trade policy more transparent. Yet the distortions in the import regime remain.

Concluding Remarks

Over the past 17 years of economic transition, China has established markets for goods and services in which prices are determined by trade, not central planners. Unlike western capitalist systems, however, free entry into and exit from these markets are not guaranteed. In addition, clear rules and regulations to prevent abuse of market power have yet to be laid down. So the markets generate income for those with privileged access to them, and people with good *guanxi*, or connections, can ensure they get it. Despite many efforts to liberalise and decentralise trade in 1993-94, China's import regime remains highly distorted.

What lessons can be drawn from the Chinese experience of economic transition? First, China is not unique in terms of trade policy reform:

- i) The shift in trade policy to outward orientation since the mid-1980s has been a critical factor in China's economic transition and a key to its growth performance. This is true for other economies in transition, like the CEECs: although the tools used to open them were different, in both cases export growth "pulled" economic growth.
- ii) Liberalisation and decentralisation of trade decisively affected the opening of the Chinese economy by unleashing its strong comparative advantages in labour-intensive activities. The resulting changes in trade patterns are similar to those experienced by other East Asian countries, such as Japan, ASEAN members or South Korea. Indeed, China's remarkable trade and growth performance during the post-reform period has been possible only because it is well-equipped to strengthen regional ties with fast-growing East Asian economies.

Second, despite efforts in 1993-94, China's reforms concerning import liberalisation are incomplete and its import regime still very distorted. This is a major difference from the CEECs in transition and the dynamic East Asian economies. Such uneven progress may be seen as part of the "dual track approach" to trade reform¹⁸. It mainly reflects resistance from vested interests to import liberalisation and the reluctance of the authorities to let world prices affect domestic prices too brutally. In the wider context of economic transition, this incomplete trade reform delays introduction of international competition in the domestic sector, which, as the experience of CEECs shows, is a key element of domestic enterprise reform¹⁹.

The lack of a firm commitment to liberalise imports is a major obstacle — although not the only one²⁰ — on China's path to joining the WTO. It is ironic that the gradualism which allowed Chinese reformers to make policy changes at the start of economic transition is now working against the country's full integration into the world economy. The agenda for establishing a "socialist market economy" by the end of the century is comprehensive and far-reaching, but it does not say how to achieve it. In trade policy reform, negotiations on China's protocol accession to the GATT/WTO unfortunately did not succeed. What the country needs today is a firm commitment to a comprehensive overhaul of its trade regime with a clear timetable to make it credible. Recent moves by President Jiang Zemin at the APEC forum in Osaka in November 1995 indicate things are heading in this direction.

The future of China's trade policy reform must also be seen from a regional perspective. In recent years, many developing economies in East and South Asia have been unilaterally liberalising imports. In particular, ASEAN countries — China's main competitors — are committed to forming AFTA by 2003. More recently, APEC member states announced they would try for "free trade in the region" by 2010 (for developed members) or 2020 (for the rest). In a rapidly-changing trade environment, the transition strategy of the 1980s may not be the right one for the 1990s and beyond.

Notes and References

- * OECD Development Centre.
1. See, for example, Csaba, 1995; Fan, 1995; Fischer, 1993; Fukasaku and Wall, 1994; Gelb *et al.*, 1993; Lee and Reisen, 1994; Macmillan and Naughton, 1993; Perkins, 1992; Rana and Dowling, 1993; and Sachs and Woo, 1994.
 2. The term “trade policy reform” is used here in a broad sense. To better describe changes in China’s commercial policy framework, Fukasaku and Wall (1994) use the term “open-economy reform”, which means reform of foreign trade and exchange regimes, establishment of a legal and institutional framework for foreign direct investment and establishment of SEZs and other development zones.
 3. See Fukasaku and Wall (1994, Chapter 2) for a full description of China’s trade policy reforms since the late 1970s.
 4. A word of caution on the role of trade policy reform in economic transition: once the reform process had begun, and as decentralisation and opening of the Chinese economy continued, virtually every aspect of China’s economic management system had to change as well. This involves ownership and management reforms, establishment of markets for goods, services and factors of production, and price reforms and economic decentralisation.
 5. How to handle FDI was another contentious issue. A key aspect of China’s policy reform in this area was to enact first politically crucial but unspecific “enabling laws” that allowed the government to introduce more specific measures later when political and economic conditions were met. Due to the traditional policy of self-reliance under central planning and suspicion of foreign-funded firms, both of which were particularly strong during the Cultural Revolution (1966-76), China had to establish from scratch a legal and institutional framework for FDI. The first measure taken after 1978, when the political wind shifted with respect to FDI, was to get the landmark 1979 Joint Venture Law passed. This was followed by numerous laws and regulations in areas concerning both Chinese and foreign firms, including income tax, profit repatriation, labour management, land use and property rights.
 6. From 1978 to 1983, the real effective exchange rate of the Chinese yuan appreciated by about 30 per cent, before depreciating rapidly in subsequent years. In bilateral terms, the yuan depreciated substantially and rapidly between 1985 and 1991 against the currencies of Singapore, Chinese Taipei, Malaysia and Thailand, and, to a lesser extent, those of Hong Kong and Republic of Korea (Fukasaku and Wu, 1993).

7. Measuring China's GDP in US dollars or purchasing power parities (PPPs) poses a major problem for analysing trade openness. We used the dollar exchange rate in Table 1, which tends to overstate the degree of trade openness because of successive devaluations of the yuan. According to Lemoine (1995, p. 10), the share of exports in GDP would be around five to 7 per cent using the PPPs, instead of 20 per cent using current exchange rates. Despite this measurement problem, however, most trade analysts agree that the economy is progressively opening up during the post-reform period. See Lardy (1992) for a detailed discussion of China's national accounts and trade statistics.
8. Conversely, in the CEECs, reorientation of trade patterns has benefited by proximity to the European Union. In 1994, the EU bought over 60 per cent of Poland's total exports and more than 50 per cent Hungary's. See Lemoine, 1995.
9. Based on the Almanac of China's Foreign Economic Relations and Trade 1993/94.
10. Due to limited compatibility of sources, 1992 was the last year for which calculations were possible.
11. See Fukasaku, 1992, for an empirical investigation of East Asian trade developments.
12. The case of Singapore is explained by its special status as an entrepot, since its export statistics include re-exports in which commodities have a high share. The case of Malaysia may be due to a high concentration of exports of electronic products.
13. Similarly, export licensing and export taxes have been used as the main tools to control exports, as mandatory planning for exports was abolished in 1991 (Fukasaku and Wall, 1994, p. 50). These measures are used to keep prices up where China is a dominant supplier in the world market (e.g. tin, tungsten and antimony). Export licenses have been applied to ensure China keeps its obligations under international agreements such as the MFA and VERs.
14. The tariff collection rate for 1986 was 9.7 per cent in China (World Bank, 1993, p. 60).
15. The Philippine Government adopted new tariff reform measures in July 1991 to bring the average tariff down to 14 per cent by 1995 and to simplify the tariff structure by reducing the number of categories and lowering the dispersion of tariff rates (Dean *et al.*, 1994, p. 83).
16. For different perspectives on the issue of China's accession to the GATT/WTO, see Drysdale and Elek (1992), Garnaut and Huang (1994) and Lardy (1994).
17. The four other planks concern reform of state-owned enterprises, establishing a sound macroeconomic management system, income distribution, and social security.
18. On the "dual track" approach to economic transition, see Fan, 1995.
19. See, for example, the cases of Poland and the Czech Republic, in Bouin and Grosfeld (1995, p. 783).
20. Other problems remain, concerning rules on state trading, developing country status, the demand of trading partners for special mechanisms, etc.

Comparative Advantage Indicator

Balassa's Revealed Comparative Advantage index is defined as:

$$RCA = \frac{(X_{ik} / X_{.k})}{(X_i / X_{..})}$$

where X stands for the value of exports, i denotes a country and k a product. The RCA index thus indicates the relative export share of country i in world trade in product k divided by that country's share of total world trade. If the $RCA = 1$, it usually means the "normal" export performance of country i in world trade in product k in terms of the size of that country as an exporter in total world trade. If the RCA is > 1 (< 1), then country i is considered to have comparative advantage (disadvantage) in the export of product k .

Two major difficulties arise when applying the RCA index to actual data:

- i)* The change in the market share on which the RCA index is based reflects not only the change in the underlying comparative advantage of the exporting countries but also any change in demand from the importing countries. So it is hardly possible to assume the RCA index should indicate the *ex ante* comparative advantage of a country, which is determined by the pre-trade relative prices. This raises particular problems in analysing the evolution of the RCA index over time.
- ii)* The RCA index also captures the effect of changes in the volume of total production of item k , and not only the change in export performance of the country. It also does not take into account product k 's relative contribution to the country's export performance.

The calculation of Chelem's Comparative Advantage Indicator aims at overcoming these two limitations of the RCA.

- i)* The impact of changes in the relative market shares of each product at the world level, which are not specific to country i , are neutralised. Export and import figures used in the calculation of CAI are weighted by changes in world demand:

before they are used in the CAI calculation, exports (X) and imports (M) are adjusted for all years n , based on a year of reference r . Adjusted exports (X') and imports (M') are calculated as follows:

$$X'^{(n)}_{ik} = X^{(n)}_{ik} \times e^{(n)}_k$$

$$M'^{(n)}_{ik} = M^{(n)}_{ik} \times e^{(n)}_k$$

$$\text{with } e^{(n)}_k = \frac{X_{\cdot k}^{(r)} / X_{\cdot\cdot}^{(r)}}{X_{\cdot k}^{(n)} / X_{\cdot\cdot}^{(n)}}$$

where $X_{\cdot k}$ is the total world trade for product k .

ii) The CAI is based on the calculation of net trade and takes the size of the national market into account.

For each country i and each product k , the share of net trade in GDP (Y) is calculated, with X and M adjusted as mentioned above, by the following formula:

$$t_{ik} = \frac{(X'_{ik} - M'_{ik})}{Y_i}$$

Now the CAI is defined as follows:

$$CAI_{ik} = t_{ik} - g_{ik} \times t_{i\cdot}$$

with:

$$g_{ik} = \frac{(X'_{ik} + M'_{ik})}{(X'_{i\cdot} + M'_{i\cdot})}$$

and

$$t_{i\cdot} = \frac{(X'_{i\cdot} - M'_{i\cdot})}{Y_i}$$

A weighted comparative advantage indicator CAI_{ik} is then obtained, in which the effects of both the size of the country and the changes in demand are corrected:

$$CAI_{ik} = \frac{(X'_{ik} - M'_{ik})}{Y_i} - \left[\frac{(X'_{ik} + M'_{ik})}{(X'_{i\cdot} + M'_{i\cdot})} * \left(\frac{(X'_{i\cdot} - M'_{i\cdot})}{Y_i} \right) \right]$$

Annex 2. Chinese Industrial Classification and Codes

Chinese Industrial Classification	Codes	CHELEM	notes	SITC, Rev.2
Industry	7 to 89 (excluding 16, 40)			
Extraction (5)				
Coal mining and processing	7, 8	IA		322.1, 322.2, 322.3, 323
Petroleum and natural gas	9, 10	IB, IC		333, 341.3, 341.4
Ferrous metals	11	HA		281, 282
Nonferrous metals	12	HB		286 to 289
Nonmetal minerals	13	HC		27
Manufacturing (28)				
Grain processing	17 to 21	KA, KB, KG	(a)	046 to 048, 41, 42, 022 to 024, 091, 08
Food manufacturing	22	KD, KE, KF		012, 014, 035, 037, 056, 06, 073, 058.2, 058.3, 058.6, 058.9, 098
Beverages	23, 24	KH		011, 058.5
Tobacco	25	KI		122
Textile products	27 to 32	DA, DD		652, 655 to 659, 651.1 to 651.3, 651.5, 651.6, 651.8, 651.9
Garments and other made-ups	33	DB, DC		842 to 846, 847.1, 847.2
Leather products	34	DE		61, 83, 85, 848.1 to 848.3
Timber processing	35	EA		63
Furniture	36	EB		82
Paper products	37	EC		25, 64
Printing	38	ED		892
Petroleum refineries and cokes	41 to 43	IH, IG		323, 334, 335
Basic chemical products	44 to 50	GA, GB, GC, GD, GE		51, 52, 56, 57, 591, 592, 598.1 to 598.3, 43, 53, 55, 598.9
Medical and pharmaceutical products	51	GF		54
Chemical fibres	52	GG		58, 233, 266, 267, 651.4, 651.7
Rubber products	53, 54	GI		62
Plastic products	55, 56	GH		893
Non metal mineral products	57 to 63	BA, BB, BC		661 to 666
Primary iron and steel products	64	CA, CB		671 to 679
Primary non-ferrous metal products	65	CC		68
Metal products	66, 67	FA, FB		691 to 697, 699, 749, 812.1, 812.2
Ordinary machinery	68, 69, 72,	FC, FE, FF		711, 712, 718, 723, 728.1, 736, 737, 741 to 744, 713.2, 713.3, 713.8, 713.9, 714.88, 714.99
Specialised machinery	70, 71, 73	FD, FG		721, 722, 724 to 727, 745, 728.3, 728.4
Transport equipment	75 to 79	FS, FT, FU, FV, FW		713.1, 714.4, 714.81, 714.91, 781 to 786, 791 to 793
Electrical machinery and equipment	80 to 82	FP, FQ, FR		716, 771 to 773, 775, 778, 812.4
Electronic appliances and telecom	83 to 85	FL, FM, FN, FO		751 (-751.82), 752, 759 (-759.19), 761 to 764, 776
Precision instruments	86	FI		774, 872 to 874
Other manufactures	39, 87 to 89	EE, FH, FJ, FK	(b)	269, 667, 882, 883, 894 to 899, 951, 885, 871, 881, 884, 751.82, 759.19

a. Including food for animals (Chelem KG, SITC 08).

b. Including "Articles of arts and craft" (Chelem EE; Chinese 39), armament (Chelem FH), clocks (Chelem FJ), optical equipment & cameras (Chelem FK).

Annex 3

Effective Rate of Protection (ERP)

The Effective Rate of Protection (ERP) is the rate of protection provided to the economic activity that produces the value added in the product concerned. This indicates the extent to which protectionist policies influence the allocation of resources towards, or away from, particular activities or sectors. We used the 1987 Chinese Input/Output table to calculate the shares of value added and of various inputs in each product. For each activity j , the ERP is defined by the following formula:

$$g_j = \frac{t_j - a_{ij} t_i}{1 - a_{ij}}$$

with

g_j = effective ratio of protection rate for activity j ; *i.e.* the proportional increase in the effective price resulting from tariffs.

t_j = tariff on product j

t_i = tariff on product i

a_{ij} = share of i in the cost of j in the absence of tariffs

As a_{ij} is not easily available, we use a'_{ij} , which represents the input shares that results after the tariffs raised both domestic final good prices and domestic input prices:

$$a'_{ij} = a_{ij} \frac{1 + t_i}{1 + t_j}$$

We then obtain the following formula:

$$g_j = \frac{1 - a'_{ij}}{\frac{1}{1 + t_j} - \frac{a'_{ij}}{1 + t_i}} - 1$$

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Trade Policy and Trade Patterns during Transition: China and the CEECs Compared

*Françoise Lemoine**

Most comparisons of the transition to a market economy in China and Central and Eastern Europe conclude that different starting points explain much of the dissimilarity in reform strategy and economic performance of the two areas (Sachs and Woo, 1994). The economic development level, geographical size and international surroundings are important in foreign trade policies and patterns because they affect how the CEECs and China can be integrated into the world economy.

Comparison of trade policies and patterns during transition is relevant because although these countries have chosen different approaches to market reforms, opening up to international trade has been a key part of such transition. The comparison raises several questions. How have these very different countries pursued the same target and stepped up their involvement in international trade and capital flows? How have their trade policies been tied in with their overall reform strategy? How have domestic and external constraints affected their trade performance and what predictions can be made about their evolving position in world trade?

This paper first outlines the experiences of China and the CEECs (the four Central European countries¹, plus Bulgaria and Romania) in trade policy and trade reform. It does not consider details of liberalisation in each CEEC since the aim is not to compare their trade policies but to point out broad outlines so as to highlight similarities and dissimilarities between the East European and Chinese trade strategies. Two approaches emerge: liberalisation (CEECs) versus decentralisation (China), import liberalisation (CEECs) versus export promotion (China).

Trade development and changes in the trade patterns of the CEECs and China during the transition period are then analysed. The comparison focuses on exports to OECD markets in order to by-pass the adverse effect the CMEA disruption had on CEEC trade performance from 1989 to 1993 (although trade between former CMEA countries will have to be taken into account to assess their overall trade performance in the future). China's export growth has accelerated since the mid-1980s, indicating that time is important for trade policies to succeed. Although the period seems rather

short to make a definitive assessment of CEEC trade strategy, these few years of transition have already seen a major turnaround in their trade performance. Some CEECs have registered growth of exports to the OECD countries comparable to China's export growth during the first years of its transition. Can they sustain this over the long run, as China has done over the last 15 years? Their ability to attract foreign direct investment to speed up their industrial restructuring contains part of the answer.

Trade Liberalisation and Trade Policy

There are many assessments of the CEECs' trade liberalisation and trade policy (Drabek and Smith, 1995; EBRD, 1994; Messerlin, 1995; Toth 1992; Winters, 1995). Other studies analyse China's opening (Fukasaku and Solignac Lecomte in this volume; Fukasaku and Wall, 1994; Lardy, 1992; World Bank, 1994). But few take a comparative approach (an exception is de M n l, 1995). The conclusions from the different analyses of the trade policies of both areas can be integrated, with similarities and differences highlighted.

Major Similarities

Initial Institutional Settings

In both the CEECs and China, trade reform broke with the inherited centralised and inward-looking economic system. Before the reforms, organisation of foreign trade in China closely followed the Soviet model and trade itself was completely under central control. In other areas of the Chinese economy, central planning had less hold because of the country's size and level of development. Maoist policies also promoted decentralisation. On the eve of the reforms in China (1978) and in the CEECs (1988), foreign economic relations had a similar institutional setting and were run in the same centralised way. This was associated with currency inconvertibility and a strategy of import substitution.

Some things differed. Limited foreign trade reforms had been made in the CEECs in the 1970s and 1980s. Some big firms had trade rights and foreign direct investments were allowed in some countries. Yet these reforms had a marginal impact on the CEECs' foreign trade. A more significant difference was that much of the CEECs' foreign trade was locked in the CMEA, whereas most of China's was with market economies. Unlike in China, the CEECs' trade liberalisation was a breaking-down of institutional and economic dependencies established in the CMEA (Csaba, 1995).

China has made gradual institutional reforms in foreign economic relations and in the domestic economy since 1979. In the early 1980s, the changes affecting trade organisation in China were still very small. Far-reaching reform came only later. The CEECs made radical institutional changes in 1990-91. The different approaches have led to similar outcomes, however: de-monopolisation of foreign trade, progress towards currency convertibility and inflows of foreign direct investment.

De-monopolisation, New Entrants

A common feature of the reforms in China and the CEECs was the de-monopolisation of foreign trade that allowed new entrants. As Georges de M n l says, “the dismantling of central planning, [and] the introduction of decentralised initiatives . . . uncovered large, previously hidden opportunities for commercial gains, and unleashed previously suppressed entrepreneurial energies” (de M n l, 1995).

In the CEECs, the state monopoly on foreign trade and foreign currencies ended in 1990 or 1991, foreign trade corporations were dismantled and all firms and individuals could engage in exporting and importing. More firms became involved in foreign trade, although the number of firms supplying the domestic market increased even faster. Private enterprise grew quickly, especially in import activities. As large industrial entities were split up and new firms created, the concentration of exports in the hands of a few exporters fell sharply (Table 1).

Table 1. The Growing Number of Exporting Firms in Manufacturing Industry

	Czech Republic		Hungary		Poland	
	Total Firms	Exporting Firms	Total Firms	Exporting Firms	Total Firms	Exporting Firms
1989	613	482*	4 000		4 651	2 619
1991			9 660	2 576	11 100	2 865
1992	1 759	1 342	11 670	3 582		

* Firms exporting in convertible currencies.

Source: National Statistics Office and Ministry of Finance.

In China, the monopoly on foreign trade was gradually relaxed. In 1984, “the provincial branches of the national foreign trade corporations (FTC) became independent financial and operating bodies, and each province was allowed to create its own FTC” (World Bank, 1994). The number of foreign trade corporations increased from 12 in 1978 to more than 9 000 in 1994. This enabled increased competition upstream and downstream: FTCs had to compete for foreign markets as well as for domestic supply as production units gained a capacity to choose their FTC (Lardy, 1992; Zweig, 1994). Some Chinese producers (about 9 000 in 1994) have been allowed to make direct export and import transactions. Most companies directly engaged in foreign trade (40 000 exporters and 88 000 importers) are firms with foreign capital. (ITC-UNCTAD/GATT, 1995).

In China and the CEECs, the most dynamic part of foreign trade was increasingly outside the state sector (Table 2). In the CEECs, the bigger share of private firms in foreign trade came from new firms resulting from privatisation. In China, township and village enterprises (TVE) became important suppliers of goods for export. Joint ventures with foreign capital increased, accounting for nearly 30 per cent of Chinese exports and half of Hungary’s in 1994. Joint ventures and the non-state sector are overlapping categories and their roles in foreign trade cannot be assessed accurately.

Table 2. **Private (Non State) Firms in Foreign Trade**

	Czech Republic	Poland	Romania	China
	1992	1994	1995	1995
Private (Non State) Firms:				
Per cent of exports	7.5	51.3	40.9	29
Per cent of imports	n.a.	65.8	47.4	52

n.a. not available.

Sources: CR: Kolanda; Poland: Foreign Trade Research Institute; Romania: monthly *Bulletin of Statistics*; China: Customs Statistics.

Towards Currency Convertibility

Liberalisation of the foreign exchange system was part of trade policy. The CEECs introduced convertibility for current account operations and then adopted different exchange rate regimes. Progress toward convertibility was much slower in China. At first, local swap markets for foreign currencies were established in the mid-1980s and gradually expanded their operations. The official and market exchange rates were unified in January 1994 and convertibility for trade was introduced in April 1996.

All transition countries resorted to devaluation to maintain their export competitiveness and protect domestic markets. In most CEECs, the initial devaluations were followed by re-appreciation of the currencies (IMF, 1994b), but in China, the real exchange rate of the currency (the Renminbi) fell steadily (Lardy, 1992; World Bank, 1994). In 1993, the gap between the current exchange rate and the Purchasing Power Parity (PPP), measured by the exchange rate deviation index (ERDI), was much higher in China than in the CEECs. This explains why, at current exchange rates, China appears more open than Romania (Table 3). The exchange rate deviations may be explained by the “Balassa Effect”, a positive relation between the ratio of the PPP and the exchange rates to per capita income levels, assuming that they reflect the level of productivity. China’s income figure is not much different from Romania’s (\$2 300 versus \$2 800), but average prices are much lower. There is not enough information about productivity in transition economies to assess how much it accounts for price differences.

Table 3. **Openness of China and the CEECs**

	Export + Imports as % of GDP		Erdi	GDP p.c.
	A	B	C	D
China	7.5	45.8	0.16	2 330
Hungary	34.8	56.4	0.62	6 050
Poland	15.6	38.2	0.41	5 500
Slovakia	35.4	106.5	0.33	6 290
Czech Republic	34.0	83.6	0.41	7 550
Bulgaria	22.7	79.8	0.28	4 100
Romania	17.7	43.5	0.41	2 800

A: based on GDP at Purchasing Power Parity.

B: based on GDP at current exchange rates.

C: Exchange rate deviation index: Purchasing Power Parity/current exchange rate.

D: GDP per capita at PPP.

Source: World Bank, 1995.

Attracting FDI

For transition countries, foreign direct investments were considered essential to successful integration into the world economy. They were to supplement domestic financial resources and provide technological and organisational know-how for economic modernisation. In Central European countries (Hungary, Czech Republic, Poland), between a third and half of net capital inflows in 1992 and 1993 were FDI. Since 1990, FDI has been the only source of net foreign financing in China as net foreign borrowings have become negative.

In China, attracting foreign direct investments was a priority of trade policy. The first step in the opening was to allow FDI and create special economic zones to draw foreign investors. The policy towards FDI included strong incentives as well as severe constraints. Joint ventures received tax exemptions and reductions as well as lower import duties (World Bank, 1994). These preferences varied among industrial sectors and geographic areas. The “open zones” were gradually extended to much of the coastal area. Currency inconvertibility and the requirement to balance their foreign exchange operations were major obstacles for foreign investors. The development of foreign exchange adjustment centres (FEACs) from the mid-1980s was a way to bypass the problem (Pomfret, 1996).

The CEECs also attracted foreign capital inflows but they were expected to result mainly from economic liberalisation. Currency convertibility for current account operations and free repatriation of profits were decisive for foreign investors. In the first years of transition, preferential fiscal treatment was also used to lure foreign direct investments. The tendency in Central Europe, however, has been to reduce these fiscal concessions and introduce equal treatment for domestic and foreign firms. Some preferences can still be granted on a case-by-case basis (Poland, Hungary). Administrative formalities have been streamlined (simple registration of FDI instead of authorisation). Trade policy has also been used to attract foreign capital since measures to protect the domestic market have been taken, often under the pressure of the foreign investors (EBRD, 1994; Messerlin, 1995).

It took a long time to attract heavy direct investment in China. FDI flows grew gradually from the early 1980s to 1991 and took off only in 1992, prompted by rapid economic growth and the opening of new sectors (retailing, real estate, infrastructure) to foreign investors. They surged from \$4 billion in 1991 to \$11 billion in 1992, \$27.5 billion in 1993 and \$33.8 billion in 1994. In the CEECs, FDI has rapidly increased; in 1993 they received about \$5 billion, more than China did in 1991. FDI slowed down in 1994 (to about \$4.5 billion) but recovered strongly to about \$9 billion in 1995 (UN/ECE, 1996). The contrast is between the accumulated FDI in China from 1979 to 1994 (\$110 billion) as against some \$17 billion in the CEECs from 1988 to 1994.

