

IPS Working Paper No. 2

**The Japanese Economy and Economic Policy
in Light of the East Asian Financial Crisis**

Ramkishan S. Rajan

Research Associate
The Institute of Policy Studies (IPS), Singapore
E-mail: rrajan@pacific.net.sg

August 1998

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The author is grateful to Naveen Chandra, Ben Dolven and particularly Arun Mahizhnan and Lee Tsao Yuan for useful comments on an earlier draft. Editorial assistance by B.R.S. Rajan, Yap Mui Teng and Chang Li Lin is much appreciated. Particular thanks are due to Gwee Wee Chen, who greatly assisted with the graphs. The usual disclaimer applies.

*Given the nature of this paper, the need for up-to-date data has required heavy dependence on data from various issues of *The Economist* magazine and selected analysts' reports.*

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Abstract

The depth and breadth of the East Asian financial crisis has added a sense of acute urgency for some concrete and credible measures by policy-makers to revitalise the Japanese economy. While steps to be taken for the long-run competitiveness and economic revitalisation of the Japanese economy are clear (with the only doubt being about whether and how effectively they will be implemented), those needed to boost aggregate demand in the short-run are far less obvious. Given the near-zero nominal interest rates in Japan, most observers argue that an expansionary monetary policy would be ineffective. However, as with Krugman (1998a,b), we argue that once a distinction is made between *real* and *nominal* interest rates, it is logically possible for monetary policy to be effective in raising demand if it is able to create inflationary expectations. This could probably be effected through explicit announcements by the Bank of Japan of the intention to target a certain inflation rate in the future.

1. Background and Motivation

Japan, the world's second largest economy and largest creditor nation, has been relatively stagnant since the early 1990s following the bursting of the real estate and stock market bubbles of the 1980s. This has contrasted sharply with the relative dynamism of the world's largest economy, the US, during this period (Chart 1). Things turned particularly bleak in 1998, with a full-fledged recession (defined as two consecutive quarters of negative growth), the first since 1974 (JRI, 1997a and Sugawara, 1998a). Accordingly, its unemployment rate which is currently slightly over 4 percent, is expected to surpass that of the US if the current growth trends in the two countries persist (Charts 2 and 3)¹. Grave fears remain about "Japan being sucked into a deflationary spiral" (The Economist, 1998, June 20 and Tett and Harney, 1998) (Chart 4)², with real wages declining on a year-on-year basis since the fourth quarter of 1997 (EIU, 1998b).

¹ Japan's effective unemployment rate will look relatively worse than the 4 percent figure once account is taken of the extent of underemployment, given Japan's life-time employment 'guarantee' or 'employee-friendly' attitude (Graham, 1998 and Sugawara, 1998b). Forecasts by JP Morgan (1998b) and DRI (1998) are for the unemployment rate in Japan to reach 4.6-4.8 percent in 1998 and 5.2-5.3 percent in 1999.

² To be sure, while consumer price growth has remained slightly positive, domestic wholesale prices fell on a year-on-year basis in 1996 by 1.6 percent and were flat in 1997. Wholesale and even consumer prices are both forecast to decline in 1998 and 1999 (JP Morgan, 1998b and DRI, 1998).

Insert Chart 1

Insert Chart 2

Insert Chart 3

Insert Chart 4

There have been a number of high-profile bank failures since late 1995, the most spectacular being the recent closure of Yamaichi Securities, the fourth largest brokerage house in Japan (ICR, 1998 and The Economist, November 29, 1997, pp.87-8). In 1995 itself, Koichi Hamada (1995, pp.274-5) had noted that “the seriousness of current financial troubles can be regarded as being historically unprecedented since the financial crisis of 1927...(which)...was a forerunner of the world-wide Great Depression.”

American banks were the predominant external creditors in the cases of the Mexican-Tequila crisis in 1994-95 and during the Latin American debt crisis of the early 1980s. In contrast, Japanese (and less so European) banks were responsible for the bulk of lending (about 30 percent) to the crisis-hit East Asian economies, viz. Indonesia, Malaysia, Thailand and Korea (Table 1)³. The financial crisis in East Asia has thus contributed to an aggravation of the financial sector malaise in Japan, with banks forced to ‘cut losses’ by refusing to roll-over existing loans, let alone extend new ones (Chart 5)⁴. This has created a vicious spiral of illiquidity, leading possibly to insolvency and a consequent worsening of net asset positions of the (Japanese) creditors⁵. In turn, this deterioration of financial intermediation abilities and functions

³ A point not always appreciated is the existence of significant intra-regional variations among the East Asian economies. Thus, in this case, Japanese bank lending has ranged from a low of 15 percent in the Philippines to highs of 38 percent in Indonesia and Thailand (Table 1).

⁴ Indeed, Japanese banks have reportedly been amongst the most reluctant of creditors to work towards systematic debt restructuring (not to mention outright forgiveness) of the debts of the most afflicted East Asian economies (Kagda, 1998 and Lee, 1998).

of Japanese banks has exacerbated the domestic and regional credit crunches (and thus the financial crisis), as they seek to enhance their balance sheet situations⁶.

Table 1
Nationality of Banks Providing Loans to Selected East Asian Economies, June 1997
(US\$ billion)

<u>From</u> <u>To</u>	Japan (1)	Germany (2)	France (3)	USA (4)	UK (5)	Hong Kong (6)	Total (7)	1/7 (%)	(2+3+5)/7 (%)	4/7 (%)
Indonesia	23	6	5	5	4	6	61	37.7	24.5	6.6
Thailand	38	8	5	4	3	18	99	38.3	16.1	4.0
Korea	24	11	10	10	6	2	117	20.5	23.1	8.5
Malaysia	10	6	2	2	2	3	33	30.3	33.3	6.1
Philippines	2	2	3	3	1	4	17	11.8	35.2	17.6
Total	97	32	24	24	16	53	326	29.7	22.3	7.4
Mexico (June 1994)	4	4	20	20	16	0	71	5.6	32.4	28.2

Source: Goldstein and Hawkins (1988)

Insert Chart 5

All these problems and weaknesses in Japan have contributed to general pessimism about its short and medium-term prospects. Compounding these have been the political uncertainties following the heavy election defeat by the ruling Liberal Democratic Party (LDP) in the upper house on July 12, 1998, and the consequent resignation of Prime Minister Ryutaro Hashimoto the next day⁷. Against this back-drop, the US financial credit agency Moody's announced on July 23 that it was considering a possible review and downgrading of Japan's country debt rating

⁵ According to ING Baring Securities, Japan's non-performing loans (NPLs) to the rest of Asia doubled since the crisis to ¥6 trillion (The Economist, April 18, 1998, p.75).

⁶ The perceived vulnerability and low credit standing of Japanese banks is seen from the fact that all banks have to pay a 'Japan premium' on borrowings from international capital markets. This risk premium - referred to as the Harberger premium after UCLA economist Arnold Harberger (1980) - for even the best Japanese banks, is between 0.4 to 0.6 points above base rates (ICR, 1998, p.113).

⁷ The LDP won just 44 of the 126 seats up for grabs in the Upper house. However the LDP is as of yet not in danger of losing its grip on power (Landers, 1998a). This is so, as of importance as far as choosing the Prime Minister is concerned, is the Lower house, where it currently enjoys the absolute majority.

from its top-notch AAA grade (Rowley, 1998a). While such a move is questionable in light of Japan's status as the world's largest creditor nation (with about US\$900 billion in overseas assets), it does emphasise the dramatic deterioration of and the precarious state of confidence in the growth prospects of the Japanese economy.

