

# FROM COVID-19 TO CLIMATE CHANGE

*How Vietnam can become  
the Champion of Green Recovery*





TAKING STOCK

DECEMBER 2020

# FROM COVID-19 TO CLIMATE CHANGE

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the Champion of Green Recovery*

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Central Exchange Rate of the State Bank of Vietnam: US\$1 = VND 23.147 (December 3, 2020)  
*Government Fiscal Year: January 1–December 31*

## ABBREVIATIONS

Covid-19	Coronavirus Disease 2019
EU	European Union
FDI	foreign direct investment
GDP	gross domestic product
GSO	General Statistics Office
IMF	International Monetary Fund
MOF	Ministry of Finance
MOLISA	Ministry of Labor, Industry and Social Affairs
OECD	Organization for Economic Co-operation and Development
SBV	State Bank of Vietnam
SMEs	small and medium-sized enterprises
SOEs	state-owned enterprises
VND	Vietnamese dong
y/y	year-over-year



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# KEY MESSAGES

In these early days of December 2020, most Vietnamese must wear a face mask. The cause is not only the fear of COVID-19, but also of polluted air which, in the country's major cities, is four times more polluted than the safety level recommended by international agencies. Regrettably, even if the government has done a superb job containing the biggest and most recent pandemic, Vietnam is vulnerable to many health and environmental disasters. Beyond air pollution, which is killing an estimated 60,000 people every year, the country is exposed to coastal erosion, drought, and saline intrusion and landslide. The recent series of tropical storms in the central region, with over 240 casualties and a quarter million damaged or destroyed homes, has been another painful reminder of this fragility.

This edition of the Taking Stock, after describing the recent trends in the Vietnamese economy, asks why Vietnam has not been as effective in dealing with environmental and climate challenges as with the COVID-19 crisis, which are arguably different but have also many similarities. The successful experience in implementing the right measures at the right time during the COVID-19 crisis deserves more attention as it can inspire policymakers in their commitment to address the environmental and climate challenges. First, the successful management of the pandemic has demonstrated (again) that it is better to be ready and to act early and boldly. Second, beyond vision and capacity, the ability to inspire experimentation and innovation is an effective way to change individual and collective behaviors, which is fundamental in the effort to cope with health and climate threats.

## ***Part 1: Vietnam's (almost) unique performance during the COVID-19 crisis***

By all standards, Vietnam has managed the COVID 19 crisis very well. The number of infections and deaths has been minimal, with few community infections since mid-September. Despite strict social distancing measures and an unprecedented global recession, Vietnam's economy is expected to grow at 2.8 percent in 2020. Although this performance is about 4.2 percentage points lower than the country's recent performance, Vietnam will remain in positive growth territory, while the world economy is expected to contract by at least 4 percent. In East Asia, only two other countries—China and Myanmar—are expected to report positive GDP growth this year.

Vietnam's economic resilience is explained by the behavior of both its domestic economy and its external sector. After three weeks of national lockdown in April, most industrial and service activities rebounded as domestic consumers and investors regained confidence. Not only has the private sector reacted positively to the gradual easing of social distancing and mobility measures, but the government has changed the course of its fiscal policy to support the recovery. After three years of fiscal consolidation, the authorities acted decisively and accelerated the disbursement of the public investment program, which increased by about 40

percent between January and September compared to the same period a year ago. Concurrently, like most central banks, the accommodative monetary policy and temporary financial relief measures of the State Bank of Vietnam provides breathing space to affected businesses and people.

The external sector—the main driver of economic growth in Vietnam over the past decade—has performed exceptionally well during the COVID-19 crisis. The country is on the verge of reporting not only its highest merchandise trade surplus ever but will also accumulate significant international reserves. Such positive developments were somewhat unexpected at the beginning of the COVID-19 crisis, when Vietnam was perceived as highly vulnerable to a global economic downturn and the closure of international borders. The restrictions on foreign visitors have cut foreign exchange earnings from tourism, and the level of remittances is estimated to decline by about 7.8 percent in 2020, but foreign investors have continued to come, and merchandise exports increased by about 4.8 percent in the first 10 months of 2020 compared to the same period in 2019. The strong management of the COVID-19 crisis has been Vietnam's best promotional tool, encouraging foreign companies to reallocate their production activities to Vietnam from other countries where their factories are still closed, thus contributing to the country's robust export performance.

