



# Resilient

## ASEAN and Asia:

Learning from Pandemic Challenges

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## Authorship and Acknowledgements

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## Executive Summary

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In the three years since the start of the COVID-19 pandemic, many governments in Asia have been eager to transition into a post-pandemic phase, moving past the heavy lockdown and restrictions that characterised the years since 2020. However, the pandemic continues to inflict costly damages on our economy, with these costs being borne most heavily by vulnerable industry sectors and populations. This Special Report is an expansion of the commentary titled “The dangers of pandemic amnesia” co-authored by Associate Professor Simon Tay and Ms Evelyn Tan, published in *The Business Times* on 19 May 2023. Emphasising the dangers of pandemic amnesia, the report underscores the need to assess the full economic costs of the pandemic and learn from the lessons to prepare for future outbreaks.

Our report opens with the scarring socioeconomic impact of COVID-19. The pandemic period was punctuated with frequent travel and health restrictions, particularly impacting the tourism and the logistics sectors. The healthcare sector, a critical industry, was heavily burdened by the pandemic and often operated well beyond its capacity.

Apart from the direct economic costs, little literature has been found on the indirect economic costs, stemming from factors such as the loss of work productivity, the costs borne due to looking after vulnerable populations such as those with long COVID, and rising government debt. Future-looking analysis and projected economic costs are also needed. Additionally, there is an urgent need to re-examine COVID-era policies in the region and understand the gaps in policies so as to better position ASEAN and Asia in the face of future pandemics.

This report zooms in on key regional frameworks and initiatives formulated by ASEAN in response to COVID-19. We evaluate their intended outcomes and compare them to what has been achieved today. Beyond that, we believe there is value in understanding ASEAN’s bilateral ties with strategic partners and how the pandemic may have led to the evolution of these relationships. During the pandemic, key partners from both Asia and the West cooperated to secure access to necessary medical supplies and vaccination, as well as access to funding for lower-income countries.

On balance, while it is commendable to have frameworks established and to have acknowledged the need for a regional response, these initiatives often fell short of their intended outcomes. Generally, ASEAN has witnessed a patchy and often inefficient response to the pandemic, with some frameworks demonstrating slow implementation and little follow-through. However, despite these shortcomings, working on establishing these frameworks and initiatives has enabled ASEAN to reaffirm relations with its key strategic partners, as well as provide a platform for dialogue and mutual cooperation. Such cooperation is important for building regional resilience.

In view of such an evaluation, the report proposes policy recommendations that are addressed to policymakers in ASEAN and Asia to address gaps in their approach to crisis management, as well as to better prepare the region for future outbreaks. Broadly, the recommendations are: (i) investment in smart and broad-based healthcare; (ii) more efficient and targeted public expenditure; as well as to (iii) build supply chain resilience. These recommendations are targeted at key regional shortcomings that the pandemic has revealed, and to promote greater regional unity and efficiency.

# 1. Introduction

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COVID-19 was officially declared a global pandemic by the World Health Organisation (WHO) in March 2020. Three years on, in May 2023, the organisation declared the end of the global health emergency, citing the “downward trend” in number of COVID-19 cases.<sup>1</sup> This is after the virus had inflicted over 700 million cases of infection and nearly seven million deaths globally,<sup>2</sup> with estimates of a higher actual death toll of up to 20 million.<sup>3</sup>

The WHO’s announcement came on the back of several countries relaxing pandemic regulations, including travel restrictions and mask mandates, signalling the shift towards treating COVID-19 as endemic. The Singapore government declared that from February 2023, all COVID-19 border restrictions and domestic social distancing measures would be lifted. Even the cautious Chinese government abruptly ended most restrictions under its once infamous ‘zero-COVID’ policy in November 2022, with President Xi Jinping later declaring a victory over the coronavirus. This marked a definitive transition towards a post-pandemic era. This was part of a gradual wave of easing restrictions by Asian governments over 2022 and 2023, with Indonesia being the latest to announce the pandemic’s end in June 2023.

However, the rush to lift pandemic restrictions was accompanied by an uptick in COVID-19 cases. Throughout Asia, several countries have seen a resurgence of cases following the relaxation of measures. In India, the WHO reported a 114 per cent increase in COVID-19 deaths, and a 437 per cent rise in cases in March 2023 alone.<sup>4</sup> In May 2023, South Korea witnessed a similar rise in daily caseload following eased restrictions.<sup>5</sup> Rising case numbers were also seen in ASEAN countries. In April 2023, two months after the lifting of the mask mandate, Singapore saw a wave of new COVID-19 cases, leading to a rapid rise in daily infection numbers.<sup>6</sup> A month later in May, Malaysia also experienced an increase in cases, reporting that more than 70 per cent of government hospital beds were occupied.<sup>7</sup> Despite some countries (such as Vietnam<sup>8</sup> and Singapore<sup>9</sup>) giving guidance to mask up in crowded areas and on public transport, none returned to lockdowns. The desire to avoid strict lockdown measures is understandable due to the tremendous socioeconomic costs and direct impact on people’s livelihood. More significantly, this demonstrates that most governments ostensibly believe that their respective vaccination programmes have successfully led to an acceptable level of protection of the health of their citizens.