The remainder of the paper is organised as follows. The next section summarises the importance of a robust Japanese economy (including a stable and 'strong' yen) for the rest of East Asia. Section 3 discusses the long and short-term economic policy implications for the Japanese economy. Section 4 focuses on short-term demand management policies (viz. fiscal versus monetary policies). The penultimate section details the analytics and importance of 'inflation-inducing' monetary policy in boosting short-term demand in Japan. Potential drawbacks of such a policy are also highlighted and rationalised. The final section provides a summary and concluding observations.

2. Consequences of a Sluggish Japanese Economy and Weak Yen for East Asia

Nominal interest rates in Japan - which are close to zero (Charts 6 and 7) - cannot be raised for fear of the damaging effects it could have on:

- i) the domestic banking sector (which is very fragile);
- ii) the already highly depressed stock market - which has trailed other major industrial stock markets (Charts 8 and 9); as well as
- iii) the fairly large government deficit (Chart 10) and public debt (Chart 11 and section 2.1)⁸.

⁸ Most observers opine that once the Nikkei index falls below a certain 'trigger' level (estimated at 16,000 points), a number of Japanese banks will lose their 'hidden capital gains' in the form of large shareholdings in corporate customers and affiliated firms, which were purchased at a significant discount (below value). These 'latent losses' will further lessen the lending propensities of the banks, particularly so if the 8 percent capital adequacy ratio mandated by the Bank for International Settlements (BIS) is in threat of being breached (EIU, 1998a). Indeed, there have been suggestions that the Japanese government has been

Insert Chart 6

Insert Chart 7
Insert Chart 8

Insert Chart 9

Insert Chart 11

All these have in turn caused unprecedented weakness in the yen relative to US\$ (Chart 12). The yen fell to about 145 per US\$ on June 12, 1998, an all-time low since 1991, and way below the peak of about 80 in April 1995. This sharp drop in the US\$ value of the yen was despite a US\$20 billion intervention by the Japanese authorities. A smaller but highly symbolic joint US\$4 billion intervention by the US and Japanese monetary authorities on June 19, 1998 - reportedly divided almost evenly between the two countries - did help to prop-up the yen slightly. But this proved to be only a temporary respite, as the yen fell back to about 141 to the US\$ as at July 4, 1998 (Sanger, 1998a)⁹.

Insert Chart 12

The weak yen and sluggish domestic demand have stalled economic recovery in East Asia through a number of transmission channels (see Table 2).

Table 2
Significance of Japan and the Yen to Selected East Asian Economies, 1997
(%)

	Proportion of Debt denominated in yen	Proportion of Exports Destined to Japan	Proportion of Imports Sourced from Japan	Proportion of In-Coming Tourists from Japan	Proportion of FDI from Japan
Indonesia	39.5	21.0	18.0	16.6	6.8
Korea	54.0	15.0	25.6	13.4	23.1

using the postal savings and pension funds to keep the Nikkei at around the 16,000 level.
⁹ The significance/symbolism of this joint intervention ought not to be under-rated. There have been only two other precedents for such a joint action: the 'Plaza Accord' in mid 1985 to bolster the yen against the strong US\$ and the 'reverse Plaza Accord' in April 1995 to weaken the yen.

Thailand	23.0	10.8	19.2	42.9	7.9
Malaysia	15.0	12.6	21.9	5.0	9.9
Philippines	25.0	16.2	20.6	7.1	36.8
China	32.0	17.4	20.3	23.0	19.0
Average	31.4	15.5	20.9	18.0	17.3

Source: Bhaskaran (1998)

First, the weak yen has partly offset the depreciation of the Korean won and the Taiwanese \$ and therefore their economies' cost competitiveness - given their broadly similar comparative advantage (chart 13)¹⁰.

Insert Chart 13

Second, the weak yen has reduced the relative attractiveness of assets in East Asia, thereby diminishing the incentive for Japan to undertake foreign direct investment (FDI) in the region (so-termed 'wealth effect')¹¹. This problem is particularly true of China, which is the only country in the region whose currency has not depreciated in nominal terms since the official devaluation in 1994 (see Fernald, et al., 1988). Apart from this wealth effect, to the extent that a substantial part of lending to the region by Japanese banks is to subsidiaries of Japanese companies, the acute and growing financial sector problems in Japan may be expected to have

¹⁰ The impact on Korea may be questioned in light of the almost 45 percent depreciation in the won during July 1997-July 1998 in nominal terms. However, given zero price increase or even deflation in Japan on the one hand, and the relatively high inflationary pressures in Korea on the other, seen in real terms (i.e. real exchange rate), the worries for Korea may be legitimate. Indeed, real effective exchange rate computations by JP Morgan (1998b, p.6) is revealing. Between September 1997 and December 1997, Korea's real effective exchange rate depreciated by 31 percent, but the depreciation between September 1997 and June 1998 was only 19 percent (given the nominal appreciation of the Korean won, depreciation of yen and other regional currencies and higher inflation rate in Korea relative to some of its trading partners, including Japan). In contrast, while Japan's real effective exchange rate essentially remained stable between September 1997 and December 1997, it depreciated by about 10 percent between September 1997 and June 1998. If current trends persist, the initial advantages of the sharp nominal depreciation of the won in 1997 and early 1998 will be completely eroded (relative to Japan).

¹¹ The wealth effect of a change in the real value of the yen has been shown to be a significant factor determining Japanese regional FDI (Goldberg and Klein, 1997). Thus, there was a surge in Japanese FDI following yen appreciation between 1986-89 and again in 1992-95, with there being a sharp drop off between 1989-91 when the yen depreciated (Kawai, 1997).

a further negative impact on FDI.

Third, despite the pronouncements to the contrary by high-ranking Chinese leaders (see for instance, Kwang, 1998), there is also the 'psychological' aspect, in which financial market participants have convinced themselves that continued weakness in the yen will necessitate a depreciation of the Chinese renminbi¹². It is popularly argued that a renminbi devaluation in turn may then add to the pressures for the Hong Kong \$ peg to be revoked (or conversely, the Hong Kong \$ peg may be broken, which in turn could negatively affect the renminbi - see footnote 14)¹³. If this occurs, another round of 'competitive devaluations' in the region cannot be discounted^{14,15}.

Fourth, and probably most important, the weak yen and sluggish demand growth in Japan have thus far precluded any sort of economic recovery in the crisis-hit East Asian economies through exporting to Japan, as part of a broader strategy

¹² Fong (1998) has suggested that Chinese officials are of the view that a yen per US\$ rate of 160-165 will be the 'pressure point' at which the Chinese yuan will 'have to be' devalued, while other analysts have suggested the range is more like 150-155 yen to the US\$. See Dornbusch (1998) and Tao (1998) for two succinct articles on reasons why it would be in China's self-interest not to devalue the renminbi.

¹³ While this may indeed happen, the economic rationale is not convincing (recognising though that often, perception may be more important than reality in short-term asset market fluctuations and pricing). To the extent that a lower renminbi does not hurt the Chinese economy, and if anything, may possibly enhance its export competitiveness (albeit slightly), Hong Kong may actually stand to benefit, given its role in servicing mainland trade. Further, a weaker yen (relative to renminbi) would imply that the local value of debt burden owed by China to its Japanese creditors would decline (Table 2). Admittedly though, the net impact of a yen devaluation on China (and thus Hong Kong) is not as straightforward. For instance, at least two broad factors counter the above 'positive impact' of a yen depreciation. First, about 25-30 percent of China's foreign exchange reserve holdings (roughly estimated currently at about US\$140 billion) are denominated in yen (Harding, 1998). Second, a significant proportion of Japanese loans are channeled to Japanese subsidiaries on the one hand, and there is also a net positive impact of a strong yen on FDI to the East Asian region on the other, as discussed in this section.

¹⁴ It is sometimes forgotten that China does not allow for capital account convertibility. Accordingly, while bearishness about the currency will invariably lead to some capital flight (illegally) as well as the creation and flourishing of parallel markets (which tend to understate the true market value of the renminbi due to a risk premium), a direct short-selling of the renminbi - as outlined in Rajan (1998) and as happened in the other East Asian economies - cannot occur.

