



SPOTLIGHT

Crisis in Sri Lanka: Lessons from the Asian financial crisis

Sri Lanka is in the middle of a deep and unprecedented economic crisis after a series of macroeconomic shocks. Before the pandemic, the economy was already vulnerable to external shocks owing to inadequate international reserves and elevated risks to public debt sustainability, exacerbated by the Easter Sunday terrorist attacks in 2019, large tax cuts, and loss of access to the international sovereign bond market. The impact of COVID-19 resulted in the historically largest contraction of the Sri Lankan economy, with a sharp drop in foreign exchange flows from trade, tourism, and all other sectors of the economy. Sri Lanka experienced a combined balance of payments and sovereign debt crisis owing to inadequate external buffers and later a sovereign debt default. The fiscal deficit increased sharply to 11.6 percent of GDP in 2021 and 9 percent of GDP as of 2022Q1,¹ raising public debt well above 100 percent of GDP.

As Sri Lanka goes through one of the most difficult episodes in the country's history, looking at previous crises in the world can be instructive. The Asian financial crisis of 1997 also started in the external sectors, and the Asian countries that had the largest contractions recovered quickly, showing a distinctly V-shaped adjustment. Comparisons with earlier balance-of-payments crises, such as the 1980s crises in Latin America, can also be informative. This spotlight compares the situations of the East and Southeast Asian crisis countries in the 1990s with Sri Lanka now to draw lessons for Sri Lanka and other developing economies. Table S.1 summarizes the main similarities and differences between the two crises.

¹ Quarterly fiscal deficit as percent of GDP comes from Haver Analytics, computed using quarterly central government overall deficit (Ministry of Finance Sri Lanka) and quarterly GDP (Sri Lanka Department of Census and Statistics), both are not seasonally adjusted.

Table S.1. Summary of key similarities and differences between the Asian financial crisis and Sri Lanka's current crisis

Similarities			
Pre-crisis		Decline in productivity	
		Substantial external debt	
		Large short-term external debt	
		Low foreign reserves	
		Large current account deficit	
		Periods of low interest rates and ample credit from abroad	
During the crisis		Large currency depreciation	
		Large fall in foreign reserves	
		Fall in imports*	
Differences			
		Asian financial crisis countries	Sri Lanka
Pre-crisis	External debt composition:	Mainly private	Mainly public
	Public foreign debt held by:	Mainly bilateral and multilateral	Mainly private sector creditors
During the crisis	Origin of the crisis:	Financial sector fragilities	Longstanding debt overhang and unsustainable fiscal policies
	External shock:	Speculative shock on currency	Real shock from COVID-19

Note: The fall in imports started in Sri Lanka in 2022.

S.1 Vulnerabilities before the crisis

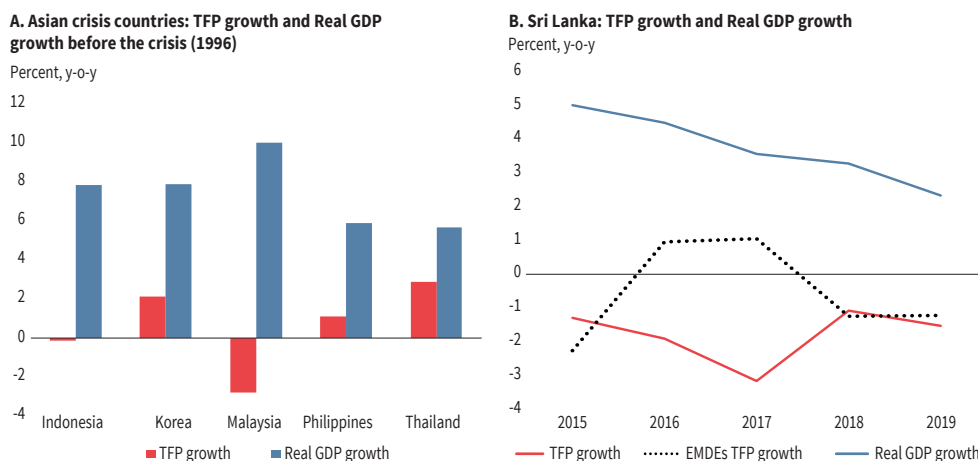
At the start of 1997, the countries of East and Southeast Asia were economic “miracles” of the developing world, with rapid growth that put several close to the advanced-country status. However, the economies shared several weaknesses, some of which were also shared by Sri Lanka before the current crisis:

1. Lack of productivity growth

Despite the rapid output growth, the Asian economies saw little improvement in productivity, in terms of output per unit of input (Färe, Grosskopf, and Margaritis 2001; Kim and Lau

1994; Krugman 1994; Krugman, Obstfeld, and Melitz 2014; Young 1992; 1994; 1995). In 1996, for example, the total factor productivity (TFP) growth was estimated to be below 3 percent or even negative for Indonesia (-0.13%), Korea (2.10%), Malaysia (-2.81%), Philippines (1.09%) and Thailand (2.88%), even though their real GDP growth was between 6-10 percent (Figure S.1). Similarly, Sri Lanka experienced negative TFP growth during 2015-2019, even during the earlier period when real GDP growth was above 4 percent.