To prevent a resurgence of cases, vaccine effectiveness studies have shown that receiving two or three doses of the COVID-19 vaccine can reduce severe outcomes like hospitalisation and death.<sup>10</sup> Indeed, over three billion people have been vaccinated<sup>11</sup> in ASEAN to build herd immunity, in turn limiting the spread and severity of the virus. Therefore, to achieve and maintain such relative immunity, a willingness to take additional COVID-19 vaccine boosters is critical, even in the low-risk future. Nonetheless, surveys show that nearly two in five global respondents have reported decreased support for vaccination mandates.<sup>12</sup> A recent survey also found that 38 per cent of Singaporeans do not intend to take an additional booster.<sup>13</sup> Growing hesitancy towards booster vaccinations reflects a shift away from the necessary attention and caution towards COVID-19. With the resumption of pre-pandemic activities, the increasingly complacent mindset points to a real danger of pandemic amnesia.

Given significant losses in lives and socioeconomic costs, we must guard against pandemic amnesia and ensure that the right lessons are learned. In this report, we seek a deeper understanding of the full range of costs of the pandemic – both historical and projected. This is critical not only as a reminder of the pandemic’s scarring economic impact, but to also provide an understanding of what the scale of the impact may be, should another outbreak occur. In addition, there needs to be a thorough evaluation of the regional crisis response, ensuring that ASEAN and Asia as a region can be better prepared for future crises. This allows us to draw lessons on how to best operationalise regional frameworks, while prioritising the strengthening of socioeconomic resilience.

## 2. Dangers of Pandemic Amnesia: Understanding the True Costs of the Pandemic

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Undoubtedly, COVID-19 has left deep scars with the huge number of lives lost and the socioeconomic disruptions globally. As ASEAN and the world moves forward, we need to monitor the residual and hidden costs of the pandemic, such as productivity losses due to long COVID, directly or indirectly. Understanding the real costs and the longer-term impact would help policymakers guard against pandemic amnesia and complacency.

### 2.1 Scarring Economic Impact

Globally, losses were estimated to be between 5.5 per cent and 8.7 per cent of world's Gross Domestic Product (GDP) in 2020, with corresponding losses for ASEAN countries amounting to between 6.0 per cent and 9.5 per cent of regional GDP in the same year.<sup>14</sup> The Asian Development Bank (ADB) reduced its growth forecast for ASEAN countries by 3.7 percentage points,<sup>15</sup> underscoring the immediate and severe economic losses faced by ASEAN countries.

Across ASEAN, all countries saw different industries plummet in profits and value. Singapore, Malaysia and Thailand were the most affected by supply chain disruptions; Vietnam, Cambodia and Laos bore the brunt of the spillover effects from the harsh restrictions in China.<sup>16</sup> Additionally, the Philippines was hit the hardest for labour mobility and employment, while oil-exporting Brunei and Malaysia suffered from the pandemic-driven price war. Finally, Thailand was badly affected by regional travel restrictions, as tourism made up 11.5 per cent of its pre-pandemic GDP in 2019.<sup>17</sup>

Restrictions were wide-ranging and crippling. Border closures severely impeded global trade by USD 1.7 trillion to 2.6 trillion,<sup>18</sup> with the drastic drop in energy exports particularly hurting countries dependent on petroleum and natural gas exports, such as Indonesia.<sup>19</sup> Transport and logistics sectors across ASEAN were also disrupted: many firms admitted to weaknesses in supply chains being exposed (especially with staffing), where they were stuck with billions of dollars in unsold goods. This caused inventory-to-sales ratios to surge briefly before businesses liquidated these inventories, resulting in financial losses. Moreover, manpower shortages and operational failures were exacerbated:<sup>20</sup> Singapore's USD 188 billion<sup>21</sup> and South Korea's USD 90 billion<sup>22</sup> logistics industries saw slower and more inefficient logistics and transport operations worsen revenue loss.

Tourism has experienced a sharp fall that affected industries which have yet to fully recover despite the lifting of most travel restrictions: Taiwan, whose pre-pandemic levels of tourism and travel contributed to 4.4 per cent of its national economy, faces up to a 50 per cent decline in visitor volumes and tourism spending,<sup>23</sup> reducing its total industry revenue. Relatedly, with the removal of travel restrictions, the sudden demand surge was met with manpower shortages and other logistical challenges that led to consumer frustrations and affected industries' profitability.<sup>24</sup> Singapore, often touted as a world-class aviation hub, faced workforce shortages in the aviation sector with its workforce levels only returning to 80 per cent of pre-COVID times in late 2022.<sup>25</sup>

Finally, it is imperative to consider the damage to the healthcare sector, a critical industry constituting a sizeable portion of Asia's GDP. In 2021, health expenditure constituted over 11 per cent of Japan's GDP, and nearly 9 per cent of South Korea's GDP.<sup>26</sup> During the pandemic, hospitals were pushed to devote more financial and manpower resources, such as overtime staff salary and ventilators, to cope with each surge of COVID-19 patients. More resources had to be devoted to care for the vulnerable and immunocompromised populations, who are more susceptible to COVID-19 complications.