Considering their differences in size, the importance of FDI in Central European countries is not as marginal as it is often pictured and in some cases it has greater importance than in China. In 1993, FDI represented 2 per cent of GDP in Poland,

3.5 per cent in the Czech Republic and 6.3 billion in Hungary, versus 5.4 per cent in China (Table 4). In 1994, it accounted for as big a share of gross domestic investment in Central European countries as in China. The importance of these flows must take into account not only the size of the economies but also the very different domestic environment. In Central Europe, FDI has to some extent compensated for low domestic investment during the recession. Until 1993, investment had dropped sharply from the high levels of the pre-transition period, as the savings of firms as well as the government sector declined. Economic recovery in the CEECs should stimulate both domestic savings and investment, and there have been signs of this since 1994 (European Commission, 1995 and UN/ECE, 1996). Because of the underdeveloped financial system and the weak banking sector, most investment will have to come from companies (Sgard, 1995).

Table 4. Importance of FDI in the Domestic Economy

	1993	1994
FDI/GDP ratio		
China	5.4	5.9
Czech Republic	2.1	2.4
Hungary	6.1	2.8
Poland	2.0	2.0
FDI/GDI ratio		
China	13.1	13.4
Czech Republic	11.8	8.1
Hungary	30.8	12.9
Poland	12.8	13.5

Note: GDP: Gross Domestic Product; GDI: Gross domestic investment.

Sources: World Bank, IMF, OECD.

Unlike in the CEECs, the increase in FDI in China has coincided with rising domestic investment. Gross domestic investment reached 43 per cent of GDP in 1994 (versus 33 per cent in 1990). This would bear out the theory that inflows of FDI to developing countries are linked with increased total capital accumulation and that one way FDI influences economic growth is through “crowding in” domestic investment (Borensztein *et al.*, 1995).

Major Differences

Integration into the world economy was one aim of the reforms in the CEECs and China, but opening the domestic economy also responded to other concerns and priorities. For the CEECs, trade liberalisation was a cornerstone of overall economic liberalisation. For China, opening was a means to economic growth and modernisation. The differences in trade policies go back to the respective global strategies of reform

that involved not only different timing (radical change versus gradualism) but also different choices. The CEECs emphasised trade liberalisation in the form of import liberalisation. China stressed decentralisation of foreign trade decisions and export promotion policies. The international and regional context also provided opportunities and constraints that influenced their strategies.

Imports: Liberalisation Versus Decentralisation

In Central Europe (Hungary, the Czech Republic, Slovakia and Poland), “trade liberalisation was accomplished in record time” (Sapir, 1995). Between 1989 and 1991, the monopoly on trade was abolished, quantitative restrictions on imports were sharply reduced or eliminated for most industrial products and, contrary to what often happens in the first stage of trade liberalisation, the ending of quantitative restrictions was not associated with raising tariffs (Toth, 1992), which were set at low or moderate levels [IMF, 1994a]. Currency convertibility for current account operations complemented this liberalisation package. Protection of the domestic market relied on sharp devaluations of national currencies and to some extent different tariffs according to the degree of processing (OECD, 1994 and 1995).

The choice of rapid import liberalisation in the CEECs has several explanations:

- It was part of overall liberalisation. It aimed to increase competition from outside, counter the effects of a highly monopolised industrial structure and expose domestic economies to (effectively to “import”) world relative prices (Sapir, 1995).
- As the real comparative advantages of Central European economies were very uncertain, it was also perhaps less risky to let them emerge under market forces and competition. (Audretsh, 1995). Import liberalisation was also meant to stimulate sectoral modernisation and eventually the capacity to export.
- The lack or inefficiency of pressure groups in the initial phase of the transition made it possible to enforce such a policy, all the more so because its consequences may not have been fully understood (Sapir, 1995). “The role of certain elites (among them economists) and the general advice the CEECs were receiving” were among the major forces pushing for trade liberalisation (Messerlin, 1995).

Thus both the domestic political situation and external pressures led to an initial rapid import liberalisation. A more cautious approach could have been argued, with a degree of protection based on macroeconomic considerations (to increase fiscal revenue and ensure foreign trade balance) and on microeconomic ones (to protect infant industries and allow a gradual phasing out of declining industries and the restructuring of potentially competitive firms). Pressure for increased protection emerged very soon after this initial radical liberalisation and led to reversals in policy (Drabek and Smith, 1995; Messerlin, 1995; Toth, 1992; Csaba, 1995). This was reinforced by the recession (much more severe than expected), by rising unemployment and in some cases by a deteriorating balance of payments (Poland in 1992, Hungary in 1995). The revival of

pressure groups (domestic firms and joint ventures) strengthened this and led the authorities to raise tariffs and use instruments of protection such as border barriers (fees, quotas, quality controls) and non-border measures (domestic taxes on imported goods, standards) (Messerlin, 1995).

These reversals could be the indirect effects of a too-rapid liberalisation. In the mid-1990s, the tariffs of the CEECs range from low — comparable to those of industrial countries (in the case of the Czech Republic) — to relatively high, close to those of developing economies (Table 5). As the European Union now accounts for about half the CEECs' total trade, the Association Agreements providing for further tariff liberalisation will continue to be a powerful means to influence the CEECs' trade policies (Sapir, 1995). As tariff reductions may go hand in hand with contingent protection, their trade regimes will converge with that of the West European economies (Messerlin, 1995).

Table 5. Tariffs on Industrial Imports
(Weighted Averages)

Industrial Countries*	5
EU	5.7
Japan	1.9
United States	5.4
Czech Republic	4.5
Hungary (1995)	13 + 8% surcharge
Poland (1995)	9.2 + 6% surcharge
Bulgaria (1995)	16
Romania (1995)	7
China (1995)	32
Brazil	15
India	54
Thailand	35

* Pre-Uruguay Round.

Sources: IMF (1994) (b); WIIW (1995).

The open-door policy began in China as early as 1979, gaining momentum in the second half of the 1980s and again in the early 1990s, in line with the overall economic reforms. It introduced far-reaching changes in the area of FDI (see above) and favoured export-oriented activities, but on the import side liberalisation measures clearly lagged behind (World Bank, 1994; Fukasaku and Solignac Lecomte, in this volume). In the early 1990s, the import regime had the following characteristics:

a) The foreign trade reforms led to phasing out mandatory planning and decentralising decision making and responsibilities (Lardy, 1992; Fukasaku and Wall, 1994). The scope of the foreign trade plan was reduced; in 1992, mandatory planning covered less than 20 per cent of imports. This has gone together with decentralisation in implementing the plan and an increased number of foreign trade companies, mainly at local level but still subject to local or central administrative control.

b) Protection remained high in the early 1990s, with a tariff of 32 per cent (weighted average) but also with multiple overlapping non-tariff barriers administered by national or provincial authorities. In 1992, they included:

- import licensing (covering 25 per cent of all imports in 1992);
- import rights given to a few FTCs for specific products (32 per cent of imports);
- direct control of imports of some commodities (machinery and equipment) (7.7 per cent of imports);
- foreign exchange allocations: imports outside the plan were indirectly regulated through control of firms' access to foreign currency. In the early 1990s, the authorities controlled about 50 per cent of imports in this way.

c) As implementation of trade policy is now decentralised, assessing the exact degree of liberalisation is complicated. The whole system of tariffs and non-tariff barriers has a low degree of transparency and lacks neutrality (Panagarya, 1993; IMF, 1993). Tariffs are high but materials and components imported for export processing, as well as equipment and machinery for joint ventures and export-processing firms, are exempt from duty. These concessions, which cover half of all imports, meant that revenue actually collected as a percentage of total imports fell sharply during the transition and is much below that in the CEECs (Table 6). Thus China's imports are subject to a dualist regime. The April 1996 measures were meant to alleviate this dualism: tariffs were cut to 24-25 per cent; quotas, licences and other import controls were eliminated on a third of the commodities subject to such restrictions; and tariff exemptions on imports of machinery and equipment by joint ventures were to be abolished.

Table 6. Revenue Collected from Customs Duties
(in per cent *ad valorem*)

	1991	1992	1993	1994
Hungary	n.a.	10.7	10.7	9.7
Poland	10.4	12.2	12.9	10
	1978	1983	1988	1993
China	15.3	12.8	7.5	4.3

n.a. not available.

Sources: National statistics.

While the CEECs' trade regime follows the European model, China's trade policy is moving along the track of fast-growing Asian countries (Fukasaku *et al.*, in this volume), where import liberalisation has also been slow (Helliwell, 1994) and trade regimes have been defined as "mixed" (World Bank, 1993). China's bias towards exports reinforces these similarities.

Export Policy

In the CEECs' strategy, export policy relied mainly on macroeconomic instruments, notably exchange rate policy. The domestic and trade liberalisation process and macroeconomic policy were to create conditions to stimulate exports. The initial sharp devaluations of national currencies were to ensure a balance in trade by dampening import demand and supporting export competitiveness. High domestic inflation, however, meant that since 1992 real exchange rates have risen, endangering competitiveness and forcing some countries to devalue. The Association Agreements with the EC and free trade agreements with the EFTA countries also formed an important part of the CEECs' trade policies. They provided better access to Western European markets and boosted ties between Western and Eastern European firms.

Direct subsidies for exports have been eliminated and agencies for export financing were created only recently (1994 in Hungary, 1995 in the Czech Republic). Indirect subsidies to industrial firms still exist, however, through non-performing loans and fiscal arrears. Incentives apply to subcontracting and assembling (tariff rebates on inputs) (OECD, 1994) and this has played a key part in export expansion of sectors like textiles (Lemoine, 1994); but the CEECs did not design selective export policies. Many things, including uncertainty about the CEECs' comparative advantages, have inhibited this, but rejection of any kind of industrial policy may now appear too radical (Portes, 1994).

China, in contrast, put export promotion at the centre of its strategy of opening, which aimed from the start at developing a new exporting sector. This was helped by strong comparative advantage in labour-intensive industries. Such traditional industrial policies, with selected targets (firms or industries), are effective in industrial catching-up where comparative advantages are fairly clear (Audretsh, 1995).

The export-oriented policy relied on a range of instruments:

- Foreign trade corporations sign contracts with the Ministry of Foreign Trade and Economic Relations setting targets for foreign exchange earnings.
- As an incentive for implementing them, exporters were allowed (as previously under the export plan), to keep part of the foreign currency. The retention schemes varied greatly according to place and industrial sector. The foreign exchange reform of January 1994 abolished them and exporters now have to change all their foreign currency earnings. In return, it was made easier to buy foreign currency to pay for imports. Since April 1996, importers with a valid import contract and licenses or quota permits have been able to buy foreign exchange without prior authorisation from the government.
- Incentives included tariff exemptions and concessions for imports for export processing, as well as the exchange rate policy.
- The policy of attracting FDI has also aimed at expanding export capacity by requiring joint ventures to balance foreign exchange imports and exports.

Trade Restructuring

Global Trade Performance

Since the beginning of the 1980s, China's and the CEECs' foreign trade have gone different ways. The CEECs lost ground in world markets during the 1980s and the situation worsened in the first half of the 1990s with the collapse of the CMEA. China's trade, however, has expanded much faster than world trade and has accelerated since the end of the 1980s. In 1988, the CEECs taken together had about the same weight in international trade as China (1.8 per cent and 1.9 per cent of world trade respectively) but the gap then widened and by 1994, China's foreign trade was about twice as big as the CEECs' (2.9 per cent versus 1.4 per cent).

The drop in the CEECs' trade from 1989 to 1992 reflected the collapse of their trade with the CMEA. By 1994, trade flows of Central European countries (former Czechoslovakia (CSFR), Hungary, Poland) had returned to their pre-transition level, thanks to redirection of their trade towards the OECD countries. Bulgaria and Romania however have not yet made up for the loss of Eastern markets (Table 7).

Table 7. CEECs' Trade: 1988-94

1994/1988	CSFR	Hungary	Poland	Bulgaria	Romania
1988=100					
Exports	126	107	117	53	67
Imports	143	156	168	51	117

Sources: UN/ECE, 1995; WIIW, 1995. Based on values in dollars.

Because of the disruptions in the CEECs' trade at the beginning of their transition, it seems better to focus on their trade with the OECD countries for the purposes of comparison. The OECD area has been the main target of the CEECs' export drive as well as China's during transition, and it now accounts for an overwhelming share of their total trade: more than two-thirds of the CEECs' exports and imports, 80 per cent of China's exports and 60 per cent of its imports (China's trade with the OECD states includes here trade through Hong Kong). These trends provide important pointers to their performance and position in international trade.

Rapid Increase in Manufacturing Exports to the OECD

Increasing exports to market economies was a major challenge for these countries, which had been isolated from international competition for decades. It was a requirement for their integration into the world economy since it would determine their capacity to import. For China and the CEECs, the economic and trade reforms have led to a rapid rise in exports to the OECD area, with manufacturing at the centre of it.

China's export performance has benefited from opening for more than 15 years and its exports have shot up since the mid-1980s, indicating that time is important for new trade policies to work (Table 8). By contrast, the CEECs' trade performance up to 1993-94 was still merely the result of their early steps to adapt to a radically new context. Comparison between growth of the CEECs' foreign trade since 1989 and China's from 1978 to 1983 shows Chinese export performance during this first phase as above the CEECs' average, although not very much ahead of the best CEEC exporters — the ex-CSFR, Poland and Bulgaria. From 1978 to 1983, the growth of China's manufactured exports was 24 per cent, while from 1988 to 1993 the rates in these three CEECs were above 20 per cent. Thus the very first phase of the gradual strategy in China did not produce much better results than the rapid liberalisation in the CEECs.

Table 8. CEECs' and China's Exports to OECD Countries
(Average annual change, in per cent)

	Total (1988 to 1994)	Manufacturing Industry (1988 to 1993)
CEECs		
Former CSFR	19.3	22.9
Hungary	9	14.5
Poland	13	20.1
Bulgaria	15.8	23
Romania	-7.2	-2
China		
1978 to 1983	21.3	23.9
1984 to 1988	21.5	33
1989 to 1993	23.4	29.7
1978 to 1993		28.8

Sources: CEPII, CHELEM Database; OECD.

The CEECs' export growth since 1989 is all the more remarkable as it contrasts sharply with their previous performance. Their share in the OECD area's markets shrank steadily from the mid-1970s up to the end of the 1980s, but since 1990 they have made up for this loss. The export drive also resulted from redirection of trade away from the CMEA despite a deep economic recession until 1992-93. Economic recovery began in Poland in 1992 and had spread to all the CEECs by 1994. Most registered high industrial growth rates with strong export performance in 1994 and 1995 as they entered a new phase of dynamic adaptation of the supply side in industry (UN/ECE 1996). In contrast, China's export surge has been part of strong economic growth backed by a high level of investment and big inflows of labour into industry.

Restructuring the Commodity Pattern of Exports

In both the CEECs and China, development of exports has been matched by substantial changes in their commodity composition. An index of structural changes has been calculated (Table 9). It measures the changes in the commodity structure of CEEC exports from 1989 to 1993 and in Chinese exports from 1978 to 1983, 1984 to

1988, and 1989 to 1993. The indexes show that changes in CEEC exports were of the same magnitude as in China in each five-year period — which suggests that neither radical nor gradual reforms alter the pace of export restructuring and time is essential to the process. Comparison with market economies shows transition countries have had to make exceptional changes in their export patterns so as to integrate into international trade. The increase and the restructuring of their exports during transition are two closely interrelated phenomena which spring from their original repressed and distorted position in international trade (Pomfret, 1996).

Table 9. Index of Structural Changes in Exports to OECD Countries*

	Total Exports
	CEEC 1988-93
CSFR	58
Hungary	46
Poland	49
Bulgaria	63
Romania	72
	China
1978-83	47
1984-88	60
1989-93	58
1978-93	120

* Sum of absolute differences in the commodity structures:

Sum (i) = |Share (i,t) - share (i, t-5)|, in which (i, t) is the sectoral share of the sector i, in year t.

Sources: CEPII, CHELEM database.

How far the changes in the CEECs' exports have been in line with their comparative advantages is debatable since these were highly distorted before liberalisation and remain uncertain. Research on the commodity pattern of CEEC exports during transition has stressed some disappointing developments (Faini and Portes, 1995; European Commission, 1994; Landesmann, 1995), especially the relative inertia of the CEECs' export structure to the West: they did not increase their market share in new sectors and relied instead on the comparative advantages inherited from the pre-transition era, in capital-intensive but low tech industries, as well as on exports of labour-intensive products.

Table 10 shows that the export drive of the Central European countries (ex-CSFR, Hungary and Poland) has been led by labour-intensive industries (such as clothing and leather or furniture). It also shows that several branches of the mechanical industry have been among the fastest growing exports. The importance of equipment goods increased substantially in ex-CSFR and Hungarian exports. Although diversification of export structures still seems limited and vulnerable (dependent on FDI and co-operation with Western firms), it points to emerging new export capacities in Central Europe.

Table 10. Sectoral Changes in Central European Exports to the OECD Area
(By sectors, in per cent)

	CSFR		Hungary		Poland	
	1989	1993	1989	1993	1989	1993
Total	100.0	100.0	100.0	100.0	100.0	100.0
Manufacturing Industry	71.0	82.1	60.5	73.7	56.0	72.5
Textiles	13.2	16.7	16.1	21.2	11.4	19.7
Wood and Paper products	10.2	10.3	4.5	5.0	5.8	10.8
Chemicals	19.3	17.4	15.0	13.9	12.1	10.8
Iron and Steel	11.9	9.2	5.7	3.0	6.1	3.9
Non-ferrous Metals	1.4	2.1	5.7	3.0	7.4	5.9
Machinery	9.6	14.0	7.5	10.9	8.8	11.1
Transport Equipment	3.5	7.6	1.9	3.6	3.1	6.5
Electrical Machinery	2.6	5.5	4.8	9.8	3.2	4.2
Electronic Equipment	0.9	1.9	1.4	4.8	1.0	1.4
Energy	10.2	4.6	6.7	3.8	14.4	10.1
Agricultural and Food Prod.	14.7	8.2	29.3	19.8	25.3	14.2
Unclassified	2.5	2.3	1.6	1.2	1.4	1.5

Source: CEPII, CHELEM Data Base.

In China, four sectors have pulled exports: textiles, wood-paper-miscellaneous products, electronics and electrical machinery (Table 11). In 1993, exports were heavily concentrated in these four sectors. The first 10 commodities (out of the 70 in the CHELEM data base) accounted for more than three-quarters of China's exports to the OECD area, while for Central European countries, the first 10 accounted for 50 per cent to 60 per cent. This high concentration shows how China's export drive has relied on its clear comparative advantages in labour-intensive industries.

Table 11. Sectoral Changes in China's Exports to the OECD Area
(By sectors, in per cent)

	1980	1989	1993
Total	100.0	100.0	100.0
Manufacturing Industry	39.6	72.6	86.4
Textiles	23.9	36.5	41.7
Wood and Paper Products	4.7	12.9	15.5
Chemicals	9.7	8.4	7.3
Iron and Steel	0.5	1.2	0.5
Non-ferrous Metals	2.4	1.5	0.6
Machinery	1.4	3.4	3.9
Transport Equipment	0.0	0.3	0.6
Electrical Machinery	0.2	3.5	6.5
Electronic Equipment	0.4	7.0	10.5
Energy	31.7	8.6	3.3
Agricultural and Food Production	23.3	15.5	8.4
Unclassified	1.8	1.2	1.1

Source: CEPII, CHELEM Data Base.

These dissimilarities between the CEECs and China coincide with the relative importance of inter- and intra-industry trade that mirrors differences in levels of economic development. Interindustry trade, based on complementary products, is the traditional form of trade between industrialised countries and LDCs. Intra-industry flows are usually in trade between industrialised countries and reflect a higher degree of economic integration between countries. The Grubel-Lloyd Index was used to describe the situation of the CEECs and China in this respect (Table 12). In 1978, interindustry flows accounted for the overwhelming share of China's trade with OECD countries and they were still dominant in 1993. Despite the structural changes that supported China's export drive, its position in the international division of labour is still characterised by sectoral complementarities. The very impressive export performance in the early 1990s was matched by relative stagnation of intra-industry trade. The CEECs are in different positions. In Hungary and the former CSFR, intra-industry flows represented at least half of the trade with OECD countries in 1988; this share increased during the transition period. Romania went the opposite way, towards China's situation.

Table 12. Indices of Intra-Industry Trade with OECD Countries
(Manufacturing industry)

	1988	1989	1990	1991	1992	1993
CSFR	52	53	52	60	60	65
Hungary	58	58	58	60	60	61
Poland	49	50	47	45	48	51
Bulgaria	49	49	44	41	43	48
Romania	43	40	41	40	36	36
	1978	1983	1988	1991	1992	1993
China	18	21	28	32	32	32

$$\text{Grubel-Lloyd Index: } 1 - \frac{\sum |x_i - m_i|}{(X + M) / 2}$$

Source: CEPII, CHELEM Database.

Trends in inter- and intra-industry trade have been influenced by changes in both export and import structures. The CEECs have imported more consumer goods, while China has concentrated on importing machinery and capital equipment. This may partly explain the difference in the respective importance of inter- and intra-industry trade.

Compared with the Chinese trade performance over the past 15 years, the CEECs' international trade is still in its first phase of adjustment. Where China relied on intersectoral complementarities to foster trade expansion, the Central European countries have entered international trade more as the industrial countries have. They have to take part in the international division of labour within industrial sectors. They can develop co-operative links with foreign firms so as to take a place in the vertical division of production; they can also continue to rely on specialising in down-market products where they take advantage of their low labour costs (Landesmann, 1995;

Fontagné *et al.*, 1995). In the short and medium term, the CEECs are likely to make use of both opportunities. In the long run, their trade patterns are likely to depend on investment trends in industry that will determine growth and restructuring. Foreign direct investment is expected to play an important part.

Foreign Direct Investment and Restructuring

In both China and Hungary, joint ventures have helped develop an outward-oriented sector; they have taken a decisive role in exports and even more in imports. Their heavy reliance on imported equipment has made them the main modernisers of industrial capacity.

In the small Hungarian economy, joint ventures have rapidly taken a major role in foreign trade and industrial restructuring. They are the core of the industrial exporting sector: in 1992, they accounted for half of the firms with an export/output ratio above 40 per cent and one in four joint ventures exported more than half of its output (Lemoine, 1995a). They were entirely responsible for the increase in exports in 1992 and 1993 and in 1994 accounted for about half of all Hungarian exports (against 30 per cent in 1992). In a few industries, their share was over 80 per cent (tobacco, electrical machinery, paper products, office machinery and computers) (OECD, 1995).

This highlights not only the positive impact of joint ventures on Hungarian foreign trade but also the relative inertia of domestic firms. It confirms that, in the CEECs, only the firms with foreign investment have engaged in “strategic restructuring,” while most domestic industrial firms have carried out only “defensive restructuring” — cutting costs and eventually production in order to survive (Grosfeld and Roland, 1995). Their contribution to domestic investment illustrates this: according to the recent OECD survey on Hungary (OECD, 1995), firms with foreign capital made 47 per cent of the country’s gross domestic investment in manufacturing in 1993. They accounted for more than half the new investments in 18 of 22 manufacturing sectors. Joint ventures are not exclusively oriented towards foreign markets. Although more export-oriented than other firms, they have also developed domestic sales and accounted for 40 per cent of these in Hungary in 1994.

In China, the size of the country has meant joint ventures are less important, but the deliberate export promotion strategy has made them central to the foreign trade sector. In 1993, joint ventures accounted for about 10 per cent of total industrial output but more than a quarter of all exports and 46 per cent of imports. Attracting foreign direct investment to promote industrial exports has been a success but joint ventures have developed their foreign trade without any substantial forward and backward linkage with the rest of Chinese industry. Until 1995, joint venture exports and imports were mainly connected with processing and assembly operations. That year, more than 90 per cent of joint venture exports were processed imported materials and 60 per cent of their imports were materials and components to be processed for exports (Table 13). This is the result of export promotion measures over the previous decade

which gave export-oriented firms concessional access to imported goods, as well as the origin of most FDI in Hong Kong and Chinese Taipei to relocate labour-intensive industry in China (Lemoine, 1995b). The bias towards export processing has also affected state-owned firms, though less. A third of their foreign trade involves processed imported materials.

Table 13. China's Foreign Trade by Type of Company and Customs Regime (1994)

	Exports		
	Total Exports	Processing Exports	Exports Except Processing
Total Exports	100.0	47.1	52.9
Foreign Enterprises and J.V.	28.8	25.3	3.5
Chinese Firms	71.2	21.8	49.4
	Imports		
	Total Imports	Imports for Processing	Imports Except Processing
Total Exports	100.0	41.2	58.8
Foreign Enterprises and J.V.	45.4	24.3	21.1
Chinese Firms	54.6	16.9	37.7

Source: International Trade Centre UNCTAD/GATT (1995).

The export policy has produced an exceptional surge in China's international trade. But the direct effect on the whole of Chinese industry has been limited as more than 45 per cent of all foreign trade is based on transforming imported materials. This strategy has taken full advantage of low labour costs but has meant expanding exports with a relatively low local content and a low amount of value added of around 15 per cent (ITC/UNCTAD-GATT, 1995). It also contains a strong bias towards economic growth in coastal regions (Lemoine, 1995c). The authorities recently adopted a new policy toward FDI, to limit development of low value-added and labour-intensive industries in coastal areas and divert FDI into more basic industries inland.

Conclusion

China and the CEECs have followed trade policies that not only mirror differences between gradual and radical reform processes but have grown from different policy choices. Beyond domestic factors, their international surroundings are a key element in these choices. The CEECs have adopted trade policies emulating those of Western Europe, with the aim of joining the European Union, while China has found an attractive model in the East Asian economic strategy.

The outcome of trade policies has been a rapid rise of these economies in international trade, as measured by their export performance in OECD area markets. This has been associated with changes in the commodity structure of exports. The pace of these changes has been similar in China and Central Europe, showing that in any reform strategy, industrial restructuring is a gradual process. China and the CEECs are in different positions in the international division of labour. Despite far-reaching

changes in the commodity pattern of exports over the last 15 years, China's trade has stayed closely in line with an inter-sectoral division of labour. The relocation in China of Hong Kong and Chinese Taipei firms that supported China's trade expansion has confirmed its comparative advantage in labour-intensive industries. The Central European countries have an international trade dominated by intra-industrial specialisation.

