



Review of Economies in Transition

Idäntalouksien katsauksia

1998 • No. 5

27.11.1998

Reprint in PDF format 2002

Tom Nordman

Will China catch the Asian Flu?

Bank of Finland

Institute for Economies in Transition, BOFIT

ISSN 1235-7405
Reprint in PDF format 2002

Bank of Finland
Institute for Economies in Transition (BOFIT)

PO Box 160
FIN-00101 Helsinki
Phone: +358 9 183 2268
Fax: +358 9 183 2294
bofit@bof.fi
www.bof.fi/bofit

The opinions expressed in this paper are those of the authors and do not necessarily reflect the views of the Bank of Finland.

Tom Nordman

Will China catch the Asian Flu?

Abstract

The Asian financial crisis has engulfed most of the region's countries, with the notable exception of China, which has maintained a stable dollar exchange rate. However, China's situation is being widely discussed, some commentators claim that China will eventually be forced to devalue while others maintain that China neither needs to nor would gain from a devaluation. China, not yet a fully open economy, has the means and resources to withstand pressures against its currency. Reserves remain comfortable and the trade surplus is even growing as China's exports to the United States and Europe continue to grow at a healthy pace although exports to other Asian countries have slumped. Domestic economic activity is recovering from a slowdown as public expenditure is rising. However, rapid reform of China's state-owned industries and bad-debt ridden state-owned commercial banks may be endangered if foreign direct investment fails to pick up the slack in the labour market as state-owned industries and government ministries shed millions of workers. Chinese authorities might be tempted to ease the pressure through a devaluation of the renminbi. However, China's exports have an import content of 50 percent, so a small devaluation would make little difference, and a large devaluation would probably trigger a new round of competitive devaluations among the region's countries, in the end leaving everyone worse off than before. For the time being China is therefore best served by maintaining a stable exchange rate, but in the longer term China may have to reconsider the wisdom of its peg to the US dollar.

Keywords: China, Asian crisis, devaluation, exports, trade surplus, exchange reserves, renminbi, reform

1 Introduction

The Asian financial crisis started over a year ago, initially in Thailand, but it quickly engulfed all the ASEAN-4 group of countries (Thailand, Malaysia, Indonesia and the Philippines) as well as all NIEs (Hong Kong, Taiwan, Korea and Singapore). Thailand, Indonesia and Korea now have IMF stabilisation programs in place, but the stock markets and the currencies have crashed or come under pressure throughout the region. The real economies of all the region's countries are in sharp contraction as investors, both domestic and foreign, have fled the region. At the same time the protracted stagnation of the Japanese economy has continued, and Japan has therefore not been able to provide the other economies with buoyant demand and a flow of investments. The predicament of the region has not been helped by the persistent strength of the US dollar in the global exchange markets. The recent sharp weakening of the US dollar against the yen has relieved some of the pressure, but the sheer sharpness of the change may call into question its durability.

From Asia, investor nervousness has spread also to other emerging markets, in particular Latin America. The crisis in Russia, while hastened and deepened by these developments, is mostly homegrown. In this situation one major economy, China, stands out as a bastion of stability and continued economic growth. However, as the crisis in Asia drags on without signs of early recovery, the possibility that China might also have to follow suit has been a major topic for discussion and argument. The purpose of this paper is to review some of the issues affecting China. The current state of the Chinese economy on the basis of the latest available data will be briefly reviewed, after which China's exposure to the Asian crisis will be evaluated in the light of some of the arguments made in the ongoing discussion.

2 China's current economic situation

The economy

Economic developments in China have clearly been affected by the ongoing crisis in the region. However, so far the effect amounts to a slowdown in growth, not a reversal of prevailing trends. Table 1 provides a brief sketch of the current situation.

Chinese authorities continue to maintain that 8 percent GDP growth will be achieved this year, even in spite of the natural disasters that may cut growth by one half percent. Growth for the first three quarters 1998 has been reported at 7.6 percent. Floods apparently have prevented a significant recover in output during the third quarter, but fourth quarter growth is optimistically projected at over 9 percent. Market analysts' consensus forecast is 7.2 percent for the whole of 1998, and 8.2 percent for 1999. In the October 1998 World Economic Outlook report, IMF forecasts growth of only 5.5 percent in China this year. A whole range of public investment initiatives are said to be coming on stream during the second half of the year, some of them to repair extensive flood damages. Anecdotal evidence seems to indicate that economic activity indeed has begun to pick up during the second half of the year, although industrial production is clearly lagging behind last year's growth rates. The recovery has been evident in higher investments and spending on a range of consumer durables. Housing investment is also up 10 percent, and spending on rail and road infrastructures has gone up by 50 percent. Recently the growth target for industrial production this year has been cut from 11 percent to 9.6 percent. This is not expected to reduce GNP growth, due to higher contributions by construction and services, which are said to be booming.

These initiatives are being financed by bond issues and bank lending. Rmb100 billion will be raised through bond issues to fund infrastructure investments, and another Rmb270 billion has been issued to recapitalise the state-

owned commercial banks and to boost lending. This bond carries a 7.2 percent coupon and has a maturity of 30 years. The bonds will be purchased by the four state-owned commercial banks with funds released by a cut in the reserve requirement. The ceiling on state bank lending has also been raised by around Rmb1 trillion in order to facilitate repairs to flood damaged facilities.

Inflation, which peaked in 1994 at over 20 percent, has been falling ever since. This year both consumer and retail prices have actually been falling, reflecting bumper crops and sluggish domestic consumer demand. However, inflation is expected to pick up toward the end of the year or early next year in line with more aggressive public spending.

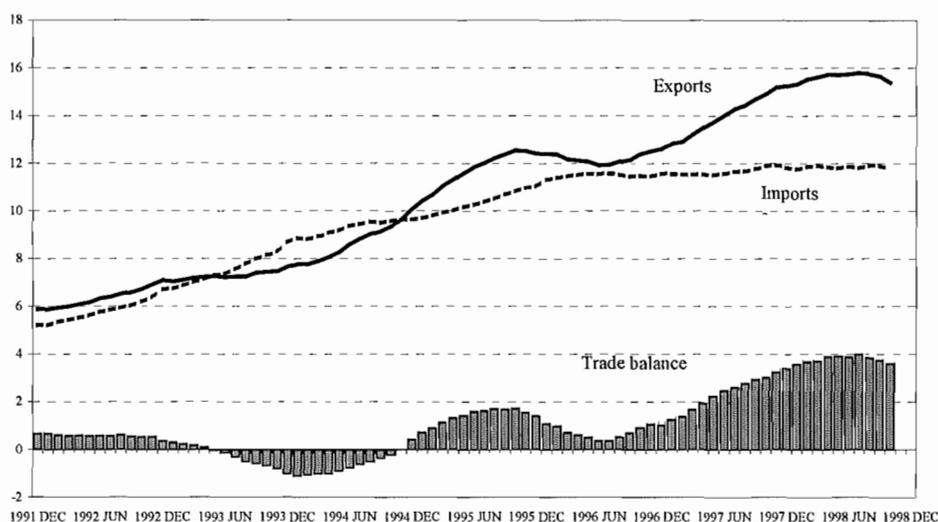
Table 1. Summary Indicators for China's Economy

	1996	1997	1998				To date
			Proj.	Aug	Sept	Oct	
Real GDP, % change	9.6	8.8	5.5- 8.0				7.6
Industrial production, % change	15.1	13.2	9.6	7.9	10.2	10.6	8.2
CPI, % change	8.3	2.8		-1.4	-1.5		-0.7
Retails sales, nominal, % change				9.5	7.0	7.6	6.5
State fixed-asset investment		10.1	21.8	17.4			21.2
Exports, \$ billion	151.2	182.9	190.0	15.6	15.5	14.7	+1.3%
Imports, \$ billion	138.9	142.2	143.3	10.9	11.5	11.7	-0.3%
Trade Balance, \$ billion	12.3	40.7	46.7	4.7	4.0		+7.8%
FDI, net, \$ billion	39.6	41.7	32.0				39.4
Level of reserves, \$ billion	105.0	139.9	148.0	140.0	141.1		
Exchange Rate, Rmb/\$	8.30	8.28	8.28	8.28	8.28		
Deposit rate, %	7.47	5.67		4.77	3.96		
Lending rate, %	10.08	8.64			6.93		

Sources: 1996-97 data from IFS. Projected data based on published news and IMF/WEO October 1998 data and projections. To date-data is published data for 1st half year (GDP) or January-September over same period in 1997.