Looking ahead, Vietnam's prospects appear positive, as the economy is projected to grow by about 6.8 percent in 2021, and thereafter stabilize at around 6.5 percent. This projection assumes that the COVID-19 crisis will be gradually brought under control, notably through the introduction of an effective vaccine. In this baseline scenario, as economic recovery firms up, monetary and fiscal policies adopted in response to the crisis are expected to be unwound. Monetary policy is to resume its prudent approach to balancing between supporting economic growth and managing inflation, while closely monitoring the health of the financial sector. While fiscal consolidation will be necessary to maintain the debt level to a sustainable level, the authorities will need

to improve their revenue collection performance to finance the expected increase in infrastructure and quality social services that the country will need in the next decade. Improving expenditure efficiency, both at the central and local levels and through revised decentralization mechanisms, will further support the overall fiscal objectives. Public-private partnerships should help attract further financing and enhance the quality of investment projects through technology transfers and an improved governance framework.

Yet, the magnitude and duration of the pandemic, as well as its economic implications, are difficult to predict and, for that reason, a low-case scenario is also included. If the world, and possibly Vietnam, suffers from new COVID-19 waves, the economic rebound will be less and convergence toward the historical growth trend and fiscal consolidation will be slower than anticipated.

Amid the COVID-19 uncertainty, Vietnam is exposed to fiscal, financial, and social risks.

- Since the beginning of the COVID-19 crisis, the government has collected less revenue (down 10.8 percent) but spent more (up by 8.1 percent). In other words, it has been foregoing an average of around US\$1 billion per month during the second and third quarters of 2020. Such a policy response, justified to stimulate the recovery, has so far been financed by the massive cash flow reserves accumulated by the government before the COVID-19 crisis. However, if such an accommodative policy were to be sustained over a longer period, the government would need to identify new sources of funding that would require substantial reforms in the areas of public financial management, tax collection, and debt, as well as asset management.
- The financial sector, especially commercial banks, is not immune to the COVID-19 crisis. Because such an impact will be mainly indirect, a consequence of deterioration in the real sector, it might take some time to materialize. The main danger is that an increasing number of borrowers will gradually default on their debt,

raising the proportion of problematic loans for banks. Because Vietnam has one of the highest levels of banking credit (relative to GDP) in the world, close attention should be given to this risk. Furthermore, some banks might have exposure to sectors that have been the most vulnerable to the crisis, including but not only the tourism and the transport sectors. This risk could be mitigated by improving the quality of reporting by the monetary authorities, stabilizing banks' profits, and encouraging the capitalization of several banks that have not yet fulfilled Basel II prudential requirements.

- Social risks could arise from people and businesses that are now in financial distress because of the COVID-19 crisis. On average, the shock has been well absorbed by the domestic economy, and the unemployment rate and number of active businesses are close to pre-crisis levels. But as in every crisis, there have been winners and losers. For example, about one-third of households saw their income decline between July and August, while 60 percent reported no change and 7 percent reported an increase. Among the losers, about 2.5 million people earn nothing or less than half of their usual income. The government should pay immediate attention to these victims, who are generally not covered by existing social programs and are in danger of being left behind.

If these risks are well-managed, Vietnam can emerge stronger than before the COVID-19 crisis. The excellent management of the pandemic has already enabled the country to build a competitive edge over many of its competitors. For example, the country has strengthened its footprint in the world economy by capturing a larger share of global trade and foreign direct investment (FDI). Its digital development has accelerated, with more than half of local businesses reporting higher use of digital tools and platforms in recent months. The government also increased the number of e-services integrated into the National Portal by elevenfold between March and November 2020. These moves toward more integration into the world economy, and digitalization, are fully aligned

with the forthcoming national development strategy (2021–30).

Policymakers have also increasingly recognized that Vietnam's future will require greater attention to the management of the country's natural resources and to rising climate risks, which are direct threats to the country's aspiration of becoming a high-income economy. Yet, despite the high-level commitment, measurable progress has remained elusive. Looking ahead, the main challenge will be for Vietnam to implement the reforms, investments, and policies that will help it address its environmental and climate challenges with a greater sense of urgency.