Foreign trade expansion has been part of the internationalisation of both these economies, which have been more and more integrated in the worldwide production and trade networks of foreign firms. FDI flows to China have been much larger than those to Central Europe, but given the respective sizes of the countries, their relative importance was not so different in Central Europe and in China in the mid-1990s.

Despite different approaches to market reforms in Europe and China, foreign trade and investment have played an important part in the transition process. These countries have advanced their integration in international trade, but it is incomplete. China has to diversify its exports towards products embodying more technology and liberalise access to its domestic markets. Both require domestic reforms to make state-owned firms more efficient and improve allocation of resources. The CEECs now have to consolidate the economic recovery which began only recently and is highly dependent on Western European markets. The high growth rates in some industrial sectors in recent years are evidence of rapid restructuring of industrial supply which is likely to change the trade patterns of these countries.

Notes

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A Comment

*Richard Pomfret**

Both papers give good accounts of the opening-up of the economies of China and Central and Eastern Europe (CEEC). On the big issues there is little to disagree with, because the need to integrate the transition economies into the world trading system is indisputable. In some transition economies (Uzbekistan, for example), such an opening-up has yet to take place because of the dominant political influence of import-competing producers, but neither China nor the CEECs fall into this category.

Both China and the CEECs have successfully opened their economies, but for different reasons. Trade reform was intended to bring higher living standards to a stagnant inward-looking Chinese economy and so help to avert popular discontent, whereas trade reform in the CEECs followed political change and was a fast-track approach to introducing market pressures into economies which the leadership wanted to transform fundamentally. The point is important because it has many implications, and I will focus on it here. Then I will mention three points of disagreement with the two papers.

The potential trade gains available to China at the start of its reforms in 1978/79 were huge. The economy had been closed for two decades since the Sino-Soviet split. The difference between world prices and Chinese opportunity costs was large, and comparative advantage was fairly easy to identify and exploit. The process was helped by the fortunate coincidence that Hong Kong was rapidly losing its comparative advantage in labour-intensive manufactures; as wages and rents rose in Hong Kong in 1983-84 and the HK \$ (pegged to the US dollar) appreciated against most currencies, Hong Kong entrepreneurs combined their skills and used machinery with cheap labour across the border in China. The process continues because China has a large pool of low-wage labour, and Hong Kong entrepreneurs have been joined by entrepreneurs from other newly-industrialised Asian economies whose expertise is no longer valuable at home.

The CEECs, however, reformed at the same time as established trade within the CMEA collapsed. They had to restructure their trade, which is more difficult than starting afresh. Also, as middle-income countries, the CEECs' comparative advantage was harder to identify and the potential gains from trade were more limited than for

China. The main significance of trade reform in the CEECs was not so much stimulation of growth, but introduction of appropriate relative prices (world prices) and creation of competition; as Lemoine points out, trade reform was a cornerstone of overall reform in the CEECs. It is central to their rapid and far-reaching price and enterprise reform. So even if the growth impact of opening the economy is smaller in the CEECs than in China, it does not mean the CEECs have been less successful.

China in the 1980s and 1990s is a case of successful export-led growth, but it remains a partially reformed economy. Policy makers have continued to insulate the domestic price structure from world prices, creating what Lardy (1992) calls an “airlock”. This is an important aspect of the dual-pricing system described by Fan Gang, which provides scope for corruption associated with arbitrage opportunities. Much of China’s post-reform economic history has been a tug-of-war between recognition that the export-led growth machine must be kept running if the government is to retain popular support and fear of loosening a grip on some of the levers of economic power (especially those that prevent mass state enterprise closures). The gradual liberalisation of foreign investment and foreign exchange rules has been driven by the former recognition, while the slowness of the process and maintenance of the airlock reflect the latter fear¹.

Incomplete reform with its burgeoning corruption (despite draconian punishment for economic crimes, including well-publicised executions and other threats) has made the Chinese model unattractive to other transition economies, even though China has an outstanding growth record. Notably, Vietnam appears to be enjoying China-like export-led growth in the 1990s, but has undertaken more thorough CEEC-like price reform.

Now some disagreements with the two papers. They all concern China, whose opening has been more complex because not based on a commitment to liberalisation, as in the CEECs, but on a pragmatic, instrumental view of trade reform. They concern the role of Special Economic Zones (SEZs), export targeting and location.

China’s reforms have involved local experiments which are then generalised (as in agricultural reform) or shelved (as with several bankruptcy experiments). The creation of four SEZs at the inception of the open-door policy in the late 1970s falls into the first category. A large percentage of approved joint-ventures in the early reform years were in the Shenzhen SEZ. Once the first export-led boom began to gather pace in 1983-84, however, the Hong Kong entrepreneurs who were leading it quickly bypassed Shenzhen and sought other locations in the Pearl River Delta (Pomfret, 1991). The SEZs ceased to be special as hundreds of special zones were created and even non-zones could offer duty exemptions, tax holidays and rapid approval of small joint ventures. Shenzhen continues to prosper, but it is impossible to separate the effect of its SEZ-status from the benefits of proximity to Hong Kong. Among the other SEZs, Shantou remains a relative backwater, while provinces such as Zhejiang and Jiangsu in the Yangtze Delta or Shandong in the north, which have no SEZs, enjoy growth rates similar to those of Guangdong and Fujian provinces, where the SEZs are. Since the early 1980s, SEZ status has been neither necessary nor sufficient for rapid economic growth.

Both papers rightly emphasise the incomplete state of import liberalisation and especially the lack of transparency which has hobbled China's GATT/WTO application. Lemoine also claims that China's export promotion has involved targeting. Central, provincial and local governments have tried export targeting but these attempts have been irrelevant to China's export growth. The important export promotion measures have been import duty rebates and real exchange rate depreciation since the early 1980s, both of which are general rather than targeted measures. Attempts to promote export-oriented foreign investment in high-tech industries have been total failures in generating exports; the car industry has been a notable example, with Beijing Jeep the best documented case. The truly export-oriented joint-ventures make labour-intensive manufactures and the items made are chosen not by policy makers but by entrepreneurs who have the contacts and knowledge to know whether dinosaurs or power rangers are going to sell overseas this year.

Finally, I disagree that being in Asia helps explain China's success. Being Asian is not a sufficient condition for rapid growth in market economies (e.g. the Philippines) or transition economies (e.g. Mongolia). China's export-led growth has been based on the world market, not the Asian market; the United States alone buys two-fifths of China's exports. Asian entrepreneurs have played a key facilitating role, but this is driven by economic considerations. Hong Kong entrepreneurs may have felt Cantonese affinity to their neighbours in the Pearl River Delta, but they also made big profits (over 100 per cent annual return on capital is not uncommon). The same applied to other Overseas Chinese entrepreneurs. Koreans joined the party only in the 1990s; the delay was not so much because they were not Chinese but because among the Four Dragons, the Republic of Korea had the largest domestic labour force and lowest per capita income.

China has enjoyed export-led growth because the government opened up the economy in the late 1970s and has gradually eased restrictions on exporters since then. Special incentives and cultural or locational advantages have not been important. Indeed the CEECs may have a bigger locational advantage with the European Union's high-income regions only a short road or rail journey away.

Notes

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1. Exchange rate regime choice in China has not been driven by macroeconomic considerations, as in most other transition economies, but by the needs of joint ventures and the export sector (Pomfret, 1996, chapters 2-4).

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PART THREE

FINANCIAL INTERMEDIATION

Financial Discipline and State Enterprise Reform in China in the 1990s

*Olivier Bouin**

A lively debate has developed over the best or least costly way to reform socialist economic systems and move to a market economy. The gradual approach adopted by China and others is quite different from the Polish, Czech or Russian “big bang” approaches. China’s impressive macroeconomic performance — contrasted with the first results of the so-called shock therapies — gave considerable advantage to gradualists in the early phase of the debate. The rapid growth of Chinese exports, the spectacular development of the non-state productive sector and improved performance of state-owned enterprises (SOEs) were considered clear signs of a successful reform strategy. In state sector restructuring, authors cited two main reasons for SOEs’ improved performance: *i*) the increasing autonomy given to SOEs for profit retention, designation of managers, investment decisions and more flexible sales on the product markets; and *ii*) the role of competition, through gradual price liberalisation and entry of many collective and individual enterprises (Dollar, 1990; Gordon and Li, 1991; MacMillan and Naughton, 1992; Jefferson *et al.* 1992; Jefferson and Rawski, 1995).

This favourable interpretation of the performance of Chinese SOEs has been questioned in recent years¹. First, their economic performance throughout the 1980s has been looked at again in a much less optimistic light (Woo *et al.*, 1994; Raiser, 1995*a*). Second, their financial performance has steadily deteriorated despite the rapid economic recovery after the 1989-90 retrenchment and achievement of double-digit growth since 1992. An increasing number of SOEs have shown repeated losses, amounting in 1993 to between Y75 billion and Y84 billion, or 2.5-3 per cent of GDP (Broadman 1995, Raiser 1995*b*). A third of all SOEs reported losses in 1993 compared with only 10 per cent four years earlier. Another third had very precarious financial situations. Third, the SOEs’ wage and investment policies have played a big part in the periodic overheating of the economy.

Several factors have been cited to explain these unfavourable trends. Some authors linked the imperfection of incentives in SOEs to the incompleteness of enterprise autonomy (Groves *et al.*, 1992) or to the inability of the state to ensure a long-lasting implementation of managers’ and employees’ contracts (Naughton, 1995*a*). Huchet

and Yan (1995) emphasized the low competence of managers and accumulation of non-economic investment decisions. The incomplete reform of the health care and pension systems and that of the housing and job markets have also been seen as important (IMF, 1994). As SOEs have not yet been relieved of their social functions, they cannot compete equally with new entrants, mostly town and village enterprises or foreign joint ventures (especially since the latter have been allowed to sell an increasing share of their output on local markets). Their factor productivity and profitability have been harmed by this persisting social burden.

Because of this vital social role and their key, though decreasing, share in industry (see Annex 1), SOEs have been permanently and heavily subsidised by the government and have received preferential access to state bank credit. As a result, they have never had to face severe budget constraint. In this paper, the notion of budget constraint is understood in a sense close to the now-classic Dewatripont-Maskin (1991) definition: a dynamic problem of government's commitment to impose financial discipline on enterprises. The paper stresses tougher budget constraint as a prerequisite for efficient state enterprise restructuring in China and compares how financial environments and SOEs' behaviour have evolved in China and in central and eastern European countries since 1989.

The first section examines the behaviour of Chinese SOEs over the 1989-93 period. It shows that the conjunction of SOEs' increasing autonomy and the lasting lack of financial discipline has created a debilitating financial environment for enterprise restructuring and caused major overheating of the economy. The second section compares the financial environment in China over this period with those in the Czech Republic, Hungary and Poland. In these three countries, tighter financial discipline has played a significant part in positive microeconomic changes in SOEs². The long and rocky road to credible financial discipline is stressed. The third section assesses the progress made by the Chinese authorities along this road since the major economic policy changes of July 1993. The conclusion discusses whether the country has entered a new phase in its transition to a market economy.

Increasing Autonomy and Easy Access to External Finance: 1989-93

Has the gradual and piecemeal state enterprise reform undertaken by the Chinese authorities produced long-term positive changes in the behaviour of SOEs? Most authors consider that the impact of autonomy and insiders' incentives on total factor productivity (TFP) was positive overall and that SOEs improved their efficiency during the 1980s. Recent work by Fan and Woo (1993), however, showed that, despite numerous reforms in the state enterprise sector (Annex 2), SOEs at the end of the 1980s displayed over-consumption and over-investment. A preliminary analysis, relating their behaviour at the beginning of the 1990s to their easy access to finance amidst a lack of financial discipline, will help us decide whether their economic performance improved.

Total Factor Productivity in SOEs, 1989-93

Aggregated microeconomic data published in the *China Statistical Yearbooks* support a rough account of recent trends in industrial SOEs. Figures are available for all industrial SOEs with independent accounting systems, which account for 95 per cent of the total output of industrial SOEs. The data cover 1989-93 — from the economic slowdown to the high point of the overheating of the economy.

A two-input Cobb-Douglas specification serves to calculate the change in TFP³. The coefficients used for *L* and *K* come from Woo *et al.* (1994, Table 11) — 0.6 and 0.4 respectively. The calculations assume that industrial SOEs did not leave additional capital stock and labour force unused and that returns to scale are constant. The rapid increase in the stock of fixed assets — 14 per cent a year at constant prices — has by far contributed the most to output growth; the contribution of the increase in the labour force has been much more modest. Based on net industrial value added, total factor productivity fell by 1.4 per cent annually over 1989-93, while gross industrial output value yields a somewhat less significant decline of 0.5 per cent a year (Table 1). In both cases, the growth of value added is lower than suggested by the real increase in inputs. These results are similar to those of Fan and Woo (1993), which are based on a sample of 300 industrial SOEs over the 1984-88 period.

Table 1. SOE's Total Factor Productivity and its Components, 1989-93
(annual rate of change)

	1989-92	1989-93
Industrial Gross Output Value (IGOV) (a)	6.8	6.2
Net Industrial Value-added (NIVA) (a) (b)	5.8	5.2
Increase in labour stock	2.0	1.7
Increase in stock of fixed assets (c)	13.8	14.0
Total factor productivity (based on IGOV)	0.1	-0.5
Total factor productivity (based on NIVA)	-0.8	-1.4

a. Deflated by the producer price index for industrial products.

b. 1993 has been estimated by applying the value added ratio of 1992 to the 1993 gross output value.

c. New investment in fixed assets of each period is deflated and added to the depreciated capital stock of the previous period (the deflator is the price for investment in fixed assets by the non-financial state sector, from World Bank, 1996, Appendix, Table 3).

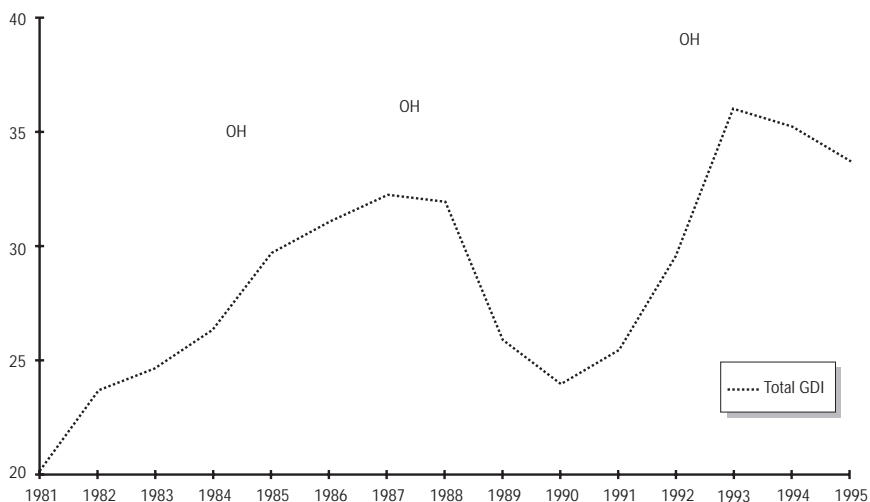
Source: Author calculations based on *China Statistical Yearbook*, various issues.

SOEs' Investment Policy in China: How Hungry?

One of the most striking features of reforming China is its high domestic investment. Over 1980-93, the average rate was 27.6 per cent of GNP, fairly comparable to the investment rates in socialist CEECs during the 1980s but much higher than that observed in post-socialist CEECs. During the first years of the transition period, these rates were about 20 per cent. Compared to other developing countries, the Chinese domestic investment rate approximates the high levels in south-east Asian dynamic economies — for example, 25.3 per cent in Thailand and 30.5 per cent in Malaysia throughout the 1980s — and is far above Latin American levels (15.6 per cent in Chile and 22.2 per cent in Mexico over the same period).

Recurrent increases in gross domestic investment have contributed to periodic overheating of the Chinese economy (see Figure 1). Excessive investment spending in 1985-88 and again in 1992-93 created heavy sectoral shortages and ignited inflation with a few quarters of delay. SOEs bore a major responsibility for these investment splurges as they accounted for more than two-thirds of total investment throughout the 1980s. The 1992-93 overheating was apparently no exception. Investment as a percentage of GNP went significantly above its average rate — reaching 29.5 per cent in 1992 and 36.1 per cent in 1993 — and the state sector contributed to this increase. SOE investment in fixed assets grew by 26 per cent in 1992 and 15 per cent in 1993 (at constant prices). Real growth reached 20 per cent in 1993 for capital construction and technical updating, which measure the investment by SOEs in productive capacity.

Figure 1. Economic Overheating and Gross Domestic Investment in China, 1981-95



Note: OH = Overheating (strong GDP growth and high/rapidly rising inflation).

Three characteristics mark the evolution of SOEs' investment in 1990-93:

i) Three-quarters of this investment goes to development of new projects and expansion of existing production capacity. Capacity expansion was the primary investment motive for SOE managers. In 1993, it represented 60 per cent of total investment for technical updating and transformation — six times the share used to improve product quality and 15 times that going to save energy and other inputs in the production process⁴. SOEs' behaviour thus clearly shows continued reliance on extensive rather than intensive investment to meet plan and market demands. The potential for inefficient allocation of resources is very high.

ii) The total value of investment approved by local authorities grew an impressive 52 per cent, twice the total value of investment approved by central government (both figures are at current prices). As a result, central government projects accounted for less than 40 per cent of total capital construction in 1993, against 54 per cent in 1985. This trend illustrates the partial lack of control by central authorities over the investment behaviour of SOEs controlled by provincial or local governments.

iii) The SOEs' share of total investment in fixed assets (two-thirds in 1992) is now twice their contribution to GDP (about one-third in 1992). This does not mean *per se* that Chinese SOEs over-invest, because SOEs in developing countries are traditionally capital intensive and invest much more than they actually contribute to GDP. As in most developing countries, however, high investment by the state sector reveals that SOEs are prone to invest outside public infrastructure and public goods, inefficiently crowding out the private sector.

Over-Consumption? Wage Increases in SOEs

With the rise in capital intensity, both average and marginal productivity of labour increased. Marginal labour productivity rose by around 5 per cent a year in 1989-1993 — but real wages rose even faster, leading to a rapid increase in real unit labour costs. Managers accommodated the consumption demand of SOE workers once again after 1990 and thus contributed to the deterioration of SOEs' financial performance. Table 2 shows that real wages in SOEs rose until 1994. Between 1990 and 1992, they climbed sharply but more slowly than during the previous 1984-86 wage drift (Fan and Woo, 1993). Raiser (1995*a*) reached a similar conclusion for a sample of 200 SOEs in four coastal cities. During 1993 and 1994, real wage increases accelerated in SOEs. A wage drift comparable to 1984-86 took place, inducing an increase in real unit labour costs of almost 7 per cent a year. Wage increases in SOEs have been larger than in the more profitable urban collective-owned enterprises (UCOEs). Trends became more differentiated after 1993, as wage increases cooled down in UCOEs.

Table 2. **Real Average Wage in State and Urban Collective-Owned Units**
(annual percentage change)

	1984-86	1987-89	1990-92	1993-94
State-Owned Units	11.9	-1.3	8.4	11.8
Urban Collective-Owned Units	10.2	-2.1	7.2	6.9

Note: Nominal average wages are deflated by the overall retail price index.

Source: Author calculations based on *China Statistical Yearbook* (1994).

Despite reforms aimed at decentralising key managerial decisions at the enterprise level, no real change occurred in the ability of managers to control the wage bill of SOEs. Even though trade unions traditionally play a minor role in Chinese SOEs and “the role of workers within the enterprise is mostly consultative” (Qian, 1995), over 70 per cent of SOE managers believed that they faced strong workers’ pressure for higher pay during the 1980s (Fan and Woo, 1993). Decentralisation reforms gave more power to enterprise managers but they did not radically change their attitude towards wage claims. The lack of clear ownership control and the absence of tight financial discipline created a perverse environment for managerial decisions over the employees’ pay. As a result, a real wage drift occurred in Chinese SOEs in 1990-94. In some respects, the behaviour of Chinese SOEs is comparable to that of Polish SOEs during the 1980s⁵.

Easy Access to Finance Without Financial Discipline: Could It Be Worse?

How much can this behaviour of Chinese SOEs during 1990-93 be linked with the prevailing financial environment? Financial indiscipline does distort SOEs’ behaviour. In a “pure” model of a centrally-planned economy, SOEs operate to meet planned output targets and ensure social peace, whatever the financial cost. SOEs face no threat of bankruptcy or liquidation as long as they achieve central planners’ objectives. Should an SOE operate at a loss, state subsidies or state bank credits keep it afloat⁶. Such financial indiscipline — which at the firm level means soft budget constraint — adversely affects economic efficiency. First, as noted by Hay *et al.* (1994), it “weakens or even eliminates the incentives for enterprises to operate efficiently, because jobs and income are to a considerable extent secured against poor performance”. Production efficiency in SOEs is hampered by an absence of cost-minimisation incentives. Second, SOE managers are encouraged to overachieve central planning objectives and tempted to over-invest in order to increase the company’s size and thus its future level of consumption and political importance. They may also increase excessively employees’ wages and social benefits, as “the reputation of being popular with workers is invaluable when a manager is considered for promotion” (Wong *et al.*, 1993). As a result, SOEs’ demand for external finance is potentially infinite⁷. The scope for crowding out non-state enterprises from access to capital is

enormous and depends on the allocation of capital resources decided by the central government (through allocation of state subsidies and state bank loans under the credit plan). As long as SOEs' managers expect budget constraints to be softened sooner or later, their demand for capital will be unrelated to its cost.

In China, radical changes in SOEs' access to finance — inducing changes in the cost of capital available to them — have occurred since the beginning of economic reforms (see Woo, this volume). Yet none of them has really questioned the prevailing financial indiscipline. Before the reforms began, SOEs' access to finance was dominated by state subsidies that provided working capital, financed investment in fixed assets and covered operating losses. SOEs had very few external liabilities. The zero cost of subsidies gave them no incentives to moderate their demand for capital or to use it efficiently.

A second period began in the mid-1980s. State subsidies were gradually reduced (Annex 3), following the cut in state budget expenditures. As a result, SOEs received more and more bank credit and became increasingly dependent on bank funds for investment of all kinds (Naughton, 1995*b*). Local governments also significantly eased access to bank credit for SOEs under their control, as a result of the combination of fiscal decentralisation that allowed retention of a larger share of tax revenues at a local level and *de facto* monetary decentralisation that granted local governments greater control over state bank branches⁸. In 1985, SOEs absorbed about three-quarters of banking sector loans to finance investment in the Chinese economy (Table 3). This share remained stable until 1992. The fall in the SOEs' share since 1993 is a first outcome of the Central Bank's radical intervention to cut loans obtained by SOEs through local branches of state commercial banks.

Table 3. Percentage Share of SOEs in Sources of Financing Investment

	1985	1992	1993	1994
State Budget	98.9	99.5	98.4	84.6
Domestic loans	75.9	74.4	66.6	64.7
Foreign Investment	94.2	92.1	51.3	37.8
Self-raised funds and others	52.3	59.4	58.7	55.4

Source: China Statistical Yearbook, various issues.

SOEs considered this privileged access to bank credit as a continuation of their soft budget constraint. Several factors show that financial indiscipline prevailed despite the switch from zero-cost subsidies to bank credit. Annual negotiated loan repayments — often supported by local authorities — rapidly developed. State banks remained passive towards highly-leveraged debtors, acting more like “public accountants or notaries” than financial intermediaries operating on a profit-and-loss basis (Calvo and Coricelli, 1993). The lack of political willingness to enforce bankruptcy regulations on the books since December 1986 was also seen as an unambiguous sign of pervasive, close political control over allocation of capital in the economy. Thus a large share of new bank credit continued to pour into SOEs, whatever their financial structure or performance. Because of this easy access to bank credit and non-binding repayment conditions, SOE investment decisions (and wage policies) remained dictated by factors other than profitability.

The third period began in the early 1990s, with greater reliance of SOEs on self-raised funds obtained outside the state financial sector for financing investment. These funds include retained profits, issues of shares or bonds and loans from non-banking financial institutions (NBFIs). They now account for a significant share in the financing of investment (Annex 4)⁹. They bear more binding repayment conditions. Interest rates on NBFI loans are much higher than on state bank loans. Even when the latter are negative — as in 1992-93 (see below) — the former are positive real rates¹⁰. Nevertheless, the tightening of budget constraints that could have resulted for SOEs through their increasing reliance on costly sources of external finance was weakened by the ubiquitous financial indiscipline of the state enterprise/state banks nexus. The pervasiveness of SOE access to soft finance has perpetuated disincentives towards more efficient use of capital.

In this highly distorted financial environment, the rise in the cost of capital has not significantly changed SOE investment decisions. Based on a survey of 300 large and medium-sized SOEs for 1984-89, Fan and Woo (1993) reached a similar conclusion. They noted that the interest rate elasticity of loans was low and that 65 per cent of SOE managers would not have changed their investment plans if the interest rate had increased by 10 percentage points. A recent IMF study (1994) supports this conclusion, showing that demand for credit and investment levels were unrelated to interest rate changes, due chiefly to the persisting soft budget constraint.

The foregoing would suggest that SOE demand for capital can be constrained only through controlling the supply of soft bank credit. This requires a careful appraisal of monetary policy in 1989-93 to assess how far SOE claims for capital have been accommodated. In China, where the state banking sector still accounted for 80 per cent of total loans in the early 1990s, monetary policy mostly reflected the Central bank's administrative controls and refinancing policy. The quantity of reserve money supplied by the Central bank to commercial and policy banks under the credit plan was considered as the most effective monetary policy instrument¹¹.

Table 4 gives estimates of the excess supply of reserve money by the People's Bank of China over 1989-95, defined as the difference between the actual expansion of reserve money and that required by the real increase in transactions in the economy. From the calculations, monetary policy appears as exceptionally lax after the 1987-88 tightening. The excess supply of reserve money reached almost 5 per cent of GDP a year, double that of 1986-88. The return to an accommodating monetary policy in 1989 continued through 1993, except in 1992 when an unexpected surge in real transactions temporarily made monetary policy less expansionary. Since 1994, the monetary authorities have achieved some tightening.