China's external balance remains strong, but it has clearly been affected by the Asian crisis. Export growth has fallen sharply overall. This reflects a steep fall in exports to emerging Asian markets and Hong Kong, while exports to Japan are flat. Exports to the United States and Europe continue to grow at a healthy pace. In September, total exports fell 6.7 percent from September of last year in spite of buoyant exports to the United States (+16.5 % in September) and Europe (+21.7 % in September). In spite of this, China's trade surplus has increased, but this is due to weaker domestic

demand in China, which has brought import growth to a virtual standstill. The net inflow of foreign direct investment has apparently continued, but at a lower pace. Export competitiveness has also been enhanced by reducing export taxes on a range of commodities, which for some commodities have an effect equivalent to up to a 17 percent depreciation of the renminbi. These incentives will be extended also to foreign-owned enterprises as from the beginning of next year.

Chart 1 **China: Foreign Trade. Billion on US dollars, 12 month moving averages**

However, exchange reserves have no longer been rising, since enterprises and banks have been hoarding foreign currencies in the expectation that the renminbi will be devalued. On occasion, the central bank has intervened in the exchange market by selling dollars to prevent the exchange rate from depreciating beyond the Rmb/\$8.28 de facto peg. In the early summer months the black market became more active, and the black market rate at times approached Rmb 9. Recently the spread between the two rates has narrowed, pressure against the renminbi has eased and the central bank has even on occasion bought dollars again to prevent the renminbi from appreciating. Pressure has also eased due to the recent strengthening of the Japanese yen against the US dollar. There are also expectations that interest rates will be lowered in China to boost economic activity and discourage excessive saving. Chinese officials have also repeatedly pledged that China will not devalue the renminbi. However, recently some officials have added "this year" to their statements.

At the beginning of this year major exporters were permitted to retain 15 percent of their annual export earnings. This liberalisation was introduced in order to relieve pressure on the renminbi to appreciate. However, authorities now suspect that enterprises are hoarding

more foreign exchange than they should. Enforcement of exchange controls has therefore been strengthened in order to prevent circumvention of constraints on capital movements. No de facto new constraints appear to have been introduced, bona fide current payments remain free, but rules requiring supporting documentation are enforced more vigorously, penalties for non-observance of regulations have been made more severe, and more comprehensive computer control systems are being put in place. The SAFE (State Administration of Foreign Exchange) is paying particular attention to enterprises active both in special economic zones and elsewhere in China. Exchange regulations for enterprise in special economic zones are more liberal than for enterprises elsewhere. The SAFE estimates, that Chinese enterprises and individuals are holding foreign assets of up to \$80 billion.

Economic reform

Last fall, the Fifteenth Peoples Congress set an ambitious agenda for reform of the Chinese economy. The key elements of this reform process are the reform of state enterprises and the strengthening of state-owned commercial banks. The reform of state-owned enterprises involves the consolidation of a core group of

1000 large enterprise that are to remain in state ownership, and the privatisation or closure of 113,000 small and medium size enterprises. Currently, approximately 70 percent of the labour force is employed in state-owned enterprises to which nearly 80 percent of all bank loans have also been extended, while they produce only 30 percent of total industrial output, and half of them are loss-making. Chinese authorities are hoping that foreign investors will play an important role in this process.

The reforms are going to result in massive layoffs of labour, up to 10 million this year alone according to some estimates, although more conservative official estimates talk of "only" 3.5 million layoffs. During the first half of 1998 2.7 million workers were laid off, according to official statistics. This has reduced state enterprise payrolls to 105 million people by the end of June. At the same time, less than a million new jobs have been created in the non-state sector.

Officials are hoping that unemployment, which officially stood at 3.1 percent or 11.5 million by the end of 1997, can be contained to 3.5 percent. This may prove to be an optimistic assumption, given continuing weak domestic demand. It should also be noted that official unemployment only covers urban areas, and it does not include workers of state enterprises who are receiving partial pay to stay home. The growing army of migrant workers, amounting to at least 70 million people also presents a problem. Major cities, in particular in the coastal regions, look very attractive, offering on average more than twice as high earnings as rural areas.

China is therefore facing a dilemma between reform and social considerations, as weakening foreign and domestic demand fail to create the new jobs needed to relocate workers laid off by state enterprises. This is already seen to be slowing down the reform process amid calls for local authorities to show greater concern for the social consequences of closing down inefficient or loss-making state enterprises.

The drive to expand lending for infrastructure and other state projects also flies in the face of efforts to strengthen state commercial banks' balance sheets, which would require

a winding down of lending for state projects with low rates of return and very long pay-off periods. The ceiling for loans of this type has been raised to Rmb1 trillion. According to official definitions, only 6 to 7 percent of banks' loan portfolios are non-recoverable. However, the governor of the central bank has also admitted that by applying more stringent international standards, up to 30 percent of loan portfolios may be doubtful. New loan classification standards are to be implemented in the four state-owned commercial banks in early 1999. These four banks account for 90 percent of all bank assets in China.

A warning sign over the health of the financial system was raised recently, when the PBC closed Guangdong International Trust and Investment Corp (GITIC), the investment arm of the Guangdong provincial government. GITIC had been experiencing difficulties in honouring its foreign obligations. There is a good chance that the government will honour foreign debts with government approval, but the measure is a warning sign that the implied government guarantee on foreign debt may not always be there. This may raise China's borrowing costs in the short term but is seen as a step in the right direction.

3 China's exposure to the Asian crisis

The main argument about the exchange rate of the renminbi that is used to justify the notion that the renminbi should be devalued is that the whole Asian crisis was triggered by a 50 percent devaluation of the renminbi at the beginning of 1994. The follow-up argument to this is that the other Asian currencies have now depreciated so much that China's exports are no longer competitive, China is losing markets and the renminbi therefore again needs to be devalued.

