



ASIAN DEVELOPMENT BANK  
Economics and Development Resource Center

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# THE YEN DEPRECIATION AND ITS IMPLICATIONS FOR EAST AND SOUTHEAST ASIA

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## Foreword

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One of the most disquieting economic developments in recent weeks has been the steady depreciation of the Japanese yen relative to the US dollar and major European currencies. After reaching a seven-year low on 16 June, the Japanese currency rebounded somewhat, partially assisted by international intervention, only to depreciate once again. Still, uncertainties continue, including the currently weak state of the Japanese economy, large interest rate differentials between Japan and other major markets, and developments in related regional economies.

While it is difficult to separate the effects of the depreciation of the yen from the economic recession and other difficulties in that economy, this note attempts to examine the implications of yen depreciation on major East and Southeast Asian economies.<sup>1</sup> This particular geographic focus should not be construed to suggest that the other developing member countries (DMCs) of the Bank are not affected by the yen depreciation. However, given the closer economic linkages between Japan and the economies of East and Southeast Asia, the latter group of economies are affected to a greater degree by changes in Japan's economic conditions than other DMCs, such as those in South Asia.<sup>2</sup>

The paper is organized as follows. First, it briefly traces changes in the value of the yen in recent years. It then explores the implications of the yen depreciation for trade, investment flows, finance and external debt; and the prospects for the People's Republic

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1. These include the ASEAN-4 economies (Indonesia, Malaysia, Philippines, and Thailand); the NIEs (Hong Kong, China; Republic of Korea; Singapore; and Taipei, China); and the People's Republic of China (PRC).

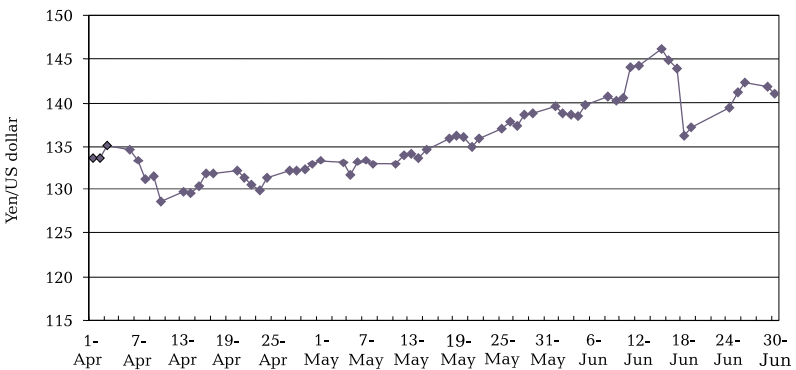
2. While South Asian economies (Bangladesh, India, Nepal, Pakistan, and Sri Lanka) have exported on average only about 5 percent of their total exports to Japan in recent years, the corresponding share for the nine East and Southeast Asian economies considered in this paper has been on average about 15 percent. In addition, the former group of countries are much less dependent on trade: total trade (exports plus imports) as a percent of GDP has been about 48 percent in 1995. In contrast, even if one excludes Taipei, China and the two entrepot economies Hong Kong, China and Singapore, total trade as a percent of GDP is on average about 88 percent for the remaining East and Southeast Asian economies.

of China's renminbi. Other considerations are discussed, and conclusions drawn.

### The Value of the Yen in Recent Years

Following the 1985 Plaza Accord, the Group of Seven (G-7) countries undertook massive and concerted currency market intervention to realign exchange rates. One major effect of this was the appreciation of the Japanese yen (and depreciation of the US dollar) from about 260 to the dollar to close to 130. By 1995, the yen had appreciated further, reaching less than 85 to the dollar in April of that year before depreciating again. In recent weeks the yen has depreciated more sharply and by 15 June 1998 the market rate was more than 146 to the dollar. Figure 1 shows the movement of the (nominal) exchange rate of the yen vis-a-vis the dollar.