Figure S.1. Little increase in productivity for most countries prior to the crisis



Source: Penn World Table and Haver Analytics.
 Note: EMDEs TFP growth is averaged.

2. Financial sector fragility

Among the factors that contributed to the onset of the Asian crisis, financial fragility was the main source of the increased vulnerability. This involved two related aspects.

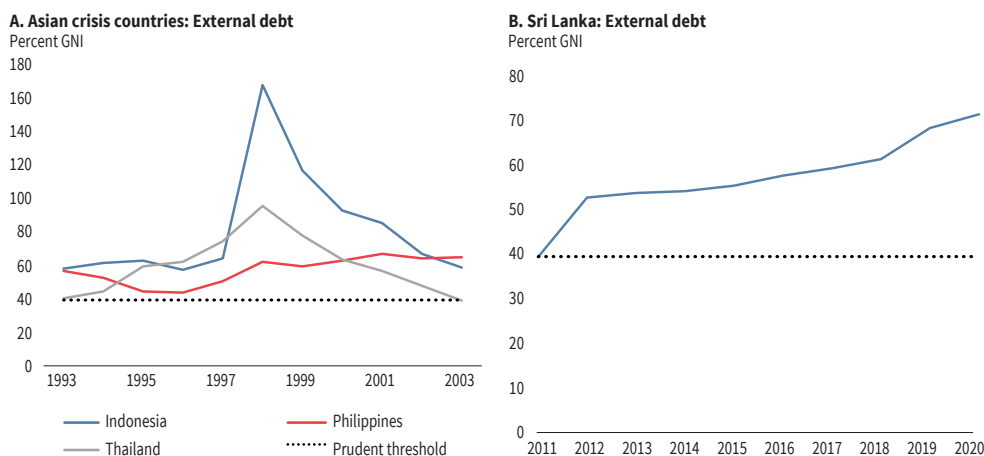
First, the size and composition of the country’s external debt. All crisis countries had substantial external debt prior to the crisis, exceeding the 40 percent of GNP prudent threshold (Williamson 1999) (Figure S.2.A).² Because of low borrowing rates in the global market, the local financial sector (both banks and nonbanks) borrowed heavily in foreign currencies and issued loans in local currency to domestic projects. That exposed the financial sector to currency mismatch. At the same time, their balance sheets were vulnerable to maturity mismatch. The financial sector accumulated large short-term foreign loans that exceeded the

² GNI (Gross National Income) is based on a similar principle to GNP (Gross National Product). The World Bank defines GNI as “the sum of value added by all resident producers plus any product taxes (minus subsidies) not included in the valuation of output plus net receipts of primary income (compensation of employees and property income) from abroad.” The World Bank now use GNI rather than GNP.

country’s available total reserves (Figure S.3.A) while lending mostly went to long-term projects in the form of loans (Figure S.4.A).³ Both kinds of balance-sheet mismatches increased the countries’ vulnerability. To varying degrees, exchange rate risk was either borne by financial institutions (in Korea and Thailand), passed on to corporations through lending (thereby converting exchange risk to credit risk), or borne directly by corporations that borrowed such debt (in Indonesia).

Sri Lanka’s external debt reached 72 percent of GNI in 2020, almost doubling since 2011 (Figure S.2.B). Concessional loans stood at 17.5 percent of GNI in 2021. At the same time, its short-term debt has exceeded the stock of reserves since 2015 (Figure S.3.B). Different from Asian countries back then, Sri Lanka’s external debt consists of mostly government debt (Figure S.4.B). While the official sector held most of the public external debt in the Asian crisis countries (except Malaysia), a large share of Sri Lanka’s public foreign debt was held by private creditors (Figure S.5) who can be hard to negotiate with during crises. High external debt and foreign exchange shortages make public debt vulnerable to large macroeconomic shocks.

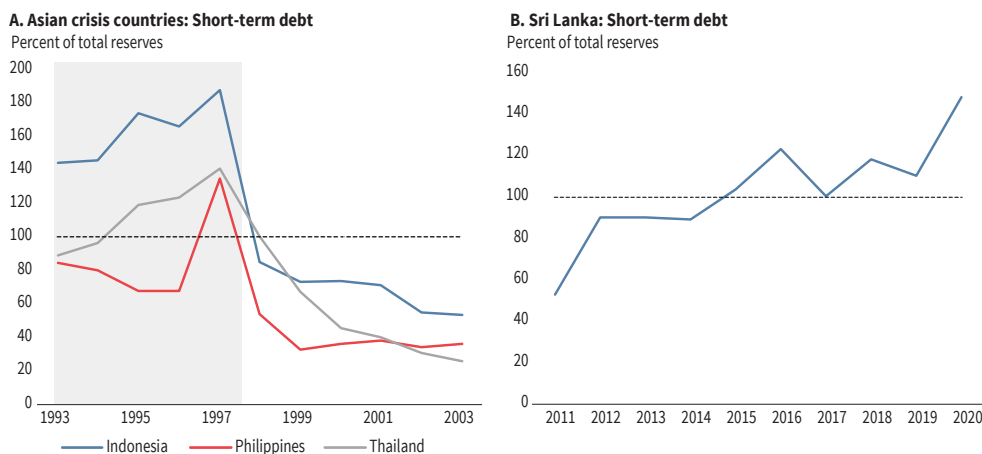
Figure S.2. Substantial (over 40 percent of GNI) external debt prior to the crisis