¹⁵ This is reportedly the reason for the US Treasury's intervention in the foreign exchange markets to help stabilise the yen, the timing of the action coinciding exactly with the US

of “exporting themselves out of trouble”. On the contrary, the fear is that a weak yen, by making Japanese goods relatively more competitive, could allow Japan to expand exports to extra-regional economies at the expense of the other East Asian economies (Lincoln, 1988, p.65). There’s a ‘double whammy’ in operation here, in that it is generally found that Japanese FDI in the East Asian region is trade-creating (see Rajan, 1996 and references cited within). In particular, it spurs exports (to the US mainly and less so to Japan), while concurrently stimulating imports of intermediate goods and components from Japan (Goldberg and Klein, 1997). Thus a weak yen could have a depressing impact on regional trade.

Fifth, a weak yen along with stagnant/declining real wages will reduce the demand for luxury items such as overseas holidays by Japanese. In fact, according to a survey by the Japan Travel Bureau (JTB), every sector of outbound travel from Japan (i.e. business and leisure) was expected to worsen in 1998 (JRI, 1998)¹⁶. Reduced numbers of Japanese tourist arrivals (or expenditure per Japanese tourist) can be expected to have a significant negative impact on the regional countries, especially those that were depending on it as an important source of foreign currency.

In light of the above, there is a growing feeling among regional policy-makers and most observers that, far from being part of the solution, Japan has hitherto been a large part of the problem as far as the East Asian financial crisis is concerned. This is in sharp contrast to America’s role during the Tequila crisis. Specifically, at that time, the US was seen to have been extremely open (benign?) to exports from Latin America, in recognition of the need for the crisis-hit economies (viz. Mexico and Argentina) to increase exports as a means of stimulating growth and reducing external debt burdens (Tanaka, 1998).

president’s visit to China (Sanger, 1998a).

¹⁶ Latest data reveals a decline in the number of Japanese vacationing abroad during the traditional ‘obon’ summer break. This was the first decline in eighteen years (Straits Times,

3. Policy Implications: Long-Term Versus Short-Term Policies

Japanese economic policy must involve a two-pronged strategy.

First, *medium and longer-term recovery* require that financial sector malaises be tackled, particularly with regard to the quick disposal of non-performing loans (NPLs), which are conservatively estimated at anywhere between ¥70 and ¥100 trillion (Sanger, 1998b, Shikano, 1998 and Smith, 1998). While accurate estimates of recapitalisation needs of Japanese banks are unavailable, figures suggested range from a low of 10 percent to as high as 20 percent (Table 3).

Table 3
Recapitalisation Needs of the Banking Sectors of Selected East Asian Economies,
1998 Estimates (%)

	Hong Kong	Indonesia	Japan	Malaysia	Philippines	Korea	Thailand
(DC/GDP) ^a	175	75	170	165	60	165	155
(NPLs/TLs) ^b	6-10	30-35	15-20	15-25	8-10	25-30	25-30
CAR ^c	15-20	8-10	6-10	8-14	15-18	6-10	6-10
CAR-NPL ^d	14	-17	-4	-4	10	-10	-11
Recap ^e	none	19	20	20	none	30	30

Notes: a) Domestic credit-to-GDP; b) Non-performing loans-to-Total loans; c) Capital-asset ratio; d) Capital-asset ratio after NPL write-off; e) Recapitalisation needs

Source: Rajan (1998, table 11)

In this light, belated but nevertheless of significance, is the recent package of reforms to be implemented over a five-year period to complement the 'Big Bang' proposal (outlined in mid 1997). The Big Bang is aimed at deregulating the financial market by the Year 2001 (Sakae, 1997 and Smith, 1998). Most notably, the reforms include the establishment of bridge banks to acquire failing financial institutions while maintaining credit availability to commercially viable ones (Chart 14). Though details are yet unavailable, indications are that the bridge bank proposal shares broad similarities with the US Resolution Trust Corporations (RTC), which were established in the 1980s in order to liquidate assets of failed Savings and Loans

(S&Ls).

Insert Chart 14

It must be said though that the comparison with the S&L debacle in the US may not be entirely appropriate. The bad loan problem has impacted virtually all major banks in Japan (with the top 19 accounting for about 60 percent of total banks loans in the country), while the S&Ls were only a small part of the overall financial system in the US (US banks and other institutions remained unaffected). As such, there existed a number of potential buyers of the S&Ls in the US. This does not exist in Japan. Further, costs involved in resolving the bad debts in the S&L crisis amounted to some US\$160 billion or 2.7 percent of US GDP. In comparison, the bad debt resolution costs-to-GDP ratio in Japan, even conservatively estimated, is expected to be double digit (well over 10 percent of GDP). This has led to some skepticism that the bridge bank scheme may be meant more as a means of 'saving' or prolonging the lives of weak banks, rather than at restructuring the Japanese financial system. Accordingly, more innovative, market-based schemes, such as the securitisation of bad debts as outlined by Ezrati (1998), may be considered in parallel with the bridge bank plan.

The overall financial restructuring effort must be accompanied by other supply-side measures that enhance the structural flexibility of the Japanese economy (such as revoking life-time employment, allowing for greater market

access to FDI and imports into Japan, further relaxation or preferably, complete dissolution of the Large Scale Retail store Law which effectively protects local merchants from retail competition). It must be added though, that while important initiatives have been announced in recent times, political economy compulsions have led to much market-skepticism regarding the commitment of the Japanese authorities towards their actual implementation (see for instance, Lincoln, 1998)¹⁷.

Second, for reasons noted above, there is an urgent need for measures to improve short-term growth prospects in Japan. This is needed in order to help stabilise/(strengthen?) the yen, as well as to assist the region directly by allowing increased exports to Japan as part of an export-led recovery. Nomura (1998) has estimated that for every 1 percent increase of Japanese GDP growth, the crisis-hit East Asian economies will grow an additional 0.13 percent on average¹⁸. In view of the seeming absence of outright debt repudiation or forgiveness and limited/partial and snail-paced systematic debt workout agreements, the need for the regional economies to export/grow their way out of indebtedness cannot be sufficiently emphasised¹⁹.

Short-term strategies must focus on reflating the economy through aggregate demand management policies, i.e. monetary and/or fiscal. The Japanese

¹⁷ This is particularly so following the upper house election defeat by the LDP. It remains to be seen if the ruling party is able to muster sufficient votes in the upper house to pass legislation pertaining to some of the important reforms (The Economist, August 15, 1998, pp.65-6).

¹⁸ The country-specific growth boosts are as follows: Korea 0.10 percent, Indonesia 0.11 percent; Malaysia 0.27 percent, Thailand 0.15 percent, and the Philippines 0.14 percent (Nomura, 1998).

¹⁹ The tight monetary policy stance maintained in the crisis-hit economies as part of IMF-mandated conditions, has been a further reason that has precluded an export-led recovery from taking place. There are indications that some of the regional economies (Malaysia and Thailand in particular) are leaning towards easing interest rates to help stimulate growth. While this may have merit (given the high leverage ratios of most of the firms in the region), the worst case scenario of such a policy, *if implemented prematurely*, is that it could lead to selling pressures on the currencies, with consequent depreciation-cum-inflationary spirals (Rajan, 1998 discusses this issue in more detail).

Economic Planning Agency (EPA) announced in December, 1997 that “personal consumption is at a standstill” (quoted in ICR, 1998, p.106), while planned business investment has also fallen sharply (JP Morgan, 1998b). The other component of private expenditure, viz. exports, have also seen a sharp decline recently. This is mainly due to the deep recessionary conditions in Asia, which account for about 40 percent of Japan’s total exports (JP Morgan, 1998b). This excess aggregate expenditure over output is reflected in a rapid build-up of inventories (Chart 15)²⁰.