Table 4. Excess Supply of Reserve Money: Estimates, 1986-93
(per cent of GDP)

1986-88*	1989	1990	1991	1992	1993	1994	1995
2.4	4.4	6.7	4.6	1.1	6.5	4.3	3.2

* yearly average.

Source: Author calculations based on IMF data (see Annex 5 for detailed calculations).

Among the components which could explain the rapid increase in reserve money supplied by the People's Bank of China, loans to Deposit Money Banks (DMBs) took first place in 1989-93 (Table 5). Monetary financing of the government budget deficit played only a small role (11 per cent on a yearly average basis)¹². Because of statistical discontinuities, it is not possible to calculate the share of the increase in foreign asset holdings in the reserve money creation over the full period. In 1989-91, however, 24 per cent of reserve money growth came from an increase in foreign asset holdings by the People's Bank. The significant inflow of foreign capital in 1992-93 increased this share, adding an external pressure on monetary policy not captured by the statistics in Table 5. The third and largest component, loans to the mostly state-owned DMBs, accounted for 65 per cent of reserve money growth. When this growth reached an unprecedented level in 1993 (35.9 per cent), the increase in loans to DMBs represented 80 per cent of it. Excessive lending by local branches of the People's Bank to the state banking sector was the main reason for lax monetary policy.

Table 5. Main Contributors to Reserve Money Growth
(annual change, in percentage points)

	1989	1990	1991	1992	1993
Foreign Assets	3.1	8.5	9.1	- 0.9*	1.4*
Loans to Central Government	2.7	2.4	4.2	2.2	3.7
Loans to Deposit Money Banks	21.2	17.9	13.0	10.8	30.8
Other Items	- 3.7	1.3	- 2.1	4.2	--
Variation of the Reserve Money	23.3	30.1	24.2	16.3	35.9

* New series.

Source: Author calculations based on IMF, *International Financial Statistics*, various issues.

Interest rates and their evolution play a minor role in the investment decisions and demand for capital of the enterprise sector¹³. They are an auxiliary instrument of monetary policy in China, although their evolution has been given a more important role by the People's Bank of China in recent years. Nevertheless, the gradual decrease in nominal interest rates between 1989 and 1991 gives another indication of the laxness of monetary policy (Table 6). After the 1987-88 monetary stabilisation, during which nominal interest rates had been raised by 4 percentage points, nominal rates on loans to financial institutions were reduced by 3 percentage points in two years, inducing a similar decrease in interest on loans to enterprises. In real terms, the decrease in interest rates has been much more dramatic. The rapid increase in retail prices has led to negative real rates since 1992, using the classic definition of real interest rates. The trend continued in 1993 and at the end of the second half of that year, real interest rates were significantly negative.

Table 6. Evolution of Nominal and Real Lending Rates
(in percentage, end of period)

	1989	1990	1991	1992	1/93	2/93
Lending Rate to Financial Institutions	10.4	7.9	7.2	7.2	9.0	10.6
Lending Rate to Enterprises	11.3	9.4	8.5	8.5	9.4	12.1
Real Lending Rate to Enterprises (1)	8.2	6.5	3.1	-4.0	-10.1	-13.1
Real Lending Rate to Enterprises (2)	-6.5	7.3	5.6	2.6	-1.1	-2.5

Notes: Nominal rate is the one-year lending rate. (1) Deflated by the retail price index over the next one-year period.
(2) Deflated by the retail price index over the past one-year period.

Source: Smith New Court (1994) for lending rate and retail prices.

Thanks to this accommodating monetary policy, the state banking sector continued to ease access to credit for firms. A spectacular rise in total domestic credit to non-financial enterprises reached 24 per cent a year in 1989-93 (Table 7). Meanwhile, the M2 to GDP ratio rose from 71 per cent in 1989 to 96 per cent in 1993, indicating that monetisation of the Chinese economy — measured by the size of financial savings — had risen significantly. These trends suggest a financial deepening since 1989. The situation actually may be much less promising. In the absence of large-scale financial sector reform, financial intermediation remained highly segmented and poorly regulated during this period. Lending and borrowing rates were heavily subsidised and controlled. Many financial intermediaries faced strong political pressures and local interference. Repayment conditions for bank loans — as well as enterprise shares/bonds and loans from NBFIs — were not fixed by appropriate regulations protecting creditors' interests. These deficiencies severely distorted the screening of borrowers by financial intermediaries and led to biased and inefficient allocation of financial capital. Increasing monetisation of the Chinese economy thus widened the scope for

misallocation of capital resources. Similarly, the substantial excess supply of reserve money — mostly through the Central Bank’s refinancing of the state commercial banks’ credit activity — increased the scope for inefficient allocation of bank credit in the economy. This biased allocation of bank credit has primarily benefited SOEs (Table 3). Thus, the combination of financial indiscipline and easy access to soft bank finance bears the responsibility for the massive and destabilising over-investment and over-consumption that have taken place in SOEs over the 1989-93 period.

Table 7. Evolution of Net Domestic Assets and Domestic Credit, 1988-93
(annual quarterly growth rate in per cent, seasonally adjusted)

	1988	1989	1990	1991	1992	1993
Net Domestic Assets	7.8	26.8	25.6	23.1	33.8	34.5
Domestic Credit	0.8	26.0	20.7	17.8	21.9	34.6

Source: IMF (1994).

In the mid-1980s, Tidrick and Chen (1987) noted that “Investment hunger was alive and prospering despite recent reforms. Indeed, its influence might have increased with the emergence of new financing sources subject to weaker administrative control. Enterprises were still willing to invest all the funds available to them, regardless of the market conditions they face.” (p. 88). This remark would perfectly describe the 1989-93 period. Pervasive lack of financial discipline and easy access to soft bank credit did not provide a conducive environment for positive microeconomic changes to take place in the state sector. Chinese SOEs maximised their own utility through expansion of their production capacity in a “pure” socialist tradition and, more recently, by launching profitable real estate projects. They also kept on accommodating wage claims of their workers. This adverse microeconomic behaviour helped to overheat the Chinese economy.

When inflation surged in 1993, the central government decided to tighten its monetary policy. Its classic stop-go management of inflationary pressures was this time accompanied by a strong commitment to large-scale reform of the financial sector. Vice-Premier Zhu Rongji — and governor of the People’s Bank of China between July 1993 and June 1995 — acknowledged that financial discipline was needed to achieve macro stabilisation and re-engineer non-inflationary economic growth. Tight financial discipline would force more and more autonomous SOEs to use their resources more efficiently and radically restructure their production. After a long period of soft budget constraint and widespread bias in allocation of resources, however, the government’s commitment to impose financial discipline on the economy needs credibility to induce positive microeconomic changes; the question is how to build it. The central and eastern European countries (CEECs) provide interesting examples of governments which have tried to enforce tight financial discipline on the road to a market economy.

The Rocky Road to Financial Discipline: Insights From the CEECs

The CEECs have in recent years radically reformed their financial systems to promote strict discipline between the enterprise sector and the financial sector. Considering the marginal role of emerging stock markets in the financing of production in these countries, efforts have focused on changing the lending behaviour of banks and the repayment attitude of debtors. This section reviews how financial discipline was promoted during the first years of transition in three post-socialist countries — former Czechoslovakia, Hungary and Poland — but will not claim to describe the full complexity of financial reforms there. It sketches three stylised facts that have played a major part in the emergence of credible financial discipline.

Radical Institutional Reform

One of the most striking features of transition to a market economy in the CEECs is the emphasis laid on rapid establishment of a new regulatory framework. In the three countries under review, the basic rules for the enterprise and banking sectors and the relations between them were enacted in less than four years (Table 8). This massive legislative activity was accompanied by major macroeconomic reforms such as radical price liberalisation, opening to foreign trade, sharp cuts in subsidies and tightening of monetary policy. All three pro-reform governments saw such institutional and macroeconomic measures as ways to boost the credibility of a lasting break with previous socialist practices, to provide adequate incentives to economic actors and to help develop and spread much needed financial discipline in these economies.

Table 8. **Timetable of Selected Institutional Reforms**

	ex-CSFR (a)	Hungary (b)	Poland (c)	China (d)
Central Bank Act (e)	I	done	I	VI
Central Bank Act (f)	III	III	III	XVII
Banking Act	III	III	IV	XVII
Bankruptcy Law	IV	IV	II	XIV
Securities Act	III	II	III	not yet
Corporate Law	I	I	I	XV
Accounting Law	II	III	III	XV
Social Security Act	I	I	II	XVI
Unemployment Act	I	III	II	XV

(a) Year I = 1990, (b) and (c) Year I = 1989, (d) Year I = 1979. (e) Establishment of a two-tier system.

(f) Law specifying Central Bank control. For more details and sources, see Annex 2.

Reform of banking sector regulations — which cover a very substantial share of financial assets in the three countries — was a top priority. The main aim was to establish an institutional environment that would lead to significant change in the lending behaviour and credit management of commercial banks. They should act as efficient financial intermediaries in the allocation of available capital to the enterprise sector and no longer like “public notaries and accountants”. Key reforms went into practice rapidly, with the first step the replacement of the monobank system by a dual system dominated by a central bank¹⁴. Within two years, this first reform was supplemented by new bank regulations codifying the role of the central bank, specifying instruments for monetary policy, changing the bank’s accounting system and strengthening prudential regulations.

In the enterprise sector, new commercial codes or company laws have diversified the range of corporate forms, legalised the notion of equal treatment between different ownership forms and provided a legal framework for the “corporatisation” of SOEs — their transformation into joint-stock companies. In their new corporate status, SOEs are autonomous firms and so — in principle — more accountable for their financial performance. To increase their accountability, they have been rapidly relieved of the social burden stemming from the internalisation of social costs (health, unemployment, pensions, housing). Social security reforms came during the early years of the transition.

Based on this clarified framework, new provisions for bankruptcy have been enacted to stimulate loan repayment by firms and improve creditors’ control over firms¹⁵. In Hungary, the unused 1986 Law on Bankruptcy was amended in May 1990 and again in September 1991 to ease the start of re-organisation or liquidation procedures. In Poland, the 1934 Bankruptcy Law was reactivated and amended in February 1990. Enforcement of the bankruptcy laws has depended on the willingness of the government to enforce them. This is especially true in the Czech Republic, where enforcement was delayed by a year and a half, from July 1991 to March 1993. Enforcement also crucially depends on the incentives for commercial banks to make use of bankruptcy provisions against defaulting and insolvent debtors. In the three countries, accompanying measures have included enforcing Western-type prudential bank regulations, recapitalisation of banks, debt write-offs or legislative amendments to encourage banks to be tougher over credit repayment and new loans¹⁶.

A Tighter Monetary Policy

Tightening of monetary policy after 1989 brought two spectacular changes. The first was a surge in real interest rates (Table 9). In the three countries, price liberalisation initially induced higher than expected inflation and real interest rates remained negative, but the increase in nominal lending rates was harshly felt in the second year of reforms as inflation cooled. Since then, real lending rates have been significantly positive. According to Sgard (1995a), they stabilised in 1994 at moderately positive levels (6.1 per cent in the Czech Republic, 6.3 per cent in Poland and 9.3 per cent in Hungary).

Table 9. Evolution of Real Lending Rates in Selected CEECs
(in per cent, end of period)

	Q2 1991	Q4 1991	Q4 1992	Q4 1993
Ex-CSFR (a)	- 5.8	5.7	- 7.5	12.3
Hungary	18.6	19.3	10.0	20.1
Poland	30.3	23.4	11.5	6.5

Note: Average of monthly lending rates deflated by producer prices. (a) Czech Republic for 1993.

Source: Dittus (1994).

The second change was the severe shortage of bank credit for the enterprise sector. As shown by Dittus (1994), the volume of credit fell significantly in the three countries. Accustomed to smoothly receiving bank credit to meet central planning output targets, companies had unprecedented difficulty getting credit from their banks. Over 1990-93, with the exception of Poland in 1991, a net transfer of capital took place from the enterprise sector to the banking sector; new credits obtained by firms from banks were smaller than repayments. The credit squeeze was particularly severe in Hungary where adverse economic policy choices — in particular, the mismanagement of foreign debt — led to a massive monetary transfer from firms. Sgard (1995a) measured the average net transfer from firms to banks to assess how restrictive the new credit environment was. According to him, the transfer from firms to banks reached an average 6 per cent of GDP a year in Hungary against 1.5 per cent in Poland (which had a big credit squeeze in 1990).

Implementing Bankruptcy Procedures

A third dimension of the new financial environment in the CEECs involved implementation of bankruptcy provisions against defaulting and insolvent debtors. Socialist systems did not make use of bankruptcy laws, because financial discipline had much less importance than political control over resource allocation. Neither debtors (firms), nor creditors (to simplify, banks) had any incentive to repay credits or carefully manage loan portfolios. By contrast, thousands of bankruptcies occurred in Hungary and Poland in the early years of the transition. In 1991-93, 22 000 bankruptcy procedures — reorganisations and liquidations — were started in Hungary (Gray *et al.*, 1995). In Poland, bankruptcy filings jumped from 1 250 in 1991 to 3 661 in 1992 and 5 249 in 1993, a total of 10 160 (OECD, 1994). Yet the impact was less dramatic than these figures suggest. Many procedures involved small private businesses and only a few state enterprises have been actually liquidated. Even if it has not significantly

contributed to the reallocation of resources in the transition economy, however (see Gray, 1995), the impressive number of bankruptcy filings has had a significant psychological impact. By increasing the credibility of the bankruptcy threat to SOEs, governments have shown willingness to eliminate their control over the allocation of resources and promote financial discipline.

Two main conclusions emerge. First, enforcing financial discipline is a complex and lengthy process. A surge in inter-enterprise credits (Begg and Portes, 1993) and bank loans to highly-indebted SOEs were the first responses of companies and banks to the new financial environment. Banks behaved rather passively towards their old clients (Mitchell, 1992), fearing that pushing insolvent SOEs to bankruptcy might compromise their own liquidity. Nevertheless, as governments maintained a restrictive policy, decided to subsidise only target companies and privatised and recapitalised the banking sector, their commitment to enforce financial discipline gained credibility. The second lesson is that, in all three countries and despite big differences in the ways governments built the credibility of tougher financial discipline, companies quickly responded to tighter budget constraint with cost cutting and adjustment (Estrin *et al.*, 1993; Pinto *et al.*; 1993, Carlin *et al.*, 1994, Aghion *et al.*, 1994, Bouin, 1996) and the attitude of banks towards credit repayment and resource allocation greatly changed (Dittus, 1994, Grosfeld, 1994, Anderson and Kegels, 1995). This suggests that the emergence of credible and long-lasting financial discipline may be crucial for the transformation of socialist systems. In that respect, the Czech Republic — often considered as not having enough budget constraints because of a less deflationary monetary policy and late implementation of bankruptcies — and Hungary — supposedly a gradual reformer — could be considered as having already reached a turning point in systemic transformation. By establishing the basic framework for a better allocation of resources and stricter enforcement of debt contracts, the CEECs entered formally into a new economic system.

Financial Discipline in China After 1993: A Credible, Long Lasting Commitment?

Since July 1993, the Chinese authorities have made clear that their main concern is to provide the economy with a stable and non-inflationary environment. The influential Vice-Premier Zhu Rongji stated firmly that a tightening of monetary policy was necessary to bring down inflationary pressures. He also put the implementation of long-delayed reforms of the enterprise and financial sectors high on the government agenda. The move towards financial discipline in the economy can be assessed on the basis of the three prerequisites identified in the previous section: radical institutional reform, a tighter monetary policy and rapid implementation of bankruptcy provisions.

Institutionalising the Market Economy

The impressive performance of the Chinese economy since 1978 has been obtained without solid institutional foundations. The politically constrained nature of the reform process — and hence its uncertain path — may explain why irreversible legal changes have been delayed. Economic and financial laws have been reformed gradually and partially, only after successful small-scale experiments controlled by the central government¹⁷. Many regulatory innovations that have proliferated fairly spontaneously at provincial or local levels — and resulted in local success stories — have not been replicated or were introduced with a delay by the central government. Most financial innovations or property recombinations have developed in an institutional vacuum, increasing the uncertainty over the rules in the economy. The slow pace of institutional reforms has also led to a costly segmentation of markets. Lack of a market environment has often been called one of the pitfalls of the Chinese reform strategy.

Against this background, 1993 was a turning point in the Chinese transition to a market economy (Annex 6). A significant acceleration in establishment of market institutions has occurred since then, related to the authorities' commitment to promote a "socialist market economy". New laws have been enforced to provide a clear framework for banks and enterprises in the matter of financial discipline. The sequence and the pace of these institutional reforms resemble very much those carried out in the CEECs (see Table 8).

The reform of the banking sector has been spectacular. Since creation of the dual banking system in 1984, no major banking reform had been undertaken by the Chinese authorities. For a decade, control of the money supply, bank supervision and commercial banking practices took place in a fragmented and inadequate regulatory environment. The reform of the banking sector has been designed and enacted to help the central government regain control over the monetary sphere, through redefinition of the roles of the central bank and commercial banks in an emerging market economy. In March 1995, two laws on the activities of the People's Bank of China and that of commercial banks were enacted. Four features of these two laws are notable¹⁸.

First, the People's Bank of China is granted more autonomy in refinancing policy. In principle, it can now resist pressures from local governments, government departments, SOEs and individuals (Central Bank Law, Arts. 7 and 12)¹⁹. *Second*, the People's Bank has new and more indirect instruments to regulate money supply. The new law allows for active interest rate management, reserve requirements and open market policies. These new instruments are intended to reduce the PBC's reliance on credit controls and mandatory loan requirements (Central Bank Law, Art. 22). *Third*, the People's Bank will monitor the behaviour of commercial banks more strictly (Art. 33), assessing whether capital adequacy and loan-to-deposit ratios are met. The

existing state banks will be given a “designated time-limit to meet these requirements” (Commercial Bank Law, Art. 39). *Fourth*, commercial banks — including state-owned ones — will be responsible for their own profits and losses and operate under the auspices of the new Company Law (Commercial Bank Law, Arts. 4 and 22).

To complement the first batch of reforms, several amendments have been passed to improve credit control and increase the competition in the banking sector. New Regulations on Lending and Borrowing were passed in August 1995²⁰. They give more details about interest rate ceilings, responsibilities accompanying loans, loan recovery, and penalties and liabilities resulting from rule violations. This substantial amendment has been designed to further guarantee the liquidity, safety and profitability of loans.

How these new laws will impact on the lending behaviour of commercial banks and so improve credit allocation and management remains to be seen. The Central Bank Law subordinates monetary policy decisions and exchange rate management by the central bank to approval by the State Council. The Commercial Bank Law stipulates that state-owned banks can still issue policy loans, if required by the State Council. These features may hinder the independence of the central bank and jeopardise the separation between state banks extending commercial loans and the three policy banks established in 1994.

Significant institutional reforms have also been made in the enterprise sector. As in the banking sector, they aim to clarify the role of non-financial enterprises in the economy and create conditions for improving economic efficiency, in particular of SOEs. Among the many reforms since 1993, only the reforms concerning financial discipline in enterprises are considered here²¹. Two major reforms have been undertaken: enactment of a new Company Law and reform of the social security system.

A new Company Law came into effect in July 1994, the first attempt to standardise the legal framework for establishment and operation of small and large companies²². It provides a legal basis for the “corporatisation” of SOEs — their transformation into joint stock companies. This legal transformation aims to make SOEs more accountable for their financial losses and external liabilities. When corporatised, autonomous firms could face bankruptcy procedures in case of default. Enactment of the Company Law has been accompanied by gradual clarification of the tax system. Numerous tax-breaks granted to SOEs have been cancelled since 1994, such as the 40 per cent reduction in taxes on profits reinvested in the firm. The State Council decided that no preferential treatment should be given to firms involved in the experimental implementation of the modern enterprise system. Eliminating most tax exemptions is another way of putting SOEs in an operational environment similar to that faced by other enterprises.

Reform of the social security system (health care, pensions, housing, education) aims at relieving SOEs of costly social functions that no firm normally performs in a market economy²³. It also creates conditions for more flexible labour adjustment in SOEs and establishes a standard social safety net for employees and laid-off workers. It will help reveal their true financial performance — by drawing a line between production costs and actual expenses stemming from enterprise-linked social functions — and make liquidation of most inefficient SOEs possible. As noted by Epstein (1993), after the State Enterprise Bankruptcy Law came into effect in 1988, the Supreme People's Court informed all lower courts to refuse bankruptcy petitions until the social and economic consequences of winding up an enterprise were adequately resolved.

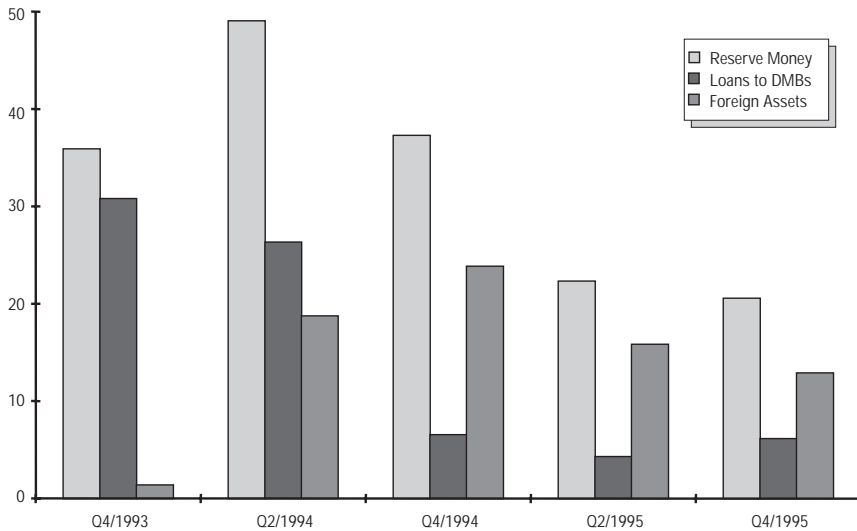
Social security reform has gained momentum since 1994. A full description of these reforms is far beyond the scope of this paper²⁴, which gives just an overview of the progress in reforming current employment contracts, unemployment and pensions. In January 1995, a new Labour Law came into effect. Under it, SOEs can adjust their labour force by directly recruiting and dismissing workers. The central authorities have introduced labour contracts between employees and employers. Ministry of Labour statistics indicate that 55 million workers — almost 40 per cent of the total work force in SOEs and UCOEs — were already under contract by the end of 1995 (87 per cent of workers in private companies had contract status). The government aims to have all SOE employees under contracts by the year 2000. As SOEs have the right to dismiss workers, a new unemployment benefit system has been set up. In 1994, three-quarters of employees in SOEs — 74 million workers in 470 000 SOEs — already contributed to unemployment insurance. Significant measures have been taken to reform the old-age pension system, the most costly burden for SOEs. A new scheme under which pensions will be funded by enterprises, individuals and the state is progressively replacing the old one in which enterprises were the sole support of retirees. In 1995, 34 million workers in SOEs were covered by the new insurance programme and received pensions from banks.

Monetary Control and its Impact on Behaviour of SOEs

Since the middle of 1993, the Chinese authorities have been trying to cool down the economy. As in the past, they have relied mostly on short-term expedients such as re-establishing price controls or enforcing severe quantitative credit controls. In 1995, they managed for the first time to curb inflation while maintaining rapid economic growth. Unlike previous attempts at controlling the economy through quantitative restrictions, the authorities declared that tight monetary policy would be continued and that the enterprise and financial sectors would be radically reformed to obtain more stable, non-inflationary economic growth.

It is hard to judge, however, exactly how tight monetary policy has been since July 1993. In 1994, tighter targets for reserve money were not met. Reserve money growth was significantly higher than the already sharp 1993 increase (33.9 per cent against 28.3 per cent). A look at changes in the breakdown of assets held by the People's Bank of China qualifies this quantitative picture, however. Following massive foreign capital inflows, foreign asset holdings replaced loans to DMBs as the main contributor to reserve money growth in 1994 (Figure 2)²⁵. By the last quarter of 1994, the increase in foreign assets accounted for 80 per cent of the reserve money growth, while the contribution of loans to DMBs fell to only 20 per cent. The monetary authorities opted for partial sterilisation and implicitly accepted a large increase in reserve money. In 1995, control over reserve money growth improved thanks to a slower increase in foreign assets. Loans to DMBs remained stable at a low level. At the end of year, the annualised growth rate was below 20 per cent for the first time since 1990 and as a result, excess reserve money declined sharply (see Table 5).

Figure 2. Evolution of Reserve Money and its Main Components, 1993-95



Note: Quarterly data for 1994 have been adjusted to be comparable with those of the previous year.

Percentages are given for year on year change.

Sources: *International Financial Statistics* for 1993 and People's Bank of China (1995) for 1994.

Although nominal interest rates played a limited role in the conduct of monetary policy in 1993-95, the People's Bank of China raised them twice in 1995. The rise was marginal in nominal terms (Table 10) but the drop in inflation led to the emergence of positive real interest rates. Preferential lending rates to thirteen sectors were also eliminated in 1995 to increase the role of interest rates in monetary management.

Table 10. **Evolution of Nominal and Real Lending Rates**
(in per cent, end of period)

	1/94	2/94	1/95	2/95
Nominal Lending Rate	12.1	12.1	13.0	13.5
Real Lending Rate to Enterprises (1)	-8.0	-11.9	-5.5	+4.0
Real Lending Rate to Enterprises (2)	-6.4	+1.6	+3.0	+3.5

Notes: Nominal rate is the one-year lending rate to enterprises. (1) Deflated by the actual rise in retail prices over the past year period, (2) Deflated by the actual rise in retail prices over the next year period. For 1/95 and 2/95, figures are based on official targets for 1996 (10 per cent).

Sources: Smith New Court for lending rates, *China Monthly Statistics* for retail prices.

