Fiscal Policy Options to Build Forward Better

Vatcharin Sirimaneetham
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About the author: Vatcharin Sirimaneetham is Economic Affairs Officer, Macroeconomic Policy and Analysis Section, Macroeconomic Policy and Financing for Development Division (email: sirimaneetham@un.org).

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Abstract

Amid tighter fiscal space in Asia and the Pacific, this paper examines how the region’s economies can mobilize additional fiscal and financial resources to ensure public debt sustainability while achieving the Sustainable Development Goals. It explores four selected policy areas, including public debt service suspension, sovereign bond financing, debt swaps for development, and catastrophe finance. While offering some specific policy recommendations, this paper notes at a broad level that developing countries in the region could further benefit from existing debt relief initiatives; governments should increasingly explore bond financing to complement traditional fiscal borrowings; creditors and debtors can work more closely to increase the effectiveness of debt swap arrangements; and countries need to have a mix of financing modalities that match their catastrophe risks. Individual Asia-Pacific countries should carefully consider the instruments and modalities that leverage their strengths and are implementable given institutional capacity.

Keywords: Public debt relief, government bond, debt swap, catastrophe finance

JEL classification: H62, H63, H84
1. Introduction

While ESCAP (2021) demonstrated that having adequate fiscal space can help increase the region’s ability to withstand past adverse shocks, Holland and Sirimaneetham (2021) showed that investing in ‘build forward better’ policies to help build such resilience could increase the risk of public debt distress in many Asia-Pacific economies. Beyond sustained economic growth momentum, public debt sustainability depends primarily on government’s ability to maintain sustainable fiscal deficits over the medium term. This brings forward a critical policy question: how can Asia-Pacific countries mobilize additional financial resources to enhance fiscal space and ensure public debt sustainability while pursing the 2030 Agenda for Sustainable Development? The answer to this question comprises the essence of this paper.

Asia-Pacific economies are facing several fiscal challenges which are likely to continue over the coming years. In the near term, they are obliged to service public debts that are maturing. Over the next few years, the region will continue to face large fiscal deficits, as economic growth is projected to recover only gradually while fiscal spending may remain elevated if the pandemic is prolonged. For example, while gross financing needs (the sum of primary fiscal deficit and maturing debt obligations) during the period 2021-2023 in many developing Asia-Pacific economies are expected to trend down from the level in 2020 when the pandemic began, the projected levels are far higher than that in the pre-pandemic year of 2019 (figure 1). Meanwhile, amid tighter fiscal space, coping financially with next emergency situations, such as natural disasters and health outbreaks, will remain an ongoing challenge for policymakers.

Figure 1: Gross financing needs in selected Asia-Pacific countries

Source: Author, based on Munevar (2020).

This policy package is aimed at enhancing access to basic social services (such as healthcare and social protection floor), closing the digital divide (through better education and access to information and communications technology), and strengthening climate and clean energy actions.
While available financing options are many (figure 2), this paper highlights four selected policy areas that would help address fiscal challenges faced by the region (figure 3). To address immediate fiscal needs, section 2 explores the role of debt service suspension. To cope with large fiscal shortfalls over the coming years, selected policy areas include sovereign bond financing, especially offshore public bonds and diaspora bonds (section 3) and debt swaps for development (section 4). Given shrinking fiscal resources, section 5 discusses how the region could further benefit from emergency financing mechanisms. Section 6 provides concluding remarks and a set of specific policy recommendations.

Figure 2: Examples of financing options for sustainable development

<table>
<thead>
<tr>
<th>Public revenue</th>
<th>Bonds</th>
<th>Loans and guarantees</th>
<th>Insurance</th>
<th>Funds</th>
<th>Grants</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Income tax</td>
<td>• Sovereign domestic bonds</td>
<td>• Multilateral development banks</td>
<td>• Catastrophe risk insurance facility</td>
<td>• Global Environment Facility</td>
<td>• Official development assistance</td>
</tr>
<tr>
<td>• Value added/consumption tax</td>
<td>• Sovereign international bonds</td>
<td>• Other official flows</td>
<td>• Weather index insurance</td>
<td>• Green Climate Fund</td>
<td>• Philanthropic and other donations</td>
</tr>
<tr>
<td>• Property tax</td>
<td>• Diaspora bonds</td>
<td>• Contingent credit facilities</td>
<td>• Securities and structured funds</td>
<td>• Microfinance investment funds</td>
<td></td>
</tr>
<tr>
<td>• Import tariff</td>
<td>• GDP-linked bonds</td>
<td>• Development policy loans</td>
<td>•</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Green tax</td>
<td>• Green/blue bonds</td>
<td>• Debt swaps and buybacks</td>
<td>•</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Financial transaction tax</td>
<td>• Social impact bonds</td>
<td>• Blended finance</td>
<td>•</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Airline ticket tax</td>
<td>• Development impact bonds</td>
<td>• Public-private partnerships</td>
<td>•</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• State guarantees</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Author, based on UNDP (2018).

Figure 3: Four fiscal policy options covered in this paper

<table>
<thead>
<tr>
<th>Immediate / short term</th>
<th>Medium term</th>
</tr>
</thead>
<tbody>
<tr>
<td>Servicing maturing public debts</td>
<td>Achieving the SDGs amid tighter fiscal space</td>
</tr>
<tr>
<td>• Debt service suspension</td>
<td>• Emergency financing mechanisms</td>
</tr>
<tr>
<td>Managing larger fiscal deficits</td>
<td>• Sovereign bond financing</td>
</tr>
<tr>
<td>• Sovereign bond financing</td>
<td>• Debt swaps for development</td>
</tr>
</tbody>
</table>

Source: Author.

These policy options are selected because they fit certain economic conditions and opportunities in Asia-Pacific economies. These policies also expand the recent work of ESCAP on fiscal policies. For example, recent ESCAP works have explored various government revenue and spending policies to enhance the fiscal space. On the revenue side, these include improving tax administration and widening tax base (ESCAP, 2018a), strengthening city finance (ESCAP, 2018b), stronger regional tax cooperation (ESCAP, 2019a), and tax collection based on positive local spillover effects of infrastructure projects (ESCAP, 2019b). On the spending side, ESCAP (2019c) discussed SDG-aligned spending and public spending efficiency.
Based on these fiscal options, this paper contains several policy messages. **First**, to further benefit from debt service suspension, less developed Asia-Pacific countries should participate more actively in debt negotiations with official and multilateral creditors, while emerging economies should focus their efforts on dialogues with commercial creditors. Establishing a regional debt platform to discuss such issues would benefit all debtors in the region.

**Second**, Governments should increasingly explore public bond financing to supplement traditional fiscal borrowings. Offshore bonds and diaspora bonds can be viewed as low-hanging fruit, as they leverage economic opportunities in many Asia-Pacific economies. Yet, the success of these bonds requires careful implementation by issuing countries.

**Third**, based on past experience, creditors and debtors should work together to enhance the effectiveness of debt swaps for development by making the financing conditions of these agreements more generous, reducing high transaction costs and ensuring that freed up funds are used as intended. These improvements would make debt swaps a more appealing policy choice.

**Finally**, to better handle the next emergency situations, countries need to have a mix of financing modalities that match their catastrophe risks. For recurrent, low-impact disaster events, reserve funds in several Asia-Pacific countries remain inadequate. To deal with larger, rarer shocks, there remains considerable room for the region to increase the use of risk-transfer instruments, such as bonds and insurance.
2. Public debt service suspension: applying different focus for different debtors

Creditor and debtor countries can consider various debt restructuring modalities to defer or reduce debt-service obligations. Broadly, there are four main methods of debt restructuring (IMF, 2014). These are: (a) debt cancellation or forgiveness, which reduces the amount of debt; (b) debt rescheduling or refinancing, which amends the terms and conditions of the amount of debt owed; (c) debt conversion and prepayment (such as debt-for-nature swaps and debt buybacks for cash), which exchange the debt title for other things having economic value; and (d) debt assumption, in which a new debtor assumes the former debtor’s outstanding liability.