Insert Chart 15

Insofar as the US experience with the RTC and S&Ls is indicative, if the bridge bank scheme is implemented in spirit as part of an overhaul of the banking system, it will in all probability deepen the spending glut. This is so, as the shutting down or restructuring of problem-banks will, other things being equal, lead to a reduction in aggregate bank lending on the one hand, while some part of the financial sector bailout/cleanup would inevitably be borne by the tax payers on the other. Conversely, if stimulus measures are effective, there ought to be fewer corporate failures, while asset prices should strengthen, hence mitigating the NPL problems of banks (given that loans are tied to asset values). Given the above, the need for effective and timely actions aimed at stimulating aggregate demand becomes readily apparent²¹. Wolf (1998) put it best when he stated:

Japan suffers from a chronic structural complaint and a critical

²⁰ This is just a restatement of the national income accounting equation. This states that if planned national savings exceeds planned domestic investment plus net exports (or alternatively, planned output exceeds planned expenditures), there will be an unplanned accumulation of inventories (i.e. over and above desired inventory holdings).

²¹ Of course, one may argue that the announcement/implementation of credible structural policies may lead to general optimism of the country’s growth prospects, thus stimulating private investment and household consumption. Nevertheless, the ‘stop-go’ nature that has characterised economic policies in Japan thus far, will, in all probability, add to uncertainties. Therefore, private spending may actually be held back by risk averse economic agents. However, even if one were to grant the possibility of optimism-driven spending, it will probably be more than outweighed by the ‘liquidity channel’ (i.e. the expectation that tax-payers will have to share at least part of the restructuring costs).

demand condition. To focus on the chronic complaint is to risk aggravating the critical condition. The priority is to boost demand, to cushion the economy during the needed reform. The question is how.

4. Short-term Strategies: Monetary Versus Fiscal Policy

Discount rates in Japan were lowered nine times between July 1991 to September 1995, reaching a historic low of 0.5 percent (Kawakita, 1996, pp.37-8). Since short-term nominal interest rates are close to zero, the opportunity for an expansionary monetary policy to boost private investment is commonly argued to be unavailable. To be sure, at near zero interest rates, an increase in the quantity of money will have no discernible impact on nominal interest rates and thus on physical investment. This is so, because at a given level of income and wealth, the only way people will be induced to increase their money holdings is to reduce the price of money, i.e. short-term nominal interest rates. This however cannot occur if these rates are at or close to zero (as they cannot be negative). This so-called Keynesian 'liquidity trap' - whereby demand consistently falls short of productive capacity despite near zero nominal interest rates (or alternately, planned aggregate savings exceeds planned investment plus net exports) - was much in vogue during the Great Depression. It seems to leave fiscal policy - i.e. reducing tax burdens and/or boosting government expenditures - as the sole means of reflating the economy.

The effectiveness of reducing tax burdens as a means of augmenting private expenditure may be limited due to the so-called 'Ricardian Equivalence' proposition. Loosely speaking, this proposition states that people, being forward-looking (rational), will realise that the decrease in tax rates today must be offset by an increase in rates some time in the future (in recognition of the intertemporal government budget constraint needing to hold in the long-term). Thus, for tax cuts

to possibly have any significant impact in boosting consumption and aggregate demand, they must be viewed as being permanent²². In light of the growing budgetary imbalance and burgeoning public debt, - which has grown to over 100 percent of GDP (Charts 10 and 11 respectively)²³ - Rudiger Dornbusch (1997) has gone so far as to suggest that Japan is faced with an outright 'fiscal crisis'. Against this backdrop, pronouncements of the permanence of tax cuts may lack credibility²⁴.

This lack-of-credibility-problem is particularly prevalent when there is significant pessimism about the growth prospects on the one hand, and realisation that households will be faced with at least some part of the burden in cleaning up the financial sector on the other. Also, the policy reversals by the Japanese authorities - for instance, a tax hike in 1997 immediately after the fiscal stimulus the previous year - will in all probability make tax cuts ineffective in raising demand (i.e. the bulk of the tax relief may be saved). This is particularly so, to the extent that the Japanese are saving for old-age in the anticipation of insufficient funds in the government's kitty to finance social security benefits, and the consequent expected rise in the ratio of social security payment costs (Kihara, 1998)²⁵. Indeed, the former

²² There are obviously a number of reasons for the Ricardian Equivalence proposition not to hold in reality (see for instance, Barro, 1989). For instance, people may not be 'forward looking' (i.e. they may be myopic), they may be liquidity constrained (such that a tax break now will, by relieving this constraint, in fact lead to increased spending), and so forth. The important point though is that this proposition does emphasise that a tax break may not necessarily be seen as a pure windfall gain, thus precluding as large (if any) an increase in spending as might be hoped for.

²³ It has been suggested that once unfunded state pension liabilities are included, the total obligations of the public sector may exceed 250 percent (Plender, 1998).

²⁴ Japan's budgetary balance has been in deficit since 1993, ballooning in 1996 (Table 9). In some part, this may be attributed to cyclical factors (i.e. reduction in tax revenues during downturns), as well as the ¥14 trillion September 1995 fiscal stimulus package, which incidentally did help temporarily boost growth in 1996 to 3.9 percent (Chart 1). Part of the growth-boost was also due to a 'front-loading' of consumer spending and capital investment in anticipation of an expected hike in the consumption tax rate from 3 to 5 percent (which actually took place in April 1997). This bringing-forward of expenditures in turn contributed to the particularly weak demand in 1997-98 (JRI, 1997b).

²⁵ As of 1995, Japan had the world's highest life expectancy (76.2 for men, 82.8 for women). Its fertility rate was 1.42, far lower than the 2.07 required for population replacement. As such, latest estimates suggest that the elderly population ratio will continue to rise until it peaks at about 32 percent by year 2050 (Kihara, 1998).

Japanese Prime Minister Hashimoto, reportedly made mention of this in late 1997 as rationale for his original aim to cut the budget deficit to 3 percent by 2004 as part of The Fiscal Structural Reform Law enacted in 1996. Consequently, the public awareness of this potential concern has been aroused. Therefore, for tax cuts to have any chance of being effective, they must *be permanent, and more importantly, need to be viewed as such by the public*²⁶. The latter suggests that if such a policy is undertaken, it must be accompanied by unambiguous statements by policy-makers about the permanent nature of the cuts (see footnote 39).

In late April 1998, the Japanese authorities announced a ¥16.7 trillion fiscal stimulus package (or about 3 percent of GDP). The package consisted mainly of expenditures on public works, and was the fifth such measure since October 1997 (EIU, 1998b). The Ricardian Equivalence proposition noted previously may once again dampen its effectiveness. Specifically, to the extent that forward-looking agents are concerned that such government spending expansions will necessitate an equivalent rise in taxes in the future (in present value terms), the net effect of this policy may be further diluted. In addition, given the gross structural inefficiencies in the economy, the effective multiplier effects of these projects much be questioned. Indeed, public sector fixed investment already accounts for almost 8 percent of Japan's GDP, far higher than other industrial economies (Chart 16).

Insert Chart 16

While a detailed exploration is beyond the scope of this paper, at the least, fiscal expenditures ought to be focused on directly improving living standards, such as urban housing conditions, which are not commensurate with the per capita

²⁶ See JRI (1998) for a discussion of concrete steps towards large-scale tax reductions and other proposals for stimulating growth in Japan. Admittedly, it is not merely a permanent tax relief, but also a revamping of the entire tax code - which is too narrowly based (the burden

income of an average Japanese household. This may also help improve consumer sentiments, hence contributing indirectly to increased domestic demand.