Source: Haver Analytics.

³ The role of short-term debt in triggering financial crises has been hotly debated. Some studies find that while short-term debt exposes borrowers to roll-over risks, it is likely to be a symptom of weak financial institutions rather than a cause of financial distress (Benmelech and Dvir 2013; Diamond and Rajan 2001a). Moreover, some argue that maturity mismatch might be an optimal ex-ante capital structure for banks when they confront limited capacity to repay investors of illiquid investments because banks have to borrow short-term to maintain liquidity (Benmelech and Dvir 2013; Diamond and Rajan 2001a, 2001b). Similarly, the maturity mismatch hypothesis that firms with large short-term debt should suffer most from capital outflows was disputed (Bleakley and Cowan 2010).

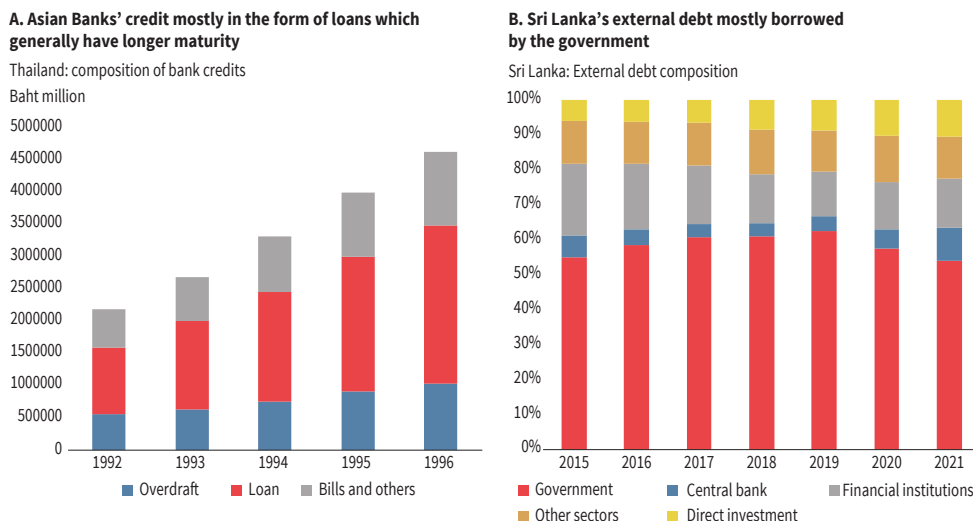
Figure S.3. Large short-term external debt exceeding stock of reserves prior to the crisis



Source: Haver Analytics.

Note: A. Shading indicates the pre-crisis period with high short-term debt.

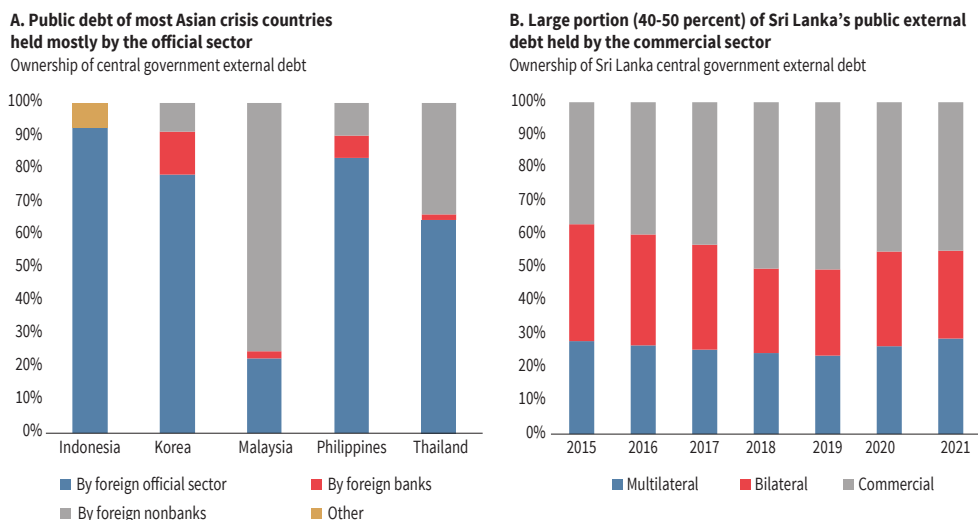
Figure S.4. Different compositions of external debt



Source: A. Bank of Thailand. B. Haver Analytics.