This section is focused on debt rescheduling, particularly debt service suspension, to relieve immediate financing needs.

A large part of public debt in less developed Asia-Pacific economies is owed to official bilateral and multilateral creditors. In 2019, official bilateral creditors and official multilateral creditors (such as the Asian Development Bank and the World Bank) each accounted for about 45 per cent of public external debt stocks in 20 low-income Asia-Pacific countries. Such a ratio can exceed 90 per cent in the case of multilateral creditors (Solomon Islands) and almost 80 per cent for bilateral creditors (Myanmar) (figure 4a). Hence, the success of debt relief efforts for less developed countries in the region depends notably on actions by official creditors.

In contrast, private creditors have played an active role in financing fiscal shortfalls in emerging Asia-Pacific economies (figure 4b). They accounted for slightly more than half of their public external debt stocks in 2019. The greater role of private creditors is mainly due to these countries’ ineligibility for concessional financing and lower sovereign credit risks, which helped ease access to global financial markets.

Among official bilateral creditors, much of the maturing debt is owed to China. For less developed Asia-Pacific economies, China accounts for a large share of their debt servicing obligations that are due in 2021 (figure 5). In terms of value, the sum of these debt principals and interest payments to China stands at about $4.1 billion. In some small Pacific island economies, such as Fiji, Tonga and Vanuatu, China accounts for more than 90 per cent of their maturing official bilateral debts. Similarly, virtually all bilateral debts maturing in 2021 in Afghanistan and Bhutan are owed to the Russian Federation and India, respectively. Finally, as a creditor country, Japan plays a key role in such countries as Mongolia and Uzbekistan.
**Figure 4**: Much of public debt in less developed Asia-Pacific economies is owed to official lenders

Composition of external public and publicly guaranteed debt, by creditor type, 2019

*a. DSSI-eligible countries*

*b. Non-DSSI-eligible countries*

Source: Author, based on World Bank 2021 International Debt Statistics.

Note: DSSI = Debt Service Suspension Initiative. The upper and lower limits of the enclosed box correspond to the 75th and 25th percentiles, respectively. The horizontal line within the box depicts the median. The vertical line shows the range with the uppermost (lowermost) point reflecting the maximum (minimum) values.

**Figure 5**: China accounts for a large share of official bilateral debt services due in 2021

Source: Author, based on World Bank 2021 International Debt Statistics.
Debt relief remains untapped, despite several Asia-Pacific countries benefiting from some initiatives. One notable example of a multi-stakeholder debt relief effort is the Debt Service Suspension Initiative (DSSI). DSSI was agreed in April 2020 and is aimed at temporarily halting the servicing of official bilateral debts owed to G20 countries by 73 low-income countries around the world. The initial suspension period was set to December 2020 but later postponed to December 2021. Of these 73 eligible countries, 48 are participating in the DSSI, as of September 2021.3 For the Asia-Pacific region, of the 24 eligible economies, 11 have participated (figure 6). The combined debt service savings in these participating countries are estimated at $9.5 billion during May 2020-December 2021. These savings are equivalent to at least 2 per cent of GDP in Maldives, Pakistan, Samoa, Tajikistan, and Tonga. Yet, the region can further benefit from DSSI. The estimated potential savings among 13 non-participating countries are about $3.8 billion. Moreover, among 11 Asia-Pacific countries with high risk of overall or external debt distress, only 6 of them have participated. Among others, some eligible countries cited concerns over possible downgrade of their sovereign credit risk rating as one of the reasons for not joining DSSI.

Multilateral creditors have also introduced debt relief initiatives. For example, the IMF Catastrophe Containment and Relief Trust permits debt relief grants to low-income and highly vulnerable countries affected by natural disasters or public health disasters. Between May 2020 and April 2021, such scheme cancelled debt repayments to 28 low-income countries around the world, including Asia-Pacific economies such as Afghanistan ($6.7 million), Nepal ($8.9 million), Solomon Islands ($0.2 million), and Tajikistan ($18.1 million) (IMF, 2020a).

Figure 6: More Asia-Pacific countries could participate in the Debt Service Suspension Initiative

<table>
<thead>
<tr>
<th>Participation in DSSI</th>
<th>Risk of overall debt distress</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Not available&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td>Fiji (0.7%)</td>
</tr>
<tr>
<td></td>
<td>Pakistan (2.6%)</td>
</tr>
<tr>
<td></td>
<td>Myanmar (1.4%)</td>
</tr>
<tr>
<td></td>
<td>Nepal (0.2%)</td>
</tr>
<tr>
<td></td>
<td>Kyrgyzstan (1.9%)</td>
</tr>
<tr>
<td></td>
<td>Afghanistan (0.6%)</td>
</tr>
<tr>
<td></td>
<td>Maldives (2.9%)</td>
</tr>
<tr>
<td></td>
<td>Papua New Guinea (1.5%)</td>
</tr>
<tr>
<td></td>
<td>Samoa (3.1%)</td>
</tr>
<tr>
<td></td>
<td>Tajikistan (2.0%)</td>
</tr>
<tr>
<td></td>
<td>Tonga (3.7%)</td>
</tr>
<tr>
<td>No</td>
<td>Mongolia (1.4%)</td>
</tr>
<tr>
<td></td>
<td>Bangladesh (0.3%)</td>
</tr>
<tr>
<td></td>
<td>Cambodia (2.1%)</td>
</tr>
<tr>
<td></td>
<td>Timor-Leste (0.0%)</td>
</tr>
<tr>
<td></td>
<td>Uzbekistan (1.2%)</td>
</tr>
<tr>
<td></td>
<td>Bhutan&lt;sup&gt;b&lt;/sup&gt; (19.3%)</td>
</tr>
<tr>
<td></td>
<td>Solomon Islands (0.2%)</td>
</tr>
<tr>
<td></td>
<td>Vanuatu (2.0%)</td>
</tr>
<tr>
<td></td>
<td>Kiribati</td>
</tr>
<tr>
<td></td>
<td>Lao PDR (5.0%)</td>
</tr>
<tr>
<td></td>
<td>Marshall Islands</td>
</tr>
<tr>
<td></td>
<td>Micronesia (Fed. States of)</td>
</tr>
<tr>
<td></td>
<td>Tuvalu&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

Source: Author, based on data from World Bank’s “COVID 19: Debt Service Suspension Initiative”.
Note: DSSI = Debt Service Suspension Initiative. Numbers in parentheses are potential DSSI savings as a share of GDP during May 2020-December 2021, where available.

<sup>a</sup> Countries not covered in debt sustainability analysis for low-income countries.
<sup>b</sup> Countries the debt distress risk of which is based on external debt only.

Recognizing that some countries may need additional debt relief beyond a suspension of debt service payments, the G20 Riyadh Summit Leaders endorsed a Paris Club’s agreement to launch a “Common Framework for Debt Treatments beyond the DSSI”. The common framework will coordinate Paris Club and other G20 bilateral creditors in the provision of debt relief to DSSI eligible countries on a case-by-case basis. As of early September 2021, only three African countries – Chad, Ethiopia, and Zambia – expressed interest in receiving debt relief through the Common Framework.