## **Part 2: COVID-19 lessons for the environmental and climate agenda**

Today, Vietnam stands at a crossroads of COVID-19 recovery. It needs to choose between a business as usual path or a green recovery path to help address the impacts of future pandemics or climate and disaster risks and build a resilient future. While the COVID-19 experience can inspire other countries in their fight against the pandemic, it can also help identify key lessons that can be applied to Vietnam's climate and environmental challenges. While health and climate shocks differ in their impact on human lives and economic structures, they have also many similarities. Their costs will increase with inactions and both require significant changes in individual and collective behaviors.

The first lesson from COVID-19 is that the best way to cope with an external shock is to be prepared in advance and to move with early and bold action. Arguably, Vietnam was ready to confront the pandemic, building on its experience of previous viral threats, as the preparedness level of its health system was above its peers and close to the one observed in most upper middle-income economies at the end of 2019. The country was also one of the first to close borders and schools, as early as the end of January. Drawing from this experience, Vietnam should move fast and get ready by becoming a champion of the green recovery in the aftermath of the COVID-19 pandemic.

Becoming a champion of a green recovery Vietnam will achieve multiple objectives. Beyond the obvious environmental gains associated with a green recovery, green policies and investments could also boost job creation and economic activity, as well as restore fiscal space. It would also be a smart business decision, as many of the multinationals that the country wants to attract are giving more attention to green policies due to their corporate responsibilities to their customers. Several policies and actions, as well as references to best practices, are proposed in the main text, with concrete examples in the areas of renewable energy, tourism development, and spatial development of cities and industrial zones, which are expected to play a pivotal role in Vietnam's future development.

The second lesson is on the mechanics of implementation. Dealing with the COVID-19 pandemic, Vietnamese authorities have faced their greatest challenge in decades. They have been forced to make and implement crucial decisions under severe pressure, which has required a common vision, a capacity and a motivation to experiment and innovate. The immediate priority for the government should therefore be to follow this example and create additional space for experimentation and innovation through the application of the following four principles derived from the COVID-19 experience:

- Smart incentives should be used to motivate people, businesses, and government officials.
- Fear of sanctions matters.
- People need to trust policymakers, policymaking,

and institutions, which, in turn, depends on the government's own behavior.

- There should be clear, broad, and transparent communication about not only actions but also results so they are seen to be in the best interest of all.

Concrete examples of how these principles can be applied to Vietnam's environment and climate agenda will be found in the main text and include reforms ranging from pricing policies to state-owned enterprises, and transparent information-sharing mechanisms that will identify and monitor main polluters and rule breakers.

Ultimately, coping with health or environmental threats is about changing behaviors. The optimal and perhaps most straightforward way for Vietnam to communicate the urgency of the environmental and climate challenges would be to reconsider using gross domestic product as its metrics of economic performance or to broaden it to include natural capital as suggested by the World Bank. Traditional indicators, by failing to account for environmental damage and degradation, provides an excessively rosy picture of the economy. As stated by former World Bank Chief Economist and Nobel Laureate Joseph Stiglitz: *"Getting the measure right – or at least a lot better—is crucially important, especially in our metrics- and performance-oriented society. If we measure the wrong thing, we will do the wrong thing. If our measures tell us everything is fine when it really isn't, we will be complacent."*<sup>1</sup>

There is no more time for complacency in Vietnam.

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1 Stiglitz 2019.





# SECTION I

RECENT ECONOMIC DEVELOPMENTS  
AND PROSPECTS



## I.1. INTRODUCTION

**T**he COVID-19 pandemic continues to devastate global health and economies unabated. As of late November 2020, there were nearly 60 million COVID-19 infections globally and nearly 1.4 million deaths due to the disease. A majority of developed countries and emerging markets and developing economies are grappling with the second wave of infections, with various degrees of success. The disease has had a severe impact on the global economy, which is forecasted to shrink by an estimated 4.4 percent in 2020, with the U.S. and EU GDPs down by 4.3 percent and 8.3 percent, respectively.<sup>2</sup> Global poverty is on the rise once again, with an estimated 88 million to 115 million more people expected to fall into extreme poverty in 2020, wiping out decades of progress.<sup>3</sup>

**Vietnam's performance has been in sharp contrast to these gloomy health and economic developments.**

It is one of a handful of economies in the world to have demonstrated the capacity to control the spread of the disease and to maintain remarkable economic resilience to the COVID-19 shock. On the health side, the combination of preparedness and early and bold decisions, at the outset of the pandemic in late January, as well as smart targeting and testing, have helped quell community transmission and keep infections and deaths to extremely low levels. The same approach was applied with success to contain the second wave in the region of Da Nang in late July and August. As a result, the confirmed coronavirus infection rate as of this writing was 9.7 per million people, or 1,306 cases, of which 35 people have died since the beginning of the crisis.