In 1995, the monetary authorities claimed that credit ceilings for state banks had been strictly enforced and that credit was tightened to the point where loss-making SOEs could only pay their workers and not invest in machinery and inventories. The 20 per cent increase in triangular debt also indicates that bank credit has been harder to obtain by non-financial enterprises. Several trends suggest that tightening has not been so successful. Broad money (M2) growth heightened in 1994-95, well above the PBC's target²⁶. Total debts of industrial SOEs rose to Y800 billion in 1995, a 23 per cent rise in nominal terms. A sharp rise in loans extended by NBF — amounting to more than Y200 billion — spoiled part of the PBC's efforts to bring M2 down. On the deposit side, subsidies of bank deposit rates were raised significantly to avoid a shift in deposits out of the state banking sector to better remunerated financial instruments. In 1995, deposits on three-year bank accounts received a 12.6 per cent subsidy, implying that state banks paid interest of 27 per cent on them while lending to SOEs at 10 per cent or less. As a result, state banks reported increasing losses and their capital to assets ratios deteriorated sharply, reducing their ability to tackle the bad debt conundrum.

Table 11 presents recent trends in SOE investment and wage policies. SOEs have responded rather quickly to the contraction of state credits. The contraction in medium- and long-term loans in 1995 can easily be seen in their investment behaviour. At constant prices, growth of investment in fixed assets that year turned negative for the first time since 1989. Real wage increases slowed down sharply to a level — 5 per cent per annum — likely to stabilise real unit labour costs in SOEs because it has rough parity with the estimated annual marginal labour productivity increase in the early 1990s. Meanwhile, SOEs have not made any significant labour force adjustment²⁷.

The labour force in SOEs fell by only 0.2 per cent between September 1993 and September 1995, a marginal decrease compared to estimated over-staffing in SOEs of 15-20 per cent. This may be rooted in (a) the lack of labour market flexibility that hinders the SOEs' capacity to adjust the labour force²⁸ and (b) their expectation of a policy reversal in the direction of a more accommodating credit supply.

Table 11. **SOEs' Investment and Wage Policies, 1993-95**
(annual rate of change, in per cent)

	1993	1994	1995
Capital Construction and Technical Updating			
Nominal Growth Rate	52.3	37.4	16.6
Real Growth Rate	20.3	24.5	-3.0
Real Increase in Wages			
Nominal Growth Rate	22.7	35.8	20.2
Real Growth Rate	8.4	11.6	4.7

Sources: *China Statistical Yearbook* and *China Monthly Statistics*.

By maintaining a restrictive monetary stance despite repeated claims for a more accommodating monetary policy and making key institutional reforms, China has made significant progress towards financial discipline. Monetary tightening based on administrative credit restriction, however, will not suffice to impose financial discipline in the economy, since it does not affect the way capital is allocated or the demand for capital from SOEs. At best, it is a costly "quick fix" against inflationary pressures in the economy. Allowing inefficient SOEs to exit the market will be the next and crucial move to make financial discipline credible, to give SOEs adequate incentives to restructure, and to improve the allocation of resources in the economy.

Bankruptcy Ahead?

According to various official estimates, 15 to 20 million workers in SOEs may lose their "iron rice bowl" over the next five years, should large and inefficient SOEs be allowed to close. Such a large-scale implementation of bankruptcies would release resources controlled by inefficient SOEs²⁹. It would also strongly boost the credibility of the Chinese government's commitment to promote financial discipline in the economy. As noted for Hungary and Poland, the credibility issue in the transformation of the financial environment may in the short run be the most important reason for enforcing bankruptcies.

Following its reform strategy, the Chinese government has relied on an experimental implementation of the 1986 Bankruptcy Law³⁰. Since 1986, the authorities have monitored bankruptcies closely. They suspended the Law until November 1988,

except in Shenyang (Northeast China) where it was experimentally enforced. Between 1989 and 1991, very few cases were reported, indicating the authorities' strong reluctance to use bankruptcy proceedings against inefficient SOEs (Table 12)³². Since mid-1992, the number of cases has significantly increased, although most involved non-state firms and very small SOEs. According to Yuan (1996), bankruptcy still is seen only as a last-resort solution, when long-term loss-making SOEs cannot be merged with more profitable ones.

Table 12. Number of Bankruptcies in China, 1989-94

1989	1990	1991	1992	1993	1994
98	32	117	428	710	1 156

Note: Number of bankruptcy applications handled by Chinese courts.

Source: Yuan (1996) for 1989-93 and Chinese Finance Association (1995) for 1994.

In 1994, the Chinese authorities launched a more ambitious programme of bankruptcies, but still a pilot, under which 52 SOEs from 18 large cities (including Shanghai, Wuhan, Qingdao, Tianjin) were to go bankrupt in the short run. Some of these cities set up special courts to handle bankruptcy cases. By mid-1994, about 40 enterprises in these places had filed for bankruptcy, including 11 large SOEs, 17 medium-sized ones, 11 small ones and one Sino-foreign venture. The total value of these 40 firms was \$500 million and the number of active and retired employees in them almost 86 000. In the whole country, 395 SOEs were declared insolvent in 1994, out of the 1 156 companies for which bankruptcy procedures had been started. In March 1995, the number of cases in the 18 cities rose to 161, with 47 settled. The experimental programme, to be extended to 52 large cities in 1996, was launched to assess the social and economic implications of bankruptcy, as the authorities intended to make a major revision of the Bankruptcy Law in 1996. The Bankruptcy Law Amendment Bill is intended to apply uniformly to all firms, including those collectively and privately owned, and not just to SOEs. Given the reluctance of the authorities to liquidate large SOEs, the new law is expected to favour corporate reorganisations.

These preparatory steps show that the central government is considering using bankruptcy provisions more widely as a restructuring device, but two important problems may severely restrict future bankruptcy experiments. First, the lack of capital of state commercial banks acts as a major impediment to large-scale enforcement of bankruptcies. Recent estimates put at about 20 per cent the loans to enterprises that have gone bad. Given their under-capitalisation and lack of means to cover potential losses on non-performing assets, state commercial banks may not survive many defaults of large SOEs. So despite a new Bankruptcy Law defending creditors' interests, state commercial banks likely will remain passive and not initiate legal proceedings against insolvent debtors. To solve this bad loan problem, the government provided Y7 billion

in 1994 as a reserve for paying back debts of bankrupt SOEs to the state banking sector. This amount was doubled in 1995. These sums will probably be insufficient, considering the resources devoted by the CEECs to solving a similar problem. Based on Dittus (1994), Sgard (1995b) and Bouin (1995), the CEEC governments have spent an estimated 2 per cent of GDP a year since the beginning of the transition just to avoid a major banking crisis caused by high SOE indebtedness, the size of bad loans and the lack of capital of state commercial banks. In China, this would mean the authorities would need to inject an annual subsidy of Y100 billion.

Second, employees in bankrupt companies have to be properly compensated in order to preserve social stability, the top priority for the Chinese government. The new Bankruptcy Law will aim at “protecting the legitimate rights of the failed SOE employees”. This clause may well hinder implementation of bankruptcies in the future, as local governments have often required a company buying a bankrupt SOE to re-employ most of its staff or have asked the labour department to solve the problem of re-employment (Yuan, 1996). Encouraging signs suggest, however, that such a stalemate could be at least partially avoided. In November 1994, a notice on bankruptcy gave detailed temporary rules about resettlement of workers from bankrupt SOEs, by providing compensation in the form of new jobs, cash or retirement. In recent cases, some capital has been drawn from liquidated SOE assets to compensate staff directly³². Still, as long as the social security system does not adequately tackle the adverse social consequences of bankruptcy, the authorities will remain reluctant to foster larger scale implementation of bankruptcies.

Conclusion: The End of an Era of Economic Reforms?

In the early 1990s, after almost 15 years of partial economic reforms and stop-go economic policies, the Chinese economy was highly distorted and dominated by vested interests. Its impressive trade and economic performance over the 1980s had been obtained despite shaky institutional foundations and increasing segmentation of the factor and product markets. Market segmentation had produced excessive transaction costs and massive misallocation of resources. After 15 years of piecemeal reform of the state enterprise sector, pervasive easy access to soft finance still diverted SOEs from minimising costs to achieve profit maximisation. As a result, SOEs remained plagued by over-consumption and over-investment and resembled SOEs in Poland or Hungary in the last years of central planning much more than SOEs in Western mixed economies. The 1992-93 overheating of the economy was the inevitable outcome of this debilitating economic and financial environment.

The Chinese authorities responded by not only reintroducing price and credit controls but also making unprecedented legal reforms to change incentives and behaviour in both the enterprise and financial sectors. The reformism of the central

government since 1993 has been impressive. Under the new institutional framework, SOEs are gradually relieved of their costly social burden and are made more accountable for their economic and financial performance. Financial intermediation now operates in a new regulatory and prudential framework, although restructuring the state banking sector is an urgent need. The court system is being rejuvenated. Can one say — with Naughton (1995a) — that these legal changes have ended an era of gradual and piecemeal economic reform? Has the critical mass of legal reforms now been undertaken to ensure that China is no longer just at the threshold of a market economy but actually entering a new phase?³³

Recent institutional reforms are best seen as a prerequisite rather than a sufficient condition for the emergence of a market economy in China. As for financial discipline in the economy, especially in the state sector, the government still has to show it will eliminate its political control over allocation of resources. So far, the authorities have shown great reluctance to do so. This means that the essence of the socialist economy has not yet been transformed.

Two important issues cast some light on challenges ahead. First, even assuming enough political will by the Chinese authorities³⁴, allowing SOEs to close will be possible only when factor market reform is well advanced. This will mark the end of the era of economic reform featuring financial indiscipline. The new era will start a learning process about the new financial environment and will call for deepening reforms in factor markets to reduce distortions in the economy further. Second, again as shown by the CEECs, tougher budget constraint is a necessary but not sufficient condition for SOE restructuring to take place. The government recently launched programmes to improve ownership control (by creating state holdings and merging loss-making SOEs with profitable ones) and day-to-day management of SOEs (by experimental implementation of a modern enterprise system). Whether these property and ownership recombinations will be enough to solve the problem of Chinese SOEs' inefficiency and lack of competitiveness remains to be seen and is the next issue on the agenda of Chinese policy makers.

Notes and References

- * OECD Development Centre. The author is grateful to Janusz Dabrowski, Richard Pomfret, Jérôme Sgard and Wing-Thye Woo for valuable comments on earlier versions of this paper. The opinions and arguments in it are the sole responsibility of the author and should not be attributed to the OECD.
1. Accounting standards and practices in SOEs create serious statistical problems. Under-reporting of profits is the rule and yearly consolidated accounts are not compulsory. This latter issue is crucial as many SOEs have in a few years incorporated numerous subsidiaries to transfer their most valuable assets into “satellite” enterprises and protect their most profitable activities from high income taxes. Should the financial results of these companies — Urban Collective-Owned Enterprises display much higher profits than SOEs — be taken into account, the consolidated performance of SOEs would be significantly improved (Hussain and Stern, 1995). The inability of “socialist” statistics to capture actual trends during the transition period has been intensively debated in Central and Eastern Europe (Sachs 1993, Dobozi and Pohl 1995). In China, the increasing volume of statistics released by the authorities has created a statistical haze (*Asian Monetary Monitor*, 1995).
 2. Bouin and Grosfeld (1995) stressed that the credibility of the government’s commitment to privatise also had a stimulating effect on enterprise restructuring.
 3. Aggregate production function parameters are used despite high sectoral discrepancies. Some sectors show increasing return to scale and parameters can be volatile (see Woo *et al.*, 1994, page 416).
 4. Author’s calculations based on China Statistical Yearbook (1994, Table 5-23). Other technical upgrading and transformation investments for which no motives have been given were excluded.
 5. Unlike Hungary, where the decentralisation reforms of the 1980s benefited SOEs’ managers, controlling rights over SOEs were transferred over the same period to workers’ councils in Poland. As a result, wages in SOEs were raised sharply, often at the expense of firms’ long-term prospects. Such excessive wage increases created strong inflationary pressures in 1989 (OECD, 1991).
 6. See Hay *et al.* (1994) for a description of the various ways commonly used to keep Chinese loss-making SOEs afloat.
 7. Kornai (1980) noted that SOEs’ demand for inputs was “insatiable”.

8. Up to 1993, local PBC branches were allowed to allocate a percentage of credit within their localities. In 1991, about 7 per cent of the credit plans was set aside for the local PBC branches. See Qian and Roland (1994) for an analytical presentation of the impact of fiscal and monetary decentralisation on allocation of capital.
9. Since fundraising in Chinese statistics includes retained profits, it is impossible to calculate the share of self-raised *external* finance.
10. The World Bank (1990) noted that “financial operations taking place in unregulated markets occurred at interest rates considerably above — by some 30-50 percent — the official limits”.
11. See Girardin (1997) on the impact of the increased autonomy of local branches of state banks (including those of the People’s Bank of China), of NBFIs’ credit activities and of inter-enterprise loans on credit control in China in the early 1990s.
12. Strictly speaking, shares should be calculated as a percentage of the total liabilities held by the PBC. Over the 1986-93 period, reserve money accounted for 90 per cent of PBC’s total liabilities.
13. While an interest rate increase may have a limited impact on credit demand from SOEs because of continued availability of subsidised loans, a significant fall in real interest rates combined with an expansionary credit policy may boost firms’ demand for credit and levels of investment.
14. In Hungary, this initial reform had been implemented in 1986.
15. See OECD (1994) for a comparative presentation of bankruptcy reforms in the CEECs.
16. See Sgard (1995b) for Hungary, Grosfeld (1994) for Poland, Bouin (1995) for the Czech Republic. For example, Sgard (1995b) evaluates the cost of recapitalisation of state banks at 9 per cent of GDP in Hungary (2.5 per cent in December 1992 and 6.5 per cent in December 1993).
17. On this issue, see Fan (1994) and Naughton (1995b).
18. For further description of these laws, see Ross and Silk (1995).
19. The Central Bank Law attracted the highest number of negative votes of any law in the history of the National People’s Congress, suggesting that vested interests may be challenged by the new law.
20. For example, approval for a new loan to an enterprise will be granted only to those who show they have repaid the principal and interest on previous loans. The borrower will also have to possess at least 25 per cent of the total capital required by the project to obtain a medium or long-term loan.
21. The analysis also leaves aside the issue of the relationship between economic efficiency and ownership, since the Chinese authorities have not yet accepted privatisation as a restructuring device for SOEs. On recent ownership reforms, see Broadman (1995) for a description of official schemes and Yuan (1996) for a more critical account.
22. New Company Laws were first enacted in fast reforming provinces (the Shenzhen Municipality in March 1992, the Shanghai Government in May 1992 and the Guangdong Provincial Government in May 1993).

23. A World Bank study (1996) noted that social sector expenditures — notably housing and pensions — raised the cost of labour in SOEs by 80 per cent.
24. See Hussain (1993) and World Bank (1996) on social security reforms in China.
25. Claims on central government are not taken into account since they have hardly contributed to reserve money growth since 1994.
26. Annual M2 growth rate reached 31.6 per cent in 1994 and 29.9 per cent in 1995, well above the Central bank's targets.
27. Officials statistics, however, reported a 66 per cent increase in disputes related to labor shedding in 1994, suggesting increasing tensions on the labour market.
28. On this issue, see Fan (1995).
29. As a significant share of SOE productive assets are obsolete, only part of the existing stock of capital would be re-allocated towards more profitable uses. Winding up chronically loss-making SOEs will also end inefficient allocation of new bank credit for bail-outs. As a result, efficiency gains may come from a better allocation and better use of capital.
30. The 1986 Bankruptcy Law applies only to SOEs. Closure for non-state enterprises is often achieved through liquidation under the owners' control, as opposed to liquidation under creditors' control in the Bankruptcy Law. While non-state enterprises may use the 1986 law as a reference, they are technically subject to section 19 of the Civil Law governing personal debt.
31. Here again, the lack of accurate time series for bankruptcies against SOEs is unfortunate. Only fragmentary data are available.
32. In general, each worker could get 15 000 to 30 000 yuan, *i.e.* from three to six years of an average monthly salary in the state sector.
33. As the change of titles of two IMF Occasional Papers between 1993 and 1994 would suggest.
34. Naughton (1995b) explains that the 1993 pro-reform move has been supported by conservatives, as they considered it was the only way to regain control over the economy. However, whether they will be prepared to accept the winding-up of numerous SOEs is a different story.

Annex 1. Industrial Gross Output Value by Type of Ownership
(in per cent of total IGOV)

	1965	1978	1985	1990	1994
State-Owned Enterprises	90.1	77.6	64.8	54.6	34.1
Collective-Owned Enterprises	9.9	22.4	32.1	35.6	40.9
Individual Sector	--	--	1.9	5.4	11.5
Other Ownership Forms (a)	--	--	1.2	4.4	13.5

a. Mainly private enterprises, foreign-owned enterprises and joint-ventures.

Source: China Statistical Yearbook, various issues.

Annex 2. Major State Enterprise Reforms in China, 1978-95

1978	Profit retention under the <i>Profit Contract System</i> . Enterprises were allowed to retain part of their profits. By the mid-1980s, the 6 600 SOEs that participated in the profit retention scheme produced 60 per cent of the output and 70 per cent of the profits. Introduction of the <i>Bonus System</i> (84 per cent of industrial SOEs introduced this bonus scheme).
1983	
1984	Introduction of a 55 per cent enterprise income tax instead of profit remittances to the state.
	<i>Management Responsibility System</i> to separate management from politics, <i>Internal Contract System</i> to build a more effective internal incentive system, (replacing the former practice of egalitarian bonuses)
1986	
1989	<i>Contract Responsibility System</i> to separate ownership from management. By the end of 1988, the CRS covered 90 per cent of SOEs.
	Enterprise Law legalised autonomy granted to enterprises in 1984 regulations.
1990	"Shareholding" and "corporatisation" formally approved for SOEs.
1992	<i>New Operating Mechanism</i> . SOEs endowed with 14 Management Autonomous Rights over their operation. Most important rights are to make investment decisions, dispose of assets, enter into joint-ventures and engage in mergers and acquisitions, and to decide on the company's organisational structure. SOEs expected to be accountable for profits and losses.
1993	
1996	<i>Modern Enterprise System</i> . 10 000 medium and large sized SOEs involved in a programme including asset valuation, granting financial autonomy and adopting a new accounting system; 1 000 enterprises delegated to state asset management firms; 100 enterprises targeted for introduction of the shareholding system; 10 cities involved in a comprehensive enterprise reform. Implementation has been progressive since 1993.

Sources: Tidrick and Chen (1987), Wong *et al.* (1993), Lee (1991), IMF (1993), IMF (1994), Broadman (1995), World Bank (1996).

Annex 3. Budget Subsidies to Loss-Making Companies

	1980	1985	1990	1993	1994
Subsidies to Loss-Making Companies	25.9	52.1	57.9	41.1	36.6
Percentage of Budget Expenditures	17.6	22.0	14.4	7.2	5.5
Percentage of GDP	5.8	6.1	3.3	1.3	0.8

Source: China Statistical Yearbook, various issues.

Annex 4. Sources of Finance by Origin and Type of Ownership

	SOEs		UCOEs		Individual	
	1985	1994	1985	1994	1986	1994
State Budget	26.4	4.9	3.7	0.4	0.0	0.0
Domestic Loans	23.0	25.6	46.1	27.4	6.3	3.3
Foreign Investment	2.8	7.1	2.3	3.8	0.0	0.0
<i>Fund-raising and others</i>	<i>47.7</i>	<i>62.4</i>	<i>47.9</i>	<i>71.4</i>	<i>93.7</i>	<i>96.7</i>
Total	100	100	100	100	100	100

Note: Fund-raising comes from three main sources: retained profits, issues of bonds and shares and non-banking financial institutions.

Source: China Statistical Yearbook, various issues.

Excess Supply of Reserve Money: An Estimate, 1986-94

Assessing monetary policy in China is difficult. This paper measures how tight or expansionary monetary policy is by estimating the excess supply of reserve money (ESRM). It defines ESRM as the difference between the actual expansion of reserve money (R) and the expansion of reserve money required by the real increase in transactions in the economy (T'). The procedure first calculates the real increase in transactions (T) using real GDP as a proxy. It then estimates how much reserve money should be created to validate the increase in real transactions. Two coefficients are computed. The first (a) is the multiplier of reserve money into M1 (the aggregate of money for transactions). The second (b) is the velocity of money — the coefficient measuring the GDP/M1 ratio. Assuming that the monetary authorities rationally anticipate changes in (a) and (b), for each period (i):

$$T'_i = T_i / (a_i \cdot b_i)$$

The results are in the following table. The first observation is that the excess supply of reserve money is large during the 1989-93 period, except for 1992 when a large portion of the increase in reserve money was absorbed by unexpectedly high real growth of the economy (13.4 per cent compared to 4 per cent and 8.2 per cent in 1990 and 1991). The need for reserve money was greater than in previous years, unexpectedly reducing the scope for soft monetary conditions in the economy. In 1993, the People's Bank of China adjusted its supply of reserve money to the high GDP growth rate. A major turnaround is visible since 1994.

Reserve Money Calculations
(in billion yuan)

	1986-88	1989	1990	1991	1992	1993	1994	1995
Growth in real transactions (T)	101	63	68	152	290	378	440	476
Reserve money coefficient (a)	1.40	1.19	1.10	1.13	1.27	1.14	1.25	1.23
GDP/M1 coefficient (b)	2.51	2.90	2.65	2.41	2.27	2.43	2.11	2.23
Reserve money to validate increase in real transactions (T')	29	18	23	56	100	137	162	171
Actual reserve money (R)	57	93	148	154	130	331	363	354
Excess reserve money (R-T')	28	75	125	98	30	194	201	183
Excess reserve money (% of GDP)	2.4	4.4	6.7	4.6	1.1	6.5	4.3	3.2

Note: Yearly average for 1986-88.

Sources: Author calculations based on IMF, *International Financial Statistics*, various issues for 1986-93 and People's Bank of China (1995) for 1994.

Annex 6. Timetable of Selected Regulatory Reforms
(date of actual enforcement and, when significantly different, *date of enactment*)

	Ex-Czechoslovakia	Hungary	Poland	China
Central Bank Act ^a	January 1990	January 1987	January 1989	1984
Central Bank Act ^b	February 1992	December 1991		March 1995 July 1995
Banking Act	February 1992	December 1991	March 1992	July 1995
Bankruptcy Law	July 1991 March 1993 April 1993	May 1990 September 1991 ^c January 1992	February 1990	December 1986 ^d 1992
Securities Act	April 1992	February 1990	March 1991	not yet ^e
Corporate Law	April 1990 November 1991 ^f January 1992	January 1989	December 1989	1992 December 1993 ^g July 1994
Accounting Law	End of 1991 January 1992	End of 1991 January 1992	End of 1991	July 1993 ^h 1997 ⁱ
Social Security Act	May 1990 ^j	January 1989 ^k	November 1990	October 1991 ^l
Unemployment Act	June 1990	March 1991	January 1990 ^m	April 1993

Notes: a. Establishment of a two-tier system. b. Law specifying Central Bank control. c. Significantly amended in September 1993. d. No actual implementation between November 1988 — date of enforcement — and 1992. e. Establishment of the China Securities Regulatory Commission. f. New Commercial Code. g. New Company Law. h. Only for the banking sector and selected SOEs. i. New accounting system to be enacted in 1996. j. Social Safety Net in February 1991. k. Significantly amended in January and April 1990. l. Old-age pension system. m. March 1992.

Sources: For the CEECs: various OECD country surveys, for China: World Bank (1993), IMF (1993, 1994), *The Banker* (1995).

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Financial Intermediation in China¹

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Background

The People's Bank of China (PBC) was established in 1948 as the currency-issuing institution, the primary financial agent of the government and the regulator of the financial system. Its branches reached down to county level in many provinces. PBC itself made project loans and performed most of the functions of a commercial bank. Three specialised banks were later formed. The Bank of China (BOC), the international exchange and remittance bank of the Kuomintang government, was designated the state foreign exchange bank in 1953. The People's Construction Bank of China (PCBC) was founded in 1954 to finance and handle budgetary allocations for large infrastructure projects. The Agricultural Bank of China (ABC) was established in 1955 to provide financial services to the rural sector, channel funds for grain procurement purchases and supervise rural credit co-operatives. Under central planning, these four banks were primarily the cashiers of the government, dispensing working and investment capital as directed by the national credit plan. The financial system was essentially an appendage of the fiscal system.

The movement towards a financial system compatible with a market economy began in 1978 with the separation of the PBC from the Ministry of Finance and its establishment as a ministerial-level organisation². In 1984, the PBC became a "normal" central bank when its commercial activities were transferred to a new state bank, the Industrial and Commercial Bank of China (ICBC), which was also designated the bank for residents and firms in urban areas. The BOC, PCBC, ABC and ICBC have been called state commercial banks. More were established as the financing needs of the economy got more complicated — China Investment Bank in 1981 and the Bank of Communications in 1986. The first privately-owned bank (Hua Sheng Bank) was set up at the end of 1995. In this paper, the term "state-owned banks" (SOBs) refers to all the state-owned banks except the PBC³.

The major decentralisation of the financial system began in 1984 when the SOBs were given greater autonomy in their loan decisions and were allowed to retain most of their profits. The decentralisation of the financial system has occurred with very little economic liberalisation. Interest rates have remained centrally controlled and many bank loans are made under government orders to “strategic” industries and unprofitable enterprises. As a result of these “policy loans”, “more than 30 per cent of state bank loans (were) bad, with no hope of repayment” in 1995⁴.

In July 1995, a law was passed to allow the SOBs to focus entirely on commercial banking. The implementation of policy laws was transferred to three new policy banks: the State Development Bank of China, the Agricultural Development Bank of China (ABC), and the Export-Import Bank of China.

The non-bank financial system up to 1979 consisted mostly of small collectively-owned rural credit co-operatives which are, in effect, grassroots units of ABC. They serve as the tributaries to channel rural savings to finance economic activities in urban areas. There is also the People’s Insurance Company of China (PICC), founded in 1949 as the monopoly insurance company. The non-bank financial system started changing in 1979 with establishment of the China International Trust and Investment Corporation (CITIC) as the investment arm of the State Council (the Chinese cabinet). Various regional trust and investment, as well as finance companies have since appeared.

The financial system is dominated by the banking system which in turn is dominated by the state banks⁵. The total values of bonds (all types) and equities at the end of 1993 were 167 billion and 23 billion yuan respectively, compared to the 3 200 billion yuan net domestic asset position of the banking system⁶. The leading position of the state banks is clearly shown by their share of total deposits and loans in 1994, after 16 years of economic reform⁷ (Table 1).