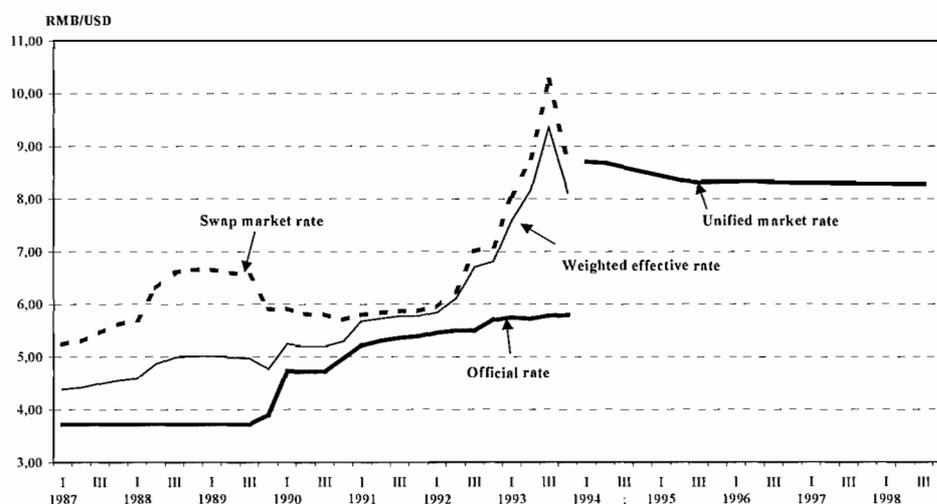
Is the Renminbi overvalued?

Several commentators who should know better have made the argument about the 50 percent devaluation. Indeed, this "devaluation" was the

last step in the unification of China's exchange system. Already in 1987 enterprises in certain Chinese cities were permitted to start trading foreign exchange proxies called retention quotas, which exporters had received in exchange for a certain portion of export proceeds sold to the central bank. These proxies could be sold to any authorised buyer of foreign exchange, typically an importer, at rates freely negotiated between the two parties. Thus, even though exporters received the official rate for the sale of the actual foreign exchange, by sel-

ling the retention quotas they were able to receive a higher effective exchange rate. Gradually more formal electronic trading mechanisms were set up in the major centres. An increasingly higher proportion of export proceeds were allocated as retention quotas, and an increasing share of importers had to buy an increasing proportion of their foreign exchange through the swap market. As a result, the effective exchange rate for exporters and importers gradually shifted away from the official rate and towards the market-determined rate.

Chart 2 **China: Renminbi exchange rates**



By the end of 1993, some 80 percent of foreign exchange was already transacted at market determined rates. At the beginning of 1994 the exchange system was unified, the official rate was abolished, and all transaction henceforth took place at the market rate. Since the market rate at the time was some 50 percent weaker than the official rate, analysts have claimed that this in fact amounted to a massive devaluation of the renminbi. However, this claim ignores the fact that most transactions already were executed at market rates. Therefore, the effective devaluation at the time amounted to

only some 7 percent. This is trivial in view of the fact that the swap market rate had depreciated from below 6 renminbi per dollar in 1992 to over 10 renminbi in late 1993 before appreciating in late 1993 before unification. The chart above illustrates the point.

In January 1994 the unified rate was 8.7 renminbi per dollar, but from there on the exchange rate started appreciating gradually, and currently the exchange rate is kept steady at 8.28. In 1994 and 1995 the Chinese economy overheated, and much of the gain from the previous depreciation was eroded by inflation.

Subsequently the economy was reined in and inflation brought under control. Over the least 2 - 3 years the trade surplus (but see discussion of trade surplus below) in combination with large inflows of direct investment funds led to a large increase in foreign exchange reserves as the central bank intervened actively to prevent the renminbi from appreciating. This year the upward pressure on the currency has abated, and at times the central bank has even been selling dollars to prevent the exchange rate from rising above 8.28.

Following all this, do we know if the renminbi is overvalued? This information does not tell us anything one way or the other about the level of China's current competitiveness, but it does refute some of the arguments presented. In particular, the Asian crisis was not triggered by a large devaluation of the renminbi in 1994 that eventually pushed other Asian countries over the brink. Likewise, the significant weakening of the market exchange rate in 1992-93 was to a great extent offset by inflation, which only was brought under control in 1997.

The significant weakening of the Japanese yen against the US dollar put increasing pressure on the countries pegging their currencies to the US dollar. Between June 1977 and July 1998 the renminbi appreciated by some 23 percent against the Japanese yen. Over the same period, the nominal effective exchange rate of the renminbi appreciated by 8 percent, but by only 3 percent in real terms due to the very low level of inflation in China. However, the recent sharp appreciation of the yen has more than reversed this development, although it remains to be seen how lasting it is.

How are China's exports doing?

Another argument made in the debate about China and the Asian crisis is that the crisis was actually triggered by inroads of Chinese exports into other Asian countries' export markets. Before discussing this issue, it will be useful to look at China's trade data in general. The issue here is the role of Hong Kong. This as well as the performance of China's exports are discussed in a very illuminating discussion paper by economists at the Federal Reserve

Board¹ The economies of China and Hong Kong are intimately linked together. About one half of China's exports go through Hong Kong, where products may be repackaged and distributed to various recipient countries worldwide by Hong Kong enterprises which may also have sold the goods. This activity adds significant value to China's exports. Some of these exports may have been classified in China foreign trade statistics as Chinese exports to Hong Kong, but over time more exports are reported according to ultimate destination. Similarly part of Hong Kong's exports are classified as either domestic exports or re-exports. Therefore, adding China's and Hong Kong's foreign trade may lead to significant double counting. Instead, it makes sense to exclude trade between the two from their aggregate trade figures. The Federal Reserve Board economists call this aggregate "Greater China". A second point they make is that in particular China's trade statistics may also be less reliable than trading partner statistics. This can be addressed by looking at trading partner data rather than Greater China data.

As table 2 shows, there are big discrepancies between how trade is registered in China and Hong Kong, on the one hand, and in trading partner countries on the other hand, in particular with regard to whether trade is with China or Hong Kong. Greater China totals, however, are quite similar. Trading partners systematically register a much greater share of imports as originating in China rather than Hong Kong, as compared to Chinese and Hong Kong export data. On the import side, in particular imports from Asia (exc. Japan) seem to be registered more as imports of China, while the exporting countries tend to register the exports as having been to Hong Kong.

Trade balance figures raise the question whether China really has been running such a large trade surplus, after all. Greater China had

¹ This section as well as tables 2 and 3 draw extensively on "Was China the First Domino: Assessing Links between China and the Rest of Emerging Asia", by John Fernald, Hali Edison and Prakash Loungani, Board of Governors of the Federal Reserve System, International Finance Discussion Paper, number 604.

a deficit according to Chinese and Hong Kong data, and was approximately balanced, according to trade partner data. According to trading partner data, the Greater China surplus towards the United States was \$39 billion, while the China surplus alone was \$42 billion. At the same time Greater China data showed a surplus of \$33 billion towards the United

States, two thirds of which was with Hong Kong. It is easy to see why there could be disagreements between the United States and China about the size and balance of their bilateral trade. Most of the deficit toward Asia is with Taiwan and Korea, two countries that have move production based on imported components to China.