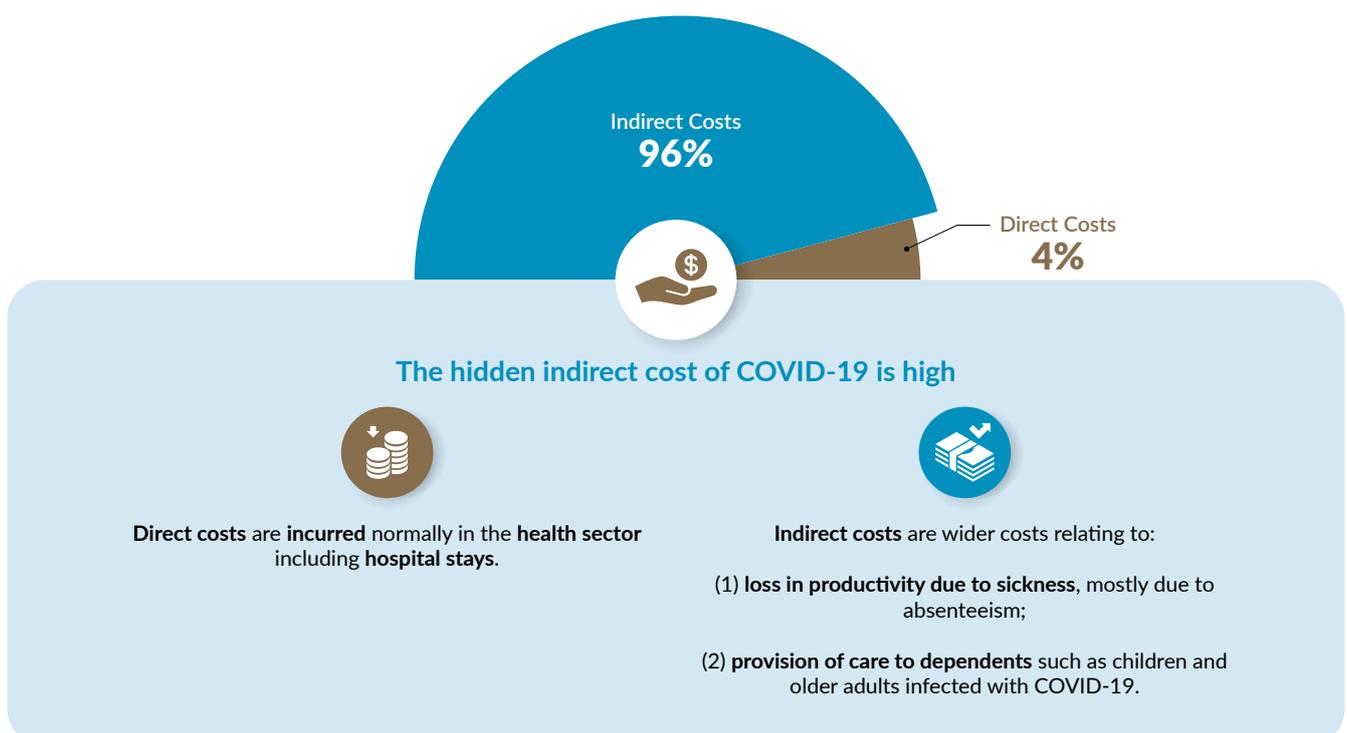
## 2.2 Projected Economic Costs

Beyond the tabulated costs, we also take a forward-looking dive into the hidden and projected costs of the pandemic as COVID-19 has continued to hamper the economy. Future-looking analysis can start with basic cost projections, encompassing tangible economic costs borne by the government, healthcare sector, society as a whole, and individuals, as well as indirect costs, particularly in the loss of work productivity. This section should help policymakers better prepare appropriate policy responses to mitigate the continued impact of COVID-19. Specifically, we examine the projected loss in GDP, as well as decreased workforce productivity.

The ASEAN+3 Macroeconomic Research Office (AMRO) has evaluated the economic prospects in today's "new normal".<sup>27</sup> According to AMRO's report, the general economic forecast is not optimistic.<sup>28</sup> After successive monetary policy tightening rounds in 2022, consumption and investment levels across advanced economies present a pessimistic picture. This projected fall may be exacerbated by the emergence of a more infectious COVID-19 variant in the region, resulting in reductions in the confidence levels of households and businesses. This is further compounded by rising inflation, driven by increases in the prices of food and commodities. In turn, this impacts both investment and consumption. The GDP of five ASEAN member states (Singapore, Indonesia, Malaysia, the Philippines and Vietnam) are also forecasted to grow at a slower pace because of the weaker external demand due to the economic slowdown in the West.