**Figure 1: Japanese Yen Spot Value, 1 April-30 June 1998**

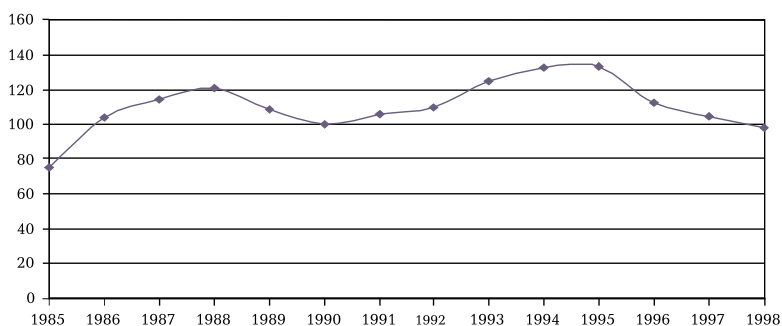


While the nominal exchange rate is an important determinant of the competitiveness of a country, it provides only a partial picture. For a more comprehensive indicator one needs to examine the movements in the real effective exchange rate (REER). The REER considers the real exchange rate (i.e., the nominal exchange rate adjusted for differences in inflation) of a country vis-a-vis the trading partners weighted by their shares in trade. With the way the REER is constructed, a decrease implies a gain in international competi-

tiveness. Figure 2, which traces the evolution of the REER of Japan, indicates that Japan has become more competitive since 1995.<sup>3</sup>

Since July 1997, many East and Southeast Asian currencies experienced a steep depreciation vis-a-vis the US dollar. These depreciations helped to largely reverse the appreciating trends these

**Figure 2: REER of Japan, 1985-1998**

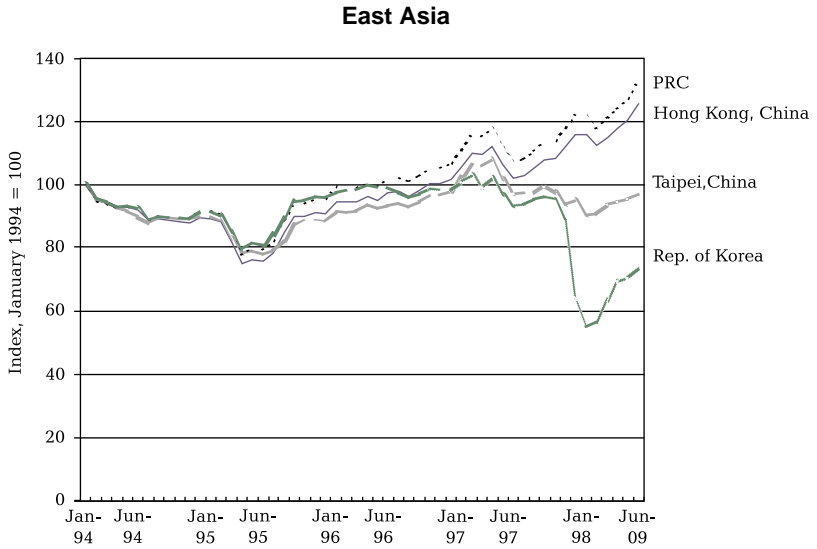


currencies experienced vis-a-vis the yen between mid-1995 and mid-1997. The recent depreciation of the yen relative to the US dollar and major European currencies, however, has been accompanied by similar falls in other East and Southeast Asian currencies, although the decline was proportionately less in the New Taiwan dollar, and there have been virtually no changes so far in the (US dollar) values of the renminbi and the Hong Kong dollar. Figures 3 and 4 illustrate the changes in the yen-related nominal exchange rates for major East and Southeast Asian currencies relative to the rates prevailing in January 1994. As the figures reveal, while there has been some appreciation of the region's currencies against the yen recently, those of the ASEAN-4 and Republic of Korea are still clearly undervalued relative to the exchange rates prevailing before the onset of the region's financial crisis in mid-1997.