Table 2. Foreign trade of China and Hong Kong (excluding trade between China and Hong Kong) according to different statistical sources, in 1966
In billions of US dollars

	<i>Chinese and Hong Kong trade statistics</i>			<i>Trade partner countries' trade statistics</i>		
	Exports of			Imports from		
	China	Hong Kong	"Greater China"	China	Hong Kong	"Greater China"
Total	118	119	237	181	51	232
Industrial countries	82	84	166	139	30	170
Asia exc. Japan	23	23	46	27	16	43
	Imports of			Exports to		
	China	Hong Kong	"Greater China"	China	Hong Kong	"Greater China"
Total	131	125	256	95	135	230
Industrial countries	73	70	143	59	68	126
Asia exc. Japan	41	49	90	23	63	86
	Trade Balance of			Trade Balance of		
	China	Hong Kong	"Greater China"	China	Hong Kong	"Greater China"
Total	-13	-6	-19	86	-84	2
Industrial countries	9	14	23	80	-38	44
Asia exc. Japan	-18	-26	-43	4	-47	-44

Table 3 seeks to establish whether Greater China has gained market share in export markets, in particular after the devaluation at the beginning of 1994. The data does not seem to support such an assumption. On the contrary, it appears in all markets, with the exception of Italy, that Greater China gained market share between 1989 and 1993, while its market share has been quite stable between 1993 and 1996. During the earlier period the market-determined exchange rate depreciated sharply while at the same time an increasing share of transactions were moved from taking place at the official rate to the market rate. Greater China's market share gains have also been more at the expense of NIEs rather than the ASEAN-4 countries that now are at the core of the Asian crisis. The above-mentioned study

also finds that Greater China's export growth is either positively correlated or non-correlated with growth of exports from ASEAN-4 countries, or non-correlated to export growth of NIE countries. Growth of exports from Greater China and other Asian countries would thus be explained by common factors, i.e. demand in export markets, rather than gains in market share for Greater China.

The extent to which China could be affected by the sharp depreciation of in particular the ASEAN-4 countries would of course also depend on the extent to which China competes directly with the same types of commodities with these countries in various markets. The Fed study reports that for most Asian countries' exports to the United States, trade is dominated by two commodity categories, semiconductors

and related capital goods, and footwear, apparel and household goods. In 1996 the first category accounted for less than 20 percent of Greater China's exports to the United States, up from 13 percent in 1989. The second category of goods accounted for almost 70 percent in 1996, slightly down from 72 percent in 1989. China's main competitors in the first

category were Singapore and Malaysia, whose exports to the United States were dominated by these commodities. In the footwear, apparel and household goods category, Greater China's main competitor was Indonesia, where by 1996 53 percent of exports to the United States were in this category.

Table 3. "Greater China's" share of selected Asian countries' exports to the US, Japan and Europe. Scaled to 100 for total exports of selected Asian countries in each market.

	1989	1993	1996	1989	1993	1996
	<i>United States</i>			<i>Japan</i>		
Greater China	24	33	34	23	29	35
NIEs ²	59	44	41	40	33	31
ASEAN-4 ³	17	23	25	37	38	34
Total	100	100	100	100	100	100
	<i>France</i>			<i>Germany</i>		
Greater China	31	38	39	36	40	40
NIEs	46	36	35	42	37	35
ASEAN-4	23	26	26	22	23	25
Total	100	100	100	100	100	100
	<i>Italy</i>			<i>United Kingdom</i>		
Greater China	37	41	50	34	37	34
NIEs	43	31	26	45	36	36
ASEAN-4	20	28	24	21	27	30
Total	100	100	100	100	100	100

A similar picture emerges in the commodity composition of Asian countries' total manufacturing exports. In 1993-95, clothing was the single most important commodity in China's exports, accounting for 22 percent, followed by the semiconductor category with 16 percent, other manufactures 15 percent and textile yarns and fabrics 12 percent. Other Asian countries' exports are clearly dominated by the electronics category except for Indonesia, whose ex-

ports are dominated by clothing while the semiconductor category only accounts for 9 percent of exports, much less than in all other Asian countries.

Direct trade between China and the ASEAN-4 and Korea has been becoming relatively more important, but these countries still account for less than 6 percent of China's exports, whereas less than 8 percent of the ASEAN-4 and Korea group's exports are

² Korea, Taiwan and Singapore.

³ Indonesia, Malaysia, Philippines and Thailand.

headed for China. Much of the increase in exports to China is probably explained by relocation of production to the lower costs in China.

It is also worth noting that the import content of China's exports is close to 50 percent, since such a large part of exports is made up of assembly of imported parts and components. If this activity were to be relocated to other countries, which now could provide lower costs, it could have important implications for China's growth and foreign trade. How much of a competitiveness buffer China gained when the exchange rate depreciated before 1994 is difficult to judge, but much if not all of it must have been wiped out at least in relation to Indonesia, the main competitor in the clothing and footwear categories. However, so far China continues to offer a much more stable environment than Indonesia.

Contagion and increased risk awareness

The Asian financial crisis spread very rapidly after breaking in Thailand in mid-1997. The speed and depth of this process took both country and international authorities by surprise. The extent to which these countries are economically inter-linked had not been fully appreciated. These were after all seen as countries that above all based their success on export to the industrialised countries. However, trade among these countries had grown even faster than exports to industrial countries. Between 1989 and 1996 the share of intra-regional exports in percent of total exports between Asian developing countries had risen from 31 percent to 40 percent. This is a strong indication that these economies are increasingly interdependent and that problems in one country would have an impact on the other countries in the group.

However, both China's and Greater China's exports are much less dependent on markets in Asian developing countries. Therefore, while exports to this region have suffered, China's exports overall have been able to hold up. It would seem reasonable, though, to assume that the growth potential for China's ex-

ports would suffer since the incentive to move production to China has been weakened. There could even be some incentives to move production from China to countries like Indonesia, although Indonesia for the time being does not appear to provide the necessary stability that would make in an attractive location.

International investors have made a radical reassessment of risk in all developing countries and emerging markets. This has been reflected in a sharp curtailment or retreat from investments in markets now perceived as being more risky. This is also affecting China, but to a lesser extent than the Asean-4 countries or Korea. Foreign investment in China primarily has been in the form of direct investment, while the other Asian economies have been much more dependent on short-term borrowing and portfolio investments, which can be withdrawn more readily than direct investments. The table below shows the sharp adjustments that have taken place in capital flows after 1996, which was the last "normal" year before the crisis broke.

The turnaround in capital flows to Asia is remarkable, from an inflow of 100 billion US dollars in 1996 to a forecasted outflow this year of close to 45 billion. Predictably, the biggest turn-around is in the "Other net" category, which includes short-term borrowing. In particular direct investment has remained much less affected. The IMF forecasts a modest resumption overall of inflows to Asia next year. When data for China is separated from overall Asian data, the big difference in the structure of capital flows becomes apparent. Net direct investment was and is expected to remain much more important for China than in other Asian countries. Another interesting item is the errors and omissions term in balance of payments data. The persistent high negative number for China may be an indication of leakage in capital controls and underreporting of imports which produces a too positive trade balance. The large increase in Asia excluding China may also be an indication of an increase in outflows of a type that have not been captured by regular balance of payments data.