The point to note is that there is room for relevant creditors to step up their debt relief effort. Among others, DSSI should extend beyond low-income countries and official bilateral debts, as well as consider options to reduce the amount of debt stocks (Ellmers, 2020). Additionally, DSSI implementation should include transparent operations by all official creditors, including national policy banks, and a common agreement that provides clear debt transparency and public debt disclosure requirements (IMF and World Bank, 2020). As past episodes of debt crisis suggested, debt restructuring effort that took place after the default resulted in larger economic losses than pre-emptive restructuring. A solid effort now can make a significant impact on future economic growth trajectory (Georgieva and others, 2020).

More broadly, the absence of global or regional debt architecture is undermining multi-stakeholder debt negotiations. Under such circumstance, debtor countries have to proceed with separate, time-consuming negotiations with different creditors. This could also result in an unfair situation when creditors that do not participate in the negotiation, such as commercial creditors, benefit from debt relief granted by other creditors. For instance, between May and December 2020, debt services to private creditors by 46 DSSI-participating countries amounted to $6.9 billion, while their DSSI savings were smaller, at $5.3 billion (Fresnillo, 2020). Past experiences have shown that debt negotiations with commercial creditors could yield sizeable debt relief in countries such as the Philippines ($19.5 billion), the Russian Federation ($68.7 billion), Turkey ($5.1 billion), and Viet Nam ($0.8 billion).

As a large creditor, China has engaged in debt relief efforts for developing countries. China is playing an important role for DSSI, with about 20 per cent of external debt in all DSSI-eligible countries owed to China (Huang and Brautigam, 2020). Under DSSI, China has so far extended debt relief worth $2.1 billion, including debts owed to entities such as the China International Development Cooperation Agency and the Export-Import Bank of China (Reuters, 2020). Over a longer period, China has cancelled about $3.4 billion of its official zero-interest loans to African countries, while restructuring an additional $7.5 billion in debt, primarily through maturity extensions, during the period 2000-2019 (Acker, Brautigam and Huang, 2020). Despite these notable efforts by China, challenges remain due to, say, the presence of numerous Chinese public and private lenders in each debtor country and a complicated, loan-by-loan negotiations approach (Brautigam, 2020).
3. Sovereign bond financing: going beyond traditional fiscal borrowing

Governments can finance their fiscal deficits through various channels. These include, among others: (a) raising taxes, especially those to address social and environmental concerns; (b) increasing debt, such as government borrowing and bond issuance in domestic and foreign markets; (c) printing money, in which the central bank would hold part of newly issued government debt instruments through creation of additional currency; and (d) emergency financial assistance from multilateral development banks. During such emergencies as the COVID-19 pandemic, Asia-Pacific economies also explored less traditional approaches. For example, as part of an effort to better leverage government assets, India has proposed a land monetization plan for some public entities. Globally, it is estimated that better management of government balance sheets could generate up to $3 trillion a year (McKinsey, 2020). Another example is central bank asset purchases in several emerging economies (box 1).

**Box 1: Asset purchases by central banks in Asia and the Pacific – proceed with caution**

To cope with the economic slump and pressing fiscal needs, central banks in several emerging Asia-Pacific economies engaged in asset purchase programmes for the first time in 2020. In March, the central banks of India and Thailand purchased government bonds in the secondary market worth about $5.5 billion and $3.1 billion, respectively. In Indonesia and the Philippines, the central banks purchased government bonds in both primary and secondary markets. Finally, Turkey’s central bank introduced a programme for outright sovereign bond purchase and increased the maximum value of purchases under open market operations.

While these asset purchases help to preserve government bond yields and revive much-needed market sentiment during this unusual time, developing Asia-Pacific countries should proceed with caution. In developed countries, asset purchases by central banks are adopted partly because the policy rates are already close to zero per cent so the room for further monetary easing is limited. However, this is currently not the case in most Asia-Pacific economies. More broadly, given that institutional quality in developing countries tends to be weaker than that in developed countries, large-scale asset purchases by central banks could jeopardize fiscal discipline, erode central banks’ independence and credibility, and lead to inflation overshooting. As such, from the long-term perspective, this may be deemed as a less viable policy option, especially at the scale being implemented in developed countries.
Asia-Pacific countries with underdeveloped financial markets have relied on external loans, while those with advanced financial markets rely more on bond financing (figure 7). Even as concessional financing makes external borrowing the only available or the cheapest source of finance, it is not the most conducive one for long-term development. In contrast, a sovereign bond market can help not only to diversify investors’ portfolios but also establish a benchmark yield curve for corporate bonds, which fosters the use of corporate bonds to fund business development. Thus, developing capital markets is one of the main pre-requisites to take advantage of additional financing options.

Against this background, this section examines sovereign bond financing, especially offshore sovereign bonds and diaspora bonds, as possible financing options. These bonds are considered suitable for countries with certain development opportunities and impediments. Beyond these bonds, there are also less conventional public bond financing methods. For instance, Indonesia raised $2.5 billion from an oversubscribed, global sukuk bond in June 2020 (Akhlas, 2020a).

**Figure 7**: Governments in less developed Asia-Pacific economies rely heavily on external borrowing

![Figure 7: Governments in less developed Asia-Pacific economies rely heavily on external borrowing](image)


Note: The order of countries is sorted according to the IMF Financial Development Index in 2018, from the least to most developed countries. See Svirydzenka (2016) for methodologies.
3.1. OFFSHORE PUBLIC BONDS: LEVERAGING NEIGHBOURS’ SAVINGS

The concept of issuing offshore public bonds in host countries’ currencies is not new. However, such sales normally took place in world’s major financial markets and carried out by governments with favourable credit risk ratings. For example, amid larger fiscal needs from the pandemic, Indonesia raised $930 million in samurai bonds (yen-denominated bonds issued in Japan) in mid-2020 (Akhlas, 2020a). Countries such as Thailand and the Philippines also had experiences with samurai bonds. Meanwhile, the Philippines and the Republic of Korea previously issued panda bonds (yuan-denominated bonds in China).

For countries with smaller market size, less developed capital markets or weaker credit ratings, public bonds could be issued in the economy of a more developed neighbour. Such issuance offers certain benefits. First, given small domestic savings, funds mobilized from the sale of bonds in the domestic market may be inadequate for fiscal needs. Second, developing domestic bond markets is a lengthy process so it cannot support urgent fiscal needs. This is because several aspects of bond market architecture and intermediaries are needed, such as wide investor base, diverse financial instruments, sufficient secondary market liquidity, effective risk transfer and credit enhancing mechanism, and strong investor protection (ESCAP, 2019b). Third, a poor sovereign credit rating means that issuing government bonds in hard currencies in major international markets is either impossible or possible only with high interest rates. For example, Tajikistan’s first international public bond sales in 2017 raised $500 million from a 7.125 per cent coupon rate (Dalal, 2017).

The issuance of bonds by the Lao People’s Democratic Republic in Thailand is noteworthy. During the period 2013-2020, the Lao Government and other entities issued a total of 43 Thai baht-denominated bonds in Thailand (figure 8). As of end-2020, the total value of outstanding bonds, with the longest maturity date of 2033, is about $2.1 billion. The first issuance in 2013 raised 1.5 billion baht, or about $49 million, from an unrated three-year bond. Arranged by a Thai bank, the proceeds were used to fund hydropower projects (Polkuamdee, 2013). Over time, the size and maturity increased. Sales in 2017, with a 15-year maturity and BBB+ rating, generated 14 billion baht for infrastructure investment and refinancing earlier bonds and bank loans (approximately $431 million) (Srimalee, 2017). Financial institutions accounted for almost 60 per cent of the buyers, followed by large investors (28 per cent) and asset managers (14 per cent). In addition to baht bonds, the Lao People’s Democratic Republic also issued United States dollar-denominated public bonds in Thailand in 2015, which raised $182 million (Nation, 2015).
Successful issuance of offshore sovereign bonds depends on features of the host countries. First, host countries need to have rather effective capital markets and sizeable domestic savings. Second, investment rules in host countries should permit the issuance of unrated or non-investment grade bonds. For example, Thailand eased restrictions on the sale of unrated bonds and cancelled the requirement that all foreign issuers of baht-denominated bonds have investment grade ratings (Boey, 2013). This is more feasible if host countries aspire to become a regional financial market, at least for their less developed neighbours (Watts, 2013). Finally, if institutional investors in these economies are allowed to invest in non-investment grade bonds and/or there is an appetite for higher-yield sovereign debt among other types of investors, then this is considered as a plus.

