LA LETTRE DU
CEPII
CENTRE D'ETUDES PROSPECTIVES ET D'INFORMATIONS INTERNATIONALES
N° 178 — April 1999

The Devaluation of the Yuan:
"A little impatience may ruin a great project" (Confucious)

China is one of the few Asian countries to have escaped financial turmoil. But the stability of the yuan against the dollar has caused it to rise vis-à-vis *other Asian currencies, which is fuelling present fears about a devaluation of the Chinese currency. To be sure, maintaining the present parity will lead to a notable fall in China's foreign trade position in the long term. But there is no hurry to devalue. In 1998, China's foreign trade held up well despite the Asian crisis, due especially to assembly and subcontracting operations. Furthermore, a precipitous devaluation would almost certainly not have had the benefits expected of it, and would have carried with it important risks. An optimal strategy would be based, instead, on a gradual readjustment of the exchange rate, spread out over a year or two.*

The appreciation of the yuan

Up until now, the financial crisis which has shaken Asia has spared China, even though the weaknesses of its financial sector are at least as important as those of other countries in the region. The banking system is in a state of insolvency, but continues to be dominated by State banks, which are guaranteed by the government[1]. Furthermore, internal inconvertibility of the currency restricts capital outflows[2]. With a current account surplus, a limited amount of foreign debt, massive foreign exchange reserves[3] and control of capital movements, China has been able to avoid the contagion of the Asian devaluations. Together with the Hong-Kong dollar, the yuan is the only currency in the region not to have experienced devaluation.

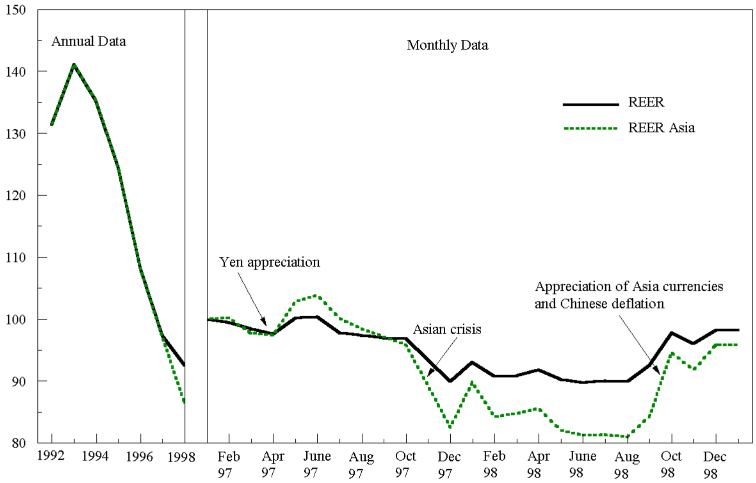
This, nevertheless, puts the Chinese economy in a difficult position. The strong, real appreciation of the yuan with respect to other Asian currencies has affected the price competitiveness of Chinese products, especially as the devaluation has come in the wake of an important appreciation that occurred between 1993 and 1997 (Graph 1). This situation is feeding recurring rumours of a yuan devaluation, rumours sometimes put about by the Chinese press itself. From time to time, the Chinese authorities reiterate that they will not devalue. But differences of opinion exist even within the leadership, reflecting the contradictory interests at stake. From a sectoral point of view, for example, a devaluation would have negative consequences for certain industries (those importing intermediate goods), though it would aid others, such as iron and steel and shipbuilding, which are in competition with Japanese and Korean rivals. The growing spreads between the spot exchange rate (yuan 8.3 to the dollar) and the long term rate (8.6 in six months, and 9.71 in 12 months) demonstrate that the markets are not convinced by official declarations, and that they expect a devaluation in the future.

Foreign Trade and the Asian Crisis

To appreciate the opportuneness of a devaluation under the present circumstances, it is important to evaluate the impact of the Asian crisis on China's foreign trade. This impact is twofold: recession in the crisis economies may provoke a fall in the external demand for China's goods; the devaluation of Asian currencies is eroding the competitiveness of Chinese products in third markets and within Asian markets themselves. These factors are difficult to distinguish, given the lack of detailed data on the price and volume of Chinese exports. Nevertheless, the analysis of statistical information does provide some useful lessons.