**The April national quarantine had immediate socioeconomic effects, but the economy rebounded.** The second-quarter growth plummeting to 0.4 percent, but the economy has rebounded thanks to the easing of social distancing measures and mobility restrictions. The export sector also demonstrated unexpected robustness. Over the first nine months of the year, the economy grew by 2.1 percent and is expected to achieve 2.8 percent GDP growth for the whole year, making Vietnam one of the fastest-growing economies in 2020.

**This section of Taking Stock aims at better understanding Vietnam's recent economic performance and discusses its short- to longer-terms prospects.** The following questions are therefore examined in the report:

- What has the impact of the COVID-19 pandemic been on Vietnam's economy during recent months, and what are the main sources of resilience in both its domestic and external sectors?
- What monetary and fiscal policies have been adopted by the authorities to support the most affected sectors and stimulate the recovery?
- What people and businesses have been most affected by the COVID-19 crisis?
- What are the short to medium-term prospects for the Vietnamese economy, and what are the potential risks emerging in the post-COVID-19 era?

**This section is organized into four parts that respond to each of these questions.** It concludes by emphasizing that the successful management of the COVID-19 crisis will be determined to a large extent by how the expected recovery affects the country's long-term growth trajectory and living conditions, including but not only by the capacity to preserve the environment and to cope with climate change and disasters.

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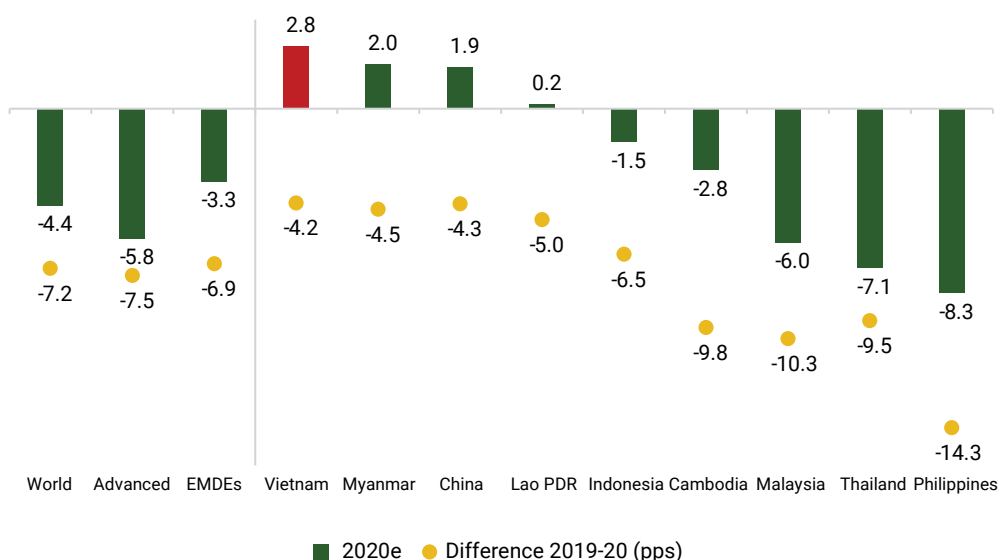
<sup>2</sup> IMF 2020.

<sup>3</sup> <https://www.worldbank.org/en/publication/poverty-and-shared-prosperity6.3>.

## I.2. RESILIENCE AMID THE COVID-19 CRISIS

**Vietnam’s economy has performed strongly in sharp contrast to the gloomy economic developments affecting the world.** After a sharp dip in the second quarter, when GDP growth registered 0.4 percent (year-over-year [y/y]), growth rebounded a solid 2.6 percent (y/y) in the third quarter, and the economy is expected to expand by 2.8 percent for the entire year. While this performance represents a drop of about 4.2 percent compared to the historical trajectory achieved by Vietnam before the COVID-19 crisis, it compares favorably with the results reported in most world economies, including in East Asia (Figure I.1).