Adding to these is a recent report by global pharmaceutical company MSD, "A Neglected Burden: The Ongoing Economic Cost of COVID-19",<sup>29</sup> which examines the extent that indirect costs make up the total economic loss borne by countries. Looking at Australia, Taiwan, South Korea, Singapore, and Hong Kong, the projection of the total economic costs are eye-watering: USD 2.6 billion in Singapore, USD 17.0 billion in Australia, and USD 27.5 billion in South Korea. This amounts to between 0.6 to 1.6 per cent of annual GDP, and could triple in a worst-case scenario.<sup>30</sup> As seen in Figure 1, the report shows that up to 96 per cent of the total costs are made up of indirect costs – mainly through losses in work productivity caused by sickness and caregiving burdens. Given that these advanced economies are projected to continue to struggle with indirect costs, one can reasonably imagine that in the more economically diverse and less uniformly developed ASEAN region, ASEAN member states would face similar, if not worse, economic losses.

Figure 1: The Hidden Indirect Cost of COVID-19<sup>31</sup>

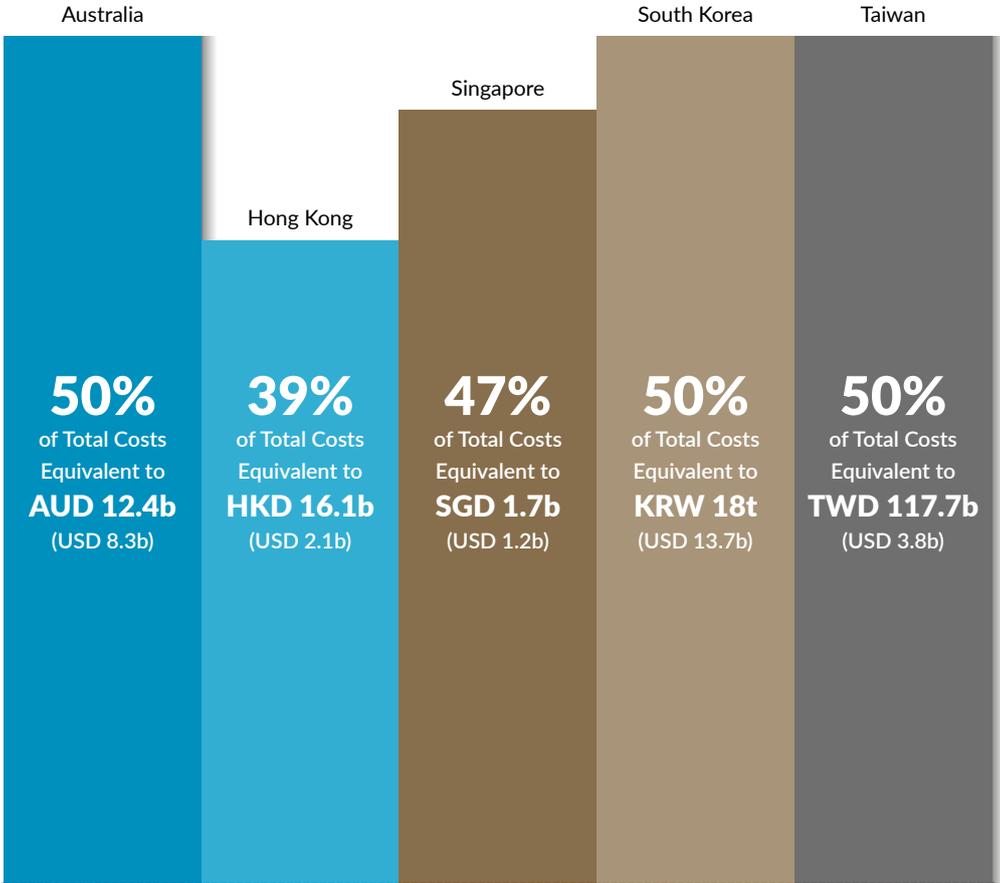


These indirect costs were also raised at a recent Economist Impact webinar held in June 2023, titled “The Multi-billion-dollar burden: Managing the costs of COVID-19”. McKinsey partner Matt Craven stresses that “[a]s we move out of the pandemic to endemic, we are still facing a lot of indirect costs”. He cites indirect costs from loss of work productivity due to high levels of absenteeism, long COVID, caregiving burdens and a general sense of caution as the world emerges from the pandemic. Indeed, recent reports estimated that over 65 million people are still living with the devastating effects of long COVID, including symptoms such as headaches, fatigue, brain fog and more.<sup>32</sup> The economic burdens of long COVID thus need to be factored in when governments consider projected costs.

There is a high risk of work piling up when workers are infected with the virus and are unable to tend to their duties; this is especially acute for front-line and critical workers, as the nature of their work puts them at a higher risk of exposure. For example, in Taiwan’s Chi Mei Hospital, an infection rate of 20 per cent among medical staff meant that their colleagues’ rounding list was increased from 5 to 7 patients,<sup>33</sup> putting strain on other employees and thus lowering overall work productivity.

Vulnerable populations, such as immunocompromised individuals, will likely be disproportionately affected by the virus, as they may experience greater risk of severe COVID-19 disease and greater reliance on healthcare system than others. Those with long COVID may also be absent from work for a longer time, leading to a loss of workforce productivity due to labour shortages. Overall, up to half of the total economic costs are being borne by vulnerable populations infected with COVID-19, of which include older people and people with co-morbidities like heart disease, obesity, or diabetes.<sup>34</sup> The figure below shows the percentages of total economic costs of COVID-19 attributable to just the impact on vulnerable populations (Figure 2).