5. Monetary Policy Reconsidered

As initially alluded to by John Makin (1996) of the American Enterprise Institute, and more recently, by prominent Japanese academic and member of Bank of Japan's (BOJ's) nine-member policy board, Kazuo Ueda (see Tett, 1998a), MIT economist Paul Krugman (1998b) and elaborated and formalised by Krugman (1998a), monetary policy may have a role to play in boosting demand. This is so, as while the short-term nominal interest rate may be near-zero and downwardly rigid (for reasons noted above), what is important for investment (and possibly consumption) is the real interest rate. Specifically, by the 'Fisher identity', we have that the real interest rate approximately equals nominal interest rate minus expected inflation. More generally, the Fisher identity is a specific application of the fact that the nominal variable can be transformed into a real variable with an appropriate price index²⁷.

Hence, if an expansionary policy leads to positive expected inflation and nominal interest rates are near-zero, real interest rates will be negative. This negative cost of capital ought to stimulate private investment. In addition, insofar as the *interest effect* on savings exceeds the *income effect*, household savings may be reduced, consequently raising consumption. Even abstracting from this interest rate channel, as long as consumers expect goods (particularly durables and 'luxuries') to

falling mainly on corporations and households) - that is required.

²⁷ To be specific, the Fisher identity is as follows:

$$(1 + r) = (1 + i)/(1 + \Pi^e),$$

where r = real interest rates; i = nominal interest rate; and Π^e = expected inflation rate. If Π^e is 'sufficiently low', often the cross product term ($r\Pi^e$) is ignored. We then obtain the desired result that:

$$r = (i - \Pi^e)$$

cost more tomorrow compared to today, they will bring forward consumption, hence boosting demand and output.

The subtle yet critical point to note is that it is not sufficient merely to increase money supply. Rather, there must be such a large injection of liquidity that there is a general expectation of inflationary conditions. Only then will real interest rates be reduced (become negative). This is a non-negligible issue, as currently the recessionary conditions do imply that there are expectations of unchanging prices, if not outright deflation²⁸. Thus, to be credible in creating inflationary expectations, not only must there be large monetary injections, these must be accompanied by unequivocal statements by policy-makers to that effect. As noted by Krugman (1998a), “(t)he way to make monetary policy effective...is for the central bank to *credibly promise to be irresponsible* - to make a persuasive case that it *will* permit inflation to occur, thereby producing the negative real interest rates the economy needs”²⁹.

Kazuo Ueda has reportedly proposed the possible introduction of a target for inflation or the monetary base. His suggestion is for a 15 percent growth in the monetary base or an inflation rate of about 1.5 percent (Tett, 1998a). It is unclear from the source as to whether Ueda is talking about inflation as measured by changes in the wholesale or consumer prices, given that the latter has generally

²⁸ Specifically, the *substitution effect* states that a fall in real interest rates will lead to savings becoming less attractive relative to consumption (as you get a lower return per \$ saved). The *income effect* states that a fall in real interest rates will mean that, for given savings, expected wealth/income will now be lower (due to reduced returns on a given level of savings). Thus, to the extent that people save in order to obtain a certain level of income over their life-times, they will now be induced to save more to make up this implicit loss in income. There is a third effect, known as the *intertemporal substitution effect*. This effect states that a fall in real interest rates, *if seen as temporary*, will induce agents to work less, as they realise that the savings they make now will obtain a lower return than if done in the future. Admittedly, the empirical relevance of the effect of real interest rate changes on work effort is dubious (and entirely absent in the case of a permanent tax change).

²⁹ Given that the BOJ is recognised as being one of the least independent central bank (from the government) in comparison to other central banks in the industrialised economies, the use of monetary policy for domestic stabilisation is institutionally feasible.

been higher than the former (see Chart 4)³⁰. However, to the extent that the consumer price index (CPI) generally tends to overstate inflation by between 1 to 2 percent, a 1.5 percent CPI-based inflation rate would only imply price stability. Therefore, given the need to ‘create inflation’, the numerical target in focus ought appropriately to be the wholesale price index (WPI) or a 3-4 percent target rate of the CPI (given the approximately 200 basis points difference between them in 1998)³¹.

Targeting the inflation rate is probably preferable to that of the monetary base. This is so, as one might expect the money multiplier to increase if and when the economy picks up, as banks will be less inclined to hold as large ‘excess reserves’ (i.e. over and above the legally mandated reserve requirements), while individuals may choose to hold less cash (or place a lower proportion of savings in the postal savings institution or in foreign currency deposits at home or abroad), as their confidence in the durability of the financial system grows³². In other words, if

³⁰ In general, differences between the %CPI and %WPI (where %CPI > %WPI) may at least partly be explained by the so-termed ‘Balassa effect’. Generally, the CPI reflects a weighted average of the prices of both tradables (P_T) and nontradables (P_{NT}), while the WPI captures only/mainly tradable goods. Let α be the proportion of the tradables sector in the economy. Thus:

$$\%CPI = \alpha(\%P_T) + (1 - \alpha)\%(P_{NT})$$

$$\%WPI = (\%P_T)$$

$$(\%CPI - \%WPI) = (1-\alpha)(\%P_{NT} - \%P_T)$$

According to Balassa (1964), the productivity growth in the tradables sector should outpace that in the nontradables sector (haircuts being the usual example). Accordingly, $\%P_{NT} > \%P_T$, such that %CPI > %WPI.

³¹ It is argued that Ueda’s proposal is not for inflation per se, but rather, to prevent outright deflation - popularly termed ‘price destruction’ or ‘kakaku hakai’ in Japan - (The Economist, July 25, 1998, p.84). However this contention seems to contradict the suggestion by Ueda of a positive target inflation rate as discussed above (also see Tett, 1998a). Regardless, as with Krugman, we take the position of the need for explicit inflation, so as to keep real interest rates negative.

³² Indeed, the BOJ reportedly noted that the households’ preference to hold cash (or place it in the postal savings system) is “in line with...(their)...persistent anxiety regarding the financial system and economic conditions” (quoted in EIU, 1998b, p.34). Similarly, there has recently been some concern that Japanese households have been moving some of their

the policy does help stimulate growth and general optimism about the economic prospects, the money multiplier ought also to rise. As such, one could envisage an initially large growth in high powered money (given expected low money multiplier), followed by slower growth rates as the economy picks up and presumably, the multiplier increases³³ (Chart 17 reveals the procyclical nature of Japan's credit multiplier).

Insert Chart 17

An important caveat should be noted. The potential effectiveness of such an inflation-inducing strategy will probably be greatest if viewed as 'temporary', thus encouraging front-loading of consumption expenditures³⁴. This is so, because if inflation is assumed to be 'temporary', presumably the substitution effect of the real interest decline (which induces greater consumption) ought to dominate the income effect (which induces lower consumption), as the income decline will not be viewed as permanent (substantial?). (We abstract from the intertemporal substitution effect, which, as noted, is probably not significant in practice). Admittedly, the practical implementation of such a technically desirable strategy is questionable. This is so, as the only way of getting people to develop positive inflationary expectations is, as noted, through a commitment by the BOJ to a sustained target inflation rate/monetary base growth. Pragmatism therefore suggests that the Ueda-proposal of a permanent target inflation rate may be desirable.

savings into foreign currency deposits in Japan or even entirely out of the country, as the yen fell to a new eight year low, hovering at about 147 to the US\$ (Strom, 1998).

³³ Growth in money supply (M2 + CDs) in Japan has annually averaged about 3.5 percent since 1995 (ICR, 1998).

³⁴ Over the longer-term, as the economy responds to the stimulus, prices and nominal interest rates will adjust such that real interest rates are constant and determined only by 'real variables'. In other words, the so-called 'monetary neutrality' proposition has to hold in the

5.1 Potential Drawbacks of 'Inflation-Inducing' Monetary Policy

While the above policy seems logically consistent, are there other potential problems in its implementation? Three problems of potential significance seem to immediately stand out.