Second, the Asian crisis countries' financial systems had structural weaknesses, including ineffective financial supervision and regulation and a tradition of implicit government guarantees. These weaknesses were exacerbated by the countries' rapid financial market globalization: liberalization of short-term inflows before long-term investments increased the countries' exposure to the more volatile short-term capital, and liberalization without a sound financial system also exposed countries to unnecessary risks (Lane et al. 1999).

Figure S.5. Sri Lanka's public foreign debt mostly held by private sector creditors



Source: Haver Analytics.

Note: A. Annual average of 1992-1998 for all countries except Korea, where only 1998 data is available and used.

Domestic depositors and foreign investors, encouraged by the strong economic performance and assuming implicit government guarantees of local banks, treated the local banks as safe investments and provided easy access to cheap credits. Without effective supervision, local banks borrowed excessively and took on riskier projects, which led to a build-up of risks.

Sri Lanka's crisis was also preceded by a period of ultra-low interest rates in the global market, while heavy reliance on financial inflows from abroad, including credit from Eurobonds and Chinese banks, and large-scale borrowing in foreign currencies also increased the country's external debt.

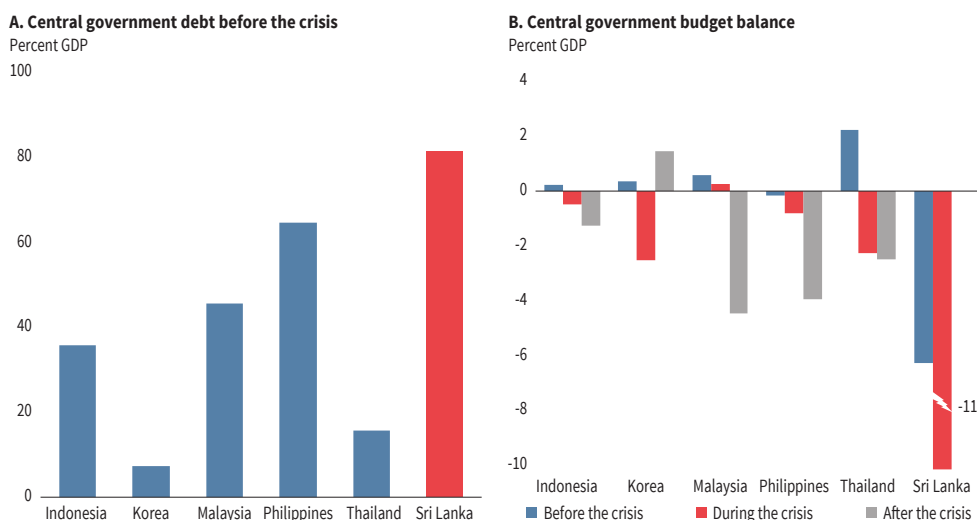
3. Weak legal framework

One important weakness of the Asian economies was the lack of good legal frameworks for bankruptcy resolution, particularly in comparison to advanced countries (Lane et al. 1999). When the crisis happened, troubled companies stopped paying debts and could not operate effectively or receive funding until outstanding debts were repaid. At the same time, creditors could not get paid. The shortcomings in the legal framework delayed the recapitalization and restructuring of the financial system, making the costs larger. Sri Lanka's resolution framework is said to be responsible for the large capital deficiencies in finance companies, which account for about 6 percent of total financial sector assets and serve higher-risk borrowers (IMF 2022). A new Banking Act is expected to be finalized and adopted in 2022. It would be important to upgrade the resolution framework for all financial institutions by

setting up a special resolution regime, broadening resolution tools, improving deposit insurance, and enhancing emergency liquidity assistance.

While **Sri Lanka** shared many vulnerabilities that the Asian countries faced back then, its weakness in the fiscal sector was not shared by the Asian crisis countries (Figure S.6). Sri Lanka’s public debt has become unsustainable due to widened fiscal deficit following the 2019 tax cuts, economic contractions during the COVID-19 pandemic, currency depreciation, and rising debt burden from state-owned enterprises mainly to state banks. The heavy public sector burden means that the government has fewer fiscal tools when dealing with the crisis compared with the Asian crisis countries.