Strong prior economic ties between host and issuing countries are also critical. Such ties help increase understanding of economic developments and gauge creditworthiness of unrated markets. In the case of the Lao People’s Democratic Republic, exports of hydroelectricity to Thailand, which were partly denominated in baht, accounted for a large part of the country’s export revenues. Moreover, Thai banks had lending experience with earlier hydroelectric projects, while many projects financed by the baht-denominated bonds were carried out by Thai construction companies. Also, certain bond repayments were secured by a long-term agreement to purchase electricity by a Thai State-owned entity (Boey, 2017).

Regional financial cooperation initiatives also play an important role. For instance, the ASEAN+3 Multi-Currency Bond Issuance Framework, which was launched under the Asian Bond Market Initiative (ABMI), aims to facilitate intraregional fixed income transactions by promoting common market practices and standardized conditions for bond issuance, such as disclosure standards and common documents.4 Beyond technical support provided by ABMI, Boey (2013) noted that Thailand’s

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4 See van der Wansem, Jessen, and Rivetti (2019) for a technical guidance on low-income countries could issue international bonds.
relaxation of investment rules can be seen as its political support for the AMBI. Meanwhile, another example is the Asian Bond Market Forum, which was established in 2010 as a common platform for bond market experts from the Asia-Pacific region, to foster the standardization of market practices and harmonization of regulations relating to cross-border bond transactions.

Despite its benefits, offshore public bond issuance should be pursued cautiously. After all, issuing bonds offshore in a foreign currency raises a Government’s vulnerability to exchange rate risks. An economy may also experience exchange rate volatility, especially during the launch and maturity of the bonds. More broadly, policymakers in the issuing countries should view offshore bonds as a supplement to, rather than a substitute for, well-developed capital markets at home. For the host countries, investing in unrated and non-investment grade bonds offers potentially higher yields but also carries higher risks of default.

### 3.2. DIASPORA BONDS: MOBILIZING SAVINGS OF COUNTRIES’ OWN EMIGRANTS

Diaspora bonds tap savings held by emigrants and could offer several benefits. For countries with limited access to foreign capital, these bonds offer a fixed-rate source of income, while enabling citizens to contribute to the development of their origin economies (IOM, 2019). In general, diaspora bonds’ interest rates can be lower than those of sovereign bonds because diasporas often have a lower country risk perception than other international investors. Diasporas are also less likely to cease bond holding during financial panics. In some cases, diasporas may also be willing to accept lower interest rates than the market interest rate for government debt because of their desire to support their home countries, usually referred to as ‘patriotic discount’, although the evidence on such a discount is inconclusive (Akkoyunlu and Stern, 2018). For emigrants, diaspora bonds offer better investment opportunities, as much of their savings are held in bank deposits in destination countries with low interest rates.

The pandemic-induced decline in remittance flows was much more modest than other international flows. In 2020, global remittances decreased by only 1.6 per cent (World Bank, 2021), compared to 42 per cent for FDI flows (UNCTAD, 2021) and 73 per cent for international tourist arrivals (UNWTO, 2021). More broadly, remittance flows, which reached a record high in 2019 and overtook foreign direct investment flows to world’s developing countries, have also been more stable than other external financial flows such as resource revenues and tourism receipts (Mohieldin and Ratha, 2020).⁵

Large remittances received by several Asia-Pacific countries present an opportunity for diaspora bonds. In 2019, Bangladesh, China, India, Pakistan, the Philippines and Viet Nam were among the world’s top 10 remittance recipients in terms of value (ranging between $17 billion and $83 billion). As a share of GDP, Kyrgyzstan, Nepal, Tajikistan and Tonga are high in the global ranking, with average remittances of more than 25 per cent of GDP during the period 2017-2019 (figure 9). More broadly, estimates suggest that annual diaspora investments beyond diaspora bonds, see Terrazas (2010) and Benson and Owuor (2019).
savings amount to at least $1 billion in 17 Asia-Pacific countries, including in least developed countries, such as Afghanistan, Cambodia, the Lao People’s Democratic Republic and Myanmar (World Bank, 2020a).

Several Asia-Pacific countries have issued or are considering the issuance of diaspora bonds. The most predominant example is India, which issued five-year diaspora bonds in 1991, 1998 and 2000, generating $32 billion in total. More recently, India also explored the use of a diaspora bond to finance post-flood reconstruction at a subnational level (World Bank, 2019). Countries such as Bangladesh, Nepal, Pakistan, the Philippines and Sri Lanka also have had experience with diaspora bonds, with varying degrees of success. For example, the sales in Nepal in the early 2010s and Pakistan in 2019 mobilized smaller-than-expected funds (Okonjo-Iweala and Ratha (2011) and Business Recorder (2019)). Meanwhile, Armenia has recently considered the use of diaspora bonds for SDG investments (Lieberman, 2018), while Georgia also expressed some interest (World Bank, 2019). Finally, amid the COVID-19 pandemic, Indonesia is considering the issuance of its first-ever diaspora bonds (Akhal, 2020b).

To fully leverage diaspora bonds, several enabling conditions and policy actions need to be in place. First, at a broad level, domestic capital markets need to be sufficiently developed. However, capital markets remain underdeveloped in most Asia-Pacific countries with large remittances (figure 10). Past experience shows that countries that have previously issued diaspora bonds, such as Bangladesh, Pakistan, the Philippines and Sri Lanka, are those that receive sizeable remittances and have reasonably developed capital markets.

**Figure 9**: Average remittances received during 2017-2019.

Source: Author, based on World Bank’s World Development Indicators.
Second, prior to the sales, a detailed demand analysis helps increase understanding of the willingness and ability of diasporas in bond investments. Apart from having a large pool of emigrants, their income level and financial literacy also matter. When Nepal first issued diaspora bonds in 2010 and 2011, the sales targeted emigrants in Arab States of the Persian Gulf and Malaysia who were mostly low-skilled with limited savings. This aspect, along with low interest rates and inadequate marketing campaigns, explains the limited success of that scheme (Okonjo-Iweala and Ratha, 2011; Ratha and Silwal, 2011)). Meanwhile, experiences from India suggest that patriotic discounts are generally larger among first-generation diasporas because they have stronger ties with their ancestral countries (Ketkar and Ratha, 2009). Relatedly, diaspora communities that have strong trust in Governments are more likely to invest in diaspora bonds. In this context, Georgia has established a ministry on diaspora affairs, which organizes regular gatherings among the country’s emigrants (Strokhecker, 2016). Finally, Akkoyunlu and Stern (2018) showed that diaspora bonds are more likely to succeed when diaspora communities are closer to their countries of origin and their Governments possess better sovereign credit ratings.

Third, the structure of diaspora bonds is important. One desirable feature is to offer some diversity in bond structure, such as maturity, currency denomination, fixed versus floating rates, frequency of interest payments, minimum purchase amounts, conditions on early redemption and payment arrangements (Benson and Owuor, 2019). For example, low minimum purchase requirements would enable greater participation by emigrants with small savings. In Bangladesh, a taka-denominated diaspora bond not only carried higher interest rates than other government bonds but was also tax-exempt (Maimbo and Ratha, 2005).