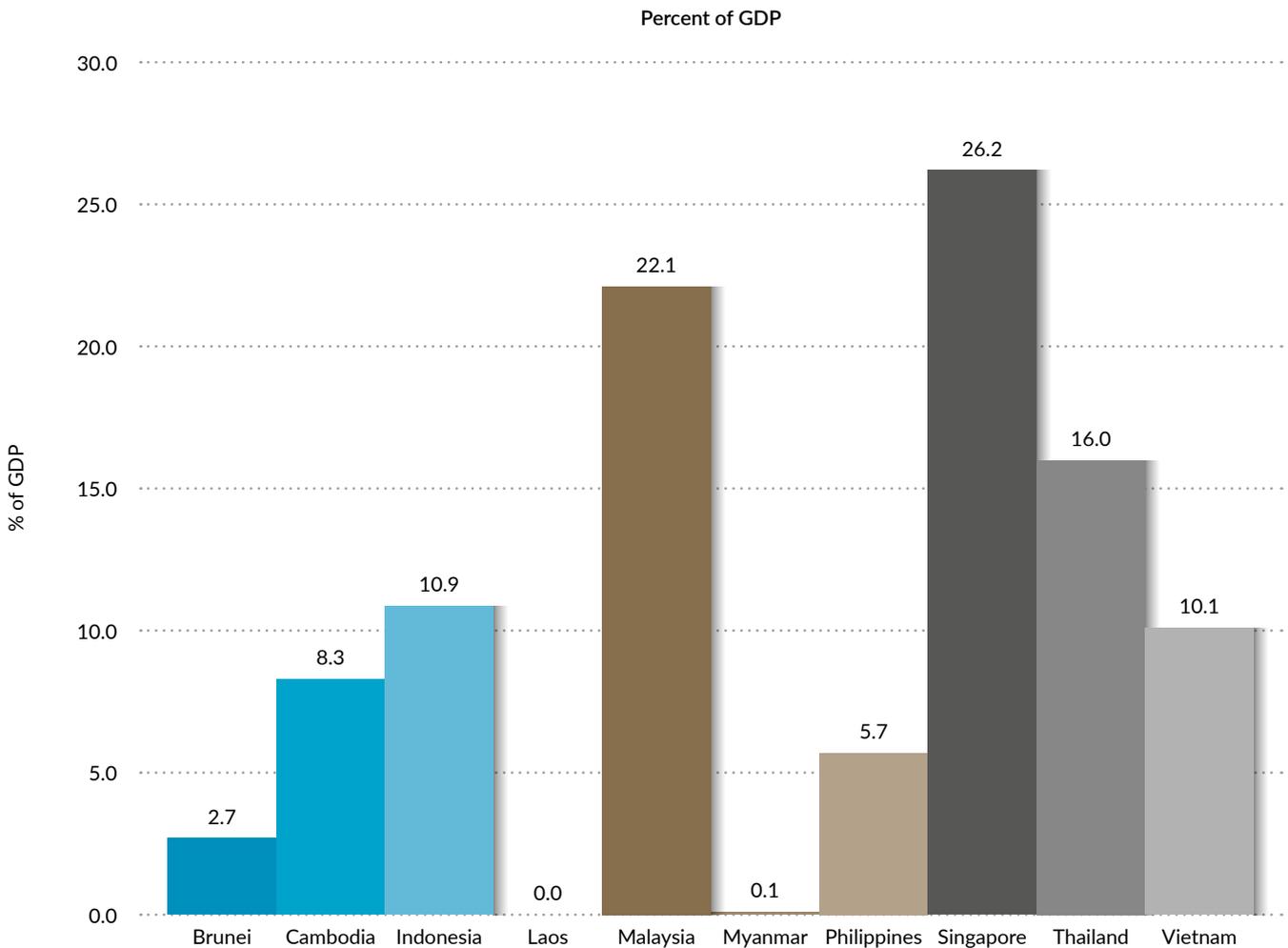
**Figure 2: Percentage of Total Economic Costs of COVID-19 Attributable to Impact on Vulnerable Populations by Market<sup>35</sup>**



### 2.3 Rising Government Debt

Governments across the region have adopted generous stimulus programmes to cushion the impact of COVID-19 on society. Figure 3 shows each ASEAN member state's government debt-to-GDP ratio, demonstrating that government expenditure to offset the costs of COVID was so great that it contributed to an increase in debt levels. In 2021, ASEAN countries authorised a total of USD 730 billion for stimulus packages, equivalent to 7.8 per cent of its total GDP; this was nearly double that of July 2020.<sup>36</sup> While these programmes were intended to boost the economy and create social safety nets, they can be seen as 'garden-hosing' money without much planning.<sup>37</sup>

Figure 3: Government Debt-to-GDP<sup>38</sup>



Singapore spent the highest percentage of GDP (at 26.2 per cent) among ASEAN countries to reinvigorate the economy at a whopping SGD 72.3 billion<sup>39</sup> over FY2020 and FY2021, disseminated from 4 budgets largely intended to rescue businesses, the retrenched, and recover the economy. The rest of Asia adopted a similar strategy: the 2020 Indonesian State Budget<sup>40</sup> shows that nearly USD 5 billion was spent to finance the health sector, USD 7.3 billion used to support social safety nets, and USD 146.6 billion pumped in to support finance business expenditure. However, such expenditure is ultimately costly and unsustainable in the long-term.