Table 4. Net private capital flows, Errors and omissions, and Change in reserves in Asia⁴
In billions of US dollars

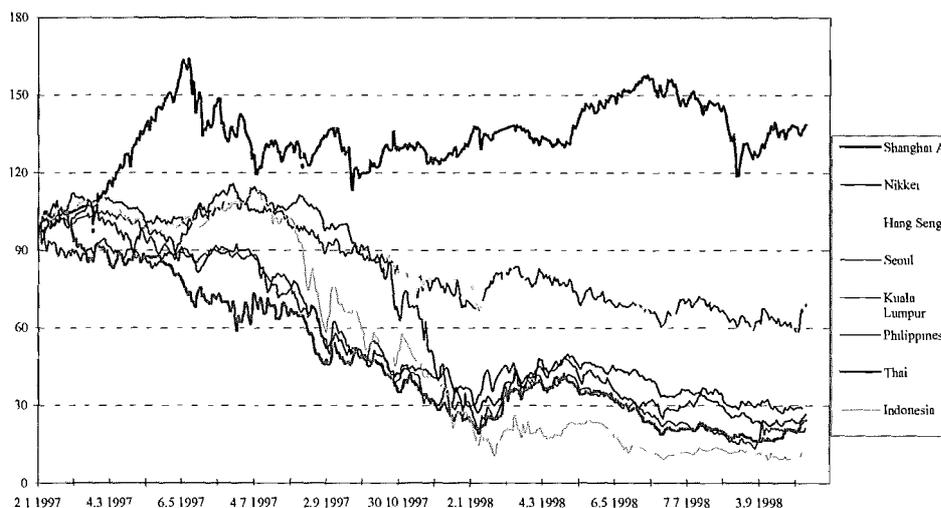
	1996	1997	1998	1999
Asia				
Net private capital flows	99.0	28.8	-44.3	11.0
Net direct investment	60.1	60.2	48.2	40.4
Net portfolio investment	10.2	11.6	-12.2	2.6
Other net investment	28.7	-43.0	-80.4	-32.1
Change in reserves(-: increase)	-48.1	-19.2	4.8	-37.9
Asia (excluding China)				
Net private capital flows	59.0	5.8	-45.3	
Net direct investment	20.5	18.5	16.2	
Net portfolio investment	8.5	4.8	-7.2	
Other net investment	30.0	-17.5	-54.4	
Change in reserves(-: increase)	-16.5	16.5	12.0	
China				
Net private capital flows	40.0	23.0	1.0	
Net direct investment	39.6	41.7	32.0	
Net portfolio investment	1.7	6.8	-5.0	
Other net investment	-1.3	-25.5	-26.0	
Errors and omissions	-15.7	-22.7	-23.0	
Change in reserves(-: increase)	-31.6	-35.7	-7.2	

Foreign investors investing in a country are interested in value expressed in their own currency. The collapse in the Asian stock markets is particularly amazing when looked at through the eyes of a US dollar based investor. The chart above shows that the dollar value of the Indonesian stock exchange has fallen to about one tenth of its value at the beginning of 1997. Hong Kong's stock market has been tracking

Japan's rather closely, to a low at around 60 percent of original dollar value. The other Asean-4 and Korea are at around one fifth of their original value. What stands out is the very different performance of the Shanghai A share index, even after allowing for weaknesses in the market's functioning. This must at least to some extent be an indication of international investors' different perception of risk in China.

⁴ Based on IMF World Economic Outlook, October 1998, and IMF International Capital Markets, September 1998.

Chart 3 Selected Asian Stock Indices expressed in US dollars (2.1.1997 = 100)



The role of Japan

The Japanese economy has now been stagnant for a decade, and genuine reforms of the financial and banking systems have until now continued to elude the political establishment. Japan has therefore not been able to provide the other Asian economies with the buoyant markets for their exports that they need to recover. In Japan, consumers have been retrenching and the economy weakening while politicians bickered. However, now it seems that a political compromise has been reached on using public funds to clean up the balance sheets of ailing Japanese banks. Financial markets in Asia have reacted positively to this, but a wait-and-see attitude would be prudent given Japan's previous record of taking decisions that seem to evaporate at execution. If this were to happen again, it would weaken China's export prospects to Japan further. This in turn would increase pressure on the balance of payments and the exchange rate. On the other hand the Japanese yen's sharp recovery from recent lows against the US dollar has served to ease pressure on all currencies pegging to the US dollar, even though the steepness of the correction may undermine its durability.

China has made much political mileage out of its own demonstrated willingness to push expansive policies and promote stability in the region while Japan appears to be incapable of shouldering its role as the economic dynamo. Much of the air would go out of this rhetoric if China devalued, even though it could-- and would -- blame Japan.

The role and position of Hong Kong

Hong Kong has a very important role as the gateway for much of China's exports to the world, and as an important regional financial centre with a very open economy. Hong Kong maintains a currency board-based peg of the Hong Kong dollar to the US dollar. Hong Kong has not escaped the financial turmoil as the peg has been attacked both in the foreign exchange and the stock markets. The odds of Hong Kong being able to maintain the system look reasonably good, since its economy is fundamentally sound and the financial system remains healthy despite sharp retrenchments in the stock and real estate markets. The authorities have tightened some of the rules governing the market to make speculation more difficult. In addition, the Hong Kong Monetary Authority also intervened in the local stock market by

buying shares to counter speculators who simultaneously sold the currency and shorted the stock market. The purpose of the intervention was to make the September futures contract close at a higher level than at which many short positions had been opened. This also did happen, although investors' losses are not known. However, the Hong Kong authorities have been much criticised for this action which was seen by market participants as a retreat from liberal free market principles.

Technically, Hong Kong does have the resources to maintain the peg to the US dollar, since foreign exchange reserves are many times larger than the amount of Hong Kong dollars in circulation. In the extreme case, all Hong Kong dollars could be withdrawn and replaced with US dollars. However, the economic cost of maintaining the peg is high. Real estate prices, admittedly very inflated, have fallen by up to 50 percent from peak levels, unemployment is rising and output is expected by some analysts to fall by up to 10 percent over the next few years.

The cost to Hong Kong of cutting its link to the US dollar would also be very high. Neither is it clear that it could gain much from cutting the US dollar link, since its primary function is that of providing highly efficient redistribution, transportation and financial services. The city-state bases much of its success on the solidity and stability of its economy and financial system and very prudent financial policies. Hong Kong is probably more exposed to China than the other way around, i.e. if China were to devalue, the pressure on Hong Kong could become unbearable. It is less clear that a devaluation of the Hong Kong dollar could force China to relinquish the renminbi/US dollar link.

4 China's options

Can China withstand the pressure?

China is not an open economy in the same way as the ASEAN-4 and NIEs. Controls on capital flows have meant that China is not exposed to short-term capital movements nearly to the

same extent as the other countries. Even though there are indications or suspicions that the exchange regulations are less than watertight, at the aggregate level the authorities probably have the where-with-all to prevent China's foreign exchange resources from being drained. Foreign exchange reserves also do amount to almost a year's import. Enforcement of existing regulations has been strengthened, and with some apparent success. And if pressure were to intensify one can not deny the possibility that major banks and enterprises could simply be instructed to repatriate foreign exchange, regardless of what the regulations say. Therefore, it is difficult to envisage that capital movements could lead to a liquidity or even confidence crisis that would force China's hand, at least in the short term. However, it may not have been very wise of the Chinese authorities to let the formally floating exchange rate get de facto pegged in the minds of the markets at a particular level. To this extent the Peoples Bank's intervention procedures could be criticised. However, the markets cannot force China to devalue.

China has indicated that it aims for full convertibility of the renminbi by the turn of the century. It is difficult to see that China could adhere to this schedule, even though the exchange system so far has been liberalised much faster than official plans have indicated. Full convertibility would put intense pressure on the Chinese financial system, which needs to be significantly strengthened and reformed.

China's problem is domestic, reform of financial institutions and the state enterprise sector, unemployment and resulting social pressures. So far much of China's boom has been export led. Now export markets in Asia are faltering, and Asian countries with sharply depreciated currencies could start to make inroads into China's market shares in industrial countries. This will make reform of the state-owned industries more difficult, since much of the labour released is expected to find employment in new or privatised industries financed to a large extent through FDI. But FDI may not be forthcoming on a sufficient scale, even though the 30 million large Chinese Diaspora undertakes a large portion of it, in particular from Hong Kong and Taiwan. These

investors are in China for the long haul and are unlikely to withdraw their investments in spite of temporary setbacks.

