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THE POTENTIAL CONTRIBUTION OF JAPAN TO ASIAN RECOVERY: EXTERNAL AID VERSUS DOMESTIC FISCAL STIMULUS

Paper prepared by the UNCTAD Secretariat

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Since the writing of UNCTAD's *Trade and Development Report 1998*, the prospects for the global economy have deteriorated significantly following the outbreak of the Russian crisis and the subsequent instability in the financial markets both in the major industrial countries and in emerging markets. While not yet a reality, a deep global recession has become more probable, thus also increasing the likelihood that recovery will be slow.

As the second largest economy in the world in terms of GDP and the largest creditor in terms of net foreign assets, Japan can undoubtedly make a crucial contribution to economic recovery in East Asia as well as in the world economy as a whole. It has so far adopted various measures, including fiscal and monetary stimuli to revive economic growth, but these policies have yet to produce their full impact. While recognizing the importance of recovery in Japan for providing an expanding export market for East Asian countries, the *TDR 1998* expresses the view that an external aid package in the form of long-term lending to the East Asian countries in crisis would probably have a greater impact on growth in the region and the world economy than a domestic fiscal package of equal magnitude. The *TDR 1998* also argues that, while needed to promote a cyclical upturn, a domestic fiscal stimulus would be unlikely to restore sustained growth in Japan.

Since the outbreak of the crisis in East Asia Japan has provided some $40 billion of financing to the region, including $28 billion long-term financing. Much of the latter has been channelled through the IMF and has been used as part of bail-out operations. More recently, since the publication of *TDR 1998*, Finance Minister Kiichi Miyazawa announced the intention of the Japanese Government to spend some $30 billion as aid to support adversely affected Asian countries.[1] The proposal, called the Miyazawa Plan, targets the five most seriously affected Asian economies (i.e. Indonesia, the Republic of Korea, Malaysia, the Philippines, and Thailand), and is designed to help restructure the corporate and banking sectors, to establish social safety nets, and to alleviate the credit crunch in these countries. It calls on the Export-Import Bank of Japan to guarantee the debts of Asian corporations and banks, to offer subsidies on interest payments, to buy Asian government bonds to provide countries with more foreign currency, and to provide additional yen-denominated loans.

Simulation of policy options

The purpose of this paper is to present a quantitative assessment of the potential impact of alternative Japanese policy measures in response to the Asian crisis on growth in the region and the world economy as a whole. A comparison is made of effects during 1998-2000 of a one-off domestic fiscal expansion in Japan with those which would be associated with an increase in long-term financial support to affected Asian economies along the lines proposed during the debt crisis of the 1980s by Saburo Okita and others for recycling part of the Japanese surplus to the highly-indebted countries in order to accelerate recovery.[2] The simulations reported below were undertaken before the announcement of the Miyazawa Plan.

To assess the implications of alternative Japanese policies in response to the Asian financial crisis, allowing for consistency among countries and regions, it is necessary to have a well-specified global modelling system which allows for interdependence of countries in terms

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[1] Last year, a proposal was made to establish a $100 billion Asian fund with contributions from Japan and other countries to help affected Asian nations. This proposal did not receive support from some other major industrial countries and multilateral financial institutions. Unlike the previous proposal, the Miyazawa Plan involves only Japanese funds for the purpose of bilateral aid to Asian countries.

[2] Saburo Okita, Lal Jayawardena, and Arjun K. Sengupta, *The Potential of the Japanese Surplus for World Economic Development*, World Institute for Development Economic Research (WIDER), Helsinki, Finland of the United Nations University (UNU),Tokyo, Japan, Study Group Series (No. 1), Tokyo, Japan, 1986.

of trade and other key linkages. The simulations presented here are based on the operations of the Futures of Global Interdependence (FUGI) Model, version 7.0 M80.[3]

Under consideration are two policy alternatives: a domestic fiscal expansion and an increase in financial support similar to that suggested by the Miyazawa Plan. The effects of each policy option are derived by the construction of an appropriate simulation scenario in the context of the FUGI system. However, to be able to evaluate the relative impact of the policies properly, it is also necessary to have a simulation run which would serve as a reference basis for comparison. For this purpose, the ***Baseline*** scenario is a simulation which takes into consideration the effects of the financial crisis on output growth in the affected Asian economies not only in 1997 but also in subsequent years. In line with the discussions of prospects in *TDR 1998*, the Baseline scenario incorporates a deterioration in economic conditions in the affected Asian countries in 1998, including a contraction of GDP growth of 12.0 per cent for Indonesia, 6.0 per cent for the Republic of Korea and 8.0 per cent for Thailand.