Resultingly, government debt levels have risen substantially. According to the report by AMRO,<sup>41</sup> sustained large primary deficit and off-budget support contributed the most to debt accumulation. Rising public debt poses a real burden to ASEAN economies amidst slowing growth and rising interest rates.

### 3. Prevention and Preparation: ASEAN and Asia’s Effort to Build Pandemic Resilience

In response to the pandemic, regional organisations have scrambled to come up with frameworks to cope with its impacts. In the European Union (EU), initiatives such as the multi-annual financial framework (MFF) and the Next Generation EU (NGEU) packages are intended to help the EU rebuild and support investment in green and digital transitions. Likewise, ASEAN has formulated regional frameworks and initiatives to deal with the health, social and economic impact of COVID-19 and other Public Health Emergencies (PHE) that may occur in the future.

#### 3.1 Evaluation of ASEAN’s Regional Response to COVID-19

ASEAN responded swiftly and collectively to the prospects of worsening situation arising from COVID-19. Then ASEAN Chair Vietnam convened the Special Meeting of the ASEAN Coordinating Council in February 2020 and the Special ASEAN Summit in April 2020, to reaffirm ASEAN-wide collective effort to deal with the impact of the pandemic. Table 1 shows the various regional frameworks and initiatives of ASEAN in response to COVID-19, and how they have performed compared to their intended outcomes.

**Table 1: Regional Initiatives: COVID-19 Response and Recovery**

Name	Description	Evaluation
ASEAN Comprehensive Recovery Framework (ACRF)	<p>Adopted at the 37<sup>th</sup> ASEAN Summit in November 2020.<sup>42</sup></p> <p>Aims to be the consolidated exit strategy to emerge resilient from COVID-19.<sup>43</sup></p> <p>Five main strategies: (i) enhancing health systems; (ii) strengthening human security; (iii) maximising the potential of broader economic integration; (iv) accelerating inclusive digital transformation; and (v) advancing towards a more sustainable and resilient future.<sup>44</sup></p>	<p>Recognises the interconnectedness of economic growth with health security.</p> <p>Whole-of-ASEAN approach will advance regional economic integration.</p>
COVID-19 ASEAN Response Fund	<p>Consolidated fund for:<sup>45</sup></p> <ol style="list-style-type: none"> <li>Procurement of medical supplies</li> <li>R&amp;D of vaccines and medicine</li> </ol> <p>Aims to ensure accessibility and affordability of medical supplies and equipment.<sup>46</sup></p>	<p>One of the more successful regional COVID-19 initiatives.<sup>47</sup></p> <p>Target USD 10 million achieved; used to procure vaccines.<sup>48</sup></p> <p>No comprehensive procedural guidelines.<sup>49</sup></p>

**Table 1: Regional Initiatives: COVID-19 Response and Recovery (Cont'd)**

Name	Description	Evaluation
Regional Reserve for Medical Supplies for Public Health Emergencies (RRMS)	Aims to encourage ASEAN member states to earmark a voluntary number of medical supplies from their national stockpiles for region-wide reserve. <sup>50</sup>	<p>Has drawn interests from the Plus Three countries (Japan, China, South Korea) to collaborate as contributing countries to the reserve.</p> <p>Little interest among member states themselves.</p> <p>Remains as a concept, as there is little occasion for the mechanism to be trialled.</p>
ASEAN Strategy Framework on Public Health Emergencies (ASF-PHE)	Established as a set of Standard Operating Procedures (SOPs) to utilise existing ASEAN and WHO mechanisms more effectively, by coordinating efforts under newly established ASEAN Centre for Public Health Emergencies and Emerging Diseases (ACPHEED), and the ASEAN Emergency Operations Centre (EOC) Network. <sup>51</sup>	Enhances cooperation with ASEAN's dialogue partners, as it is aligned with other initiatives supported by ASEAN-United States Agency for International Development Partnership.
ASEAN Centre for Public Health Emergencies and Emerging Diseases (ACPHEED)	<p>Launched at the 37<sup>th</sup> ASEAN Summit in November 2020.<sup>52</sup></p> <p>Aims to strengthen ASEAN's regional capabilities to prepare for, prevent, detect and respond to public health emergencies and emerging diseases.<sup>53</sup></p>	<p>ASEAN was only able to confirm that Thailand, Indonesia, and Vietnam would co-host the Centre in May 2022.<sup>54</sup></p> <p>Enhances cooperation with Japan and Australia through funding, although at the end of 2021, Japan informed that its proposed financial contribution to ACPHEED would expire.<sup>55</sup></p>
Regional Strategic and Action Plan on ASEAN Vaccine Security and Self-Reliance (AVSSR) 2021-2025	Built upon ASEAN Leaders' Declaration on ASEAN Vaccine Security and Self-Reliance (AVSSR) in November 2019. <sup>56</sup> One of the aims is to support the effective procurement strategies and establish the regional stockpiling mechanism. <sup>57</sup>	<p>ASEAN's amount of purchase was considered "small" and thus not prioritised by United Nations Children's Fund (UNICEF) or COVID-19 Vaccines Global Access (COVAX), resulting in a time lag until July 2022.</p> <p>As member states had already begun their own national vaccination exercises, regional efforts through this initiative were not used.<sup>58</sup></p>
ASEAN Travel Corridor Arrangement (ATCAF)	<p>Announced in November 2020.</p> <p>Aims to set up a COVID-19-safe travel corridor among ASEAN member states to assist economic recovery through facilitating travel for business and trade.<sup>59</sup></p>	By the time ATCAF was fully ready, countries were already beginning to reopen their borders. <sup>60</sup>