Figure S.6. Sri Lanka carried high public debt and large fiscal deficits pre-crisis, while fiscal positions were relatively strong in the Asian countries pre-crisis



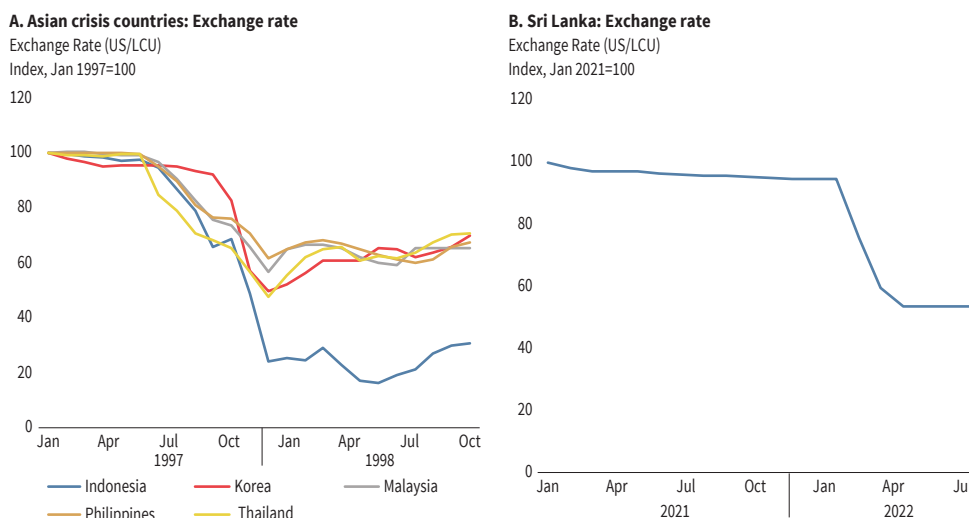
Source: Haver Analytics.

Note: For Indonesia, Korea, Malaysia, Philippines, and Thailand: before the crisis is the annual average of 1992-1996; during the crisis is the annual average of 1997-1998; after the crisis is the annual average of 1999-2003. For Sri Lanka, before the crisis is the annual average of 2015-2019; during the crisis is the annual average of 2020-latest available quarter (2022Q1).

S.2 What triggered the crisis and what happened next?

The Asian financial crisis started on July 2, 1997, with the devaluation of the Thai baht, and quickly spread to other East and Southeast Asian countries. Before the crisis, the countries experienced slowdowns in export growth and the US dollar appreciated. The deterioration in the current account led the foreign exchange market to expect the government to devalue in the future. To defend currency pegs, countries sold foreign exchange, which reduced reserve

Figure S.7. Exchange rate depreciation during the crisis



Source: Haver Analytics.

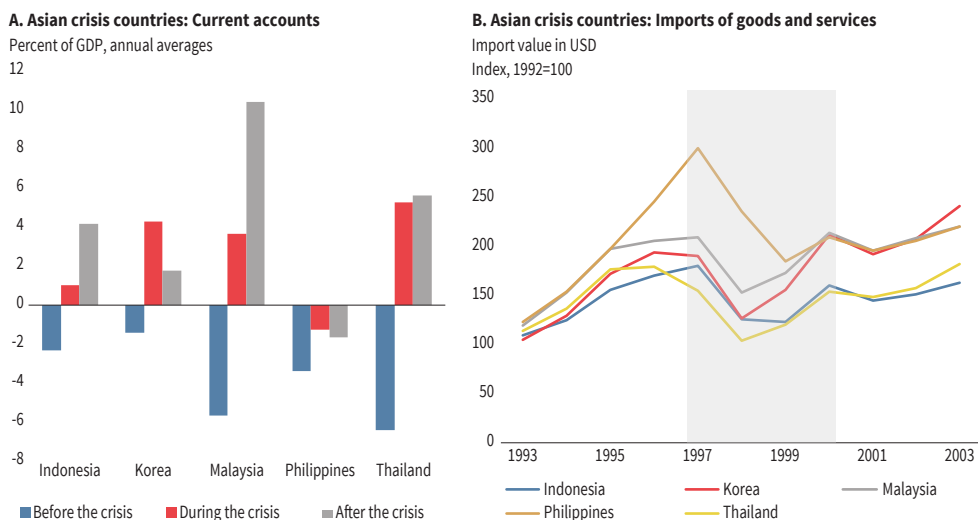
holdings and made currencies vulnerable to speculative attacks.⁴ As speculation built up for a currency devaluation, the central bank of Thailand was forced to devalue. Foreign and domestic investors rushed for the exits, and a vicious circle was created: currencies depreciated, massive bank defaults, further undermining creditors' expectations for repayment, and increasing capital outflows.

When capital exited Thailand rapidly, investors also withdrew money from other Asian countries with an open capital market, and even some Latin American countries. The affected five currencies in the region depreciated by 30-50 percent against the US dollar between June and December 1997, and the Indonesian rupiah dropped by a further 49 percent between December 1997 and January 1998 (Figure S.7.A). Imports dropped significantly as domestic demand collapsed (Figure S.8.B), while exports remained relatively stable. As a result, countries' current accounts turned from large deficits to surpluses (Figure S.8.A).