First, creating inflationary expectations could conceivably lead to socio-political instabilities. This may occur because inflationary expectations need to be created *prior to* any possible boost in output. Thus, even if the policy could be potentially successful (from a purely technical perspective), to the extent that it requires a period of actual or perceived stagnation (i.e. creating inflation on the one hand and the ongoing recession on the other), questions remain regarding how the polity will respond to this.

Second, there is the almost-instinctive repulsion from any policy that is potentially inflationary. This view is understandable, given the oft-noted statement that inflation is like toothpaste - easy to squeeze out, but extremely difficult (sometimes impossible?) to put back in. The wariness among Japanese policy-makers of an 'overly loose' monetary policy is particularly keen, in light of the fact that excessive policy-induced liquidity was the primary cause of the, now infamous, asset price bubble of the 1980s (Kawai, 1997 and Kon-ya, 1995)³⁵. However, as noted, the aggregate demand policies are but one side of the coin. In the longer-run, the supply-side initiatives ought to boost productive capacity, thus moderating any short-term inflationary pressures created. Further, the aim of this policy is not to create double-digit inflation, but rather, some 'small, positive' rate.

Third, it may be argued that higher inflation could lead to further weakness in the yen. This conclusion is however not unambiguous. Specifically, as noted, expansionary monetary policy in this case ought not to lead to a perceptible decline

long-run (to put this crudely, in the long-run, nominal variables have no real effects).

³⁵ The expansionary monetary policy was initiated following the Louvre Accord of February

in nominal interest rates (which is the whole point of the discussion). Thus, insofar as relative interest rate differentials (between Japan and the US) are unchanged, there ought to be no appreciable downward pressure on the yen. Indeed, to the extent that the policy, if successful, could reduce bearishness regarding Japan's growth prospects, the yen may actually be somewhat strengthened³⁶. Admittedly, if exchange rates depend on the inflation rate differentials (i.e. the purchasing power parity or PPP theorem), there may be a further decline in the US\$ value of the yen. However, apart from the question of the short-term validity of the PPP theorem (see Flood and Taylor, 1996 and Rogoff, 1996 among many others), the caveats noted in the previous paragraph hold³⁷.

6. Summary and Concluding Observations

Two non-trivial assumptions have been made in this paper. First, that the new Japanese administration under Prime Minister Keizo Obuchi is firmly committed to the recovery of the Japanese economy. Second, that the *policy-makers* are able to wrest control from those in the *bureaucracy* which have hitherto generally resisted radical changes (see for instance, The Economist, March 21, 1998, pp.23-5 and Landers, 1988b). If these conditions are met, we have emphasised that Japanese policy-makers must undertake a two-pronged attack:

- a) boost aggregate demand in the short-term;

1987 agreed by the G-7 countries as a means of weakening the yen.

³⁶ Implicit in the above statement is the uncovered interest parity theorem (UIP). Briefly, assume two countries, Japan (¥) and US (\$). Let the expected bilateral exchange rate (¥ per \$) = S^e . Let $i_¥$ = Japanese nominal interest rates and $i_\$$ = US interest rates. Let RP^e = expected risk premium of yen relative to US\$. The UIP simply states that $\Delta S^e = (i_¥ - i_\$) + \Delta RP^e$.

³⁷ Indeed, the current economic policies (or lack thereof) have in any case, led to recent historic lows of the US\$ value of the yen. There have been suggestions that the recent yen depreciations have to some extent, been 'actively encouraged' by the Japanese authorities as an indirect means of creating inflation. Given low yields on Japanese bonds (see Chart 12) compared to US Treasury securities, interest parity condition (see footnote 36) implies that there is a general expectation of yen undervaluation, i.e. the yen is expected to appreciate over time. This conclusion is fortified by the PPP theorem, which suggests a long-run exchange rate of about 125-135 yen per US\$.

- b) ensure that the financial sector is restructured and various economic rigidities are relieved, as part of a larger repertoire of reforms to ensure enhanced flexibility and competitiveness of the economy in the future.

While the steps to be taken for long-run competitiveness and economic revitalisation are clear (with the only doubt being about whether and how effectively they are implemented), those needed to boost aggregate demand in the short-run are far less so.

Given near-zero nominal interest rates in Japan, most observers argue that expansionary monetary policy will be ineffective. However, once a distinction is made between *real* and *nominal* interest rates, it has been argued that it is logically possible for monetary policy to be effective in raising demand if it is able to create inflationary expectations (which drives a wedge between real and nominal interest rates). This may be done by explicit announcements by the BOJ of the intention to target a certain inflation rate in the future³⁸.

Admittedly, there is no 'free lunch', and we have discussed potential negative repercussions of such a strategy. However, in the final analysis, it is grossly insufficient to highlight the dangers of this proposed policy per se. Rather, its drawbacks must be compared to those of other viable alternatives. For reasons underscored previously, a 'do-nothing' status quo is clearly a hazardous alternative in the face of the acute economic problems (crises) faced by Japan and the rest of East Asia. This leaves expansionary fiscal policy as the only viable alternative.

The new Finance Minister, Kiichi Miyazawa recently announced a planned cut in corporate and income taxes of over ¥6 trillion, that would be permanent. In his maiden policy speech to parliament, the new Japanese premier reportedly reiterated the intention to cut taxes "substantially more" than ¥6 trillion (with income tax cuts

³⁸ Indeed, in recognition of the above-noted liquidity trap, Nobel Laureate Paul Samuelson (1998) has suggested that the Japanese authorities print new domestic yen notes and

to begin in January 1999 and the corporate tax cut in April 1999). He reportedly also announced the intention to increase extra budgetary expenditures by about ¥10 trillion (Rowley, 1998b).

While details are yet unavailable, the mention of 'permanent' tax cuts is important. Nevertheless, as discussed, a number of questions remain about potential effectiveness of fiscal policy in achieving the necessary end, given the lack of credibility due to policy reversals and general uncertainties regarding economic conditions (thus the term 'fiscal stimulus fatigue' is probably apt). Even if potentially effective, the already burgeoning fiscal deficit and gross public debt, against the backdrop of a rapidly graying population (which will further add to public spending burden), sharply limits the scope for fiscal policy to be used in isolation as a credible reflationary tool. Indeed, it is revealing that no mention was made of how the latest fiscal expansion stimulus would be financed, bringing the credibility (and thus potential effectiveness) of the stimulus measures into question. As with other packages, there may be a direct demand boost to government expenditure, but the focus needs to be on boosting private investment and consumption. Indeed, the Bank of Japan reportedly also noted that "(t)he positive influence of the (fiscal) package on private demand will likely be limited" (Straits Times, August 14, 1998).

Accordingly, 'inflation inducing' monetary policy ought at least to be given serious consideration in combination with the latest fiscal stimuli measures (particularly in the form of *permanent* tax reductions)³⁹. Importantly, the authorities

distribute them to the public under the stipulation that they will become redundant/valueless if not spent within six months (so as to ensure that the windfall is not saved).

³⁹ In fact, the yen and Japanese stock market rallied initially when it was reported that Hashimoto had suggested the possibility of "permanent *income tax cuts*" on July 3, and foreign minister Keizo Obuchi supposedly reiterated the position. However on July 6, Hashimoto 'clarified' his position, noting that he was originally misquoted. According to him, he had referred to a "permanent *reform of the tax system*", which did not necessarily include a permanent tax cut (Robinson and Tett, 1998). To add to the confusion, on July 8, apparently under pressure from his political party (the LDP), Hashimoto declared that he did in fact intend to cut taxes permanently as part of an overhaul of the tax system. No details were given as to what form the tax cuts would take or how the fiscal shortfall would be

must not lose sight of the need to undertake appropriate financial and related economic restructuring for the promotion of long-term growth.