On balance, while ASEAN has been ambitious in its attempts to mitigate the fallout from the pandemic, many of its initiatives suffer from uneven implementation or a lack of follow up actions. Its slow and fragmented regional response to COVID-19 has renewed concerns about ASEAN's ability to react quickly to global and regional crises. The numerous meetings and summits resulted in several aspirational statements but did not yield a decisive and cohesive response to COVID-19. Instead, it was a combination of uncoordinated responses that relied on informal networks of information-sharing which guided national responses to the pandemic.

Other challenges faced include insufficient disease surveillance measures, limited funding for health emergencies, a scarcity of healthcare professionals, and inadequate coordination between existing mechanisms. This paints a scene of an uncoordinated and ill-equipped organisation, struggling to resolve public health emergencies. Additionally, according to the 2021 Global Health Security (GHS) Index, a substantial number of ASEAN member states scored below the global average in specific aspects including healthcare resources and capabilities and measures for infection control. Overall, ASEAN still has much to work on to build its preparedness for future public health threats.

### 3.2 ASEAN, Asia and Beyond: Cooperation in Building Resilience

Beyond its own internal response, ASEAN has also sought to maintain cooperative ties with key regional partners as a strategic move to weather the pandemic. In this report, we focus on bilateral cooperation between ASEAN and its key partners – South Korea, China, Japan, the United States (US), and the EU.

Within Asia, South Korea, Japan, and China have reiterated their commitment to strengthening bilateral ties with ASEAN vis-à-vis post-pandemic recovery. South Korea increased its monetary contributions to the ASEAN-South Korea Cooperation Fund to USD 16 million per annum,<sup>61</sup> alongside an additional USD 6 million to the COVID-19 ASEAN Response Fund.<sup>62</sup> Similarly, Japan implemented the ASEAN-Japan Economic Resilience Action Plan,<sup>63</sup> contributed to the COVID-19 ASEAN Response Fund, and expressed support for establishing ACPHEED.<sup>64</sup> Finally, China engaged in the bilateral sharing of information and best practices during the East Asia Summit, contributed USD 6 million to the ASEAN Response Fund,<sup>65</sup> and further announced plans to accelerate regional economic integration under the Regional Comprehensive Economic Partnership (RCEP).<sup>66</sup>

Beyond Asia, ASEAN's access to vaccines was further supported by cooperation with the US and EU: over 23 million vaccine doses were provided by the US,<sup>67</sup> in addition to the EU-led COVAX initiative to aid in the development, production, and global vaccine distribution. Consequently, ASEAN achieved region-wide vaccine access through AVSSR. Moreover, bilateral ties have greatly benefitted ASEAN's access to funding: the US contributed over USD 158 million in emergency health and humanitarian assistance to ASEAN member states was given by the US,<sup>68</sup> while the EU put forth a Team Europe package of USD 22 million<sup>69</sup> to assist ASEAN.



## 4. Moving Forward: Policy Priorities

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Moving forward, learning from the costs of the pandemic and the past regional responses to COVID-19, it is important for ASEAN to focus on capacity-building and empowering the region to attain enhanced self-reliance and resilience in the future. Thus, short-term initiatives must be complemented with promoting enduring and sustainable endeavours that will build long-term resilience. ASEAN should hence consider the following policy priorities as it moves towards pandemic recovery and resilience building:

### 4.1 Smart and Broad-based Investments in Healthcare

International emphasis has been placed on the vital role of investments for pandemic preparedness. The Independent Panel for Pandemic Preparedness and Response (established by the WHO) has called for an increase in the “threshold of national health and social investments”,<sup>70</sup> whilst the G20 High Level Independent Panel has acknowledged the importance of financing pandemic prevention and preparedness.<sup>71</sup> Additionally, a commission convened by the Lancet, the world’s leading medical journal, has called for investment in medical supply chains, and further research and development in areas of primary health interventions.<sup>72</sup>