Finally, less developed countries may need technical support from international development partners. For example, to understand and comply with regulatory requirements on investment regimes in destination countries, bond issuers normally have to pay high transaction costs. Development partners can help absorb such costs by providing relevant information and initial assessments (Rustomjee, 2018). Technical studies to assess financial risks associated with diaspora bonds, such as exchange rate volatility, are also useful.
4. Debt swaps for development: learning lessons from the past

As highlighted in section 2, countries can explore various public debt restructuring modalities. This section is focused on debt conversion, especially debt swaps for development, to reduce debt obligations while promoting sustainable development.

Rising public debt levels in developing countries have kindled interest in debt swaps for development. The swap agreements have been used to support development areas, such as health care, education and environmental protection, especially during the 1980s and 1990s. Even prior to the COVID-19 pandemic, the United Nations encouraged the use of debt swaps, especially for climate actions, amid rising public debt in developing countries (ECLAC, 2017; United Nations, 2019). After the outbreak of the current pandemic, interest in debt swaps has increased, both from debtor countries, such as Pakistan (Shehzad, 2020), and creditor countries in Europe (Pleeck and Gavas, 2020; Widge, 2021).

Debt swaps for development offer benefits beyond reducing debt obligations and improving debt sustainability. Compared with other debt reduction modalities, swaps tend to have more direct benefits for sustainable development. For example, during the period 1985-2015, debt-for-nature swaps worldwide involved debt amounting to more than $2.6 billion and resulted in transfers of about $1.2 billion to conservation projects (UNDP, 2017). As environmental projects have global benefits, these projects in developing countries may not be financed without international financial assistance, such as that provided by debt swaps. Other benefits of debt swaps include reduced exposure to exchange rate risks by debtor countries, potential to attract co-financing by other development partners and increased capacity of local organizations that implement the projects (Berenstain, 2007).

Several Asia-Pacific economies have engaged in debt swaps for development, both as creditors and debtors. Among others, the debtor countries were Bangladesh, Indonesia (see box 2), Pakistan and the Philippines. For these transactions, which took place mostly between the 1980s and early

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6 There are two broad categories of swap agreements. The first is bilateral swaps between two Governments, in which a creditor country agrees to cancel the debt of a debtor country in exchange for the debtor’s commitment to spend part of the freed-up fund for agreed development purposes. The second type is trilateral swaps, in which a third party (typically a non-governmental organization) purchases the debt title of a developing country in the secondary market at a discounted value and then transfers it back to the debtor in exchange for the Government’s commitment to mobilize local currency funds for specific development projects.

7 Trilateral debt swaps were mainly driven by debt crises in Latin America when a large of part debt was owed to commercial creditors. Supported by large-scale debt relief efforts, such as the Heavily Indebted Poor Country (HIPC) initiative, debt sustainability in developing countries improved so the discount on commercial debt in the secondary market decreased, thus making the swaps less commercially attractive.
2000s, the creditors or donors included Australia, Germany, Italy, the Netherlands, Norway, the United States, as well as such organizations as the World Wildlife Fund and the United States Agency for International Development. Meanwhile, as a creditor country, the Russian Federation agreed in 2017 to cancel Mozambique’s public debt of $40 million (Jerving, 2017), in which the freed-up fund was used to implement a school feeding programme.

The effectiveness of debt swaps for development has been rather mixed. Typically, debt swaps are considered effective if they: (a) provide the debtor Government’s budget with additional resources; (b) result in additional resources for the target development areas; (c) have a notable effect on debt reduction in a debtor country; and (d) are consistent with the debtor country’s policy priorities (Cassimon, Essers and Renard (2010)). In this regard, the first wave of debt swaps was often too small to significantly reduce the debtor countries’ debt burden (Cassimon and Vaessen, 2007). In many cases, the size of the counterpart fund set up by debtor countries incurred large fiscal costs when compared with the amount of debt relief they received.

**Box 2: Indonesia’s experiences on debt swaps for development**

Indonesia has engaged in various debt swaps for development with several creditors (Berensmann (2007); Buckley (2009); Cassimon, Essers, and Renard (2011); and UNDP (2017)). For debt-for-education swaps, there have been three agreements with Germany. Under the first agreement, signed in late 2002, Germany cancelled a bilateral debt of €25.6 million in exchange of Indonesia’s spending the local-currency equivalent of half of this amount over 2003-2005 on advanced teacher training. The second swap, signed in 2004 and involved €23 million of debt with a similar conversion rate of 50 per cent, was aimed at building new secondary schools in the remote areas. The third swap of €20 million was for the reconstruction of schools damaged by the earthquake that struck Indonesia in May 2006.

For other development areas, Germany and Indonesia reached the debt-for-environment swap agreements in 2004 ($29.25 million) and 2006 (€6.25 million). Part of the freed-up resources were used for a soft loan programme. On debt-for-health swaps, Germany and Indonesia also reached a trilateral agreement (€50 million of debt) in which Indonesia agreed to invest the equivalent of €25 million in the global fund for health. Australia also had a similar agreement with Indonesia. More broadly, Italy also undertook a debt swap with Indonesia in 2005 ($24.2 million and €5.7 million of loans) for various development projects to support the areas devastated by the tsunami in late 2004. With the United States, swaps for development also took place in 2009 ($30 million) and in 2014 ($12.7 million).
Studies suggest mixed outcomes in the case of Indonesia (Cassimon, Prowse and Essers, 2011; Cassimon, Essers and Fauzi, 2013). On a positive note, the debt swaps helped raise about $385 million over a 20-year period, while these agreements were broadly consistent with national development policies and sector-specific priorities. Yet, due to strong frontloading of counterpart payments, these swaps reduced Indonesia’s fiscal space in the first few years of operation. Given the modest scale of debt relief generated by these agreements, their overall impact on public debt reduction was also rather insignificant. Meanwhile, from the governance perspective, Government’s ownership of projects appeared limited because separate trust funds were established and operated with their own procedures. The coordination among different swaps in the country at the time was also largely absent.

Several aspects of debt swaps for development can be improved. First, after determining the level of political interest, an independent feasibility study should be carried out. Among others, such a study should identify the amount and profile of public debt that can be swapped, the beneficiary projects, co-financing sources, the debt discount or conversion rate and, if any, the payment schedule for organizations that are responsible for project implementation (UNDP, 2017). An example is a feasibility study for Georgia, which calculates the potential size of financial resources that the swaps could generate and suggests desirable project characteristics after considering the country’s macroeconomic and institutional contexts (OECD, 2006). Box 3 provides more technical details on some aspects of this feasibility study.

Second, relevant stakeholders should try to reduce the high transaction costs of debt swaps. Examples of these costs include a time-consuming negotiation process, conducting feasibility studies, hiring environmental experts to structure the debt deal and paying for financial and legal fees. In the case of trilateral or commercial debt swaps, transaction costs can range between 1.5-5 per cent of the debt value (UNDP, 2018). For public or bilateral agreements, one policy option is the preparation of guidelines on general terms and conditions of debt swaps by international development organizations, which would help reduce the time cost in finding general information by less experienced creditor and debtor countries (Steele and Patel, 2020).

Third, the scale of debt swaps for development should be increased. For instance, the arrangements could shift from a project- to a programme-based approach, whereby proceeds may be used for direct budget support (Ainio, 2020). Debt swaps can also be collectively carried out by multiple creditors or combined with other debt reduction modalities, such as debt forgiveness (Caliari, 2020). Relatedly, other donors beyond creditor countries could seek to augment the size of counterpart funds, or financially support debtor countries that are unable to meet the required size of counterpart funds (World Bank, 2019). Another benefit of a larger swap agreement that involves multiple creditors with programmatic approach is lower transaction costs (Hurley, 2020).