Table 1. Deposits and Loans in Chinese Financial Institutions
(billions of Yuan and per cent of total)

	Total Deposits	Total Loans
State banks	2 933.1 (72%)	3 244.1 (79%)
Other banks	82.8 (2%)	61.4 (2%)
Urban credit co-op	235.4 (6%)	132.4 (3%)
Rural credit co-op	568.1 (14%)	416.9 (10%)
Financial trust inst.	209.6 (5%)	203.2 (5%)
Finance companies	18.3 (1%)	23.2 (1%)
Total	4 047.3 (100%)	4 081.2 (100%)

Source: PBC (1995).

Modes of Financing Fixed Investment

Bank Loans

Until 1978, practically all fixed capital investment was financed by budgetary grants because SOEs had to remit all their profits and most of their depreciation funds to the government. When the SOEs were allowed to retain part of their profits in 1980, they could make small investments in certain industries without approval. Up to 1983, the cost of capital was zero but its use was controlled by the state.

It was clear to the state that if investment autonomy was given to the SOEs, there had to be a non-zero cost of capital to ensure rational use of it. In 1983, the state reduced the amount of investment grants in the budget and channeled investment funds through the SOBs, but they did not have much discretion in dispensing them. The government designated the breakdown of funds between circulating and fixed capital, their sectoral distribution, the interest rates for different types of loans depending on the industry, and the loan maturity structure. Key enterprises were also singled out for special credit allocations at preferential rates. As the SOBs became increasingly state cashiers, the state tried to encourage their intermediation function by giving them greater discretion to lend funds they raised independently, mainly through deposits. They were instructed to be financially more self-reliant and pay more attention to profitability. In 1985, they were allowed to issue financial bonds to raise funds.

Extrabudgetary Funds

The greater devolution of operating and financial decisions from the state to the SOEs has meant a surrender of financial resources (especially retained profits and depreciation funds) to the SOEs. To emphasize that the government (central and local) has yielded to firms the right to use them, these retained funds are reported as extrabudgetary revenue. (Of the Y271 billion such revenue in 1991, Y207 billion was held by the SOEs and their supervising agencies.) Accordingly, the use of these retained funds is reported as extra-budgetary expenditure.

The central and local governments have not of course completely given up their rights to the extrabudgetary revenue, especially when their budgets are tight. In 1989, SOEs contributed Y31 billion from extrabudgetary revenue to government funds for energy, industry, transportation and key construction projects, paid Y41 billion in nonbusiness fees and Y12 billion in road-use fees, and spent Y5 billion on city maintenance⁸. Government influence over an enterprise's extrabudgetary revenue depends on the region, the industry, and the personnel involved, and is variable over time. The firm usually has complete control over the bulk of the extrabudgetary revenue.

The two biggest items in extrabudgetary expenditure are investment in fixed assets and major repair, which were Y86 billion and Y28 billion respectively in 1989⁹. The rise in retained earnings has greatly changed the financing of fixed-asset investment (Table 2). Self-raised funds financed 40 per cent of SOE investment in 1985, 48 per cent in 1993 and 51 per cent in 1994.

Table 2. Sources of Fixed-asset Investment Financing in China
(per cent of total financing)

Source	1981	1985	1990	1993
State budget	28	16	9	4
Domestic loans	13	20	20	23
Foreign investment	4	4	6	7
Self-raised funds, others	55	60	65	66
(self-raised)	(n.a.)	(n.a.)	(52)	(50)
Total	100	100	100	100
Memo items				
Amount (billion yuan)	96	254	445	1 246
(SOE share, per cent)	(69)	(66)	(66)	(61)

With the decline in investment financing from the state budget and the rise in financing from self-raised funds (mainly extrabudgetary revenue), fixed-capital investment is now less under central plan directive than ever before. The national industrial policy nevertheless remains very important in determining the overall structure of production. It continues to be implemented through grants and preferential loans to “key” SOEs, as shown by Table 3.

Table 3. Destination of Funds for Fixed-Asset Investment, by Ownership Type, 1990
(per cent from each source)

	SOEs	Urban Collectives	Rural Collectives	Individuals	Total
State budget	99	1	0	0	100
Domestic loans	79	7	10	4	100
Foreign investment	96	4	0	0	100
Self-raised funds	53	4	7	36	100
Others	59	0	18	23	100

The importance of extrabudgetary financing of investment at present is well captured by the financing sources of the Y5 billion spent on capital construction in Chongqing in 1991:

- Y0.5 billion (10 per cent) was from the finance bureau —Y0.2 billion from budgetary and extra-budgetary funds and Y0.3 billion from earmarked funds;
- Y2.5 billion (50 per cent) was from bank loans — of which Y0.3 billion was from foreign banks;
- Y1 billion (20 per cent) was from retained profits; and

— Y1 billion (20 per cent) was from financial markets — of which Y0.5 billion was from long-term bonds, Y0.2 billion from short-term bonds, Y0.1 billion from bonds issued by TICs, and Y0.07 billion from equities.

The last item of Y0.07 billion raised from equities is insignificant in amount but extremely revealing of a potentially big financing source. The shares were openly sold in Chongqing to the general public even though no formal stock market had been approved.

The Stock Markets

China has two approved stock markets, one in Shanghai and a bigger and more active one in Shenzhen¹⁰. Only spot trading is allowed. There are two kinds of shares. A-shares can be held only by Chinese citizens, and B-shares only by foreigners. The trading of A-shares started in December 1990 and of B-shares in November 1991. The B-shares are denominated in Renminbi and the exchange rate used for transactions is the rate determined in the foreign exchange swap centres. Trade in A-shares has to be settled by the next business day and trade in B-shares within three business days.

In July 1992, there were 18 companies listed on the Shenzhen stock exchange and eight of them also issued B-shares¹¹. The total issued capital was Y1.6 billion for A-shares, Y0.4 billion for B-shares and Y0.3 billion for bonds. The total market capitalisation was Y44.6 billion for A-shares, Y5.4 billion for B-shares, and Y0.3 billion for bonds. The daily average value traded was Y0.3 billion. In September 1992, the price-earnings (P/E) ratio was 86 for A-shares and 37 for B-shares, producing an average price-earnings ratio of 70.

Financial history was made in August 1992 when a public demonstration in Shenzhen demanded that more shares be sold to the general public. The background was that 40 companies were waiting for approval to float shares on the Shenzhen stock market, and the government announced that domestic agents could buy application forms to purchase Y1 billion of new equities to be issued by the soon-to-be-listed companies. Villages all over China sent representatives to purchase these application forms. On the appointed day, it quickly became apparent that a large number of application forms had already been distributed to government employees and their families. Needless to say, there were many disappointed people. That evening, the frustrated applicants gathered in front of Shenzhen city hall to demand that the government sell more shares to the general public, and force had to be used to disperse this group of self-professed privatisers¹².

Enterprises not in one of these two cities or not approved to list their shares can apply for permission to sell a minority portion of them to their workers. Workers who leave these companies will have to sell their shares to the other workers. There are 99 companies in Shenzhen with such internal stock markets, and they are allowed to sell up to 30 per cent of their shares to workers. In practice, workers have been known to

sell their shares to outsiders. Active informal stock exchanges are reported to exist in large cities like Shenyang, Chengdu and Chongqing. In 1991, several SOEs in Chongqing raised Y72 million from open sales of equities to the general public.

Bonds

Formal bond markets started in the coastal cities of Beijing, Guangzhou, Harbin, Shanghai and Shenyang in 1986. Over 70 cities now have bond markets. The Securities Trading Automated Quotation System (STAQS) links 40 domestic securities companies and trust and investment companies (TICs) in different provinces to provide a national trading network. STAQS also performs clearance and payments functions. A bureau of the PBC, the State Administration of Exchange Control, regulates issue of international bonds by Chinese enterprises. The bond market is dominated by government bonds. The value of outstanding bonds at the end of 1991 was Y58.4 billion. They comprise: state bonds (Y53.2 billion), financial institution bonds (Y1.5 billion), enterprise bonds (Y3.6 billion) and certificates of deposit (Y0.2 billion).

Other Sources of Investment Financing

In times of tight credit, non-SOEs have more problems getting bank loans. In 1989, ceilings were imposed on loans to rural collectives (township, village and production team enterprises, TVEs) and working capital credit from banks to private enterprises was severely curtailed. (Banks gave virtually no fixed-capital credit to private enterprises before then). The result was that the number of private enterprises dropped from 225 000 in mid-1988 to 98 000 in early 1991.

Private and small collective enterprises have in fact always found it hard to get credit. A 1992 field investigation reported that a fast-growing private electronics company¹³ paid interest of 2.5 per cent a month on its working capital; its start-up capital had come from the savings of the partners and informal loans from friends. This reliance of small non-SOEs on self-financing is well captured in Table 4's aggregate data on fixed-asset investment financing.

Table 4. Sources of Investment Financing by Ownership Type in 1990
(per cent of each unit's total)

	SOEs	Urban Collectives	Rural Collectives	Individuals
State budget	13	1	0	0
Domestic loans	24	35	24	4
Foreign investment	9	8	0	0
Self-raised funds	42	56	47	83
Others	12	0	29	13
Total	100	100	100	100

Given the heavy reliance by rural collectives and individual enterprises on informal investment financing, a new financial instrument called the employee bond (“jizi”) has emerged as a significant source of funds. An employee bond is purchased by the new employee when he or she joins the enterprise and it carries interest at least equal to that of a time deposit with the same maturity. One firm¹⁴ raised Y3 million from “jizi” to acquire its Y14 million of fixed assets, while another¹⁵ raised Y1.5 million towards its fixed-asset investment of Y8 million. Many non-SOEs also issue a hybrid equity-bond instrument which, as well as paying a fixed base rate, also pays a bonus rate — the size of which depends on the firm’s profitability¹⁶.

In many cases, especially for collectives, tax exemption provides an important source of investment financing. Since many counties, towns and villages are on tax contracts with their upper levels that specify a fixed amount, they typically start exempting once their tax quotas are reached, provided that the extra retained funds are invested. One big company¹⁷ received tax concessions of Y3.5 million a year to allow it to accumulate funds to double its output.

The resort to grey-market activities is not limited to non-SOEs. Many SOEs have reportedly relented their bank loans to non-SOEs at three (or more) times the official bank rate. In 1993, it emerged that of \$200 million that Tsingtao Beer had raised in foreign capital markets to expand capacity, at least \$71 million had been lent to other Chinese companies at very high interest rates.

The Government Bond Market

An array of bonds directly backed by the central government is available. The Ministry of Finance has issued six types: treasury, fiscal, state construction, key construction, special state bonds and index bonds¹⁸. The State Planning Commission issues the capital construction bonds. The key enterprises in the electrical, metallurgical, nonferrous and petrochemical industries issue key enterprise bonds, which are guaranteed by the supervising ministries.

When the economic reforms began in 1979, there was no government debt outstanding. The last issue of treasury bonds from 1958 had all been retired by 1974. The first government borrowings in the reform era were from abroad, Y3.5 billion in 1979 and Y4.3 billion in 1980. The first issue of treasury bonds was in 1981 for Y4.9 billion. (The government also borrowed Y7.3 billion from abroad that year, but at the same time it retired Y6.3 billion of its external debt.)

The 1981 treasury bonds were distributed in the same way as in the 1950s. Each city was allocated a portion, which it re-allocated in turn to the work units, specifying the breakdown between enterprise and individual holdings. The city would then instruct the banks of the work units to transfer the funds from the work units’ accounts. A

work unit would usually divide its individual holding quota into two parts: mandatory purchases (which were deducted from the workers' wages) and voluntary purchases (enforced by moral suasion if necessary).

The 1981 issue had a 10-year maturity and carried a simple (uncompounded) annual interest of 4 per cent, with all interest payments made at maturity¹⁹. As the banks were offering 6.8 per cent for five-year deposits by households, acquisition of these treasury bonds was clearly involuntary.

Beginning with treasury bonds issued in 1982, the state paid slightly higher interest than on time deposits of equal duration for individual purchases (e.g. 8 per cent and 7.9 per cent respectively in 1982). For enterprise purchases, the interest paid continued to be lower than the equivalent time deposit rate from enterprise deposits²⁰. From 1982 to 1988, the gap between the bond rate paid to households and the rate paid to enterprises was 4 percentage points. From 1981 to 1984, about Y4 billion worth of treasury bonds were issued each year with a 50-50 split between households and enterprises. From 1985 to 1987, about Y6 billion was issued annually with two-thirds going to the household sector.

1988 was a threshold year for bond issues. Both fiscal and monetary policies were extremely expansionary. The expansionary fiscal policy resulted in a treasury bond issue of Y9.2 billion²¹, a state construction bond issue of Y3 billion and a key enterprise bond issue of Y1 billion. The supply of bonds further swelled when the Ministry of Finance sought to reduce the money supply and stabilise the economy by forcing the financial institutions to buy Y8 billion of capital construction bonds and Y6.6 billion of fiscal bonds.

The practice of setting purchasing quotas for government bonds was unpopular from the start. Workers saw these "forced savings" as taxes and resisted buying the treasury bonds. This unpopularity is the reason the government raised the interest rate on individual purchases in 1982. To increase the attractiveness of these bonds, the government in 1988 shortened their maturity from five to three years (without changing the interest of 10 per cent) and allowed the creation of secondary markets for government bonds held by individuals.

Since the interest rate was below 10 per cent before 1986, holders of bonds issued in the 1983-85 period would have suffered a capital loss if they sold these bonds in the secondary market. The central government instructed local governments and banks to intervene in the secondary market to preserve the face value of the bonds and established a Y0.3 billion fund to finance the intervention. The result was predictable. With a massive rush to cash in the old bonds, local governments and banks spent at least Y1 billion in the intervention, three times than more expected.

This Y1 billion loss by the government has been rationalised as having increased public faith in the safety of government bonds, which in turn explained why the record government bond issue in 1988 was completed without a big increase in the interest rate. One should be skeptical of this alleged benefit. The enterprises and their workers really had no choice over the purchases; the relevant amounts were simply transferred

from the bank accounts of the enterprises. Whatever part of the voluntary portion workers did not buy became part of the enterprise holding by default. Furthermore, the administratively-set interest rates always responded with a lag.

The key question is what portion of the funds obtained from the early redemption of pre-1988 bonds actually went back to purchase new 1988 bonds. As the inflation rate of 19 per cent in 1988 greatly exceeded the coupon rate of 10 per cent, it is unlikely that agents voluntarily switched from money to these bonds. In the atmosphere of high inflation, bank runs and panic buying sprees in July and August 1988, they more likely switched mostly from money to tangible goods — accentuating the ongoing inflation. This analysis is supported by the wholesale redemption of government bonds in the secondary market at face value in 1989 when it was clear the big price increases in 1988 were not a once-off affair. Local governments and banks suffered heavy capital losses from the interventions they were ordered to make because no central funds were allocated to them. At the enterprise level, the diversion of funds to buy new government bond issues (with a coupon rate of 6 per cent in 1988 compared to the average 7.6 per cent for three-year deposits) caused severe losses. There was greater unwillingness than ever to take any more government paper.

The state responded to this debt management crisis in 1989 by raising the coupon rates of treasury bonds targeted at households from 10 per cent to 14 per cent; it replaced treasury bonds targeted at enterprises with fiscal bonds which paid 15 per cent; and it issued two bonds (index and capital construction bonds) with floating rates that fully compensated for changes in the cost of living. In September 1988, the government had sought to halt the runs on the banks by raising interest rates on household deposits; resetting the rates on enterprise deposits to equal the new household deposit rates; and indexing the interest rates on (existing and new) time deposits with maturities of three years or more to the inflation rate.

The mandatory method of bond placement and the face-value stabilization intervention undermined the purpose behind the 1981 shift from 100 per cent money-financing of the deficit. The 1981 shift toward partial bond-financing came about because of the desire to reduce inflation by making fiscal policy independent of monetary policy. With bond-financing, an increase in government expenditure that widened the budget deficit would not cause a corresponding increase in the (reserve) money supply. The mandatory method of bond placement, however, strengthened enterprises' requests for bank loans. They claimed that involuntary withdrawals of their working capital to purchase bonds were causing them cash-flow problems. So the banking system monetised most of the deficit with the enterprises acting as intermediaries. The face-value stabilisation interventions also resulted in a net increase in the high-power money supply because local governments covered their losses with loans from local banks, which in turn received more central bank deposits.

Economic Consequences

The distorted financial system had three main consequences:

- an inflationary bias that comes from the incentives to the SOBs to expand credit;
- an anti-inflationary bias that comes from increasing the demand for money; and
- the misallocation of capital

Bias towards Increasing the Money Supply

There are three institutional flaws that produce an inflationary bias. The first is the problematic set-up of the central bank. The Council that sets monetary policy has representatives from almost every ministry and economic agency. This wide range of departmental interests makes it difficult to reach consensus on monetary policy except when macro-economic instability is very severe. The upshot is a monetary policy that is reactive rather than anticipatory, constantly lagging behind events.

The second major institutional flaw is that regional branches of the central bank and the SOBs are under “dual leadership.” A branch is supervised by both its head office and the local government. Because the local government also provides a host of amenities to all civil servants, the staff of a branch can be very dependent on the local government for housing and medical attention. The head of the branch is also normally a local resident appointed by the local government. So the branch is under great pressure to respect the wishes of the local government.

Although the credit quotas set by the central financial authority were pretty much left intact by the 1978-89 reforms, the local banks after 1984 faced greater incentives and pressures to expand credit beyond their quotas. The incentives arose because personal incomes at the local banks became dependent on the volume of their lending and the overall prosperity of the local economy. The pressures came from local governments which are often co-investors in the local SOEs and also oversee management of the local SOBs.

This confluence of self-interest and external pressures has resulted in many SOBs not only ignoring the credit quotas when they had excess reserves but also resorting to ingenious ways to “squeeze” more reserves from the central bank. A common method was to lend local enterprises the funds designated for projects in the central plan. When a centrally-directed project began to draw on its centrally-allocated credits, the local bank would present the central bank with the dilemma of supporting or stopping the fulfillment of the central plan. The usual central bank response was to provide more credit to enable completion of the central plan projects. The latest example of such diversion of targeted funds that forced the central bank to increase credit is the funds for procurement of grain by the state²².

In summer 1993, the PBC tried to reduce local influence on its branches by making key personnel appointments from the centre, but the situation does not seem much improved after two years. The Deputy Governor of the PBC revealed in a 1995 speech that “the situation of local governments forcing banks to expand credit or investment through public financing cannot be controlled easily.”²³

The third major institutional flaw is the system of administratively-set interest rates at which the central bank is obliged to supply funds. With interest rates usually set at low levels, the central bank constantly found itself under great pressure to meet credit demands that exceeded the credit target. This clearly occurred in 1982 when the government moved investment financing from the budget to the specialised banks, and set interest rates for (long-term) investment loans *below* those for (short-term) working capital loans. Then when the rates for ordinary investment loans were finally set above those for working capital in August 1985, preferential investment loans carrying rates below those of working capital were introduced the following year.

Bias towards Increasing the Demand for Money

An earlier article (Liang-Yn Liu and Wing Thye Woo, 1995) pointed out that the private savings rate would increase with the following amendments to the standard Ando Modigliani life-style model:

- the rate of return on physical investment is very high compared to the controlled bank deposit rate;
- the regulated financial system does not provide investment credit to small private enterprises;
- there is a threshold, lumpy amount of investment that needs to be made before production can begin; and
- there are binding quantitative restrictions on foreign capital inflow.

In such a *fragmented financial market setting*, the savings rate increases in order for the private agent to be able to reap the high rate of return on physical investments. Such modifications to the life-cycle model reflect the Chinese situation, with the added feature that continued economic liberalisation is steadily raising the rate of return on physical investments. This may explain why the household savings rate in China (23 per cent) is higher than in Japan (21 per cent), Chinese Taipei (18 per cent), West Germany (13 per cent) and the United States (8 per cent)²⁴.

In China, money is the only form of outside asset available to the aspiring entrepreneur, and his demand for it increases as economic liberalisation proceeds. The result of this increase in money demand is a reduction in inflationary pressure. The ratio of M2 to GDP has been rising steadily, from 37.5 per cent in 1979 to 60.8 per cent in 1985, 86.5 per cent in 1990 and 107.2 per cent in 1994.

There is an interesting implication of this anti-inflation feature of the fragmented financial system. At present, the savings of the private sector are being channeled by the banking system to help cover the losses of the SOE sector. If the SOEs are successfully reformed to eradicate their dis-saving, and the financial system remains fragmented, then China could become a persistent current account surplus country like its East Asian neighbours, Chinese Taipei and Japan. This prediction follows because the current account position is the difference between the domestic saving and domestic investment rates.

The Misallocation of Capital

The present financial system actively discriminates against the non-state sector and the agricultural sector. All empirical evidence shows that total factor productivity growth in non-state enterprises is much higher than in SOEs²⁵. There is also evidence to suggest that a not insignificant amount of SOE output is pure waste, production that has no market value. Inventory investment for China averaged 7 per cent of GDP annually in the 1984-93 period compared to less than 2 per cent in Malaysia, Thailand, Japan, France, West Germany and the United States. The only instance of comparable inventory investment (5 per cent) was in Hungary, Poland and Rumania during 1980-88.

Given the soft-budget constraint the SOBs operate under, they have shown a proclivity towards high-risk lending. According to Wu Xiaoling of the PBC, banks have diverted a significant portion of their lending away from fixed capital investment towards stock market and real estate speculation — contributing to asset price bubbles (Wu Xiaoling, 1994).

The absence of an interest rate mechanism means that allocations of capital to SOEs take the form of across-the-board availability (or scarcity) without reference to individual productivity. SOEs generally display a “hunger for investment” that is insensitive to the interest rate, because experience has taught them that investment is a no-lose activity: profits can be privatised through creative bookkeeping and losses socialised through the soft budget constraint.

Issues in Reforming the Financial System

The banking system remains very much a fiscal agent of the state. Through their almost automatic financing of budget deficits, the monetary authorities act as a tax collector for the state — collecting the inflation tax. This fiscal role of the banking system is not appropriate for a market economy — the banking system’s primary role should be the intermediation of funds in a market-determined fashion. Instead of the central bank levying an inflation tax, it should be ensuring the price stability required for the working of a market economy.

It is highly unlikely that channeling almost all policy loans through the three new policy banks would improve the macro-economic stability of the system unless the total volume of policy loans is to be held to a strict target. It is also unlikely that these policy banks would be more capable than the other banks in identifying “winners”; the international experience with industrial targeting has been mostly negative. The existence of the new policy banks has not improved the portfolios of the other SOBs because the funds of the policy banks have come mostly from other SOBs ordered to make deposits there.

Interest rate controls, like price controls, are anathema to a market economy. Freeing interest rates will not only ensure that funds go to projects with the highest rates of return, it will also give the monetary authorities a timely indicator of the level of aggregate demand. An interest rate rise for a given amount of reserves in the banking system can be a signal that the economy is overheating. No such information can be extracted in a regulated interest rate environment because there is always an excess demand for bank loans (even during cyclical downturns). Freeing of interest rates will also enhance control of monetary aggregates. It resolves the conflict between the two goals of interest rate and credit targets that has resulted in occasional big increases in the money supply.

The SOBs must be restructured. Proper accounting would show many in poor financial health. Given that half the SOEs in Shenyang and Chongqing are running losses, for example, the portfolios of local SOB branches likely are saddled with many non-performing loans. The central bank governor revealed in 1995 that the four largest SOBs (ICBC, BOC, ABC and PCBC) had non-performing loans amounting to 20 per cent of their loan portfolio:

- 2 per cent were “bad loans”;
- 7 per cent were “problem loans” in that interest payments were current but the principal repayments were at least three years overdue; and
- 11 per cent were loans whose repayments were at least a year overdue²⁶.

This realisation of the weak balance sheets of the SOBs led Moody to downgrade the rating of these four banks and CITIC to Baa1 from A3, and the rating of the Guangdong International Trust and Investment Corporation to Baa2 from A3²⁷. In Moody’s assessment of banks’ independent financial strength on a scale of A to E, BOC received a D, and ICBC, ABC and PCBC received an E-plus. The government will have to recapitalise some of the SOBs before they can compete in the market as independent financial entities. Without such prior recapitalisation, the SOBs with the most *inherited* non-performing loans will fail, threatening not only the integrity of the financial system but also wrongly identifying “blind competition” as the cause for their collapse.

Besides financial restructuring, the government must restructure the lines of corporate responsibility in the SOBs. There should be a board of external directors that the management team reports to, and an external auditing body that reports to the

board. The compensation scheme of the directors and management team must be closely linked to the bank's profit performance. The privatisation of the SOBs may be the best way to ensure that the banks take the hard budget constraint seriously. This will also remove the ability of local governments to engineer increases in credit.

The banks' intermediation of funds should be supplemented by other forms of intermediation — nationally integrated networks of commercial paper markets, bond markets and stock markets. Development of such financial markets should be a high priority because it will not only improve allocation of capital but also give the central bank the ability to conduct open-market operations to better control the money supply. As a first step, the government should quickly deepen the secondary markets for government paper and integrate them into a national market so it can conduct open-market operations.

Notes and References

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2. For an overall discussion of Chinese economic performance, see Sachs and Woo (1995).
3. For details on the evolution of the Chinese financial system, see Gang Y. (1994) and *Almanac of China's Finance and Banking: 1990*. For a short overview, see Richard Pomfret (forthcoming).
4. "Chinese banking: the banks that can't go bust," *The Economist*, 9 September 1995.
5. The term "state banks" here does not correspond to the term SOB, but refers to PBC, BOC, ABC, PCBC, ICBC, the three policy banks, Bank of Communications and CITIC Industrial Bank. This usage is from People's Bank of China (1995). So "state banks" here is a subset of the term "SOBs".
6. Data from Tables 14 and 31 of statistical appendix to IMF (1995).
7. Figures are from People's Bank of China (1995), pp. 93-94.
8. Data from *China Statistical Yearbook 1992* (Chinese edition), Table 6-15, p. 229.
9. The total extra-budgetary expenditure was Y250 billion. The third biggest item was Y21 billion on worker's welfare.
10. Two recent discussions of the development of China's equity markets are A. Chen (1994) and C. Yuanzheng and X. Gang (1994).
11. A company must satisfy the following requirements before it can be considered for listing on the Shenzhen exchange: *a*) the number of shareholders must exceed 1 000; *b*) its main products must not contravene the goals of Shenzhen's industrial policy; and *c*) its tangible net assets must be greater than 25 per cent of total net assets.
12. See "Irrational rationing: Chaotic Shenzhen share issue reveals basic flaws," *Far Eastern Economic Review* (1992) and "Public officials punished over Shenzhen riots," *China Daily* (1992).
13. Bao An county factory, 28 September 1992, Case A27.