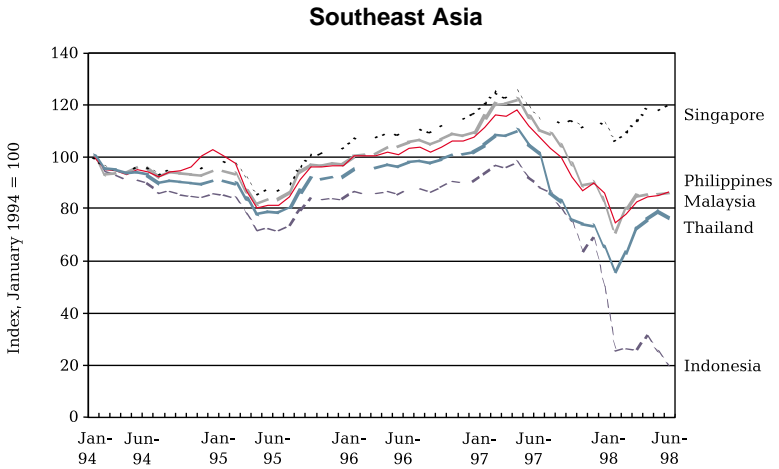
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3. In constructing the REER, ten top trading partners of Japan were included: United States; Germany; United Kingdom; three Newly Industrialized Economies (Hong Kong, China; Republic of Korea; and Singapore); three Southeast Asian countries (Indonesia, Malaysia, and Thailand); and the People's Republic of China. The presentation is in index form, with 1990=100.

**Figure 3: Yen Price of Local Currency, January 1994-June 1998**



**Figure 4: Yen Price of Local Currency, January 1994-June 1998**





## **The Falling Yen and Its Implications for Trade**

It is difficult to assess quantitatively with precision the full impact of the yen's steady depreciation on the trade of East and Southeast Asian economies. The impact on individual economies depends on a number of factors: First, it depends on the relative parities of the currencies at the beginning of the depreciation period and the extent of their relative depreciations during the period. Second, it also depends on the relationship between goods and services produced by the various East and Southeast Asian economies and those made in Japan. To the extent that they are close substitutes, a depreciation of the yen will not only make Japanese products more competitive at home, they would be more likely to price East and Southeast Asian exports out of third country markets. However, to the extent that Japanese products are intensively used as inputs by producers in East and Southeast Asia a depreciating yen leads to lower overall costs of production and greater competitiveness of East and Southeast Asian economies in third country markets.

Few goods and services that Japan exports can be considered close substitutes (and thus competitors) for those exported by its Asian neighbors, except some Republic of Korea and Taipei, China goods, and perhaps some Hong Kong, China and Singapore services. The depreciation of the yen is of particular concern to the Republic of Korea, which competes directly with Japan in manufactured exports such as steel, ships, automobiles, computer chips, and consumer electronics. Although the won has depreciated more than the yen over the past year, the Republic of Korea's central bank has estimated that a 10 percent fall in the yen would reduce the country's export earnings by \$1.2 billion. However, given that the Republic of Korea's exports amounted to about \$138 billion in 1997, the impact does not appear to be significant. Indeed, the estimates suggest that a reduction in exports of these magnitudes would slow down GDP growth by less than 0.2 percentage points. Even so, the main competitive edge that Republic of Korea products have against often qualitatively superior Japanese products is price. And any reduction in Korea's trade surplus would reduce the liquidity available to that country's financial markets, where it is critically needed.

During the first quarter of 1998, Taipei, China experienced its first quarterly trade deficit in 17 years, as exports to Southeast Asia, PRC, and Japan all declined. In addition to declining direct demand in Japan and Southeast Asia, depreciation of the exchange rates in Southeast Asia increased their export competitiveness, which may reduce demand for Taipei, China's exports of materials and components in the PRC.

A weakening yen also implies that exports from the region to Japan become more expensive for Japanese consumers and businesses. Given the fact that the region's economies have pinned their hopes of economic recovery on exports, any factor that dampens demand for foreign goods in Japan does not bode well for such a recovery. This is of course more applicable to economies that rely more heavily on Japan for their exports. As Table 1 indicates, PRC and Indonesia are two economies whose merchandise exports to Japan were more than 20 percent of their total exports in 1996,

**Table 1: Merchandise Exports to Japan (1996)<sup>4</sup>**

<b>Economy</b>	<b>Percent Share</b>
Indonesia	28.8
PRC	20.4
Philippines	17.1
Thailand	16.8
Malaysia	13.4
Republic of Korea	12.3
Taipei, China	11.8 (1995)
Singapore	8.2
Hong Kong, China	6.5

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4. While Hong Kong, China is not as reliant as the other East and Southeast Asian economies on merchandise trade with Japan, it does rely on Japanese tourists to a large extent. About 17 percent of all visitor arrivals to Hong Kong, China in 1995 were from Japan and these Japanese tourists were among the highest spending ones. Unfortunately, spending by Japanese tourists is estimated to have dropped by half compared to a year ago, partly reflecting the declining value of the yen vis-a-vis the Hong Kong dollar.

suggesting that they would be affected more adversely by a yen depreciation, other things being equal.