However, the slowdown in exports may force China to slow down its economic reform programme, and there are already signs of this happening. The danger is that many of the large infrastructure investments that now are being pushed to boost domestic demand are of inferior quality. State-owned bank's balance sheets may be burdened by further soft loans just when the banks are supposed to start applying more rigid and onerous criteria in their lending operations and balance sheet valuations. In the face of rising domestic problems, internal pressure for what appears like a solution could increase to the point where the authorities run out of arguments and lose credibility.

Would devaluation help China's economy?

China continues to run comfortable trade and current account surpluses. A devaluation in this situation would certainly be regarded as purely competitive, a beggar-thy-neighbour move. China may have lost competitiveness in some areas to other Asian countries, but the collapse in exports to Asian markets probably has more to do with weak demand than competitiveness. FDI continues to flow into China, albeit at a slower pace.

What, then, could be the consequence of a devaluation of the renminbi. Here China faces a difficult dilemma. The currencies of competitor countries have devalued by anything between 40 and 80 percent against the US dollar, although inflation is already beginning to erode some of this advantage. A small devaluation of the renminbi would thus not help China, in particular since the import content of China's exports is so high, 50 percent. To gain 10 percentage points in competitiveness, the devaluation would have to be twice as big. A small devaluation would not make much economic difference to China or the other countries in the region, but it could unleash expectations for further adjustments.

A very large devaluation would then be needed for economically meaningful effects. A large devaluation of the renminbi would surely unleash a new round of uncontrolled depreciation of the region's currencies and set back the region's recovery even further. With the current uncertain state of world financial markets this would surely also have major global repercussions, the end result being that China would be worse off than before, since demand for its goods in industrial countries, still healthy, would certainly also be affected.

There are also good political reasons why China wants to avoid devaluation. Devaluation would surely lead to a further increase in China's trade surplus with the US, which is politically very sensitive. China also has strong aspirations to join the WTO. The main opposition to China's entry has come from the US, which wants China to open more of its economy to competition. Devaluation would most certainly make this process more difficult. China has also made much political mileage out of its responsible and proactive role in maintaining stability in the region, in particular at the expense of Japan. The Chinese authorities are aspiring for the leadership role that belongs to the second largest economy in the world.

Nothing is forever. There is a clear time dimension to the devaluation issue. If China maintains its current regime for a few years and China's current external surpluses turn into deficits, and if by that time the other economies in the region have begun to recover, devaluation would be easier to accept and justify, and a much smaller devaluation might suffice.

If and when China eventually adjusts the exchange rate, the new exchange regime should provide for greater flexibility in the exchange rate than today. The fate of the other Asian economies show the danger of a pegged exchange rate that is maintained for too long. But over the next few years, devaluation is a no-win solution for China.

REVIEW OF ECONOMIES IN TRANSITION

from number 4 ISSN 1235-7405

- 1/92 Pekka Sutela: **Neuvostoliiton hajoamisen taloudelliset aspektit.** 24 s.
Jouko Rautava: **Suomen ja Venäjän taloussuhteet Suomen EY-jäsenyyden valossa.** 12 s.
- 2/92 Seija Lainela - Jouko Rautava **Neuvostoliiton talouskehitys vuonna 1991.** 15 s.
Seija Lainela **Viron taloudellisen kehityksen lähtökohdat.** 9 s.
Merja Tekoniemi **Yksityistäminen itäisen Euroopan maissa ja Baltiassa.** 7 s.
- 3/92 Kamil Janáček **Transformation of Czechoslovakia's Economy: Results, Prospects, Open Issues.** 20 p.
Sergey Alexashenko **General Remarks on the Speed of Transformation in the Socialist Countries.** 25 p.
Sergey Alexashenko **The Free Exchange Rate in Russia: Policy, Dynamics, and Projections for the Future.** 19 p.
Jouko Rautava **Liikaraha, inflaatio ja vakauttaminen.** 16 s.
- 4/92 Stanislava Janáčková - Kamil Janáček **Privatization in Czechoslovakia.** 8 p.
Sergey Alexashenko **The Collapse of the Soviet Fiscal System: What Should Be Done?** 45 p.
Juhani Laurila **Neuvostoliiton ja Venäjän velka.** 23 s.
Jukka Kero **Neuvostoliiton ja Venäjän ulkomaankauppa.** 24 s.
- 5/92 Pekka Sutela **Clearing, Money and Investment: The Finnish Perspective on Trading with the USSR.** 26 p.
Petri Matikainen **"Suuri pamaus" - Puolan talousuudistus 1990.** 22 s.
- 6/92 Miroslav Hrnčíř **Foreign Trade and Exchange Rate in Czechoslovakia: Challenges of the Transition and Economic Recovery.** 39 p.
Terhi Kivilahti - Jukka Kero - Merja Tekoniemi **Venäjän rahoitus- ja pankkijärjestelmä.** 37 s.
- 7/92 Seija Lainela **Baltian maiden rahauudistukset.** 23 s.
Seija Lainela - Jouko Rautava **Baltian maiden poliittisen ja taloudellisen kehityksen taustat ja nykytilanne.** 14 s.
Sergei Alexashenko **Verojen ja tulonsiirtojen jakautuminen entisessä Neuvostoliitossa.** 17 s.
- 1/93 Pekka Sutela **Taloudellinen transitio Venäjällä.** 11 s.
Pekka Sutela **Venäjän taloudellinen voima 2000-luvulla.** 9 s.
Pekka Sutela **Itäinen Eurooppa integraatiossa: ottopolkia, sisarpuolia vai ...** 11 s.
- 2/93 Inkeri Hirvensalo **Changes in the Competitive Advantages of Finnish Exporters in the Former USSR after the Abolition of the Clearing Payment System.** 35 p.
Miroslav Hrnčíř **The Exchange Rate Regime and Economic Recovery.** 17 p.
Gábor Oblath **Real Exchange Rate Changes and Exchange Rate Policy under Economic Transformation in Hungary and Central-Eastern Europe.** 31 p.
Gábor Oblath **Interpreting and Implementing Currency Convertibility in Central and Eastern Europe: a Hungarian Perspective.** 19 p.
- 3/93 Jouko Rautava **Venäjän järjestelmämuutos ja talouskehitys 1992.** 19 s.
Seija Lainela **Baltian maiden talous vuonna 1992.** 25 s.
Pekka Sutela **Itäinen Eurooppa vuonna 1992.** 14 s.
- 4/93 Jouko Rautava **Monetary Overhang, Inflation and Stabilization in the Economies in Transition.** 17 p.
Jarmo Eronen **Manufacturing Industries before and after the Collapse of Soviet Markets: a Comparison of Finnish and Czechoslovak Experience.** 19 p.