**Figure I.1. Vietnam is at the top world ranking of economic growth in 2020**



Sources: IMF, except World Bank for Vietnam.

Note: EMDEs = emerging markets and developing economies.

**Vietnam’s remarkable performance, however, masks some variations across sectors** (Figure I.2). Sectors registered lower rates of growth during the pandemic than pre-COVID period, with industries expanding by 3.08 percent in the first three quarters of 2020, followed by agriculture (1.84 percent) and services (1.37 percent). There have been also significant fluctuations within each sector and over time, as retail sales of goods were up 5.4 percent in the first 10 months of 2020 compared to the same period last year. In particular, the food sector rose 9.4 percent; and utensils, tools, and home equipment rose 6.3 percent. In contrast, domestic and international travel registered 30 percent and 80 percent drops, respectively, in the first 10 months of 2020 compared to the same period of 2019, given necessary mobility restrictions (Figure I.3).

**On the demand side, the drivers of growth are expected to switch from the private to the public sector, while the contribution of exports will be lower than in recent years** (Figure I.4). While still expanding, both private consumption and investment have been affected by the containment measures, even if they rebounded in the second part of the year. The uncertainty in both the domestic and global contexts has pushed many investors to postpone or even cancel their investment plans as a precautionary measure. The contribution of exports has declined but still remained positive in a depressed global trade environment, while imports fell for the first time in recent years. The government has compensated the lower contribution from the

traditional drivers by accelerating the execution of its investment program—up by almost 1.7 percentage points of GDP in the first three quarters of 2020 (Box I.1).

**Below is a proposed deep dive into the factors behind the resilience of the Vietnamese economy.** These include the responsiveness of the domestic sector to the easing of social distancing and mobility restrictions, the exceptional robustness of the external sector in a depressing global environment, and the smart policy response from the government, which has provided breathing space and channeled funds into the economy.

### *Rapid rebound of the domestic sector*

**The domestic private sector was seriously affected by the almost complete national lockdown in April but responded quickly to the gradual easing of restrictions in the subsequent months.** This so-called V-recovery can be captured through the evolution of manufacturing production and retail sales, which fell by about 15 percent and 21 percent (m/m), respectively, in April and recovered from May onward. The Danang outbreak increased uncertainty among economic actors for a short time in August, but the government's rapid and targeted response helped allay these concerns and explain why the second wave had minimal impact on national economic activities. In October—the latest data available at the time of this report—the domestic rebound strengthened, since both indicators registered their highest growth rates (y/y) since the outbreak of COVID-19 in February, growing by 6.6 percent and 6.7 percent (y/y), respectively. These rates were close to the ones observed before the COVID-19 crisis.

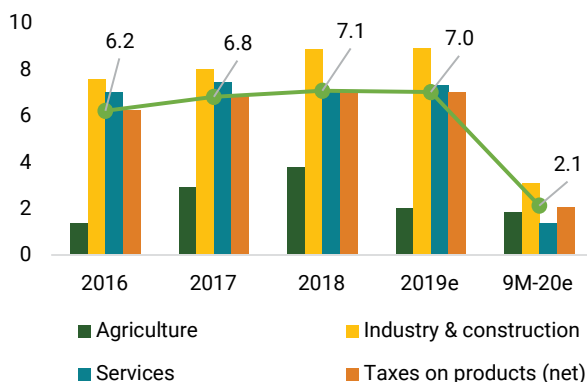
**The responsiveness of the domestic sector can be largely explained by the successful management of the health crisis, which in turn has allowed the government to lift the mobility restrictions measures over time.** The close relationship between economic activity and mobility indicators is illustrated in Figure I.5. The level of manufacturing activities fell by 13.4 percent (y/y) during the national lockdown in April, when the stringency index rose abruptly. Subsequently, the gradual removal of restrictive measures led to an increase in both mobility and economic activity over time.

**Overall, the close and positive relationship between economic activity and mobility seen in Vietnam has been found in most economies in the world.<sup>4</sup>** Vietnam has been an outlier, not in the above relationship, but in its capacity to lift those containment measures on a more permanent basis, including during the second wave in August. This success has certainly increased the confidence of local consumers and investors, who have in turn boosted domestic demand over time, leading to higher production and retail sales.