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8 See Mitchell (2015) for steps of actions needed to operationalize debt swaps for development.
The first consideration is to identify potential debtor countries. In principle, the swap agreements should aim at non-concessional public debts that are likely to be serviced (Cassimon, Renard, and Verbeke (2008); and Cassimon, Essers, and Fauzi (2013)). When swaps are carried out for debts that would eventually default, it indeed adds fiscal burden for debtor countries as they need to mobilize counterpart funds in an absence of debt service savings. Hence, debt swaps seem more appropriate for economies with certain debt reserving ability but whose spending in critical development areas would fall short of needs without financial support from creditors.

Beyond debt servicing ability, there are also other factors that creditor countries can consider when identifying potential debtor countries. For example, based on criteria such as climate vulnerability and risk, biodiversity richness, and the quality of public policy and institutions, Steele and Patel (2020) suggested that Cambodia, Kyrgyzstan, Papua New Guinea, and Viet Nam could be among the world’s priority countries for debt for climate and nature swaps.

The second consideration is to determine the debt discount rate. While the timeframe that a debtor country is requested to mobilize funding for agreed development projects is relatively short (within a few years), debt repayments that were scheduled to happen without the swaps could have taken many years to complete. This is especially the case when debts are on a concessional financing with decades-long repayment period and low interest rates. In this regard, implied debt service savings and counterpart payments should be calculated based on their net present value terms (rather than the nominal terms), as this better reflects whether the swaps would result in additional financial resources (UNESCO, 2011). Relatedly, the discount rate on counterpart payments should be set at a sufficiently high level to ensure net financial gains to debtor countries.

Fourth, to ensure that additional financial resources are made available, effort should be made to minimize the fund fungibility issue. As debt swaps are typically considered as part of their ODA commitments (0.7 per cent of gross national income), creditor countries are tempted to cut the amount of ODA that may have been planned elsewhere (Ito, Sekiguchi and Yamawake, 2018). Governments of debtor countries, on the other hand, tend to cut spending on development areas that have received debt swap proceeds or use the proceeds for other purposes. Such behaviours should be discouraged by using historical data on public spending in different development areas as a benchmark to gauge the extent of fungibility.

Finally, practices should be adopted to ensure prudent operation of the arrangements. To reduce fiduciary risks, a strong monitoring mechanism should be in place, such as documentation produced by independent auditors (Kamel and Tooma, 2005). To increase country ownership, requirements on the use of swap proceeds should be based on spending principles (e.g. climate resilience) rather than a specific list of project targets (Steele and Patel, 2020). The interest of local population should also be observed (Rosebrock and Sondhof, 1991). Finally, where possible, effort should be made to generate revenues from beneficiary projects, such as biodiversity protection projects that promote ecotourism (UNDP, 2017).
Recent shifts in the financial landscape could foster the use of these swaps. Unlike an earlier wave of debt swaps when developed economies played a leading role, some Asia-Pacific economies have emerged as key bilateral creditors for their regional peers. For example, public debt owed to China by 73 low-income countries worldwide was estimated at $102 billion in 2018 (Westphal and Liu, 2020).

Another important shift in the financial landscape is the emergence of sustainability-oriented financial institutions and investors. For emerging Asia-Pacific economies where much of their external public debt is owed to commercial creditors, these financial institutions and investors can help promote the use of swap agreements, both as creditors and donors/third parties.
5. Emergency financing mechanism: getting ready for future shocks

Effective emergency financing mechanisms help enhance preparedness for future shocks. Only about one-third of countries worldwide can adequately respond to public health emergencies, partly due to inadequate financial resources and rigid emergency responses (Osewe, 2017). In the short run, an effective financing mechanism can provide quicker, larger financial assistance during emergency situations, when speed and scale of spending are critical to limiting the devastating impacts of shocks. For example, developing countries worldwide need to spend at least $154 billion in a short 12-week period to combat the COVID-19 pandemic (Tan-Torres and others, 2020). In the longer term, an effective financing mechanism can also help countries to reduce fiscal contingent liabilities (as pre-arranged financing options generally have lower financing costs), face smaller post-event budgetary disruptions, and improve public financial management. Given these benefits, this section discusses financing modalities and instruments that Asia-Pacific governments could consider in coping with emergency situations while managing their financial risks. The discussion mainly touches upon shocks stemming from natural disasters and health outbreaks, although immediate financing is also needed in events such as famine, terrorism, cyber-attacks, and displaced populations.

There are several gaps in disaster risk financing strategies in Asia-Pacific economies. Assessing a country’s readiness to finance natural disasters involves several exercises, such as compiling statistics about past disasters and their socioeconomic and fiscal impacts, examining the quality of legal and institutional frameworks (e.g. speed of budget execution during emergencies), and reviewing the current state of financing mechanism and instruments that can be used (ADB and World Bank, 2017). In this context, studies show that such countries as Armenia, Cambodia, Georgia, the Lao People’s Democratic Republic, Myanmar and Papua New Guinea face a large funding gap when dealing with recurrent or in disaster-prone Fiji, insurance companies can only supply property catastrophe insurance for houses of a certified construction standard (PCRAFI, 2018a).

9 Over half of the projected cost is on case management (e.g. health personnel, field hospitals, and drugs), followed by maintaining essential services, and surveillance and rapid response.

10 This section also does not cover catastrophe risks faced by individuals and households. While instruments are available (e.g. personal health insurance that covers health outbreak and private property catastrophe insurance), access to and affordability of these instruments are often the main challenges. For example, while these are assessments for disaster risk financing strategies, assessing a country’s pandemic risk financing shares some of the concepts. For example, to assess a country’s preparedness to health outbreaks, Oppenheim and others (2019) examine institutional capacity and economic resources.
In some of these countries, a comprehensive strategy to manage the financial impacts of natural disasters is not in place. For others, such as Uzbekistan, it is unclear how the information collected on disaster impacts is centralized and used for fiscal planning. Similarly, there is limited information on contingent liabilities due to disaster risks in Pakistan (World Bank, 2020b), while Nepal’s macroeconomic assessment of disaster risk covers only hazard risks (ADB, 2019). Finally, regarding operational issues, there are overlaps in the scope of use of funds under existing reserve funds in the Lao People’s Democratic Republic, while Nepal exhibits limited budget execution capacity for disaster response, especially at a local government level.

Hence, financing modalities and instruments should be mixed and matched with catastrophic risks. Broadly, a national emergency financing framework comprises an assessment of catastrophic risks that the country is facing and a combination of financial instruments that fit such risk assessment. Choosing a financing instrument involves a risk-layering approach, which is often used in the context of climate and disaster risks (figure 11). Such a choice highlights at least three messages. First, for frequent catastrophes and those with limited impact, such as seasonal floods in some areas13, countries could rely on such instruments as government reserves, contingent funds and budget reallocation. Second, for less frequent catastrophes and those with larger impacts, such as nationwide floods, contingent loans and credits could be initially used, while relying more on tax increase and domestic and external borrowings afterwards. For instruments mentioned so far, Governments retain much of the catastrophic risks, so they primarily bear the cost of policy response. Third, for occasional catastrophes that have large impacts, such as earthquakes/tsunamis and pandemics, countries should explore instruments in which sovereign catastrophic risk is partially or wholly transferred to other entities, such as private investors. Examples of such instruments, which are arranged prior to shocks, are catastrophe bonds and swaps, parametric (e.g. weather-linked) insurance, and traditional (indemnity-based) insurance.14 For these large-scale shocks, international assistance is clearly important for less developed countries.