However, many of the currencies of the East and Southeast Asian economies have also continued to maintain their depreciating trends. Thus, it would be difficult to argue that, for example, Indonesian exports have not rebounded due to the fall in the yen after an 80 percent depreciation in the rupiah. Instead, it is more likely that the combination of credit shortages and weak domestic demand in the region and Japan is responsible for the worse than expected export performance of East and Southeast Asian economies rather than the yen depreciation per se.

To the extent that a depreciating yen makes for a speedier recovery in Japan by spurring external demand for Japanese products, East and Southeast Asia stand to benefit as recovery of Japan's gross domestic product (GDP) should favorably affect their exports to Japan. Indeed, the current weakness of Japan's economy has already taken a toll on exports from developing Asia. While Asian exports (excluding those of Japan) to the US and Europe are increasing, exports to Japan by other Asian economies fell 16 percent in the first five months of this year in comparison to the same period last year. However, any positive effect of a depreciating yen on Japan's economy through the recovery of its exports is likely to be more important in the long run. Past experience suggests that exports and imports react slowly to movements in exchange rates. It is, therefore, difficult to imagine that the relatively moderate slide that the yen has undergone in recent weeks will have either a dramatic or immediate impact on Japanese trade or on that of its East and Southeast Asian neighbors.

### **The Declining Yen and Its Implications for Investment Flows**

The rapid appreciation of the yen in the late 1980s and early 1990s prompted Japanese firms to shift some production activities out of Japan. An important destination for Japanese foreign direct investment (FDI) has been East and Southeast Asia (see Table 2). This is particularly true for manufacturing-related FDI. According to a recent report of the Electronic Industries Association of Japan, almost 60 percent of Japanese FDI in electronics is located in East

and Southeast Asia. Moreover, Japanese FDI has been a very important source of FDI in the region, accounting for from about a quarter to almost half of all FDI in some economies (for example, approximately 47 percent for Thailand, 34 percent for Singapore, and 27 percent for Malaysia).

**Table 2: Destination of Total Japanese FDI by Region (1997)**

<b>Region</b>	<b>Cases (in percent)</b>	<b>Value (in percent)</b>
ASEAN-4, NIEs, and PRC	42.6	20.6
North America	24.6	39.6
Latin America	12.2	11.7
Europe	10.0	20.8
Oceania	5.7	3.8
Rest of Asia	3.7	2.0
Africa	1.0	0.6
Mid and Near East	0.2	0.9
Total	100	100

Will the depreciation of the yen prompt Japanese firms to decrease their levels of FDI in East and Southeast Asia? In recent years, Japanese firms' FDI has served to relocate or expand production abroad for essentially two reasons: (i) for easier access to foreign markets (such as in the case of automobile production in Thailand), to economize on assembly and transport costs, and to mitigate the potentially debilitating impacts of exchange rate fluctuations; and (ii) to economize on labor costs—Japan relocated to DMCs the labor-intensive production processes of certain industries so that overall labor costs could be reduced. Investments made for the first of those reasons are unlikely to be affected by the falling yen, while those of the second category might, depending on the changes in wage differentials.

An examination of the distribution of Japanese FDI across the East and Southeast Asian economies (Table 3) indicates that it is less concentrated in Republic of Korea and Taipei, China—the two economies commonly believed to manufacture products most similar to those produced domestically in Japan. The three economies that

receive the largest amount of Japanese FDI in the region are well behind Japan technologically. This suggests that the FDI in these economies is drawn by their low-wage, semiskilled labor. Shifting production back to Japan would just not make sense. Finally, one of the virtues of FDI is precisely that it is not easily reversible, as it entails substantial fixed and sunk costs for entry.