Through the crisis, the economies went through structural changes. Before the crisis, economic growth in the crisis countries was driven by physical capital accumulation fueled by hot money

⁴ The current account deterioration prompted a speculation of future currency devaluation by the government. When fears of devaluation arise because the central bank's reserves are low to begin with, capital flight is often occurring, which forces the central bank to devalue sooner and by a larger amount than planned. In addition, fears about the currency depreciation that spark liquidity attacks can be self-fulfilling, that is, an economy can be vulnerable to currency speculation even without being in such bad shape that a collapse of its fixed exchange rate regime is inevitable. If other creditors are pulling their money out, each individual creditor has an incentive to do the same thing. In such a setting, even a moderate deterioration in macroeconomic conditions could have a disproportionate effect.

Figure S.8. Current accounts turned from deficit to surplus driven by a fall in imports as economies contracted during the Asian financial crisis



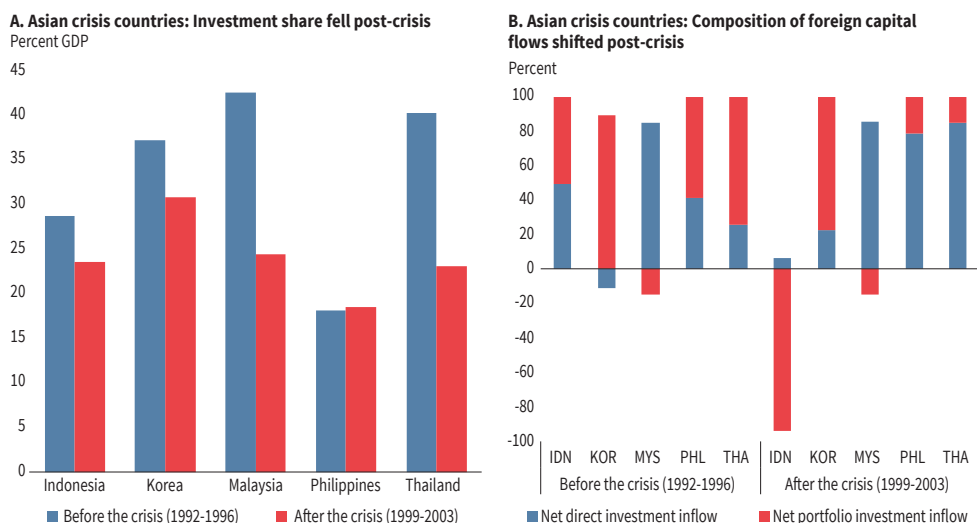
Source: Haver Analytics.

Note: A. Before the crisis is the annual average of 1992-1996; during the crisis is the annual average of 1997-1998; after the crisis is the annual average of 1999-2003. B. Shading indicates the fall in imports.

from abroad. After the crisis, investment as a share of GDP fell all except for the Philippines (Figure S.9.A) as countries shifted toward a more sustainable development paradigm. The capital inflow composition also changed from net portfolio investment to net direct investment, which is relatively less volatile, in most troubled countries after the crisis (Figure S.9.B).

Sri Lanka's crisis started as a combination of a balance of payments crisis and a sovereign debt crisis. A series of ambitious tax cuts in 2019 led to rating downgrades and loss of market access. The country's loss of tourism earnings during the COVID lockdowns and larger import bills due to elevated import commodity prices since late 2021 also contributed to rising current account deficits. Foreign exchange reserves fell, exacerbated as the country sold foreign currencies in early 2022 to defend a currency peg. The currency peg also led to parallel exchange rate markets and a drop in remittance inflows that contributed to current account deficits (Figure S.10.A). The country's currency depreciated by over 70 percent between January and May 2022, with a drastic drop after the country relaxed the currency peg in early March (Figure S.7.B). By early April, its foreign exchange reserves were enough to cover only 1.4 months of imports (World Bank 2022). Depleted of foreign currency, the government defaulted on external debt payments in April 2022. As most of the external debt is borrowed by the government, the private sector is less exposed than in the Asian crisis countries. But Sri Lankan banks have large holdings of foreign currency-denominated government debt and have been facing severe liquidity issues since the default.

Figure S.9. Investment fell and capital inflows shifted from portfolio investment to direct investment following the crisis in most Asian crisis countries



Source: Haver Analytics.

Note: Positive sign for net direct investment inflow and net portfolio investment inflow, and negative sign for outflow. IND=Indonesia, KOR=Korea, MYS=Malaysia, PHL=the Philippines, THA=Thailand.

Sri Lanka’s imports already started declining in January 2022 due to a shortage of foreign currency and import controls; following the default in April 2022, the country’s imports fell more rapidly (Figure S.10.B), parallel to the Asian crisis countries during the crisis. The exchange rate has stabilized as the country moved to a managed float exchange rate regime on May 12 that targets a variable spot rate (Central Bank of Sri Lanka 2022). Domestic inflation reached record highs due to currency depreciation, shortage of imported goods, and elevated global prices (Section 1.1, Figure 1.1).