1. B. Naughton, "China Financial Reform: Achievements and Challenges", ***BRIE Working Papers***, 112/1998.
2. J.G. Fernald and O.D. Babson, "Why Has China Survived the Asian Crisis So Well? What Risks Remain?", Boards of Govenors of the Federal Reserve System, ***International Finance Discussion Papers***, No 633, February 1999.
3. In 1998, the amount of foreign debt stood at between $139 dollars (official Chinese figures) and $180 billion (according to expert estimations), equivalent to 14 and 18% of GDP respectively. Foreign exchange reserves were running at $145 billion.

Graph 1 - China's Real Effective Exchange Rate (January 1997 = 100)



Note: A fall indicates an appreciation. China's Real Effective Exchange Rate (REER) is calculated as the average of bilateral real exchange rates with China's 15 main trade partners, weighted according to their importance in Chinese exports. China's Real Effective Exchange Rate with respect to the Asian currencies (REER Asia) is calculated at the average of the bilateral real exchange rate with China's 8 main trade partners in Asia, weighted according to their importance in Chinese exports (including Hong-Kong and Japan).

Source: CHELEM-CEPII and the International Financial Statistics of the IMF, authors' calculations. It should be noted that in the CHELEM database, trade between China and Hong-Kong is corrected for re-export trade.

on raw materials whose prices have collapsed and it is of course vulnerable to competitiveness losses in manufactured products.

Despite a slowdown in exports, this segment of foreign trade has maintained its high surpluses, as "ordinary" imports have also been depressed by the slowdown of the Chinese economy. These surpluses collapsed towards the end of 1998, as the expansionary policy launched by the authorities in the middle of the year generated a renewed rise in industrial imports. Thus, imports from Europe, for example, rose by 25% during the first two months of 1999. The rise in imports is probably also due to the strengthened competitiveness of products coming from Asia, but the intensification of competition in the domestic market is difficult to appreciate, because of the lack of data on prices.

On average, Chinese exports stagnated during 1998 in value terms (dollars), and have been falling since the autumn[4]. This stagnation is the result of two diverging trends: the fall in sales to Asia (-10%) was compensated for by a progression in exports to the European Union (+18%) and the United States (+16%). Thus, only the demand effect seems to have been at work, up until the autumn of 1998 at least. The competitiveness effect, which is likely to affect exports to the region as well as to third markets, seems to be very limited. This is often explained by the fact that financial constraints have not allowed the supply-side of Asian countries to benefit fully from devaluation. Another explanation lies in the nature of Chinese exports themselves: while "ordinary" exports have been affected by both trends in demand and relative prices, exports linked to assembly and subcontracting work are less sensitive to exchange rate movements, and have held up well for quite some time.

Ordinary trade

"Ordinary" trade which is subject to the general Customs regime accounts for 36% of China's total exports. It excludes trade stemming from special tariff regimes, notably assembly and subcontracting operations as well as imports linked to inward direct investment. In 1998, such "ordinary" exports fell by nearly 5% on average, on a trend that is still falling (see Graph 2). By January-February 1999, such exports were down by 15% compared to January-February 1998. This segment of Chinese exports is thus fully suffering from the effects of the crisis, for a number or reasons: it is dependent

Assembly and subcontracting operations

The other segment of Chinese exports, made up of subcontracting and assembly operations, has contributed to dampening the effects of the Asian crisis. These operations have been favoured by China's trade policy since the 1980s, and have witnessed accelerated growth since 1992, under the impact of the rapid expansion of inward direct investment, and the relocation of Asian production to China[5]. Companies with foreign capital account for two-thirds of these operations, which made up 56% of Chinese exports in 1998, and 49% of imports (as opposed to 48% and 35% respectively in 1993).

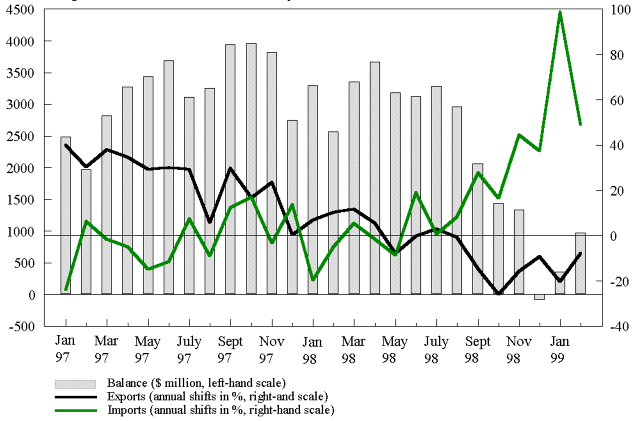
The import content of these exports is especially high in this "assembly and subcontracting" segment, as it accounts for 70% of the value of exports (the average figure for 1998). This trade is thus little sensitive to exchange rate fluctuations as the effects on import prices and export prices partially cancel each other out. Hence, such operations have expanded spectacularly since 1993, despite the appreciation of the yuan. Since the beginning of the Asian crisis, the evolution of such exports demonstrates indeed that they have been less affected than "ordinary" exports. They continued to grow until August 1998 (Graph 3).