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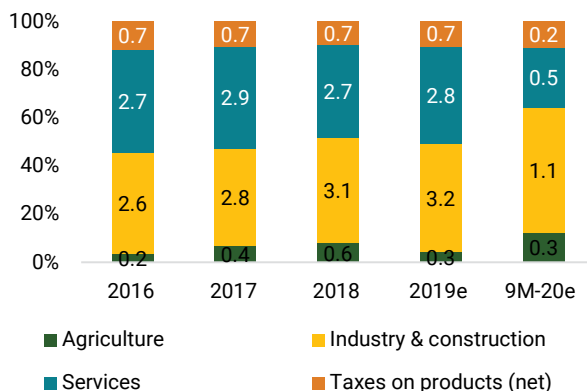
4 In a recent study, Pradhan et al. 2020 (IMF) examined the effects of containment measures on economic activities in many economies affected by COVID-19. The main results suggest that containment measures have had, on average, a large impact on economic activity—equivalent to a loss of about 15 percent in industrial production over a 30-day period following their implementation. This estimate holds quite well for Vietnam.

**Figure I.2. GDP and sector growth (%)**



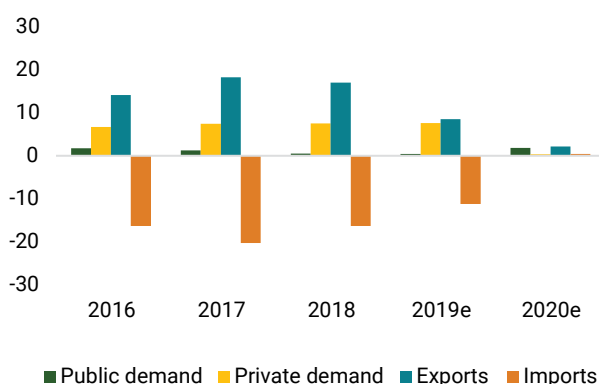
Sources: GSO and World Bank estimates.

**Figure I.3. Contribution to GDP growth by sector**



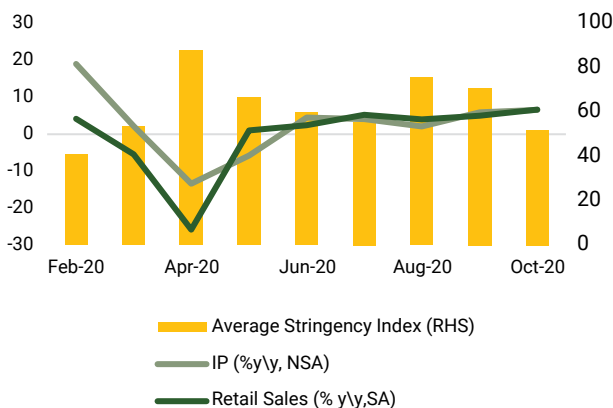
Sources: GSO and World Bank estimates.

**Figure I.4. Contribution of demand side to GDP growth (pps)**



Sources: GSO and World Bank estimates.

**Figure I.5. Economic activities and restrictive measures**



Sources: GSO/Haver Analytics and Our World in Data. The higher the bar on the stringency index (RHS), the more stringent are the social distancing measures.

### Robustness of the external sector

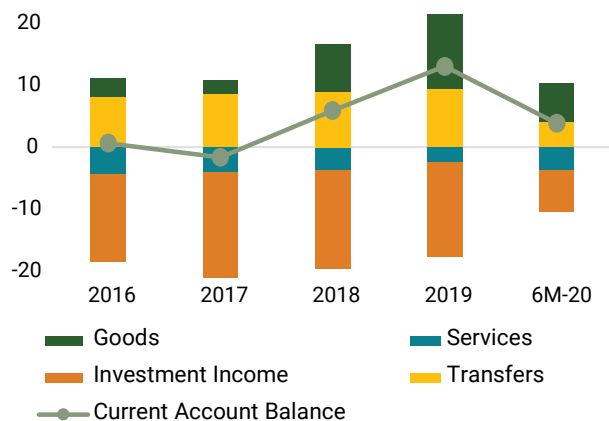
**If the responsiveness of the domestic sector to the easing of stringency of measures was in line with international experience, the robustness of Vietnam's external sector was not expected.** At the beginning of the crisis, the prediction was that this sector was going to be hurt badly by the global downturn, the closure of international borders, and the revamping of global value chains that appeared excessively concentrated in China, including for key medicine and pharmaceutical products.<sup>5</sup> After all, Vietnam's economy is one of the most open in the world, with a merchandise trade-to-GDP ratio close to 200 percent, and well-established trade and financial bilateral relationships with China.