**Table 3: Destination of Total Japanese FDI by Economy**  
(averages for 1995-1997)

<b>Economy</b>	<b>Cases</b> (in percent)	<b>Value</b> (in percent)
PRC	17.3	5.9
Indonesia	6.4	4.3
Thailand	6.4	2.9
Hong Kong, China	4.1	2.2
Singapore	3.7	2.7
Philippines	3.0	1.2
Malaysia	2.7	1.3
Taipei, China	2.0	0.9
Republic of Korea	1.4	0.9

Nevertheless, Japanese firms are not likely to sink in any new capital anytime soon either. The reason for this is probably not so much the yen depreciation per se but the weakness of domestic demand in Japan and East and Southeast Asia. Surveys of Japanese manufacturing firms' Asian affiliates suggest that a large fraction of both final and intermediate goods produced by them are sold within the host country (generally the largest single market) and Japan (generally the second largest market). Thus, whereas weakness in domestic demand in Japan constrains growth in the type of FDI driven mainly by the desire to economize on labor costs with a view to cater to the Japanese market, weakness in domestic demand in East and Southeast Asia constrains growth in the type of FDI driven mainly by easy access to the host's market. Unless export markets elsewhere (especially in Europe and the US) are found to be incapable of being satisfied by currently installed capacity, fresh flows

of FDI from Japan to East and Southeast Asia are not likely to be significant.

Such negative effects on new FDI would be inopportune when other regional countries are eager to encourage greater FDI inflows to replace their previous over-reliance on short-term capital inflows.

### **A Falling Yen's Effect on Financial Markets and Flows**

Perhaps the most immediate effects of the depreciating yen have been felt in financial markets across East and Southeast Asian economies. In particular, the fear of investors that a depreciating yen will precipitate a second wave of financial problems in Asia has triggered the recent sell-off in regional markets. The reason for this fear is as follows. Japanese banks hold around a third or more of the total foreign debt of the other Asian economies affected by the financial crisis. A large part of this debt is denominated in US dollars. A depreciation of the yen vis-a-vis the US dollar raises the yen value of the debt denominated in US dollars and results in a deterioration in Japanese banks' capital adequacy ratios. Japanese banks, already reeling under the pressure of pre-existing bad loans at home, then face greater pressure to call in or cut their asset holdings to fit or expand their capital base.

Given that most East and Southeast Asian economies are currently suffering from a severe shortage of credit any further cut-back in lending by Japanese banks in response to the yen's depreciation would only worsen the credit crunch. Paradoxically, some of the highest quality borrowers of funds from Japanese banks have been hit hard by the banks' desire to adjust their capital base. For example, by one estimate between US\$10-20 billion has been repatriated from Hong Kong, China to Japanese banks. This has taken place because the loans to corporations in Hong Kong, China, some of which are categorized as blue chips, have been the easiest to liquidate.

### **Prospects for Devaluation of the Renminbi**

More recently, in addition to other economies of East and Southeast Asia, Taipei, China has also allowed its currency to follow

the yen downwards, increasing the gaps between the PRC and Hong Kong, China currencies and those of other regional economies. Thailand and Indonesia in particular may regain some market shares at the PRC's expense. There are also suggestions that the Republic of Korea is becoming a more difficult market for PRC exports.

A great source of uncertainty stems from the prospect for devaluation of the renminbi. Japan is typically the largest destination for exports from the PRC, which would be adversely affected by a yen depreciation relative to the renminbi. In addition, the PRC's exports are becoming uncompetitive vis-a-vis those of Southeast Asian economies in other industrialized markets as the currencies of the Southeast Asian countries continue depreciating. Should the PRC decide to devalue its currency, it would put pressure on the other economies of the region, and a further round of competitive devaluations might ensue.<sup>5</sup>

The lack of convertibility on the capital account in the PRC's balance of payments largely insulates the renminbi from speculative attacks or sudden outflows of large volumes of capital.<sup>6</sup> In addition, exports remain a relatively small share of the PRC economy, although a share that has accounted for a disproportionate amount of economic growth in recent years.<sup>7</sup> Therefore, while the renminbi is likely to remain stable in the near future, if the domestic economy continues to slow in the PRC and its export competitiveness deteriorates directly or indirectly due to yen depreciation, the country will be under increasing pressure to devalue.