Furthermore, most of the supplies to this sector come from Asia (70%), whereas half of its sales are to the American and European markets (see Table). The devaluations of the Asian currencies have led to a fall in the dollar price of imported products, which automatically raises the value-added of the transformation process in China. This has led

4. This stagnation in value terms hides a 6% progression in the volume of exports, according to estimates by J.P. Morgan.

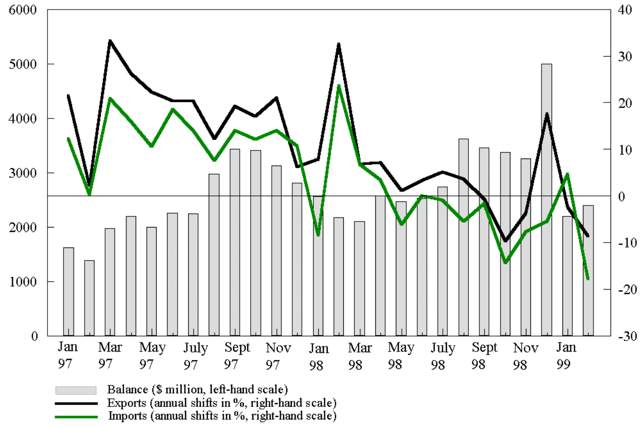
5. F. Lemoine, "Quand le marché chinois s'ouvrira...", *La Lettre du CEPII*, n°153, January 1997.

Graph 2 - Evolution of "Ordinary" Trade



Source : Chinese Customs..

Graph 3 - The Evolution of Sub-contracting and Assembly Trade



Source : Chinese Customs.

to a rise in the surplus, estimated at $35 billion in 1998, as opposed to $29 billion in 1997. Thus in 1998, the real appreciation of the yuan still had a positive impact on the value of the trade balance of this segment, exceeding the consequences of the loss in competitiveness.

However, since October 1998, the trade stemming from assembly activities has been falling (save for a brief rebound in December). This suggests that Asian companies, which had massively relocated production to China, are now reducing their activity as cost advantages are reduced.

In 1999, the negative effects of the yuan's appreciation on China's trade balance, which had been limited up to now by the strong import content of exports, are slowly getting the upper hand: a fall in the surplus of transformation trade is taking place while a deficit is growing in ordinary trade. Yet, is the devaluation of the yuan urgent, or may it be differed? Should any devaluation be substantial, or should it be gradual and well-managed?

The issue of devaluation

Several elements suggest that devaluation is not an emergency. First, China cannot presently justify a devaluation in terms of the risks to its balance of payments. The Chinese trade balance is still is in surplus: even if certain Chinese economists expect the surplus to be cut by half in 1999 (down from $43 to $25 billion) it remains sufficient to ensure a current account equilibrium. China's abundance of foreign exchange reserves and the limited convertibility of the yuan mean that the currency will go on being sheltered from external pressures. In particular, the combination of deflation in China, along with the nominal and real appreciations of Asian currencies have begun to produce a turnaround in the real effective exchange rate of the yuan and hence an improvement in Chinese competitiveness (Graph 1). In December 1998, the real effective exchange rate of the yuan with respect to the Asian currencies had practically returned to its level of October 1997.

Secondly, though there are many arguments in favour of a rapid devaluation of the yuan, its benefits may be less than expected. The first argument concerns the link between the exchange rate and direct investments. A strong yuan reduces the attractiveness of China for foreign investors, especially once foreign investors begin anticipating a devaluation. In this case, delaying it can only help to break the inflow of further investments. However, foreign direct investment (FDI) into China is a lot less sensitive to exchange rate movements than portfolio investment. In addition, incentives (such as tax breaks, simplified administrative procedures, and the opening up of new sectors to IDI) have been put into place to encourage new inflows.