- 5/93 Pekka Sutela **Uusi hanke entisen rupla-alueen kaupankäynnin monenkeskeistämiseksi.** 8 s.
Juhani Laurila **Venäjän velkakriisin kehitys ja nykytilanne.** 10 s.
- 6/93 Jouko Rautava **Yritystuesta sosiaaliturvaan: Julkisen tuen muutospaineet Venäjällä.** 7 s.
Jarmo Eronen **Venäjän uusi hallinnollinen aluejako.** 7 s.
Aleksi Tkatchenko **Pienyrityksiä Venäjällä: Nykytilanne ja kehitysnäkymät.** 35 s.
- 7/93 Tuula Ryttilä **Russian Monetary Policy Since January 1992.** 20 p.
Inkeri Hirvensalo **Developments in the Russian Banking Sector in 1992-1993.** 22 p.
- 8/93 Seija Lainela - Pekka Sutela **Introducing New Currencies in the Baltic Countries.** 26 p.
Inna Shteinbuka **The Baltics' ways: Intentions, Scenarios, Prospects.** 27 p.
Inna Shteinbuka **Latvia in Transition: First Challenges and First Results.** 33 p.
Inna Shteinbuka **Industry Policy in Transition: the Case of Latvia.** 30 p.
- 9/93 Jouko Rautava **Venäjän keskeiset taloustaapahtumat heinä- syyskuussa 1993.** 10 s.
Merja Tekoniemi **Venäjän parlamenttivaalien poliittiset ryhmittymät.** 3 s.
Jarmo Eronen **Venäläinen ja suomalainen periferia: Permin Komin ja Kainuun luetaloudellista vertailua.** 29 s.
- 10/93 Seija Lainela **Venäjän federatiivisen rakenteen muotoutuminen ja taloudellinen päätöksenteko; Pietarin asema.** 14 s.
Inkeri Hirvensalo **Pankkitoimintaa Pietarissa.** 14 s.
Juhani Laurila **Suoran sijoitustoiminnan kehittyminen Venäjällä ja Suomen lähialueella.** 29 s.
Juhani Laurila **Suomen saamiset Venäjältä. Valuuttakurssimuutosten ja vakautusten vaikutukset.** 8 s.
- 1/94 Pekka Sutela **Insider Privatization in Russia: Speculations on Systemic Change.** 22 p.
Inkeri Hirvensalo **Banking in St.Petersburg.** 18 p.
- 2/94 Aleksi Tkatchenko **Pienyritysten yksityistäminen Venäjällä.** 23 s.
Jarmo Eronen **Konversio Venäjällä: tulosten tarkastelua.** 10 s.
- 3/94 Juhani Laurila **Direct Investment from Finland to Russia, Baltic and Central Eastern European Countries: Results of a Survey by the Bank of Finland.** 14 p.
Juhani Laurila **Finland's Changing Economic Relations with Russia and the Baltic States.** 11 p.
Jouko Rautava **EC Integration: Does It Mean East-West Disintegration.** 8 p.
Eugene Gavrilin **Macroeconomic Crisis and Price Distortions in Russia.** 20 p.
Eugene Gavrilin **Russia: Out of the Post-Soviet Macroeconomic Deadlock through a Labyrinth of Reforms.** 22 p.
- 4/94 Jouko Rautava **Venäjän järjestelmämuutos ja talouskehitys 1993.** 16 s.
Seija Lainela **Baltian maat vuonna 1993.** 19 s.
Jouko Rautava **Suomen idänkauppa 1990-93.** 7 s.
- 5/94 Pekka Sutela **Production, Employment and Inflation in the Baltic Countries.** 22 p.
Seija Lainela **Private Sector Development and Liberalization in the Baltics.** 14 p.
Seija Lainela **Small Countries Establishing Their Own Independent Monetary Systems: the Case of the Baltics.** 17 p.
- 6/94 Merja Tekoniemi **Työttömyys ja sosiaaliturva Venäjällä.** 31 s.
- 7/94 Pekka Sutela **Fiscal Federalism in Russia.** 23 p.
Jouko Rautava **Interdependence of Politics and Economic Development: Financial Stabilization in Russia.** 12 p.
Eugene Gavrilin **"Monetarism" and Monetary Policy in Russia.** 8 p.

- 8/94 Pekka Sutela **The Instability of Political Regimes, Prices and Enterprise Financing and Their Impact on the External Activities of the Russian Enterprises.** 31 p.
 Juhani Laurila **The Republic of Karelia: Its Economy and Financial Administration.** 37 p.
 Inkeri Hirvensalo **Banking Reform in Estonia.** 21 p.
- 9/94 Jouko Rautava **Euroopan unionin ja Venäjän välinen kumppanuus- ja yhteistyösopimus - näkökohtia Suomen kannalta.** 7 s.
- 10/94 Seija Lainela - Pekka Sutela **The Comparative Efficiency of Baltic Monetary Reforms.** 22 p.
 Tuula Ryttilä **Monetary Policy in Russia.** 22 p.
- 11/94 Merja Tekoniemi **Miksi Venäjän virallinen työttömyysaste on säilynyt alhaisena?** 19 s.
- 1/95 Jouko Rautava **Venäjän järjestelmämuutos ja talouskehitys 1994.** 19 s.
 Seija Lainela **Baltian maat vuonna 1994.** 21 s.
 Vesa Korhonen **Itäisen Euroopan talouskehitys 1994.** 19 s.
- 2/95 Urmas Sepp **Inflation in Estonia: the Effect of Transition.** 27 p.
 Urmas Sepp **Financial Intermediation in Estonia.** 32 p.
- 3/95 Vesa Korhonen **EU:n ja Venäjän kumppanuus- ja yhteistyösopimus.** 31 s.
 Jouko Rautava **Talousintegraatio ja Suomen turvallisuus - Suomi Euroopan unionin idän taloussuhteissa.** 21 s.
 Jouko Rautava **Suomen idänkauppa 1985-94.** 10 s.
- 4/95 Nina Oding **Evolution of the Budgeting Process in St. Petersburg.** 29 p.
 Urmas Sepp **A Note on Inflation under the Estonian Currency Board.** 12 p.
 Pekka Sutela **But ... Does Mr. Coase Go to Russia?** 14 p.
- 5/95 Urmas Sepp **Estonia's Transition to a Market Economy 1995.** 57 p.
- 6/95 Niina Pautola **The New Trade Theory and the Pattern of East-West Trade in the New Europe.** 21 p.
 Nina Oding **Investment needs of the St.Petersburg Economy and the Possibilities to meeting them.** 20 p.
 Panu Kalmi **Evolution of Ownership Change and Corporate Control in Poland.** 21 p.
- 7/95 Vesa Korhonen **Venäjän IMF-vakauttamisohjelma 1995 ja Venäjän talouden tilanne.** 37 s.
 Inkeri Hirvensalo **Maksurästtit Venäjän transitiotaloudessa.** 30 s.
 Seija Lainela **Baltian maiden omat valuutat ja talouden vakautus - pienten maiden suuri menestys.** 14 s.
- 8/95 Pekka Sutela **Economies Under Socialism: the Russian Case.** 17 p.
 Vladimir Mau **Searching for Economic Reforms: Soviet Economists on the Road to Perestroika.** 19 p.
- 9/95 Niina Pautola **East-West Integration.** 33 p.
 Panu Kalmi **Insider-Led Privatization in Poland, Russia and Lithuania: a Comparison.** 16 p.
 Iikka Korhonen **Equity Markets in Russia.** 14 p.
 Jury V. Mishalchenko - Niina Pautola **The Taxation of Banks in Russia.** 5 p.
- 1/96 Juhani Laurila **Payment Arrangements among Economies in Transition: the Case of the CIS.** 23 p.
 Sergei Sutyryn **Problems and Prospects of Economic Reintegration within the CIS.** 17 p.
 Viktor V. Zakharov - Sergei F. Sutyryn **Manager Training - Another Emerging Market in Russian Educational Services.** 9 p.