The size of funds that these instruments can mobilize tends to vary significantly. In general, the scale of risk-retention financing tools such as national contingent funds and budget reallocations depends largely on the fiscal space. In the Asia-Pacific region, such space has shrunk in the years prior to the COVID-19 pandemic (Lee, 2020). Meanwhile, modalities such as contingent loans and credits and issuance of domestic sovereign bond can generate larger funds (Ghesquiere and Mahul, 2010). More promising approaches are those that benefit from risk transfer and external markets, such as catastrophe insurances, emergency external loans, and issuance of foreign sovereign bonds. Finally, the size of donor support is highly uncertain.

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13 These high-frequency, low-impact events accounted for 76 per cent of natural disasters in Asia and the Pacific during 1990-2020 (Chakrabarti, 2020). The figure for events with low or very low frequency (i.e. with return period of at least 25 years) but have high or very high impact is about 5 per cent, although they could trend up due to poorly planned urbanization, climate change, and environmental degradation.

14 Compared to traditional insurance, parametric insurance tends to offer quicker disbursement of funds because the payout is based on pre-agreed characteristics of an event (e.g. wind speed, rainfall amount, and number of infected cases), rather than losses that need to be estimated.
5.1. RISK-RETENTION FINANCIAL INSTRUMENTS: ENSURING AMPLE FISCAL BUFFER

Asia-Pacific countries have established national and subregional emergency funds to cope with shocks. For natural disasters, there are dedicated national reserve funds in such countries as Fiji, Myanmar, Pakistan, Solomon Islands, Tonga and Tuvalu.\(^{15}\) In response to the COVID-19 pandemic, Australia has set up a $1 billion fund to support highly affected regions, communities and industries (e.g. aviation and tourism).\(^ {16}\) Supports are given in the form of fee or levy relief, larger transfers to existing public grants, and establishing new support programmes. At the subregional level, the region recently introduced two emergency funds. First, the South Asian Association for Regional Cooperation (SAARC) launched the COVID-19 Emergency Fund in March 2020. As of April, the combined contribution from the member countries stood at $21.6 million.\(^ {17}\) Second, South-East Asian countries agreed in April 2020 to set up the ASEAN COVID-19 Response Fund to help secure necessary medical supplies for immediate response and prevention. The initiative is funded through reallocation of the existing ASEAN development funds as well as contributions from ASEAN+3 partners (China, Japan, and the Republic of Korea) (Septiari, 2020).

More broadly, there are various examples of emergency funds managed by international organizations. For instance, the Pandemic Contingency Fund by the World Health Organization (WHO) holds $100 million against

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\(^{15}\) See IMF (2018) for more details on natural disaster funds in New Zealand, the Philippines, and Turkey.


\(^{17}\) For further information, see SAARC Disaster Management Centre, available at http://covid19-sdmcentre.org/covid19-emergency-fund.
use in the first three months of a pandemic (Buckley and Pittluck, 2016). The Catastrophe Containment and Relief Trust by the IMF offers post-catastrophe debt relief to health emergencies and natural disasters. The Pandemic Emergency Financing Facility by the World Bank buys private crisis insurance and allows payouts to fund the response. Donors will pay premiums for low-income countries.

In addition to emergency funds, Governments in Asia and the Pacific have also reoriented existing spending and earmarked additional funds to cope with the pandemic. Among others, India announced in March 2020 a budget reallocation of $650 million. In general, spending reprioritization can take various forms, such as transfer of funds between line items, a decree to approve urgent spending, budget transfers to sub-national governments, and introduction of a supplementary budget (Barroy and others, 2020). At the same time, adjustments in procedures can be made to speed up disbursement of public fund by using simplified procurement process and adopting ex-post, risk-based controls. In this context, China took various measures in response to the COVID-19 pandemic: issuing a budget notice to ensure prompt budget funding, increasing central budget transfers to provinces, encouraging insurance funds to do advance payments to health facilities to relieve fiscal pressure on state governments, and allowing greater flexibility execution rules in local financial departments such as using advance allocation and payment to prioritize the allocation of funds. The key issue here is to ensure a balance between flexibility (quick disbursement of funds to the frontlines) and accountability (proper documentation and systems to track expenditures18).

5.2. RISK-TRANSFER FINANCIAL INSTRUMENTS: AN UNFINISHED AGENDA

Several Asia-Pacific countries have introduced insurance to address climate and disaster risks. In total, the region has more than 50 risk insurance schemes, mostly in South-East Asia and South and South-West Asia (Chakrabarti, 2020). More than three quarters of these schemes are micro-level schemes for rural poor, while 14 per cent are sovereign schemes. Examples include schemes for public assets in Indonesia and Viet Nam; agricultural insurance in India, Bangladesh and Mongolia; and earthquake insurance in China and Kazakhstan. As a highly disaster-prone country, the Philippines has various initiatives in place (box 4). Beyond national initiatives, Asia-Pacific countries also participate in subregional catastrophe risk pool initiatives, such as disaster risk insurance facilities to cover losses in Pacific islands (box 5). In selected countries in South-East Asia, the Southeast Asia Disaster Risk Insurance Facility was set up in 2018 to provide rapid funds in response to floods, including through developing a new satellite-based flood monitoring for insurance applications.

18 Examples are estimated costs to deal with the emergency, explanations for budget cuts and re-allocations, and a description of the planned activities.
Box 4: Disaster risk financing strategies at a country level: The case of the Philippines

Following the significant damages caused by Typhoon Yolanda in 2013, the Philippines enhanced the national disaster risk finance strategy (World Bank, 2018a, 2018b, and 2020c). In addition to combining disaster risk management funds at both the local and national levels, it also engaged in $500 million contingent credit line with the World Bank in 2015, which would provide the government with rapid liquidity in case of a disaster shock. In 2017 and 2018, the government placed a parametric catastrophe risk insurance programme, which provides $390 million insurance cover for national government assets and 25 participating provinces against major typhoons and earthquakes. The state-owned insurance agency provided the government with an insurance policy, which is wholly reinsured by the World Bank and international reinsurance companies. As such, the scheme transfers subnational sovereign risk to international markets.

Box 5: Pacific Catastrophe Risk Assessment and Financing Initiative

While highly prone to natural disasters, Pacific island countries’ ability to finance responses to such shocks is limited due to small economy size, inadequate budget reserves, and constrained access to financial markets. In these countries, the cumulative fiscal cost for one disaster could be up to 20.6 per cent of their GDP (Nishizawa, Roger, and Zhang, 2019).

The Pacific Catastrophe Risk Assessment and Financing Initiative (PCRAFI) promotes a catastrophe risk pool through parametric insurances (PCRAFI, 2018b). The initiative has two tracks. The first track is Pacific Catastrophe Risk Insurance Company (PCRIC), which was set up in 2016 as the subregion’s first catastrophe risk insurance pool. The capital is contributed by donor partners, while the scheme also works with international reinsurance companies. Prior to PCRIC, a pilot insurance programme ran between 2013 and 2015 and covered damages from tropical cyclone, earthquake and tsunami in 6 participating countries. The second track of PCRAFI is technical assistance to strengthen knowledge and institutional capacity in various areas. Examples include climate and disaster risk finance, post-disaster public financial management, and lessons learned from similar regional risk pooling mechanisms in Africa, the Caribbean, and South-East Europe.