Scenario A, representing the case of fiscal expansion, assumes a permanent income tax reduction of $100 billion by the Japanese Government in the latter half of fiscal year 1998, which is divided equally between personal and corporate income. ***Scenario B***, on the other hand, explores the implications of an additional $100 billion in financing (i.e. the same amount as the Asian fund proposed last year) by Japan to the five most seriously affected Asian countries mentioned above, which would be made available over the three-year period, 1998-2000.

A key part of the exercise under Scenario B is to determine how the given overall sum should be appropriately allocated among the most affected Asian countries in each of the three years. Since, as described under the Baseline scenario, growth in these economies is affected to different degrees by the crisis, a reasonable procedure would be to allocate the aid in such a way as to restore the output growth of these countries to levels as close as possible to their individual

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[3] The UNCTAD secretariat is grateful to Akira Onishi, Vice President of Soka University, for these simulations. For a detail description of the FUGI global model, including its historical background, methodology, scope and structure, see *Economic & Financial Computing* (Dr. H. Motamen-Scobie, managing editor), A Journal of the European Economics and Financial Centre, Volume 3, Number 1 (Spring 1993); also Akira Onishi, *Global Model Simulation: A New Frontier of Economics and Systems Science*, Soka University, Institute of Systems Science, Tokyo, 17 September 1994.

growth paths prior to the outbreak of the crisis. As a starting-point, therefore, it is necessary to have some idea of these growth rates. Accordingly, an intermediate scenario, ***Scenario C***, is designed to describe the growth paths on the basis of historical trends of GDP growth rates in each of the affected countries prior to the outbreak of the crisis. The difference in the respective rates of growth between Scenario C and the Baseline in each year during 1997-2000 for each affected country provides an indication of its loss in output growth as a consequence of the crisis.[4]

The specific assumptions of Scenario B regarding the distribution of Japan's $100 billion additional financing among the affected Asian countries during 1998-2000 are shown in table 1 below.

Table 1

DISTRIBUTION OF JAPAN'S $100 BILLION IN AID TO AFFECTED ASIAN COUNTRIES, 1998-2000

Country	1998 Share (%)	1998 Amount ($ bil.)	1999 Share (%)	1999 Amount ($ bil.)	2000 Share (%)	2000 Amount ($ bil.)
Indonesia	32	16.0	20	6.0	12	2.4
Korea, Rep. of	48	24.0	38	11.5	27	5.5
Malaysia	5	2.5	12	3.5	23	4.5
Philippines	4	2.0	6	1.8	8	1.6
Thailand	11	5.5	24	7.2	30	6.0
Total	100	50.0	100	30.0	100	20.0

Of the total additional financing for Asia, it is assumed that $50 billion are to be used in 1998, $30 billion in 1999, and the rest in year 2000. In terms of distribution among countries,

[4] For developing countries as a whole, the loss in output growth amounts to 0.3 per cent in 1997, 2.7 per cent in 1998, 1.0 per cent in 1999 and 1.6 per cent in the year 2000. For Indonesia, the Republic of Korea and Thailand, the loss in GDP growth in 1998 as a consequence of the crisis amounts to 18.0 per cent, 8.1 per cent and 13.6 per cent respectively. The impact of the crisis remains very significant even in the year 2000, especially in the cases of Thailand and Indonesia. The effects on other countries and regions, as given by a comparison of growth rates under the Scenario C and the Baseline Scenario, are rather small, except for Japan, the United States, China and Singapore. For the former two, the loss in GDP growth is most marked in 1999, and for the latter two in 2000.

about 40 per cent of the total financing is allocated to the Republic of Korea, a quarter to Indonesia and one-fifth to Thailand. Increased proportions of the yearly totals are to be allocated to Thailand and Malaysia in 1999 and 2000, while for the Republic of Korea and Indonesia large shares of the disbursements are concentrated in 1998.

Relative impact of alternative policies

For comparison, the results of the alternative scenarios for each country or region are expressed as deviations of the respective GDP growth rates in each scenario from those of the Baseline. The results, derived by subtracting the respective rates of GDP growth in the Baseline from those in fiscal-expansion and aid scenarios, are given in table 2 for selected regions and countries.