14. A Chongqing factory, 8 October 1992, Case A39.
15. A Chengdu factory, 4 October 1992, Case A34.
16. For a survey of informal financial instruments, see On Kit Tam (1991).
17. A Chengdu factory, 5 October 1992, Case A35.
18. The terminology is from the 1991 *Annual Report* of the People's Bank of China. In the *Almanac of China's Finance and Banking 1991*, the Treasury Bond term used here is termed "Treasury Bill", the Fiscal Bond is termed "Treasury Bond", and the Index Bond is termed "Inflation-Free Bond".
19. This equals a compound interest rate of 3.7 per cent. The Chinese began redeeming 20 per cent of the bonds every year from 1986.
20. Enterprise deposit rates, until September 1988, were kept about 1.8 percentage points below household deposit rates of the same maturity.
21. Y2.2 billion worth of treasury bonds were retired that year.
22. Independent empirical evidence of such locally-initiated monetary expansion is given in Fan Gang (1995), and Yasheng Huang (1996).
23. Chen Y., "China's Monetary Policy," delivered at the International Conference on China in the World Economy: Growth and Inflation, 10 May 1995.
24. Data from Table 4.9 in World Bank (1990).
25. See, for example, H. Yiping and X. Meng (1995) and W.T. Woo, W. Hai, Y. Jin and F. Gang (1994).
26. "Chinese banks suffer 20 per cent bad loans," *Financial Times*, (1995).
27. "Moody's rating cut deals blow to CITIC," *South China Morning Post Weekly* (1995).

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Financial Structure of Firms in the CEECs

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Introduction

In a world with perfect capital markets, a firm's financial structure is irrelevant for investments because external funds are a perfect substitute for internal capital. According to recent theories on optimal capital structure, however, external financing is not always guaranteed or may come at different costs, depending on the method used (debt vs. equity, long-term vs. short-term debt, etc.). Under such circumstances, firms' investment and financing decisions are interdependent.

Encouraging investment and restructuring in economies in transition cannot be separated from the issue of what is an appropriate financial system. In these countries, problems of asymmetric information and moral hazard (the basis of the imperfections of capital markets) are very strong. So it is very important to see if the financial intermediation sector is working towards allowing firms to reach their optimal capital structure despite incomplete information.

The availability of funds affects investment choices in transition. Among empirical studies of this in Western economies, Fazzari, Hubbard and Petersen (1988) look at the choice between internal and external financing in the United States (without distinguishing between different types of external financing). They show that the investment of firms that exhaust all their internal finance is more sensitive to fluctuations in cash flow than that of mature, high-dividend firms. They also show that financial effects on investment are greater when capital market information problems are most severe.

On the choice between sources of external financing, Hoshi, Kashyap and Scharfstein (1990) find that firms in Japan with close ties to their banks are less likely to be liquidity-constrained in their investments than firms which do not have such ties. Petersen and Rajan (1994) study small firms in the United States and show the effect of the strength of firm-creditor relationships on both availability and price of credit.

This suggests the importance of a relationship with a bank in a firm's behaviour. Banks monitor and help reduce asymmetries of information. Absence of an efficient intermediary sector can leave firms credit-constrained and without proper incentives. This is crucial for Central and Eastern European countries (CEECs). Corbett and Jenkinson (1994) and Rajan and Zingales (1995) document cross-country differences and consider whether institutional characteristics cause different financing patterns.

Studying such issues in transitional economies has obvious problems. Data are limited and theories on optimal capital structure must take account of the many peculiarities of these economies. This paper formulates a theory about what a firm's optimal capital structure should be in these economies and what types of financing should therefore be encouraged. It stresses the problems due to asymmetric information and moral hazard that are particularly strong and urgent. It then looks at the actual amount of indebtedness of CEEC firms, comparing it with Western companies, and tries to draw some lessons.

The Theory

What should determine optimal capital structure in Western firms? First, tax considerations should induce firms to increase their debt exposure, so as to benefit from the tax shield. Second, bankruptcy increases the cost of having a large debt exposure, so should limit the optimal amount of debt held. The total tax over GDP ratio in the CEECs is 40-50 per cent, and the profit tax over GDP ratio in these countries is high by Western standards. So the tax shield should have a role too in these countries in determining optimal capital structure.

Bankruptcy costs in the CEECs are quite low. Bankruptcy courts are not very efficient, which makes it very hard for creditors to pursue debtors. The government is also likely to rescue politically-sensitive firms if they get into serious trouble. Tax shield and bankruptcy cost considerations should then affect the optimal capital structure so more profitable firms will want to have more debt. In fact, the more profitable a firm is, the more it will try to shield its profits from taxes, especially by issuing debt. Also, the more profitable a firm is, the less likely it is to end up bankrupt, so bankruptcy costs, in expected terms, are quite low. *Ceteris paribus*, the demand for debt should be positively correlated with profitability. This implies that, with the tax shield quite high and bankruptcy costs low in the CEECs, firms there are more indebted than in OECD countries.

A third issue is very important for CEECs: informational asymmetries between borrowers and lenders, which introduce incentive problems into financial relationships. This has two effects: first, financial contracts become more complex and the optimal capital structure has to take that into account; second, it is not always possible for firms to attain optimal capital structure.

Stiglitz and Weiss (1981) have shown that in the presence of adverse selection, equilibrium may take the form of “credit rationing”. Simplifying, borrowers have projects with different degrees of risk, but the riskiness is unobservable. So lenders cannot distinguish between good and bad borrowers and cannot price discriminate (i.e. vary interest rates) in a loan contract. They will raise interest rates, but this can be self-defeating, since relatively good borrowers will find the loan offer unattractive and drop out of the market. Lenders are left only with the weakest borrowers, which will increase the probability of default and perhaps decrease lenders’ expected profits. In equilibrium, lenders may set an interest rate that leaves an excess demand for loans. Some borrowers receive loans, while other observationally-equivalent borrowers are rationed.

Asymmetry of information also helps explain why firms often rely on retained earnings for investments. In a world of incomplete information, a new equity issue may signal bad news to investors, suggesting the firm does not have enough retained earnings to rely on internal financing. In OECD countries, the price of outstanding shares usually drops when a firm announces a new equity issue. Announcement of an increase in debt has a similar, though less strong effect (the share price falls). This perhaps explains why managers will first use internal financing, turn to debt if this is not possible, and use equity issue only as a last resort. In the CEECs, the same problem may arise.

In addition to the adverse selection problem as explained so far, managers’ access to private information about the firm’s opportunities and costs creates the problem of monitoring and controlling them. The asymmetry of information arises not only because borrowers have different degrees of risk *ex ante*, but also because after entering the loan contract they can follow different types of behaviour, which imply different risks. The more sophisticated the bank, the better it can monitor managers’ choices and understand their implications.

Particular forms of contracting mechanisms and monitoring arrangements are chosen to minimise the added cost of finance under asymmetric information. For example, at high profits or high collateralisable net worth, incentive problems are mitigated and the cost of funds is low, expanding economic activity. More profitable firms or those with collateral to offer (for example fixed assets) should more easily find a lender and are less likely to be credit-constrained. The study of the supply side of debt suggests that supply of credit will be positively correlated with profitability and the availability of collateral.

As Diamond (1991) points out, one important role of banks is to monitor borrowers, so reducing the asymmetry of information. He compares borrowing from a bank, which monitors to alleviate moral hazard, to borrowing directly — issuing publicly traded bonds or commercial paper — which does not involve any monitoring. The decision between the two sources of borrowing will depend also on how strong the asymmetry of information is. New borrowers, with no credit record, will borrow from a bank; later, with a credit record acquired while being monitored by a bank,

they may issue debt directly. One important role of banks is using their ability to monitor to provide loans to firms which, because of the moral hazard problem, would not otherwise be able to obtain credit.

This is particularly important for firms in the CEECs, which have no credit history and usually no past performance to show. The issue is not so much what source of borrowing to use (bonds, although growing very fast, are still a very small percentage of corporate debt) but whether they are excessively penalised by incomplete information and thus cannot get not just cheap funding but any funding at all.

It is important to know whether firms are credit-constrained, since this affects their investment decisions. The investment of constrained firms is restricted by past shocks, since they cannot obtain funds beyond their current resources. Financial intermediaries should help overcome this friction by exploiting scale economies in the evaluation and monitoring of borrowers — so facilitating the flow of funds between savers and certain kind of investors. The terms on which intermediary credit is available are key determinants of investment by firms without easy access to direct credit.

Monitoring therefore is one important aspect of financial intermediation in these countries (as stressed by Baer and Gray, 1995). The problem, however, is that banks are asked to play a double role. They are an important source of funds in transitional economies and practically the only alternative to internal financing, given the limited possibilities from the securities markets². Banks are also increasingly asked to discipline the performance of firms. This is a key role in the effort to move away from the previous system, where banks simply provided funds, with no heed to the profitability of the borrowing firms.

Such discipline entails different behaviour, however, depending on whether firms are very bad and overloaded with bad debts, or have potential but cannot show it because of the asymmetry of information. In the first case, monitoring involves replacing the soft budget constraint with proper incentives to perform, avoiding injection of new money on top of old money, trying to collect on the bad debt by collecting on the collateral, filing for the liquidation of the firm, or working out the debt, for example by renegotiating it. In the second case, it means reducing the information problem and helping firms which would be particularly penalised by that. The bank's expertise should especially help align managers' incentives with those of shareholders, guaranteeing at least that behaviour after the loan has been obtained will be towards maximisation of profits.

The problem is that these two functions can conflict. Lending to firms for investment requires banks to give them time to accumulate enough capital to become solvent or to have a credit history. Monitoring, however, requires a hard budget constraint, with no automatic rollover of outstanding debt; and renegotiating the debt can also be bad, because the banks need to create a reputation in the eyes of other borrowers.

This problem does not usually arise in Western financial markets, since enterprises start from a different situation, where asymmetry of information is less strong, at least for some firms which can show their past performance. In the CEECs, the financial intermediation sector is much less sophisticated and has less experience. Its monitoring task is much more difficult: not only do firms not have a past record, but banks can hardly rely on short-term performance which, in the transition, will often not be correlated with long-term performance.

Finally, in the West, a monitoring role has also been assumed by other institutions (stock market, pension funds, investment funds, etc.) which have only just been created in Eastern Europe. Stock exchanges exist in only a few countries, and even there activity is still very small (Nivet, 1995; Bouin, 1995). The highest estimate of the proportion of investment finance coming through the stock exchange is 10 per cent in Poland (cited by Grosfeld and Roland, 1995). So with the possible exception of investment privatisation funds in the Czech Republic, there are no large shareholders to monitor the managers, and banks are the only resort. The transition economies thus differ greatly from the “emerging market” economies studied by Singh (1995), who finds internal finance dominated by external finance, and within the latter, new equity much more important than debt. It appears that government policies have favoured equity finance in these countries.

A different view of financial intermediation in the transition is offered by Ronald McKinnon (1991), who argues for limiting the role of banks. He has explicitly applied his view to China, with implicit comparison to Eastern Europe’s experience (McKinnon, 1993). McKinnon stresses that:

- The preferred reform strategy should be gradualism with an explicit sequencing, rather than “big bang”. In that sequence, there should be an explicit distinction between “liberalised” and “unliberalised” or “traditional” firms. They should operate under quite different rules, which would change as the sequence went from stage to stage.
- In the first stage, there should be no bank lending whatever to firms of either kind; investment should be financed by a combination of retained earnings and a form of “primitive capital accumulation”.

McKinnon is particularly concerned with the disastrous macroeconomic consequences of partial decentralisation without effective fiscal and monetary controls, and is very wary of the potentially destabilising role of bank lending to firms that do not face effective budget constraints. Yet it has proved feasible to harden the budget constraint, at least in Central Europe, even before privatisation (e.g. Pinto *et al.* 1993). McKinnon also ignores the monitoring role of financial markets and financial intermediaries, especially banks, and does not take into account the effect of financing decisions on the type of investments chosen.

We suggest that McKinnon's proposals to delay modernising the banking system and to prohibit bank lending to firms in the early stages of transition are unnecessarily extreme responses to the problems posed by the overhang of enterprise bad debt and the correspondingly weak capital base of the banking system. These problems must be attacked directly and urgently, as suggested by Begg and Portes (1993), and they should be at the top of the sequence.

Thereafter, the foregoing analysis of appropriate capital structure comes into play. McKinnon's proposal that the "second stage" should limit bank lending to what can be justified under an appropriate version of the real bills doctrine is highly questionable, since that was precisely the rule of crediting applied under the classic central planning system (Portes, 1983), and bad habits will doubtless persist. Theoretical considerations argue persuasively for a much more active role of banks in the transition. They, rather than McKinnon's fears of loss of macroeconomic control (which should be met by other policy instruments) should guide policy towards capital structure.

The Situation in Eastern Europe

Before considering which kind of financing banks should use (long-term vs. short-term debt), we should ask whether banks in Eastern Europe are performing their role adequately. Much attention has been given to the primary role of the banks: to get rid of the bad debts and provide payment discipline. At first, this was perhaps the biggest single obstacle to restructuring (Begg and Portes, 1993). Some progress has now been made in the more advanced countries (for a useful survey, see Anderson, Berglof and Mizsei, 1996). Banks there seem to have achieved these goals more satisfactorily than expected. The entire banking system, however, remains very underdeveloped. This suggests the sector is not strong enough to perform the second task. A key question, then, is whether the financial sector provides enough funds to private firms and monitors them (beyond the relatively simple task of getting rid of the lower tail of firms). Answering it, in a simple economy like those of the CEECs, is the same as judging if firms can achieve an optimal capital structure.

Two sorts of data illuminate a look at this: first, aggregate data for the non-financial corporate sector collected by various national statistical offices, and then comprehensive firm-level data for the non-financial corporate sector for Hungary and Poland which come from the World Bank Research Project on Enterprise Behaviour and Economic Reform. These data also derive from statistical office figures.

The first observation initially seems quite surprising: the enterprise sectors in the leading CEECs have relatively low, not high, amounts of debt. The debt over total asset ratio for non-financial firms in Hungary at the end of 1992 was 32 per cent. In Poland at the end of 1992 it was about 41 per cent and in the Czech Republic at the end of 1994 it was 44 per cent. This ratio will be much higher for the least profitable firms, overloaded with bad debts, at least some of which were inherited. Bonin and Schaffer (1995) show that for the least profitable Hungarian firms accounting for 10 per

cent of total enterprise sector employment, the debt-asset ratio ranges from 45 per cent to 61 per cent, depending on the proxy for profitability. Thus if we ignore this tail of the distribution and focus on the remainder, indebtedness would be lower still. The analogous ratio for Western countries is much higher than in these three countries; for example, Rajan and Zingales (1995) report that the debt-asset ratio for non-financial firms in G7 countries is 66 per cent.

Such numbers are obtained using the book value of debt and equity, since market values are not available. The market value of the debt will surely be less, however, which would make the indebtedness of CEEC firms even lower. As for total assets, most receivables and inventories are fairly new, so their book values are not very different from the market value. The book value of fixed assets, however, has two biases relative to market value. A downward bias is due to inflation, since fixed assets are accounted at historical cost. An upward bias arises because many of them date from the socialist period and their book value is recorded at the prices prevailing then. The big changes in demand with the move to a market economy mean that a large part of these assets is related to demand which has diminished or disappeared. This second bias, however, is not big enough to change the picture of low indebtedness. In the Hungarian data, for example, fixed assets are 50 per cent of total assets. On the extreme assumption that their market value was zero, the debt-asset ratio of the Hungarian enterprise sector would be 60 per cent, still lower than the Western average. The upward bias in fixed assets would have to be implausibly large to wipe out our result of low indebtedness.

The result is surprising since the general view of firms in CEECs was that they were overloaded with debt. What happened was that the lower part of the distribution of the firms — loss-making firms which actually are overloaded with debt — attracted most of the attention. In fact, on average, firms are “underloaded” with debt. Inflation before and during the transition would have contributed to this low indebtedness in Poland, but less so in the Czech Republic (where credit stocks were rebuilt following price liberalisation) and Hungary (where moderate inflation has been accompanied by, if anything, high real interest rates). The main factor is probably that debt was used less often than in Western countries to finance investment. Fixed investment was more often financed from the government budget, *i.e.* through equity, without passing through the banking system. Firms in these countries inherited a capital structure where the debt is much lower than would be optimal in a market economy.

It is natural to ask whether the continuing low indebtedness of firms is because some or most of them (the average to good ones) are actually experiencing a credit squeeze. Are market forces and the capacities of the financial sector enough to allow such firms to adjust their capital structure? Is the low leverage only a transitory characteristic due to historical circumstances or is it a persistent feature of the functioning of the financial sector that should worry us?

The two main sources of funds are retained earnings and bank debt. Whether firms with limited retained earnings — and thus fewer internal financing possibilities — can turn to bank debt is therefore an issue. We must also address the important question

of financial intermediation in Eastern Europe: whether the financial sector can alleviate the problem of asymmetry of information. The banks can do this by providing funds to firms not yet able to convey information about their quality, and by monitoring once loans are made. This type of monitoring is quite different from simple discipline towards bad debt. It may mean rolling over some debt if the bank believes short-term performance is not correlated with long-term performance (often true in CEECs), and has more to do with checking whether the low profitability of a firm is only temporary. Without such help, new firms or firms which need major restructuring will have no access to the funds they desperately need.

What Could Have Happened?

If the total debt for the lower tail of the distribution of firms is quite high, what type of firms are less exposed to debt? There are two possible scenarios. In the first, the financial intermediation sector is working well. It is trying to solve the problem of bad debts and is financing firms with more need for funds and less ability to self-finance. These might be the firms which are restructuring and so cannot yet see the results of their efforts. Banks should be able to lend to firms which can somehow signal their quality reliably, e.g. by using collateral or their profitability. Supply of credit should be positively related to tangibility and profitability. This way, firms will be able to achieve optimal capital structure.

In the second, less optimistic scenario banks do not have the experience and ability to monitor firms whose quality has not been adequately established. Firms experience credit rationing as in Stiglitz and Weiss (1981): banks charge interest which is too high because they cannot distinguish reliably between different firms. In this case, firms which can will use internal sources for financing, since external financing is too expensive. Though supply of credit should still be positively related to tangibility and profitability — insofar as observed data on collateral and profit conveys useful information — the demand for credit will be negatively related to profitability, because high-profit firms will be able to finance internally rather than by borrowing.

If this effect on the demand for credit is strong enough, it will dominate the effect on the supply side that predicts debt to be positively correlated with profitable firms. In other words, the more profitable firms would like more debt than other firms but, because of the inefficiency due to the imperfect information, they will find it more convenient to substitute for debt with retained earnings, and will be able to do it better than the other firms. The heavy reliance on internal funds to finance investments in the early stage of transition, documented by EBRD (1995) at the aggregate level, could be consistent with either of these scenarios.

To see which scenario seems more likely to be taking place, one can carry out a regression analysis similar to that conducted by Rajan and Zingales (1995) for developed countries. The regression is a reduced-form equation with a measure of leverage as the dependent variable, while the independent variables are measures of tangibility, size, and profitability. Leverage is measured as the ratio of debt (both short-term and long-term) to total assets. The ratio of fixed to total assets is a measure of tangibility. In fact, if a large part of a firm's assets is tangible, assets should serve as collateral, diminishing the risk to the lender. The ratio of earnings (before interest, taxes and depreciation) to total assets is used as a measure of profitability. Better measures, such as the ratio of the market value to the book value of the assets, suggested by Myers (1977), are not possible here in the absence of data on market value (they would not be very indicative anyway in these economies). Later analysis will argue that, for the purposes intended here, the measure used actually is more adequate. The logarithm of net sales is taken as a measure of size. Theoretically, it is not clear what effect size should have on leverage: one may believe large firms have lower probability of bankruptcy (or, in CEECs, that government will not allow them to go bankrupt), in which case size should have a positive impact. Small firms are also more likely to liquidate voluntarily, or to "disappear", making lending to them risky. Rajan and Zingales (1995), in their study of Western firms, find the size coefficient to be positive. In transition economies, however, big firms have often restructured less, so the book value of fixed assets may be less credible and size would have a negative effect on the supply of debt. Finally, we have a dummy variable for state ownership. All stock variables are start-year balance sheet values.

Table 1 shows the results of the regression for Hungary. The sample consists of all medium- and large-sized non-financial firms with legal entity in the country. The debt to total assets ratio is negatively related to profitability and tangibility of firms. The sign on the sales (size) variable is positive³. Because of the tax shield and bankruptcy cost factors, the debt-total assets ratio should be positively correlated with firms' profitability; this is what Rajan and Zingales find. The analysis here obtains the opposite result: more profitable firms have lower leverage.

Table 1. Hungary: Dependent Variable: Debt-assets Ratio

Independent Variable	Coefficient	Standard Error	t statistic
Fixed capital/asset ratio	-.4956	.0184	-27.00
Log of sales	.0263	.0029	8.96
Earnings before interest, taxes, depreciation	-.0455	.0288	-0.54
State ownership dummy	-1.58	-.0045	.0083
Constant	.2263	.0383	5.92

Mean of dependent variable = .3622
R² = .2415
N = 2773

One explanation of the negative coefficient on profitability is credit rationing due to the asymmetry of information. Although the supply of credit should be positively related to profitability, the demand for credit is negatively related to profitability because more profitable firms have retained earnings which they use to finance themselves. In our reduced-form equation, the negative coefficient of the (implicit) credit demand equation dominates the positive coefficient of the supply equation.

The theory expounded here predicts that with asymmetry of information, debt should be negatively related to availability of funds, more than profitability *per se*. Future profitability, as captured by the ratio of market to book value, does not imply that firms have funds now and can therefore avoid asking for credit from banks. What matters is that firms have funds now and for that purpose the measure used, earnings, is the right one.

In the CEECs, real interest rates are often very high for exogenous reasons, such as the macro policy adopted and the burden on banks of bad debt portfolios. This exacerbates the problem of insufficiency of credit due to adverse selection.

It might be argued that some firms are more profitable than others, that this should be a signal of better quality, and that this situation thus differs from the one of Stiglitz and Weiss (1981), who find that firms which are observationally equivalent obtain different treatment. Yet it is precisely here that the peculiarity of the transition phase in CEECs is relevant. Because firms are going through a transition process, short-term performance is not a good indicator of future performance. From the point of view of what is relevant for the banks — future performance — these firms are difficult to distinguish based on current earnings. Profitability may indeed be a signal of better quality — and hence positively related to credit supply — but not a very good one.

Such a situation is compatible with the credit constraint story: banks are reluctant to supply credit because of the asymmetry of information. The firms which can (the most profitable) use retained earnings. That more profitable firms have less debt is not a good signal but a sign they could not achieve their optimal capital structure.

A surprising result is the negative relationship with tangibility: in developed countries, it is usually positive. This is probably the result of the historical factors described above. In the pre-transition period, fixed capital was normally financed with equity (*via* the government budget), and working capital would be financed with debt. Early in the transition, balance sheets still reflect this. The measure of tangibility (fixed capital) will be positively correlated with the equity/assets ratio, and hence negatively with the debt/assets ratio.

The foregoing suggests that in economies in transition one should perhaps look not at total debt, which is heavily influenced by historical factors, but only at new debt, to see whether banks have recently been moving in the right direction. An alternative regression tries using the change in the debt-total assets ratio as the dependent variable (with the independent variables as before) to see if the flow of new debt loaned to firms in this period can be explained by their profitability and the tangibility of their assets. The results are in Table 2. The sign of profitability is still negative, while the sign of tangibility is now slightly positive, but the coefficient is not significant.

Table 2. Hungary: Dependent Variable: Changes in Debt-assets Ratio

Independent Variable	Coefficient	Standard Error	t Statistic
Fixed capital/asset ratio	.0081	.0141	0.58
Log of sales	-.0003	.0023	-0.15
Earnings before interest, taxes, depreciation	-.3139	.0218	-14.39
State ownership dummy	.0160	.0064	2.51
Constant	.0166	.0294	0.57

Mean of dependent variable = .0174
 $R^2 = .0830$
 $N = 2757$

Profitability is still significant and negative; firms with higher profitability are decreasing their leverage, not increasing it. This result strengthens the conclusion that firms which had retained earnings chose internal financing. The choice of earnings as an independent variable is the right one, since it is a better measure of availability of funds. Market versus book value may instead capture future opportunities which do not necessarily reflect availability of funds now.

Tangibility should be positively related to the change in leverage. Banks should be looking at the fixed assets previously accumulated as collateral. Nevertheless, the positive coefficient on tangibility is not significant. There may be several reasons: the book value of these fixed assets used here may be far from market value; or perhaps fixed assets are not a good signal of quality (e.g. because the transition means that sectors which were capital-intensive under the socialist system have worse prospects than average).

The result for the ownership dummy is also interesting. In the equation on the levels, this variable is not significant, but in the look at the change in the debt to total asset ratio, the coefficient is positive and significant⁴. This suggests the increase in debt went especially to state-owned firms, which is not a good sign.

Tables 3 and 4 present the results for Poland. The sample consists of all non-financial firms with legal entity (including small firms). The results are quite similar. The main difference from those for Hungary is that the coefficient of tangibility in the regression for the change in leverage is now negative and significant. The explanation of this last finding may again be poor prospects faced by capital-intensive sectors; more research is needed here. The results on the dummy are similar to the ones for Hungary (the coefficient in the difference equation is not significant but it is significant under the second definition of leverage)⁵.