So far, the scheme made three insurance payouts, which were together worth $6.7 million. The first payout took place in 2014 when a tropical cyclone hit Tonga and damaged two-thirds of homes. The payout, which amounted to $1.3 million or about half of Tonga’s national budget reserves, was made within 10 days of the event. The second and third payouts were triggered by tropical cyclones in Vanuatu in 2015 and Tonga in 2018 for the amounts of $1.9 million and $3.5 million, respectively. Going forward, feasibility studies are underway to cover insurances for volcano, excess rainfall, and drought. The scheme also seeks to increase the number of participating countries.
Despite the growing number of catastrophe insurance schemes, their scope and capital adequacy remain limited. The scope of these insurance schemes is often limited to few risks of disasters and specific categories of damage and losses. The size of the fund is also inadequate. For example, in China and Turkey, only 4 per cent of losses are covered by catastrophe risk insurance schemes (Chakrabarti, 2020). Moreover, the penetration rate of disaster risk insurance is low at only 3 per cent of overall assessed risks of disasters in the region.

The use of catastrophe bonds\textsuperscript{19} is even less common than catastrophe insurance. In addition to reducing catastrophic risk in developing countries, such bond also offers broader benefits. For example, it helps diversify risks faced by investors, while a bond pricing process that is participated by multiple stakeholders also provide additional insights about the perceived probability of a shock (Bris and Cantale, 2020). Box 6 discusses health pandemic bonds issued by the World Bank.

Regional cooperation can enhance the role of emergency financing mechanisms. Such cooperation is important because the concept of risk sharing works better when the pool of participants is larger and more diverse. For disaster risks, several political forums in Asia and the Pacific have supported the idea of joint solutions, which can go beyond financing to include policy dialogues and knowledge-sharing activities (World Bank, 2017b; ESCAP, 2018c). Yet, an important feature of a successful regional approach to emergency financing is to recognize diversity in country-level situations. For example, while potential losses in richer countries could concentrate on public infrastructure and manufacturing facilities, poorer economies suffer more from losses in agriculture and rural housing than in other sectors. Moreover, while less developed economies may have to rely more on joint catastrophe funds, emerging economies can leverage international markets for risk-sharing.

\textsuperscript{19} Catastrophe bonds are event-linked, high-yielding bonds whose aim is to transfer catastrophe risks to financial markets. When a catastrophe strikes, bondholders will lose part or all of their investment, as the payouts are activated and disbursed to beneficiaries (e.g. developing countries hit by an earthquake). The payout will occur when all the trigger criteria are met, while the payout amount depends on predetermined scale and severity of a catastrophe.
Recognizing the difficulty to secure prompt financing to combat the Ebola epidemic in West Africa during 2014-2016, the World Bank issued pandemic bonds in 2017 as part of the Pandemic Emergency Financing Facility (World Bank, 2017a). Two tranches of three-year bonds were available. “Class A” covered two viruses (flu and coronavirus), with the coupon rate of LIBOR plus 6.5 per cent. The riskier “Class B” covered six viruses, with the coupon rate of LIBOR plus 11.1 per cent. Together, the transaction, which was oversubscribed, raised $320 million. The main investors were dedicated catastrophe bond investors, pension funds, and asset managers based in Europe and the United States.

In mid-April 2020, the COVID-19 pandemic met all the activation criteria, which considered the size, growth and spread of an outbreak (World Bank, 2020d). For example, for “Class B” bonds, these included at least 250 ongoing infected cases in a single country, a total of at least 250 fatalities in developing countries, an increasing average number of new cases over the 12-week period since the outbreak was officially announced, at least 20 per cent of total reported cases are confirmed, and at least 20 fatalities in another country. As of September 2020, the entire $195.84 million insurance payout agreed in the case of coronavirus was transferred to 64 eligible countries worldwide. The allocations, which ranged between $1 million to $15 million per country, were based on population size, reported COVID-19 cases, and whether countries were considered fragile or conflict-affected. In total, 17 Asia-Pacific countries received the combined amount of $70.8 million. The top 5 recipients are Afghanistan, Bangladesh, Pakistan, Myanmar, and Viet Nam.

Despite its benefits, there are operational concerns, such as the delay in payout. Clearly, a timely payout would help slow the spread of the disease, thus limiting the eventual damage caused by the pandemic. One option to speed up the payout is to relax the stringency of the activation criteria by, for instance, shortening the required 12-week assessment period (Gross, 2020). Others also noted that the decision to release pre-arranged emergency funds should not be based on the results of risk modelling alone, but also on consultations among relevant stakeholders (Erikson and Johnson (2020), and Zhu (2020). At the same time, developing countries themselves should also seek to improve their capacity to quickly report an accurate number of infected cases (Euromoney, 2020).
6. Conclusions

This paper explored several fiscal policy options that Asia-Pacific countries could consider in meeting immediate financing needs, coping with larger fiscal deficits, and realizing the SDGs amid limited fiscal resources. At a broad level, it noted that (a) developing countries in the region could further benefit from existing debt relief initiatives; (b) governments should increasingly explore bond financing to complement traditional fiscal borrowings; (c) creditors and debtors can work more closely to increase the effectiveness of debt swap arrangements; and (d) countries need to have a mix of financing modalities that match their catastrophe risks.

This paper also offers some specific policy recommendations for Asia-Pacific countries with different income levels and multilateral development partners, as summarized in table 1 below.

Finally, there are at least two concluding remarks that are worth highlighting.

First, to build forward better together, multilateral cooperation not only matters but is also essential. The full potential of fiscal policies discussed here can only be realized when Asia-Pacific countries and their international development partners work closely together, as creditors and debtors, investors and investees, and guarantors and beneficiaries.

Second, while this paper examined several fiscal policy options to build forward better, options available to Governments in Asia and the Pacific are vast and diverse. They need to carefully consider the instruments and modalities that leverage a country’s strengths, make sizeable benefits relative to efforts needed and are implementable given their institutional capacity.
Table 1: A snapshot of recommended fiscal and financial policy actions

<table>
<thead>
<tr>
<th>Policy area</th>
<th>Less developed Asia-Pacific countries</th>
<th>Emerging Asia-Pacific economies</th>
<th>Multilateral development partners</th>
</tr>
</thead>
</table>
| **Debt service suspension**      | As debtors, actively engage in debt relief initiatives with official bilateral and multilateral creditors | As creditors, consider debt service suspension and debt stock reduction | Broaden the scope of debt service suspension  
Urge private creditors to participate in debt relief efforts  
Create a multilateral debt architecture to facilitate multi-stakeholder debt negotiations |
| **Offshore sovereign bonds**     | • As issuers, explore offshore public bonds in neighbouring countries with strong economic ties  
• Improve sovereign credit risk rating | As host markets, introduce enabling investment rules for cross-border bond sales | Promote common market practices and conditions for cross-border bond issuances |
| **Diaspora bonds**               | • As issuers, conduct a demand analysis to assess the willingness and ability of the diaspora in bond investment  
• Offer diversity in diaspora bond structure  
• Further develop domestic capital markets | • As destination economies, facilitate the outreach of bond sales  
• As issuers, explore diaspora bonds that are sustainability-oriented | Offer technical assistance to understand regulatory requirements in destination economies |
| **Debt swaps for development**   | • Explore debt swaps with official bilateral and multilateral creditors  
• Conduct technical feasibility to ensure that agreements increase fiscal space | • As creditors, negotiate debt swaps for development with debtors  
• As debtors, explore debt swaps with commercial creditors | Provide technical assistance to prepare feasibility study  
Serve as donor to reduce counterpart payments by debtor countries  
Prepare guidelines on general terms and conditions of swap arrangements to reduce transaction costs  
Minimize fund fungibility in both creditor and debtor countries |
| **Emergency financing mechanisms** | • Incorporate sovereign catastrophic risks into Government’s financial planning  
• Ensure adequate reserve funds for recurring disasters  
• Explore the use of risk-transfer financial instruments for emergencies | • Increase the scale and scope of risk-transfer instruments, including for public assets | Provide emergency supports in cases of large-scale shocks  
Coordinate regional emergency funds  
Set up more regional sovereign catastrophe risk-sharing initiatives |
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