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5. The present analysis is focused exclusively on economic effects. There may well be strong political incentives as well for maintaining the present exchange rate (for example, such as those relating to PRC's entry to the WTO). Similarly, psychological factors (the crisis of confidence) might play a large role in precipitating a further round of depreciations.

6. The renminbi can be traded for other currencies for the purpose of trade and profit remittances only. Thus, foreign exchange transactions such as short sales of the local currency—a method used by speculators anticipating a depreciation of the local currency to profit from any eventual depreciation—cannot take place, hence relieving the local currency from speculative pressures.

7. In 1997, merchandise exports accounted for 20 percent of the PRC's GDP and expanded by 20 percent, compared with 8.8 percent growth in aggregate GDP. While a 20 percent share of exports in GDP may seem large, it is smaller—sometimes substantially so—than those of other East and Southeast Asian economies.

Continued regional economic turbulence may also increase the pressure to delay the PRC's capital account liberalization. At the same time, there have been suggestions that a weaker yen relative to the renminbi may divert foreign investment from the US and Europe away from the PRC.

Should the renminbi be devalued, there would be increased pressure on delinking the Hong Kong dollar's peg to the US dollar. This could result as Hong Kong, China's services become increasingly expensive in local currency terms for PRC producers and exporters, or as PRC firms find it harder to service debt denominated in Hong Kong dollars, as well as from speculative activities.

### **Other Considerations**

The yen depreciation may have an effect on countries' official reserves. At the end of 1997, Japanese yen accounted for less than 7 percent of the foreign exchange holdings of the major Asian developing economies. The US dollar and European currencies accounted for over 60 percent. However these percentages are aggregates for the region. Individual countries may hold significantly greater or lesser shares of their reserves in the yen. Depreciation of the yen would decrease the value of those yen holdings.

The yen is likely to continue to be under pressure to depreciate further in the near future unless strong policy measures are implemented. Pressures for further depreciation result partly from large interest rate differentials between Japanese and US or European rates. To the extent that the Bank of Japan feels the need to monetize bad debts in the banking system and Japan's monetary policy diverges further from US or European trends, the interest rate differentials between Japan and these other regions may increase, adding to the pressure. Pressure also is expected to continue due to substantial net outflows from Japan of portfolio investments, which have followed the liberalization of Japan's foreign exchange controls.



## Conclusions

As long as the yen's depreciation relative to other major currencies remains less than the recent depreciations of other regional currencies, the effects on trade may be relatively mild. Moreover, the brief analysis above indicates that the yen depreciation will be likely to have greater trade-related (negative) effects on the economies of the Republic of Korea and Taipei, China, and lesser effects on the ASEAN-4. The decline in Japan's real effective exchange rate has improved Japan's competitiveness and this trend may continue. As far as new regional FDI from Japan is concerned, a downturn can be expected. However, as discussed earlier, this is more likely to reflect weakness in domestic demand both in Japan as well as the economies that host FDI from Japan. Additionally, the fact that the regional share of yen-denominated official reserves is small suggests that an erosion of the value of these reserves due to the yen depreciation is likely to be small, although there may be variations across economies.

The most perceptible (and negative) impact of the yen depreciation has so far been on investor confidence in the region. Coming on top of mounting bad loans in Japan, the yen depreciation is prompting Japanese banks to curtail lending to East and Southeast Asian economies in order to maintain their capital adequacy ratios in accordance with international requirements. Given the severe shortage of credit in the region's economies and the importance of Japanese banks as a source of credit, investors have worried that a second wave of the financial turmoil will ensue, prompting a sell-off in both regional stock and currency markets.

The greatest danger to stem from yen depreciation would be a further round of competitive devaluations or speculation in the region. This is more likely to be avoided as long as the renminbi is not devalued. However, expectations and the economic forces outlined above may increase pressures for the PRC to devalue if the yen continues to decline.

Finally, the crux of the problem that stems from the depreciation of the yen is not the extent of the devaluation per se, but the overall situation of the Japanese economy and its own persisting financial crisis. While international interventions (or prospects for

such interventions) may stem the decline of the yen in the short run, bold and determined domestic policy measures to address structural weaknesses, particularly in the banking sector, will be required for a long-term resolution of the fundamental weakness of the economy that lies at the heart of the declining yen.

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