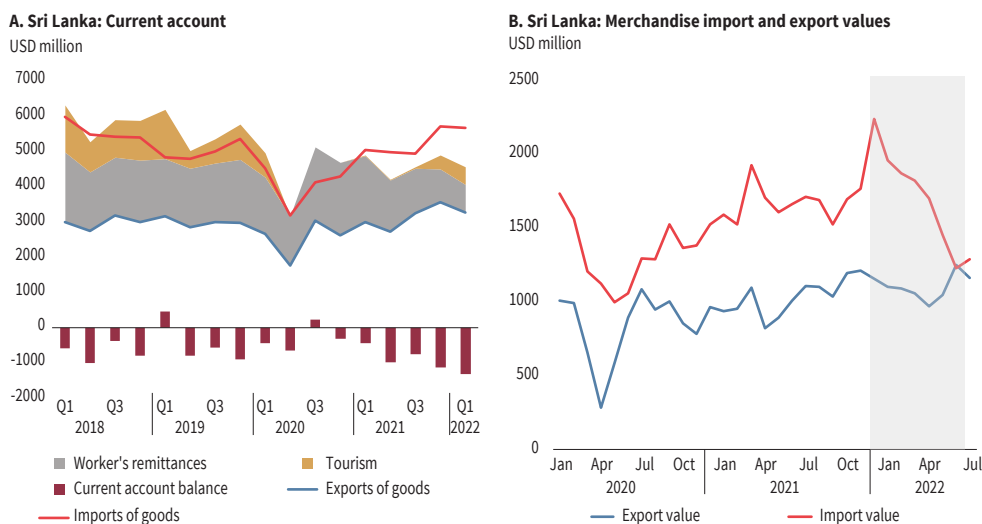
S.3 Policy responses to the Asian financial crisis

The policy responses to the Asian financial crisis helped countries recover quickly and had three main elements:

1. Large financing packages and involvement of private creditors

Large financing packages were provided by multilateral and bilateral sources to help restore confidence and limit capital outflows (Table S.2). More direct actions were also undertaken to involve private creditors to close the financing gap. The Thai authorities received

Figure S.10. Sri Lanka's current account deficits rose during the crisis, while imports declined since 2022 due to a shortage of reserves



Source: Haver Analytics.

Note: B. Shading indicates the decline of imports in 2022.

assurances from creditors at the start of the program. In Korea, the government aggressively controlled the financial institutions to roll over credit lines, followed by an agreement with foreign banks to reschedule short-term debt. In Indonesia, an agreement on restructuring corporate debt with private bank creditors was reached in June 1998, but the implementation of the agreement was complicated by the fact that nearly half of the total external debt was held by private corporations.

2. Macroeconomic policies to stabilize the economy

At the outset, massive market pressures forced most of the crisis countries to float their currencies, supported by the IMF. Thai baht was floated in July 1997; the Indonesia rupiah was floated in August 1997; and a free-floating exchange rate system was adopted in Korea in December 1997.⁵ Accordingly, the use of credit and interest rate policies was more emphasized, rather than direct foreign exchange intervention, to maintain currency stability. In Malaysia, however, unconventional policies combining capital controls and fixing the exchange rate were adopted in September 1998.

⁵ While some argued that readjusting the peg to a new rate might avoid the devastating side effects of depreciation, repegging these currencies in the midst of the crisis would have been difficult. The reserves needed to maintain the exchange rate were depleted. Additionally, it would have required considerable financing and strong commitment of the authorities to use monetary policy to defend the currencies. Pegging the currencies could also face the risk of losing credibility if a new peg must be abandoned under market pressure—as had happened with the Mexican currency crisis in 1994.

Table S.2. Official financing for the Asian financial crisis

	In billions of SDRs	In billions of US dollars	In percent of annual GDP	In percent of IMF Quota ¹
Indonesia²				
IMF	7.338	10.1	5	490
Asian Development Bank and World Bank		8.0	4	
Other		18.0	9	
Total package		36.1	17	
Korea				
IMF	15,500	21.1	5	1,938
Asian Development Bank and World Bank		14.2	3	
Other		23.1	5	
Total package		58.4	13	
Thailand				
IMF	2,900	4.0	3	505
Asian Development Bank and World Bank		2.7	2	
Other		10.5	7	
Total package		17.2	12	

Source: Table taken from Lane et al. 1999.

Note: SDR=Special Drawing Right. 1. Duration of original arrangements was 36 months for Indonesia and Korea and 34 months for Thailand. 2. Original financing package, not including augmentations since July 1998.

Monetary policy was tightened to prevent large currency depreciations from initiating depreciation-inflation spirals. In Korea and Thailand, tightened monetary policies successfully stabilized money growth and currency by mid-1998. In Indonesia, monetary control was lost amid banking collapse and political turmoil and was only restored in end-October 1998.