Thus, moving forward, the Organisation for Economic Co-operation and Development (OECD) has recommended smart investments to strengthen health system resilience<sup>73</sup> to “combat the gradual transitions, such as demographic change and the increasing burden of chronic illnesses”.<sup>74</sup> In addition, therapeutics such as oral antivirals (OAVs) should be made more accessible to the public to reduce the severity of symptoms for those infected. This would aid in reducing the odds of the COVID-19 virus evolving to resist drugs and vaccines.<sup>75</sup>

ASEAN could do more to improve its capability and self-reliance in vaccines, therapeutics, and diagnostics (VTD). The proposal discussed at the 42<sup>nd</sup> ASEAN Summit in May 2023 to establish an ASEAN Manufacturing and R&D Hub for Vaccines, Therapeutics, and Diagnostics would be a great initiative to build regional resilience. Governments in ASEAN should also actively work with private pharmaceutical companies and foundations such as the Coalition for Epidemic Preparedness Innovation (CEPI) to ensure adequate investments in vaccine development and production. Such capacities should be one of the key pillars of pandemic preparedness.

### 4.2 More Efficient and Targeted Public Expenditure

Confronting the pandemic crisis, and with lockdowns imposed, governments had to address the risk of a deep economic downturn. Billions were spent on saving jobs and companies; not just ladled out but garden hosed. As governments had to operate under tight timelines with overlapping priorities to tend to, erring on the side of caution was inevitable. But as the bills are now being totaled up, the high price of such extreme prudence is becoming clearer. Almost all governments have increased their debt levels sharply. The books, going forward, will need to be balanced.

A case in point is Singapore. Four stimulus budgets totalling USD 65.5 billion (19.2 per cent of total GDP)<sup>76</sup> were disbursed to put a floor below business failures, unemployment, and output loss. However, in July 2023, the Auditor-General’s Office (AGO) audit report found that there was an overpayment of USD 65 million for three COVID-19 grant schemes – the Jobs Support Scheme (JSS), the Rental Cash Grant (RCG), and the Rental Support Scheme (RSS).<sup>77</sup> Additionally, Singapore’s White Paper on the pandemic<sup>78</sup> details gaps that still require attention, notably to balance the government’s GDP-to-debt ratio. With Singapore’s economy growing 0.3 per cent lower than earlier estimates in 2022,<sup>79</sup> it is imperative to ensure sufficient fiscal buffer.

Instead of broad fiscal stimulus packages, we recommend governments target spending on more vulnerable populations to create social safety nets. Moving forward, 'garden-hosing' could be replaced by a more targeted 'pipetting' of funding for specific groups which would be less costly and more effective in mitigating the socioeconomic impact of the pandemic.

### 4.3 Building Supply Chain Resilience

The pandemic caused severe global supply chain disruptions: cross-border movement of people and goods became heavily impeded as travel restrictions and the slowing flow of air cargo and trade took effect. This was a costly disruption, leading to a predicted combined loss of USD 17.01 billion.<sup>80</sup> In the aforementioned Economist Impact webinar, FedEx Vice-President of the Southeast Asia operations, Audrey Cheong, provided an overview of additional challenges companies like FedEx faced due to the pandemic. These included the need to "rotat[e] schedules to minimise contact" and the "establish[ment] [of] backup resources to manage [their] work disruptions". Clearly, the pandemic led to logistical disruptions. This led to a re-evaluation of regional supply chains, and the diversification and strengthening of supply chains became a key policy priority for ASEAN.

Moving forward, priorities must include building long-term resilience through new digital infrastructure and matching industry standards. The traditional linear supply chain is being transformed into digital production networks, such that organisations can become directly connected to supplier networks to enable end-to-end traceability, collaboration, agility, and cost optimisation.<sup>81</sup>

We recommend for ASEAN to work together to digitise their supply chains so as to protect against potential future disruptions. As seen in the Master Plan on ASEAN Connectivity 2025,<sup>82</sup> this has become a regional priority. It is thus imperative to develop frameworks which allow the enhancement of supply chain efficiency, as well as increased platforms and dialogues to discuss region-specific challenges and share recommendations and best practices.



## 5. Conclusion

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As ASEAN, Asia, and the rest of the world starts to adjust to a post-pandemic world, we need to prevent pandemic amnesia and be cognisant of the ongoing and hidden costs left by the pandemic. A deeper and more granular understanding of these costs would help policymakers better assess the real impact of the crisis and inform policy choices and priorities.

In our immediate region, ASEAN governments have taken slightly different national approaches to fighting COVID-19 and mitigating the socioeconomic impact of the pandemic. However, two similar threads informed their policies – the swift and broad adoption of vaccines and generous fiscal policies to mitigate the socioeconomic impact. The collective response by ASEAN as a regional bloc, however, was found wanting. Existing frameworks on public health emergencies were not mobilised and new frameworks, while ambitious, have yet to be tested.

As the region embarked on its post-pandemic recovery, it is also facing other headwinds. The lessons to be learned from the pandemic should not be forgotten. ASEAN and its member states should prioritise smart investments and improvements in its public healthcare system, keep an eye on government debt, and work more closely together to build not only national but regional resilience as the region is closely intertwined with enhanced regional connectivity and digitalisation.



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