The impact of additional Japanese aid on growth in the world economy is considerably stronger than that of a domestic fiscal stimulus of an equal magnitude. In cumulative terms, the addition to global growth is greater by one-third in the former than in the latter scenario.

The simulations show that gains in growth resulting from an aid package can be considerable for the countries in crisis. For the Republic of Korea, the cumulative impact of aid on growth over 1998-2000 exceeds 10 per cent. In the South-East Asian countries the aid package adds more than 17 per cent to cumulative growth over the same period. The impact is particularly strong in Indonesia where the baseline shows a considerable decline in growth compared to pre-crisis trend.

As expected, the impact of aid on growth in the recipient countries is far stronger than the impact of a fiscal stimulus while for Japan the opposite is the case. However, an interesting result is the impact on other countries. In this respect, the aid package appears to be much more favourable to growth in most other regions and countries than the fiscal stimulus package. This is particularly true for the United States and the European Union. In other words, growth in the United States and the European Union would benefit more from a Japanese aid package to the East Asian countries in crisis than a Japanese domestic fiscal stimulus of an equal amount.

While it is clear that the direct, short-term impact of fiscal stimulus is greater on the level of activity in Japan than an equivalent expenditure on increased aid to Asia, the medium-term impact is less clear. First, a cyclical recovery brought about by a fiscal stimulus would bring additional government revenues and hence help to meet part of the initial deficits. Nevertheless, to avoid permanent increases in public sector debt and deficits, action would eventually be needed to raise discretionary fiscal revenues or to cut spending (or both) which could reverse much of the earlier gains in growth. The experience of the previous budget packages is instructive here. The various government expenditure packages introduced beginning in 1995 eventually produced a sharp increase in growth during 1996, but when an attempt was made to restore fiscal balance through increased taxation in the course of 1997, the level of activity declined. In 1997 the contractionary impact of fiscal policy, as measured by the OECD fiscal indicator, was 1.7 per cent of GDP, so that fiscal redressment played a substantial role in creating the current weakness in output growth in Japan. Yet it is also clear that maintaining the level of expenditure reached in 1996 was unsustainable in the medium term.

Second, as the *TDR* has stressed for some years, the underlying cause of the decline in the trend growth rate in Japan lies in structural problems in its industrial, financial and service sectors and in Japan's continued reliance on exports for growth. While promoting a cyclical upturn, domestic demand stimulus packages are unlikely permanently to restore growth in Japan. Any sustained recovery must be accompanied by resolution of the structural problems.

Thus an appropriate strategy is to combine action on three fronts; a temporary fiscal stimulus, aid to the Asian countries in crisis, and structural reforms. Over the short term the first two would combine to generate a cyclical recovery in Japan and would greatly help in overcoming the difficulties in the region. Over the longer term the positive impact of structural reforms would be felt more strongly, allowing Japan to increase its reliance on domestic (private) spending for growth and for its contribution to global demand. In this context, the recent moves in Japan, including the Miyazawa Plan, the stimulus packages and efforts to tackle structural deficiencies in the financial sector are to be welcomed.

Table 2

RELATIVE IMPACT OF ALTERNATIVE JAPANESE POLICIES ON SELECTED REGIONS AND COUNTRIES, 1998 - 2000

(Excess of GDP growth in percentage points over the Baseline scenario)

	Fiscal Expansion			*Additional Aid*		
Region / country	*1998*	*1999*	*2000*	*1998*	*1999*	*2000*
World	0.18	0.23	0.10	0.29	0.23	0.16
Developed market economies	0.24	0.31	0.10	0.00	0.10	0.09
United States	0.00	0.00	0.07	0.00	0.10	0.10
Japan	1.32	1.75	0.41	0.00	0.21	0.17
European Union	0.00	0.01	0.01	0.00	0.04	0.20
Developing economies	0.00	0.02	0.14	1.36	0.72	0.40
East Asia	0.00	0.02	0.43	2.11	0.71	0.52
China	0.00	0.00	0.38	0.00	0.10	0.24
Korea, Rep. of	0.00	0.05	0.65	7.29	2.26	1.26
South-East Asia	0.00	0.10	0.23	8.36	5.94	3.03
Indonesia	0.00	0.04	0.09	12.90	9.00	6.42
Malaysia	0.00	0.19	0.27	4.57	1.69	1.53
Philippines	0.00	0.08	0.13	4.90	2.11	0.64
Thailand	0.00	0.20	0.56	11.33	10.15	2.86