Fiscal policy adapted to the changing economic situations. The original IMF programs contained fiscal adjustments to limit fiscal deficits, based on the assumption of a moderate economic slowdown. By early 1998, as economic situations worsened, fiscal policy was eased significantly to support economic activities. As a result, the net effect of fiscal policy was expansionary in Korea and Thailand, while in Indonesia the fiscal deficit target was eased significantly.

3. An unprecedented set of structural reforms

A comprehensive package of structural reforms was implemented in the crisis countries to address the root causes of the crisis. This consisted of restructuring of the financial sector and corporate debt which was the origin of the crisis, efforts to rebuild international reserves⁶, reforms to improve governance and promote competition, and efforts to strengthen and broaden social safety nets to support the poor and vulnerable groups (IMF 2000; Koo and Kiser 2001; Lane et al. 1999). Importantly, the pressing need to improve financial supervision and regulation was recognized in the early phase of the programs, which helped prevent recurring financial fragilities.

S.4 Does the Asian financial crisis offer relevant lessons for Sri Lanka?

The East and Southeast Asian countries were able to recover quickly through sound policies. Does the experience offer useful lessons for Sri Lanka and other developing countries? A few key differences are worth bearing in mind.

The global economic environment is different. In the late 1990s, the world economy was growing and becoming more internationally integrated. In contrast, the current high inflation, global economic slowdown, and signs of a retreat from globalization are not as conducive to an export-driven growth model compared to the 1990s. This is especially relevant for Sri Lanka, whose economy relied heavily on tourism, remittances, and specialized exports (as well as non-tradable sectors). Aside from the external condition, several internal differences exist between the Asian crisis countries in 1997 and Sri Lanka now. These include the pre-crisis borrower and lender compositions of external debt, the origin of the crisis, and the nature of the external shock (see Table S.1 for a summary and Sections S.1-2 for details).

Despite the differences, some key lessons emerge from the experiences of the Asian financial crisis, both for Sri Lanka now and for other developing countries.

1. Promoting sustainable growth. This lesson is relevant both before and during a crisis. The catastrophe that overtook the Asian miracle economies underlines the importance of improving economic efficiency to achieve sustainable economic growth, instead of relying on hot money. The relatively quick recovery of the Asian countries shows that countries in crisis should not only focus on short-term debt resolution but also on policies that promote productivity growth and resilience. For Sri Lanka, further efforts to

⁶ There is a growing debate about whether the reserves build-up by Asian financial crisis countries are excessive (Park and Estrada 2009). The lesson is that the optimal amount of reserves should be judged against the cost of carrying them and the benefits accrue only when countries optimally control the saving of reserves and external borrowing.

enhance productivity growth may include lowering youth unemployment, increasing female labor force participation, addressing informality in the labor market, liberalizing the trade regime to facilitate export diversification, and improving the investment climate to strengthen non-debt foreign exchange inflows.

2. Structural change during a crisis. The structural changes that took place in the Asian crisis countries, including lower reliance on investment fueled by hot money, demonstrate that economies can come out of a crisis with a very different economic structure. As Sri Lanka moves toward a resolution of the current crisis, structural changes may be inevitable.
3. Choosing the right exchange rate regime. The pegged exchange rate encouraged the private sector of the Asian crisis countries to borrow in foreign currencies during the 1990s. When devaluation started nonetheless, much of the financial sector and corporations found themselves insolvent due to large foreign currency-denominated debt. But countries with a floating exchange rate are not immune to pressure in the external sector, as demonstrated in the global financial crisis. Better-informed choices for the exchange rate regimes should take the trade-offs and country-specific circumstances into account. For Sri Lanka, it may be a good time to consider the gradual shift to a market-determined exchange rate to facilitate external adjustment.
4. Stronger financial sector supervision and regulation. What made the Asian financial crisis particularly serious was the twin crisis—a case when the currency crisis and banking crisis occurred almost simultaneously. The collapse of the banking sector could disrupt the economy by cutting off credits to even profitable companies. In the future, governments should continue strengthening financial supervision, regulation, and legal frameworks to help build resilience to future crises.
5. The sequence of capital account liberalization matters. The Asian financial crisis also highlights the importance of the appropriate pace and sequence of capital account liberalization. It is risky to open up the capital account before a sound domestic financial system is in place. Liberalizing short-term capital flows while leaving restrictions on long-term flows also encourages reckless lending and leads to banking insolvency when foreign capital exits. Thus, developing countries should use caution when liberalizing capital accounts until the domestic financial system is strong enough.
6. No one size fits all. The diverse experiences of the Asian financial crisis countries, including Malaysia's strong rebound after following unconventional policies, demonstrate that there is no one size fits all policy response to a crisis. Policy responses such

as monetary policy and fiscal policy should be adapted to the nature of the crisis and changing economic situations.

Finally, similar experiences of the Asian crisis countries and Sri Lanka highlight the importance of sufficient foreign reserves in helping countries through periods of low foreign income or large capital outflows, as attested by the difficulties facing many South Asian countries due to dwindling foreign reserves over the past year (Section 1.4).

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