There has been much criticism that Japan has not paid sufficient attention to the regional economic crisis, being 'solely' pre-occupied by its own domestic agenda. While some of the criticism has a ring of truth to it (particularly the noted extreme reluctance by Japanese banks to help restructure debt obligations), it ought not to be exaggerated. The Japanese government has been the largest single country contributor to the IMF-orchestrated financial assistance packages to the most afflicted East Asian economies (Table 4). Further, when the Japanese authorities have attempted to take potentially useful regional initiatives, they have been thwarted by the US-IMF combine⁴⁰.

This notwithstanding, the depth and breadth of the East Asian financial crisis has added a sense of acute urgency for some concrete and credible measures by policy-makers to revitalise the Japanese economy. A rejuvenated Japan is the key to providing the region the growth stimulus it is in such dire need of. Therefore, the best thing Japanese policy-makers can do for the region is to focus earnestly on stimulating their economy in the short-run, while taking the necessary steps towards economic restructuring, so as to ensure sustained growth over the medium- and longer-runs. In the final analysis, the best way for Japan to assist the rest of East

overcome. Not surprisingly, the markets remained skeptical and did not react positively (Shirouzu, 1998). Political observers have suggested that this apparent dithering by Hashimoto on economic policy, along with Japan seemingly being side-lined in recent US-China talks (with there being suggestions of the formation of a new 'strategic alliance' in Asia between these two countries), may have contributed to the LDP's recent electoral drubbing in the upper-house.

⁴⁰ For instance, the Japanese government did initiate an 'Asian Monetary Fund' (AMF) to provide a pool of resources to assist regional currencies under selling pressure and provide necessary liquidity to relieve the acute credit crunches in the region. However, according to Altbach (1997), they quickly abandoned this initiative following reported 'outright rejection' of the idea by the US Treasury. The US seems to have been worried about the proposal possibly undermining the regional 'influence' of the IMF - and therefore that of the US government? (see Jagdish Bhagwati, 1998, who suggests the existence of an IMF-US Treasury complex). - There are indications that the new minister is attempting to revive the AMF proposal (Rowley, 1998c).

Asia during this period of turmoil, is for it to first get its own house in order.

Table 4
IMF-Led International Financial Assistance Committed to
Korea, Thailand and Indonesia^a, June-July 1998
(\$ billions)

Country and Source of Assistance	Amount (\$ billions)
<u>Korea:</u>	
IMF	20.9
World Bank	10.0
ADB	4.0
Countries	23.3
USA	5.0
Japan	10.0
Europe	6.3
Australia	1.0
Canada	1.0
Total	58.2
IMF <i>disbursements</i> as of 10 June 1998	17.0
<u>Indonesia:</u>	
IMF	9.9
World Bank	4.5
ADB	3.5
Countries	18.7
USA	3.0
Japan	5.0
Australia	1.0
China, P.R.C.	1.0
Hong Kong	1.0
Malaysia	1.0
Singapore	5.0
Total	36.6
IMF <i>disbursements</i> as of 15 July 1998	4.9
<u>Thailand:</u>	
IMF	3.9
World Bank	1.5
ADB	1.2
Countries	10.5
Japan	4.0
Australia	1.0
Brunei	0.5
China, P.R.C.	1.0
Hong Kong	1.0
Indonesia	0.5
Korea	0.5
Malaysia	1.0
Singapore	1.0
Total	17.1
IMF <i>disbursements</i> as of 15 July 1998	2.8
<u>Mexico:</u>	
IMF	17.8
World Bank and Inter-American Bank	2.8
BIS/G10	10.0
USA	20.0
Total	50.6

Sources: Compiled by author from IMF (1998a,b), *IMF News Briefs*, various issues and Goldstein and Hawkins (1998)

References

Altbach, E. (1997). "The Asian Monetary Fund: A Case Study of Japanese Regional Leadership", **JEI Report 47A**, Japan Economic Institute, December.

Balassa, B. (1964). "The Purchasing Power Parity Doctrine: A Reappraisal", **Journal of Political Economy**, 72 (3), pp.584-96.

Bank for International Settlements (BIS) (1998). **68th Annual Report**, 1st April 1997-31st March 1998, Basle.

Barro, R. (1989). "The Ricardian Approach to Budget Deficits", **Journal of Economic Perspectives**, 3, pp.1095-118.

Bhagwati, J. (1998). "The Capital Myth: The Difference between Trade in Widgets and Dollars", **Foreign Affairs**, 77, pp.7-12.

Bhaskaran, M. (1998). "The Asian Crisis - Impact and Outlook", paper presented at a conference on the Asian Crisis, jointly organised by the Asia-Europe Foundation and CEPII, Paris, May 11-12, 1998.

Chandler, C. and S. Sugawara (1998). "Are Cards Stacked Against Japan's Banks?", **Washington Post**, June 18.

Crowell, T. and M. Mutsuko (1998). "Hashimoto Takes a Fall", **Asiaweek**, July 24, pp.20-2.

Daiwa Institute of Research (DRI) (1998). **Japan Economic Outlook No.117**, Summer.

Doi, A. and K. Willenson (1998). "How Career Choices and Fewer Babies are Undermining Japan's Future", **Washington Post**, July 26.

Dornbusch, R. (1997). "Japan's Fiscal Crisis", mimeo, MIT.

_____ (1998). "Next, China?", **Financial Times**, August 5.

Ezrati, M. (1998). "Securitize Japan's Bad Debt", **Asian Wall Street Journal**, August 5.

Fernald, J., H. Edison and P. Logani (1998). "Was China the First Domino?: Assessing the Links between China and the Rest of Emerging Asia", **International Finance Discussion Paper No.604**, Board of Governors of the Federal Reserve System.

Flood, R. and M. Taylor (1996). "Exchange Rate Economics: What's Wrong with the Conventional Macro Approach?", J. Frankel, G. Galli and A. Giovannini (eds.), **The Microstructure of Foreign Exchange Markets**, Chicago: The University of Chicago Press.

Fong, C. (1998). "Asia: A Year On, The Asian Crisis Marches On....", Nomura Market Research, **Emerging Asia Fixed Income Research**, Singapore, July 16.

Goldberg, L. and M. Klein (1997). "Foreign Direct Investment, Trade and Real Exchange Rate Linkages in Southeast Asia and Latin America", **NBER Working Paper No.6344**, National Bureau of Economic Research.

Goldstein, M. and J. Hawkins (1998). "The Origin of the Asian Financial Turmoil", **RBA Research Discussion Paper RDP9805**, Reserve Bank of Australia, May.

Graham, F. (1998). "Unemployment: Changing Structures in Japan", **Financial Times**, July 15.

Hamada, K. (1995). "Bubbles, Bursts, and the Bail-outs: A Comparison of Three Episodes of Financial Crises in Japan", in M. Okabe (ed.), **The Structure of the Japanese Economy: Changes on the Domestic and International Fronts**, MacMillan Press: London.

Harberger, A. (1980). "Vignettes and the World Capital Market", **American Economic Review**, 70, pp.331-7.

Harding, J. (1998). "China: Beijing Reduces Yen Holdings", **Financial Times**, August 11.

Hollerman, L. (1998). "Japan's Recession Is No Accident", **The Asian Wall Street Journal**, July 27.

International Currency Review (ICR) (1998). "Japanese Yen", 24 (2), pp.105-16.

International Monetary Fund (IMF) (1998a). "IMF Bail Outs: Truth and Fiction", mimeo, January 1998.