Another argument favouring immediate devaluation is that it could slowdown deflationary tendencies in China, by protecting the domestic market from import competition, and by supporting exports. However, instead of devaluing, China can also implement trade policies. Indeed, it has already started to do so, by introducing (mainly tax) incentives for exports.

Lastly, a devaluation would allow monetary constraints to be relaxed. It would facilitate a fall in interest rates, both nominal and especially real rates, which would favour the demand for credit as well as consumption. This expansionary channel, which is quite normal to market economies, raises a number of questions in the Chinese case. It is not sure that the demand for credit and that household consumption are very interest-rate elastic. The stagnation of consumption is due more to the rise in unemployment and untenured work. Furthermore, a devaluation would worsen companies'

Table - The Geographic Spread of China's Foreign Trade, 1997

	TOTAL FOREIGN TRADE		ASSEMBLY AND SUB-CINTRACTING	
	Exports	*Imports*	*Exports*	*Imports*
USA-Canada	32,6	13,8	32,9	7,7
EU 15	18,0	12,5	18,3	5,1
Asia	34,2	57,4	33,5	73,0
of which Japan	21,2	23,0	20,9	25,0
NICS 1*	10,4	31,6	10,0	42,5
NICS 2**	2,6	2,8	2,6	5,5
Other	15,2	16,3	15,3	14,2
World	100	100	100	100

Sources : CEPII-Chelem and Chinese Customs. Authors' calculations.

Chinese exports passing through Hong-Kong are counted in the final destinations.

* Hongkong, S. Korea, Singapor, Taïwan.

** Malaysia, Indonesia, Philippines, Thaïland.

foreign debt and that of joint-ventures, which is currently running above $40 billion.

A sharp devaluation would have substantial costs, given the present fragile context of international finance. The most important, negative consequence would be the likely weakening of the Hong-Kong dollar, which would find itself under great, foreign, speculative attack. A devaluation could thus provoke another round of devaluations throughout Asia, which would rapidly wipe out any positive effects China could hope for its trade. Devaluation would also worsen tensions with the industrialised countries (especially the United States), which is already experiencing massive deficits in its bilateral trade. China's entry into the WTO would become even more difficult.

Ultimately, however, China will probably not be able to avoid a devaluation of its currency, sometime towards the end of 1999 or in early 2000. The country will no doubt face a rising trade account deficit, in particular given its own continuing, relatively high growth with respect to Asia and especially Japan.

Apart from demand effects, it can be shown that China's price competitiveness, resulting from appreciation since 1993, will lead to a current account deficit in the order of 3% of GDP, within two years (contrasting with a 3% surplus at present)[6]. To be sure, the surpluses that have been accumulated during the 1990s do not seem to be coherent with China's low level of development[7]. Yet it seems highly unlikely that the Chinese authorities would accept such a deficit, for both political and economic reasons. It would necessarily increase China's dependence *vis-à-vis* short term, foreign capital, whereas foreign finance is now still essentially long term. The forex crises of the emerging countries have clearly shown up the risks of such a situation. The readjustment of the exchange rate therefore seems inevitable at some point. At present, the Chinese authorities may chose between an immediate competitive devaluation geared to bringing the yuan back to a sustainable level (between yuan 9.5 and 10 to the dollar)[8], and a gradual realignment of the exchange rate aimed at meeting a sustainable level within a year or two. The arguments put forward here suggest that China has an interest in differing readjustment until the situation in Asia has stabilised sufficiently, to allow it to relax its exchange rate policy with less risk and so go ahead with a gradual, controlled devaluation.

Stéphane Dées
Françoise Lemoine

6. S. Dées, "*La politique de change en Chine: une analyse basée sur des estimations de taux de change d'équilibre de moyen terme*", mimeo, 1999.
7. J. Williamson and M. Mahar, "Current Account Tigers", in S. Wren-Lewis and R. Driver, ***Real Exchange Rates for the Year 2000***, Institute for International Economics, 1998.
8. These figures are generally put forward by capital market economists (see for example Société Générale ***Fundamental Asia***, 1/Feb/99).

LA LETTRE DU CEPII

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Le **CEPII** est sur le WEB
son adresse : **www.cepii.fr**
ISSN 0243-1947
CCP n° 1462 AD
2nd Quarter 1999
April 1999
Imp. ROBERT-PARIS
Imprimé en France.

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