- 2/96 Jouko Rautava **Venäjän järjestelmämuutos ja talouskehitys vuonna 1995.** 12 s.
 Juhani Laurila **Katsaus lähialueisiin.** 28 s.
 Iikka Korhonen **Baltian vuosikatsaus.** 10 s.
 Pekka Sutela **Ukrainan ja Valkovenäjän taloudet vuonna 1995.** 10 s.
 Vesa Korhonen **Itäisen Euroopan siirtymätalouksien kehitys 1995.** 17 s.
- 3/96 Niina Pautola **Intra-Baltic Trade and Baltic Integration.** 12 p.
 Vesa Korhonen **The Baltic Countries - Changing Foreign Trade Patterns and the Nordic Connection.** 16 p.
 Iikka Korhonen **Banking Sectors in Baltic Countries.** 22 p.
- 4/96 Niina Pautola **Trends in EU-Russia Trade, Aid and Cooperation.** 16 p.
 Niina Pautola **The Baltic States and the European Union - on the Road to Membership.** 20 p.
 Elena G. Efimova - Sergei F. Sutyryin **The Transport Network Structure of the St.Petersburg Region and its Impact on Russian-Finnish Economic Cooperation.** 11 p.
 Iikka Korhonen **An Error Correction Model for Russian Inflation.** 10 p.
- 5/96 Juhani Laurila - Inkeri Hirvensalo **Direct Investment from Finland to Eastern Europe; Results of the 1995 Bank of Finland Survey.** 21 p.
 Tatiana Popova - Merja Tekoniemi **Social Consequences of Economic Reform in Russia.** 26 p.
 Iikka Korhonen **Dollarization in Lithuania.** 7 p.
- 6/96 Juhani Laurila - Inkeri Hirvensalo **Suorat sijoitukset Suomesta Itä-Eurooppaan; Suomen Pankin vuonna 1995 tekemän kyselyn tulokset.** 20 s.
 Jouko Rautava **Suomi, Euroopan Unioni ja Venäjä.** 6 s.
 Niina Pautola **Baltian maiden talouskatsaus 1996.** 12 s.
- 1/97 Panu Kalmi **Ownership Change in Employee-Owned Enterprises in Poland and Russia.** 51 p.
- 2/97 Niina Pautola **Fiscal Transition in the Baltics.** 23 p.
 Peter Backé **Interlinkages Between European Monetary Union and a Future EU Enlargement to Central and Eastern Europe.** 19 p.
- 3/97 Iikka Korhonen **A Few Observations on the Monetary and Exchange Rate Policies of Transition Economies.** 8 p.
 Iikka Korhonen **A Brief Assessment of Russia's Treasury Bill Market.** 8 p.
 Rasa Dale **Currency Boards.** 14 p.
- 4/97 Sergei F. Sutyryin **Russia's International Economic Strategy: A General Assessment.** 17 p.
 Tatiana Popova **The Cultural Consequences of Russian Reform.** 17 p.
 Ludmilla V. Popova - Sergei F. Sutyryin **Trends and Perspectives in Sino-Russian Trade.** 11 p.
- 5/97 Jouko Rautava **Venäjän järjestelmämuutos ja talouskehitys vuonna 1996.** 10 s.
 Iikka Korhonen - Niina Pautola **Baltian talouskatsaus 1996.** 12 s.
 Merja Tekoniemi **Katsaus lähialueisiin 1996.** 11 s.
 Merja Tekoniemi **Ukrainan talouskatsaus 1996.** 10 s.
 Kari Pekonen **Valko-Venäjän talous vuonna 1996.** 6 s.
 Katri Lehtonen **Keski- ja Itä-Euroopan talouskehitys vuonna 1996.** 13 s.
- 6/97 Niina Pautola **Towards European Union Eastern Enlargement - Progress and Problems in Pre-Accession.** 17 p.
 Katri Lehtonen **Theory of Economic Reform and the Case of Poland.** 26 p.
 Boris Brodsky **Dollarization and Monetary Policy in Russia.** 14 p.
- 7/97 Toivo Kuus **Estonia and EMU Prospect.** 24 p.
 Olga Luštšik **The Anatomy of the Tallinn Stock Exchange.** 23 p.
 Riia Arukaevu **Estonian Money Market.** 20 p.

- 1/98 Iikka Korhonen **The Sustainability of Russian Fiscal Policy.** 8 p.
Tatiana Popova - Merja Tekoniemi **Challenges to Reforming Russia's Tax System.** 18 p.
Niina Pautola **Optimal Currency Areas, EMU and the Outlook for Eastern Europe.** 25 p.
- 2/98 Peter Westin **Comparative Advantage and Characteristics of Russia's Trade with the European Union.** 26 p.
Urszula Kosterna **On the Road to the European Union - Some Remarks on Budgetary Performance in Transition Economies.** 31 p.
- 3/98 Jouko Rautava **Venäjän järjestelmämuutos ja talouskehitys vuonna 1997.** 11 s.
Merja Tekoniemi **Keskuksen ja alueiden välisten suhteiden kehitys Venäjällä 1992-1997.** 10 s.
Niina Pautola **Baltian talouskatsaus 1997.** 11 s.
Merja Tekoniemi **Katsaus Suomen kauppaan IVY-maiden ja Baltian maiden kanssa 1990-1997.** 11 s.
Tom Nordman **Kiinan talouden tila ja ongelmat.** 11 s.
Merja Tekoniemi **Ukrainan talouskatsaus 1997.** 10 s.
Iikka Korhonen **Keski- ja Itä-Euroopan talouskehitys 1997.** 12 s.
- 4/98 Kustaa Äimä **Central Bank Independence in the Baltic Policy.** 30 p.
Iikka Korhonen – Hanna Pesonen **The Short and Variable Lags of Russian Monetary Policy.** 11p.
Hanna Pesonen **Assessing Causal Linkages between the Emerging Stock Markets of Asia and Russia.** 10 p.
- 5/98 Laura Solanko **Issues in Intergovernmental Fiscal Relations – Possible Lessons for Economies in Transition.** 19 p.
Iikka Korhonen **Preliminary Tests on Price Formation and Weak-form Efficiency in Baltic Stock Exchanges.** 7 p.
Iikka Korhonen **A Vector Error Correction Model for Prices, Money, Output, and Interest Rate in Russia.** 12 p.
Tom Nordman **Will China catch the Asian Flu?** 14 p.
- 6/98 Saga Holmberg **Recent Reforms in Information Disclosure and Shareholders' Rights in Russia.** 17 p.
Vladimir R. Evstigneev **Estimating the Opening-Up Shock: an Optimal Portfolio Approach to Would-Be Integration of the C.I.S. Financial Markets.** 39 p.
Laura Solanko – Merja Tekoniemi **Novgorod and Pskov – Examples of How Economic Policy Can Influence Economic Development.** 14 p.
Ülle Lõhmus - Dimitri G. Demekas **An Index of Coincident Economic Indicators for Estonia.** 12p.
- 7/98 Tatyana Popova **Financial-Industrial Groups (FIGs) and Their Roles in the Russian Economy.** 24p.
Mikhail Dmitriyev – Mikhail Matovnikov – Leonid Mikhailov – Lyudmila Sycheva **Russian Stabilization Policy and the Banking Sector, as Reflected in the Portfolios of Moscow Banks in 1995–97.** 29 p.
- 1/99 Jouko Rautava **Venäjän järjestelmämuutos ja talouskehitys vuonna 1998.** 10 s.
Iikka Korhonen – Seija Lainela **Baltian maat vuonna 1998.** 10 s.
Tom Nordman **Kiinan talouden tila ja näkymät.** 13 s.
Pekka Sutela **Ukrainan talouskatsaus 1998.** 14 s.
Iikka Korhonen **Keski- ja Itä-Euroopan talouskehitys vuonna 1998.** 10 s.