_____ (1998b), **World Economic Outlook: Part I Main Report**, Washington, D.C.: IMF.

Japan Research Institute (JRI), Economics Department (1997a). "The Long-Term Outlook for the Japanese Economy: Revitalization for the 21st Century", **Japan Research Quarterly**, 6 (2), pp.3-63.

_____ (1997b). "The Japanese Economy in 1997 and 1998: Recovery and Polarization in a Period of Structural Change", **Japan Research Quarterly**, 6 (4), pp.3-51.

_____ (1998). "The Japanese Economy in 1998: Avoiding a Meltdown", **Japan Research Quarterly**, 7 (1), pp.3-63.

JP Morgan (1998a). **Asian Financial Markets**, Second Quarter, July.

_____ (1998b). **Asian Financial Markets**, Third Quarter, July.

Kagda, S. (1998). "Only Japan Unwilling to Roll Over Debt: Indonesia", **Business Times**, Singapore, July 21.

Kawai, M. (1997). "Japan as a Creditor Nation: What is Happening to its Net

- External Assets?", **Discussion Paper Series No.F-61**, Institute of Social Science, University of Tokyo.
- Kawakita, T. (1996). "What the Central Bank Can and Cannot Do", **Japanese Economic Studies**, 25 (5), pp.33-80.
- Kihara, S. (1998). "How Should Japan's Public Pension System be Revised?", **Japan Research Quarterly**, 7 (1), pp.64-113.
- Kon-ya, F. (1995). "The Rise and Fall of the Bubble Economy: An Analysis of the Performance and Structure of the Japanese Stock Market", in M. Okabe (ed.).
- Krugman, P. (1998a). "Japan's Trap", mimeo, MIT, May.
- _____ (1998b). "Seeing Sun - Japan: What Went Wrong?", **Slate**, June 11.
- Kwan, C. (1995). "Reducing Japan's Vulnerability to Yen Appreciation", **NRI Quarterly**, October/November, pp.12-21.
- Kwan, W. (1998a). "Bridge Bank Scheme: Hub of Tokyo's Solution", **Straits Times**, Singapore, July 7.
- _____ (1998b). "Japan Expected to Focus on Stumbling Blocks to Recovery", **The Straits Times**, Singapore, July 17.
- Kwang, M. (1998). "China Rules Out Currency Devaluation", **Straits Times**, August 12.
- Landers, P. (1998a). "Japan: Urban Renewal", **Far Eastern Economic Review**, July 23, pp.18-19.
- _____ (1998b). "Japan: Too Shy for Big Time", **Far Eastern Economic Review**, July 30, p.23.
- Lee, P. (1998). "Korea Stares into the Abyss", **Euromoney**, March, pp.32-7.
- Lincoln, E. (1988). "Japan's Financial Mess", **Foreign Affairs**, 77 (3), pp.57-66.
- Makin, J. (1996). "Japan's Disastrous Keynesian Experiment", **AEI Economic Outlook**, American Enterprise Institute (AEI) for Public Policy Research, December.
- Nomura, M. (1998). "Japan's Role in the Asian Economic Recovery", paper presented at the Forum on the Japanese Economy and the Regional Economic Crisis, jointly organised by the Institute of Southeast Asian Studies, Singapore and the Embassy of Japan, Singapore, July 3.
- Okabe, M. (1995). "Monetary Policy in Japan: A Perspective on Tools, Transmission Channels and Outcomes", in M. Okabe (ed.).
- Plender, J. (1998). "Recession: Can Japan Reflate?", **Financial Times**, June 11.
- Rajan, R. (1996). "Singapore's Bilateral Merchandise Trade Linkages with Japan and the US", **Asian Economic Journal**, 10 (21), pp.378-89.

_____ (1998). "The Southeast Asian Currency and Financial Crisis: A Case of 'Sudden Death' or 'Death Foretold'?", **IPS Working Paper No.1**, The Institute of Policy Studies, Singapore, August.

S. Robinson and G. Tett (1998). "Hashimoto Sows Confusion over Tax Cuts", **Financial Times**, July 6.

Rogoff, K. (1996). "The Purchasing Power Parity Puzzle", **Journal of Economic Literature**, 34, pp.641-65.

Rowley, A. (1998a). "Japan Stunned by Timing of Moody's Credit Alert", **Business Times**, July 24.

_____ (1998b). "Obuchi Dishes Out Promise of Action to Aid Economic Recovery", **Business Times**, August 8-9.

_____ (1998c). "Asian Fund is Dead - But it Won't Lie Down", **Business Times**, August 7.

Saji, N. (1998). Japanese Economic Forecasts for FY 1998 and FY 1999, **Nikko Research Center**, April.

Sakae, S. (1997). "Finance Ministry Announced Major Reform of Financial System", **Journal of Japanese Trade & Industry**, 5, pp.36-7.

Sakura Institute of Research (SIR) (1997). "Economic Outlook of Japan for FYI 1998", **RIM, Pacific Business and Industries**, 4 (38), pp.42-52.

Samuelson, P. (1998). "How Japan can Avert Depression", **Business Times**, June 30 (reprinted from L.A. Times).

Sanger, D. (1998a). "U.S. Intervenes in Currency Markets to Support the Yen", **New York Times**, June 18.

_____ (1998b). "Japan's Bad Debt is Now Estimated Near \$1 Trillion", **New York Times**, July 30.

Schlesinger, J. and D. Hamilton (1998). "Thrift Shift: Japan's Virtue of Saving Proves an Economic Vice", **Asian Wall Street Journal**, July 22.

Shikano, Y. (1998). "Prospects for Financial Reforms in Japan", paper presented to the Japan Society, organised by The 21st Century Public Policy Institute, New York, March 5.

Shirouzu, N. (1998). "Japan's Premier Pledges Tax Cuts Starting in 1999", **Asian Wall Street Journal**, July 9.

Smith, C. (1998). "Nowhere to Hide", **Institutional Investor**, March, pp.128-33.

Strom, S. (1998). "As Yen Falls, Markets Fear Japanese Savers will Look

Elsewhere”, **New York Times**, August 12.

Sugawara, S. (1998a). “Officials Confirm Japan Is in Recession”, **Washington Post**, June 13.

_____ (1998b). “Japan Holds on to ‘Jobs for Life’”, **Business Times**, Singapore, July 10 (reprinted from Washington Post).

Suzuki, Y. (1996). “The Main Issues Facing Japan’s Economy”, **Japan and the World Economy**, 8, pp.353-60.

Takahashi, T. (1998). ‘How Japan Should Cope with Asia’s Credit and Currency Crises - Japan’s Economic Revitalization Would be the Best Solution”, **Nomura Asia Focus Quarterly**, Spring 1998, pp.2-11.

Tanaka, N. (1998). “Measures to Strengthen East Asia’ Economic Recovery”, paper presented to the Japan Society, organised by The 21st Century Public Policy Institute, New York, March 5.

Tao, D. (1998). “China Need Not Devalue”, **The Asian Wall Street Journal**, August 7-8, 1998.

Tett, G. (1998a). “Japan: True Debate Takes a Bow”, **Financial Times**, May 25.

_____ (1998b). “Japan Reaches for the Tool Kit”, **Financial Times**, July 3.

Tett, G. and A. Harney (1998). “Japan: Politician Warns of Deflationary Spiral”, **Financial Times**, August 15.

The Economist Intelligence Unit (EIU) (1998a). **EIU Country Report**, first quarter, The Economist Intelligence Unit Limited, London.

_____ (1998b). **EIU Country Report**, second quarter, The Economist Intelligence Unit Limited, London.

Wolf, M. (1998). “Japan” Caught in a Trap” **Financial Times**, June 9.

Zhang, X., M. Fan and W. Yi (1998). “Is Devaluation of the Chinese Yuan Inevitable? - The Impact of East Asia’s Crisis on China”, mimeo, University of Melbourne,