Table 3. Poland: Dependent Variable: Debt-assets Ratio

Independent Variable	Coefficient	Standard Error	t Statistic
Fixed capital/asset ratio	-.5028	.0040	-125.21
Log of sales	.0220	.0006	34.60
Earnings before interest, taxes, depreciation	-.0605	.0050	-12.02
State ownership dummy	-.0684	.0040	-17.17
Constant	.4456	.0054	81.86

Mean of dependent variable = .3929
 $R^2 = .2965$
N = 41084

Table 4. Poland: Dependent Variable: Changes in Debt-Assets Ratio

Independent Variable	Coefficient	Standard Error	t Statistic
Fixed capital/asset ratio	-.0297	.0034	-8.72
Log of sales	.0071	.0005	13.16
Earnings before interest, taxes, depreciation	-.2746	.0043	-64.28
State ownership dummy	.0062	.0035	1.81
Constant	.0261	.0046	5.64

Mean of dependent variable = .0533
 $R^2 = .0892$
N = 42902

The banks, in the effort to impose stronger payment discipline, may not have been able to fulfil adequately their second role — to provide funds for restructuring. One reason could be the great reluctance of banks in CEECs to lend long-term debt. Asymmetric information and moral hazard may also imply time inconsistency in the behaviour of both firms and banks. Whenever short-term loans are used, the problem of renegotiation arises, which typically creates sub-optimal situations. Renegotiation typically discourages specific investments, because of the hold-up problem (see Grossman and Hart, 1986). If firms know that through renegotiation they are going to be deprived of part of the surplus generated by the investment, they will undertake a sub-optimal level of investment; but specific investments in plant and machinery are exactly what is most needed by the economies in transition. Moreover, the bank faces a problem of inter-temporal inconsistency. *Ex ante* it would like to commit itself to a loan that specifies the terms of future finance, thereby encouraging the firm to undertake the investment; *ex post* it has an incentive to renegotiate.

Short-term debt allows frequent revisions of the lending contract and so may help the firm which needs to create a credit history for itself. In transition, the building of a reputation happens on both sides: from the point of view of a firm, as a good borrower, but also from the bank's point of view, as a tough lender that will not simply keep rolling over the debt. While this last aspect is not so relevant in Western economies, it is important in Eastern Europe.

As a result, banks face a trade-off: to monitor the firms, they would like to write short-term contracts and keep revising them. This should also be in the interests of the good borrowers. A good borrower may hope that after a short period, positive information about its future profitability may be available so it can get better lending conditions (see Diamond, 1989). While good performance in the short run can be interpreted as a signal of the borrower's reliability, however, bad performance is not an equally bad signal. It is not easy to make even short-term predictions in Eastern Europe, and firms are vulnerable to many exogenous shocks (high and variable inflation, abrupt movements in exchange rates, sharp changes in political situations and general economic conditions). Perhaps the poor performance of a firm cannot be attributed clearly to the firm itself. Efficiency would then require that the debt be renegotiated. The bank, however, cannot thereby build the reputation it needs: firms can blame the general environment for their own performance and so do not face proper incentives. As a result, the bank, to build a reputation, may be forced to take inefficient continuation decisions. It may choose not to renew the debt of some firms which performed badly — even if the performance was not a signal of profitability but due to exogenous circumstances — so as to give appropriate incentives to other firms to exert an optimal level of effort. If the bank can forecast all this *ex ante* it may end up not lending at all to such firms.

The alternative would be long-term debt, but such a solution is also inefficient, since it rules out two possibilities. First, it does not allow the bank to cancel debt contracts if it becomes clear the borrowing firm is not profitable. Second, it does not allow a good firm to build a reputation, since it cannot use positive short-term information to obtain better conditions. As there is little short-term information in Eastern Europe, however, it seems that one of the main advantages of the short over the long term is not present.

So it is important also to see what type of lending is prevalent in Eastern European countries, in particular whether banks use mostly long-term or short-term debt. This will be influenced by many other factors, such as inflation and the structure of balance sheets. However, the analysis suggests that, *ceteris paribus*, in countries where transition is more advanced (and so where it is easier to distinguish between unprofitable firms and firms suffering from exogenous shocks or still in transition), banks should rely more on short-term debt. In Hungary and Poland, long-term bank debt is a small percentage of the total debt. In Hungary, total long-term debt is only 31 per cent of total bank debt and 11 per cent of the total firm liabilities. Poland has no data on total short and long-term debt, but does give figures only for short and long-term bank debt. Surprisingly, Polish banks do not seem reluctant to lend long-term: long-term bank debt was 60 percent of total bank debt at the end of 1992 — but bank debt is only 15 per cent of total debt and thus not so important⁶.

Tables 5 through 8 show the results for Hungary and Poland when the dependent variables are short-term bank debt over total assets and long-term bank debt over total assets. The results are similar in both countries. The tangibility coefficient is positive for long-term debt but negative for short-term debt. So the collateral plays a role in provision of long-term debt: one expects the supply of long-term debt to be more in line with the usual theory. In a look at changes, however, tangibility has no significant relationship with changes in the long-term bank debt/assets ratio, while it has a significant negative relationship (at least for Poland) with changes in the short-term bank debt/assets ratio.

Table 5. Hungary: Dependent Variable: Short-term Bank Debt to Assets Ratio

Independent Variable	Coefficient	Standard Error	t Statistic
Fixed capital/asset ratio	-.0529	.0083	-6.40
Log of sales	.0078	.0013	5.93
Earnings before interest, taxes, depreciation	-.0328	.0218	-2.56
State ownership dummy	.0100	.0038	2.66
Constant	-.0098	.0172	-0.57
Mean of dependent variable = .0733			
$R^2 = .0388$			
N = 2786			

Table 6. Poland: Dependent Variable: Short-term Bank Debt to Assets Ratio

Independent Variable	Coefficient	Standard Error	t Statistic
Fixed capital/asset ratio	-.0070	.0014	-4.87
Log of sales	.0085	.0002	37.86
Earnings before interest, taxes, depreciation	-.0014	.0017	-0.83
State ownership dummy	-.0111	.0014	-7.71
Constant	-.0300	.0019	-15.78
Mean of dependent variable = .0375			
$R^2 = .0336$			
N = 43 730			

Table 7. Hungary: Dependent Variable: Long-term Bank Debt to Assets Ratio

Independent Variable	Coefficient	Standard Error	t Statistic
Fixed capital/asset ratio	0.343	.0046	7.44
Log of sales	.0034	.0007	4.67
Earnings before interest, taxes, depreciation	-.0107	.0072	-1.50
State ownership dummy	-.0112	.0021	-5.34
Constant	-.0328	.0096	-3.41
Mean of dependent variable = .0203			
$R^2 = .0278$			
N = 2786			

Table 8. Poland: Dependent Variable: Long-term Bank Debt to Assets Ratio

Independent Variable	Coefficient	Standard Error	t Statistic
Fixed capital/asset ratio	.0386	.0015	25.19
Log of sales	.0010	.0002	3.92
Earnings before interest, taxes, depreciation	-.0031	.0019	-1.66
State ownership dummy	-.0236	.0016	-15.07
Constant	.0031	.0021	1.51

Mean of dependent variable = .0250
 R² = .0186
 N = 43728

Profitability is not significant because short-term performance is not necessarily related to long-term performance in transition economies. All the idiosyncrasies discussed before are instead easily found in the regression for short-term debt. With the SOE dummy, we find that *ceteris paribus* SOEs have lower volumes of long-term bank debt and higher volumes of short-term bank debt in both countries, although the dummy is insignificant in the regressions for the change in ratio.

Thus it seems that because of other problems, such as inflation, banks in these countries have kept far away from the use of long-term debt, although short-term lending has more disadvantages than in more developed economies. Parts of the phenomena — both the low level of indebtedness of some firms and the absence of long-term debt — may be due also to the supply of personal savings. Abel and Szekely (1992) have documented a shift in the portfolio allocation of Hungarian households in the 1970s and 1980s. They show that financial assets were steadily declining, while real assets increased. Moreover, households currently do not seem willing to buy long-term, illiquid financial assets.

Notes and References

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1. The empirical results in the paper derive in part from a World Bank Research Project on Enterprise Behaviour and Economic Reform in Central and Eastern Europe (PRDTE). We would like to thank László Halpern and Gábor Körösi for their help.
2. Retained earnings are a main source of funds for fixed investments, while banks are mainly used to finance inventories and the extension of trade credit to customers, as is trade credit received from suppliers.
3. We have also done the regression measuring leverage in the same way as Rajan and Zingales (1995), *i.e.* subtracting accounts payable and other liabilities and in this way abstracting from trade credit. This could be a better measure since we are studying the behaviour of the credit sector. The results do not change. We obtain similar results when we use as a dependent variable the total bank debt over total assets.
4. The same results hold also with the second definition of leverage.
5. Baer and Gray (1995) report regressions for a sample of 150 Polish firms relating the 1993 change in a firm's debt to banks (only) to measures of profitability and tangibility and private ownership dummies. They find positive (but mainly insignificant) coefficients on all these variables and interpret them as evidence of improved credit allocation by banks. Caprio (1994), using these same Polish data, does not reach firm conclusions on the relationship between profitability alone and growth in bank debt, citing as contributing factors the small sample size as well as endogeneity issues.
6. The difference might also be due to how "short-term" and "long-term" are defined.

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Banks During Recovery: Missing in Action? A Comment

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The three papers analyse how the financing structure of economies in transition slowly evolves from a fiscal or quasi-fiscal intermediation mechanism towards a financial one, based on decentralised contracts and hard microeconomic solvency constraints. Although the situations of the countries differ widely, all the authors make clear that whatever the initial conditions, the macroeconomic framework or the strategy for microeconomic reforms, the process turned out to be long and painful everywhere. Completion is still fraught with great uncertainty concerning the delay before some systemic stabilisation occurs and the adjustment paths that will emerge. In both regions, the most critical issue is the extraordinary capacity of formally decentralised banking systems to perform pervasive quasi-fiscal functions, with major adverse consequences at macro and micro levels.

In all the countries, this does not come so much from direct budgetary indiscipline and monetary financing as from the intrinsic difficulty of rebuilding a performing bank-enterprise relationship — whether because of a *de facto* policy of financial repression as in China or from more implicit, microeconomic constraints as in Central Europe (weak bank balance sheets, high asymmetry of information, risk-averse lending patterns, etc.). All the papers conclude that failure to tighten credit rules and enforce stronger financial discipline on agents would raise increasing obstacles to real adjustment, efficient macroeconomic policy and real growth. The accumulation of large stocks of bad loans, as banks keep financing unadjusted SOEs, may eventually provide good case-studies of “unpleasant monetary arithmetic”, where less inflation now may deliver much more inflation later (Sargeant and Wallace, 1981).

Wing Thye Woo gives a clear history of financial reforms in China in which each main step taken since the early 1980s has been an answer to a set of underlying structural problems but has also caused new ones to emerge, in a piecemeal process which eventually delivered the highly skewed, repressive, unbalanced financial system now being witnessed. The overall logic beyond the system’s present functioning is also clearly presented: it does not work by banks contributing to capital accumulation and real growth, but the other way round. High growth and profitability in the private

and co-operative sectors explain sustained demand for bank deposits in an economy where the supply of alternative financial assets is either limited or very speculative. This is a framework close to the usual McKinnon model of underdeveloped financial systems, where banks stock private savings before entrepreneurs, or would-be entrepreneurs are able to finance their projects on a 100 per cent self-financing basis, or with the support only of informal financing sources.

High anticipated private profits explain why the inflationary tax on bank deposits, often through negative real interest rates, has not yet caused a fall in the demand for money. These hidden transfers can be interpreted (and have been defended) as a substitute for very weak fiscal administration, where the capacity to tax the private sector is low. This is true only up to a point: revenue from financial repression, such as seignorage (Hofman, 1996, in the present volume), does not finance state expenditure, such as infrastructure or education, but is mostly forwarded, directly or indirectly, to loss-making SOEs. The main opportunity cost of this political economy option is to make development of a decentralised intermediation mechanism almost impossible: co-operatives and, to a greater extent, the private sector have only residual access to loanable funds. With the hindsight of the Central and Eastern European experiences, it is hard to see how the Chinese banking sector could replicate the dualistic structure of the real economy, so as to lend to the profitable sector under hard budget constraints, while channelling hidden subsidies to SOEs. Banks have only one balance sheet.

Bouin's paper follows on, providing ample evidence that easy access to soft finance by SOEs goes with all the behaviour associated with a regime of soft-budget constraints: low elasticity of credit demand to interest rates; slow productivity growth; an excessive contribution of SOEs to total investment; a marked preference for capacity-increasing investments over efficiency-oriented ones; limited capacity to control wage pressures, etc. Bad enterprises crowd out good ones, bankruptcy procedures are still rare, commercial banks tend to be captured by local SOEs, etc. Bouin also stresses that such a segmented capital market develops strong incentives for informal secondary financial trading between unevenly-rationed agents as, for instance, when public enterprises relend borrowed funds at usurious rates to the private sector, or invest them in the stock exchange or in speculative property building. Woo also notes the development of forced investment by wage-earners, who are increasingly asked to buy bonds issued by their own firm when joining and can sell them only when leaving. A highly-segmented financial system contributes to a most illiberal confusion between labour and capital markets.

This financing structure also has big potential consequences for overall policy control. The weak interest rate elasticity of the demand for loans by SOEs, their permanent soviet-style "hunger for investment" (Woo) and difficult Central Bank control of its local branches should help limit the impact of monetary policy on real and nominal trends. It is surprising that the slowdown in inflation since late 1994 has apparently been rather easy and not incurred large losses in real growth. If the central and eastern European experience is relevant, part of the story may be that the biggest contributors to overall growth had rapid productivity gains and do not rely on

intermediated finance, or at least on the part of it under the control of the monetary authorities. A complementary reason may involve the apparent rapid reaction of households to the higher remuneration of deposits, a point less evident in Europe. Chinese SOEs, however, appear to have a “real” response function to liquidity constraints despite their regime of soft budget constraints. Bouin provides some useful elements, but more analysis of this would be of great interest from both micro and macroeconomic points of view.

The issue may prove decisive, as amply shown in Eastern Europe. Considering the many fault lines in the Chinese financial system and public industry, a sharper monetary tightening than in 1994-95, voluntary or not, may cause havoc in the whole system. As unadjusted SOEs may go bankrupt or start accumulating big interest arrears or inter-enterprise credits, the banking system would be under great pressure. This might impose a large-scale socialisation of capital losses, with damaging effects on prices and the capacity of banks to strengthen microeconomic discipline.

This systemic risk is increased by the difficulty of managing the banks’ non-performing loans, which may account for some 20 per cent of their total stock of enterprise credits (Woo). Though this misallocation of resources implies big welfare losses, the main policy problem is not one of flow. As long as growth is high and money demand does not fall, the monetary authorities should not face an immediate liquidity crisis. It may even be a good reason to do nothing, as the present situation has great benefits for many in the country. In the long run, however, the overhang of bad loans may cause widespread disruption if decisive steps towards further financial liberalisation are taken without preliminary consolidation of commercial banks. An ill-conceived move to unify markets, a sudden switch to high real interest rates or the closing down of some commercial banks may precipitate a financial crash. Built-in systemic pressures and large hidden losses would then impose an *ex post*, market-based consolidation of the financial accounts of private and public agents. Though the outcome of such a pessimistic scenario on growth would not necessarily be the same as in Central and Eastern Europe, its redistributive consequences might be destructive, as could its potential impact on inter-regional co-ordination¹.

China is in a situation reverse from that in Central and Eastern Europe, where much of the pre-1990 soft loans were initially inflated away before orthodox financial policies at macro and micro levels contributed to a fairly orderly, *ex-ante* consolidation of financial intermediaries. Adopting this strategy would now be much more difficult in China. With the sheer size of enterprise debt to banks, the socialisation of 25 to 35 per cent of its total (the usual proportion in Central and Eastern Europe) would cost up to 20 per cent of GDP. Though massive in quantity, a recapitalisation of this order should remain manageable if the government can adjust its levels of non-interest expenses or fiscal revenues in the very short term.

With the hindsight of the Polish and Hungarian experiences, the most challenging problem would be to make sure such recapitalisation happens only once: that is, controlling moral hazard, which may spread extremely rapidly in China, where financial

institutions are especially weak, property rights ill-defended and corruption endemic. The European experience shows that SOEs started to adjust when put under effective financial, competitive and governance pressures. But it also shows that the impact of these factors was decisively increased when backed up by stronger property rights, public and private, without which micro level contractual discipline cannot be brought to bear strongly. Bank consolidations should in principle address the bank-enterprise nexus, from which losses stem. A strategy addressing each category of agents separately or in a gradualist way is doomed to fail. This means that in the Chinese context further financial liberalisation may require a clear break with the step-by-step approach of the last 15 years; a massive concentration of competencies and political commitment would then be needed to push through successfully such a large systemic package.

In Central and Eastern Europe, financial liberalisation is much more advanced and, by all accounts, financial discipline and property rights are much stronger than in China, though still far from Western standards. This largely comes from a strategic choice implicit in the very first reforms of 1990-91: monetary policy was instrumental in macroeconomic stabilisation, but it was also used as a tool for microeconomic reforms, as underlined by Cornelli, Portes and Schaffer. With other instruments, increased financial constraints forced the adjustment of basically reluctant SOEs, to create a level playing field for all categories of competitors as soon as possible. This proved a much more radical strategy than in China, where gradualism in reforms translated into microeconomic dualism and segmented finance, and hence financial repression, weak property rights, slow fiscal reforms and possibly, though indirectly, preservation of the political and institutional structure.

The comparison is striking between the extreme weakening of policy and coordination instruments in China and the situation in Central and Eastern Europe, where the state authorities appear paradoxically much more centralised and effective. They have very limited scope and resources for large, discrete interventions but on the whole their capacity to manage the macroeconomy, enforce and protect property rights and build effective market institutions seems much greater. This would suggest that pervasive confusion between public and private spheres in China has deprived policy-makers of the tools and public institutions which Western governments use to regulate market economies, such as effective monetary policy instruments and fiscal administration, rule-based allocation of resources, and legal and contractual discipline.

So the future challenges are very different in the two regions. In China, decisive steps towards a more liberalised environment should be taken, while its financial time-bomb must be cautiously dismantled. In Central and Eastern Europe, the priority is to re-invent finance, interpreting Cornelli, Portes and Schaffer. As real growth reaches high levels and moves towards closing the gap with China's performance, the capacity of banks to allocate efficiently a large flow of cheap credit to firms is doubtful. Since 1992, the trend has been towards inflationary demonetisation (in Romania, Bulgaria or most of the CIS) or towards a slowly-falling (Hungary), at best stabilised level of real enterprise credit, possibly after an initial recovery (Poland). The Czech Republic is the only case which has seen long, sustained growth in real enterprise credit, from a

high initial level close to that of China. It did not rely on repressed finance, and when it eventually reached industrial growth rates closer to regional averages in 1995, real credit started to decelerate. This double turnaround was observed more sharply in Poland and Hungary at the beginning of 1992.

As macroeconomic variables are clearly not enough to account for these trends, the authors switch to the micro level and analyse the supply and demand sides of the credit market, while differentiating between the two main functions of banks during transition: working out bad debts (closing down the worst performers or negotiating restructuring and monitoring programmes when adjustment prospects are more positive) and providing new loans to adjusted or growing firms, which also requires adequate capacity to collect information. The conclusion of the paper is that, at best, Central and Eastern European banks have painfully learned how to increase financial discipline in indebted enterprises but have apparently not yet made substantial progress in allocating new resources. They may not be able to lend new credit and at the same time maintain hard financial constraints on adjusting enterprises.

The authors give a role to the internal constraints of banks, such as insufficient provision of human and base capital, but they mostly point to environmental factors, which contribute to extremely high information asymmetry. Legal and judicial institutions still make enforcement of property rights difficult (as with collateral and other loan guarantees). The authors also stress the absence of a track record of emerging potential borrowers and the low correlation between their present and future performances, especially in the case of smaller private firms. These obstacles on the supply side of the credit market explain why weak credit markets in Central and Eastern Europe may prevent firms reaching their optimal capital structure: high intermediation costs translate into high lending rates, so firms with large retained income prefer to self-finance their investment rather than borrow. This translates into a demand function for bank loans by firms which is negatively correlated to profitability.

Econometric evidence, based on very large numbers of Polish and Hungarian enterprises, shows a negative relationship to profit rate (before taxes and interest) and the debt-to-assets ratio, as well as the change in this ratio (two different equations)². Running the same regressions for each year since enterprise accounts have become more or less reliable (say, 1992) may give useful extra information on the pace of adjustment in the two countries, which have had very different experiences with bank restructuring, in 1992-93.

The overall figures confirm an assumption common in recent years: central and eastern European banks contribute only marginally to financing successful firms, so growing enterprises are apparently massively self-financed thanks to very high productivity. Governments have also been fighting methodically to bring their deficits down to Maastricht criteria, while households have shown strong preference for immediately testing the shallow but emerging consumer markets. With this exception, most financially-constrained agents, including banks, seem strongly to favour consolidating their balance sheets rather than increasing their financial exposure and

risks deriving from a weak financial system. This may mean that for now, reforming economies do not develop so much towards bank-based or market-based financing structures, but are mostly driven by accumulation of their own capital (or reduction in net debt), which would not be so surprising while building a capitalist economy³.

This would not contradict the econometric account of a downward sloping demand curve for credit as a function of profitability, but may suggest an alternative interpretation. It would not rely so much on the case where real interest rates have been very high, as in Hungary (averaging 11.3 per cent since 1992), but rather on the case of Poland and to a lesser extent the Czech Republic, where lending rates have been much closer on average to Western standards (4.5 per cent and 4.3 per cent respectively). In this context, it becomes more difficult to argue for a demand side interpretation of this relation, where profitable enterprises would respond to prices in a rather standard way. If banks were functioning normally, enterprises growing at five or 10 per cent annually (or more) should have a demand for loans priced at 4.5 per cent in real terms. The explanation of the current credit crisis would then not rely too heavily on price factors, but depend rather on why market structures do not deliver this result. A demand-side hypothesis would be that profitable enterprises became highly risk-averse to financing investment with bank debt, due to the bad track record of the banking system after a period when distress adjustment to stronger solvency constraints may have caused the indiscriminate curtailment of rolled-over, short-term debt. Given the present behaviour of financial intermediaries, the optimal capital structure of the best performers would be close to 100 per cent of its own capital.

This does not rule out supply side elements also having an impact, as the types of firms which ask for credit are not clearly identified. Is there an intermediate enterprise segment which may grow faster with more credit, without massively increasing banks' marginal risk? This would be a standard case of rationing. Alternatively, does credit demand *mostly* derive from low-profit or unadjusted industrial groups, *plus* a number of dubious firms, whose inability to produce large cash-flows would be the very best available indicator that they should not receive any loans? High risk-aversion on the supply side may be a critical issue as well. Banks under tougher supervision and solvency constraints, with high information asymmetry and low monitoring competencies, would simply not dare make any new loans outside a small group of well-established firms and Western companies. Considering the apparently weak impact of interest rates, demand and supply aspects could then be joined, so as to reach an overall conclusion even more pessimistic than that of the authors: that credit intermediation in Central and Eastern Europe may be trapped in a low-level equilibrium, where neither firms nor banks can establish a track-record on the basis of which the other side could overcome risk aversion and enter a stable credit relationship. This would also mean commercial banks could not accumulate screening and monitoring know-how to increase their capacity to reduce information asymmetry.

Another argument in this direction is the increasing reliance of Central and Eastern European firms on direct foreign credits, without a domestic intermediary. Since the beginning of 1993, the increase in the direct foreign debt of non-financial enterprises

has been \$3.2 billion in the Czech Republic and \$3.5 billion in Hungary — 75 per cent and 82 per cent of the flow of direct investments into each country over the same period⁴. This can then be compared (see Table 1) to the increases in total liabilities towards resident banks (local and foreign currencies) so as to underline the growing risk, over the last two years, of domestic banking systems being sidelined by the most dynamic enterprises.

Many factors have contributed to this phenomenon, whose relative shares are difficult to estimate from available statistics. Very large budget deficits are a key factor beyond financial distress in Hungary. Interest rate differentials with Western economies have probably also played a role, although related flows would appear as portfolio investments and loans to banks and would not have delivered exceptional gains (Sgard, 1996). Microeconomic factors are probably at play too, including the important one of inter-firm agreements, linked to ownership and/or subcontracting relations. If this does not cover all non-speculative flows, supply-side constraints on the domestic credit market come next as a causal factor, at least in the Czech case, where distribution of credit has been abundant and cheap since 1991. Central and Eastern European firms which can directly borrow abroad either have exceptional credentials or the guarantee of a foreign shareholder. In both cases, performing local banks should be able to collect this information and monitor loans more cheaply than a foreign competitor. This would also account for the apparent preference of foreign banks for lending to Central and Eastern European firms rather than to banks, as the information asymmetry concerning individual and systemic risks of bankruptcy would be smaller.

These figures highlight the risk that slowly-adjusting banks in Central and Eastern Europe may suffer a continuous process of marginalisation, as the real economy keeps growing and is likely to become more integrated into the world economy. With the most dynamic firms taking full advantage of freer capital movements, domestic banks may be progressively restricted to the sheltered sector, specialising in slow growth activities with lower profits and less potential for learning-by-doing. The capacity for mobilising domestic savings, the segmentation of the enterprise sector, or the overall exposure of the private sector to foreign exchange risks could be adversely affected.

Notes and References

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1. One may then associate various monetary-financial scenarios with those envisaged for instance by Baum (1996) for institutional-political developments; each option in the latter sphere may not be characterised by the same economic constraints, incentives and policy instruments.
2. As the authors note that levels of indebtedness are high for the lower tail of the distribution of firms, it may be asked how far these tests merely account for two different phenomena: low credit demand by the better-off among the adjusted, profitable enterprises; and the impact of highly-indebted, slowly-adjusting firms which may still be able to capitalise large parts of their interest due. As often with cross-section surveys, problems of heteroskedasticity may somewhat blur the image.
3. This possibility is mentioned by the authors, though only in passing.
4. The comparison of these two series should take into account that the latter is for flow data, as the former is for stocks, which then includes a valuation effect. This should be borne in mind in the case of Hungary, which experienced large nominal devaluations, whereas in the Czech Republic, stable nominal exchange rates over the whole period limit valuation effects to cross-movements depending upon the currency structure of foreign debt.

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