**Yet, in 2020, Vietnam is expected to achieve a current account surplus.** It is registering its highest-ever merchandise trade surplus (Figure 1.7) and accumulating almost US\$100 billion in international reserves (Figure I.9). The current account surplus will be achieved even if the tourism sector has been badly hurt

5 McKinsey 2020.

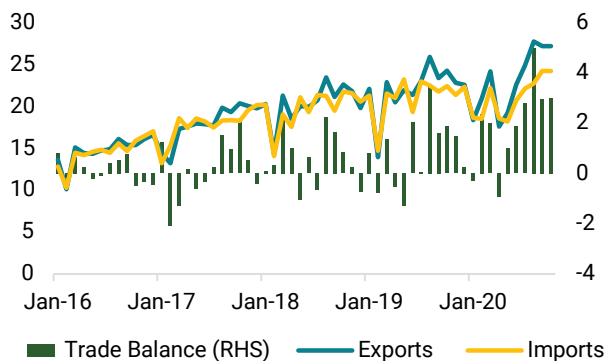
by the ban on foreign visitors, and by the expected decline in remittances from Vietnamese expatriates by approximately 7.8 percent in 2020 compared to a year earlier.<sup>6</sup>

**Figure I.6. Current account balance (US\$ bn)**



Source: SBV.

**Figure I.7. Merchandise trade balance (NSA, US\$bn)**



Source: Vietnam Customs, GSO.

Note: NSA = not seasonally adjusted; RHS = right-hand scale.

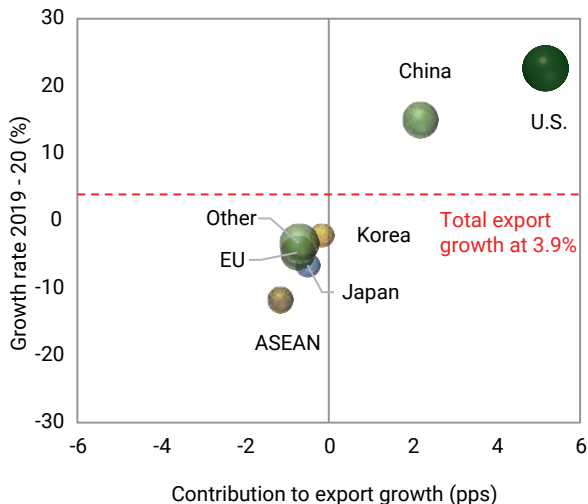
**Perhaps the most impressive result is that exports increased by about 4.8 percent in the first 10 months of 2020 compared to the same period in 2019.** While this performance is less than that recorded by Vietnam in recent years, it took place in a context where global trade flows are expected to decline by about 10 percent, according to the latest World Trade Organization estimates. In other words, Vietnam has been able to increase its share in global trade when other countries have been struggling. Part of this positive development is associated with the skillful management of the health crisis, since by reopening its factories earlier than others, Vietnam has encouraged existing exporters to reallocate some of their production away from competitors such as India or Pakistan.

#### The overall strong performance of the export sector reflects three underlying dynamics:

- First, trade by partner varied significantly during the first 10 months of the year, as exports to the United States continued to grow sharply—over 20 percent higher (y/y) in the first 10 months of the year—while also increasing to China but falling to the EU, the Association of Southeast Asian Nations (ASEAN), Korea, and Japan (Figure I.8). The sharp increase in export to the United States mirrors Vietnam's 2019 export performance and is partly due to the trade tensions between the United States and China, leading to trade diversion, from which Vietnam is benefiting (Figure I.10).
- Second, as shown in Figure I.9, while exports of lower-value manufacturing (textiles, apparel, footwear) and agricultural products declined significantly, exports of higher-value manufacturing (computers and electronics) grew solidly amid the Covid-19 crisis.
- Finally, while foreign direct investment (FDI)-owned firms export about twice more than local firms, during this crisis, local firms appear to have been the more dynamic exporters, suggesting more resilience to the shock (Figure I.11). This resilience may be rooted in the local firms' domestic supply connections, allowing them more flexibility in local sourcing compared to the FDI-owned firms, which rely more on global supply chains.

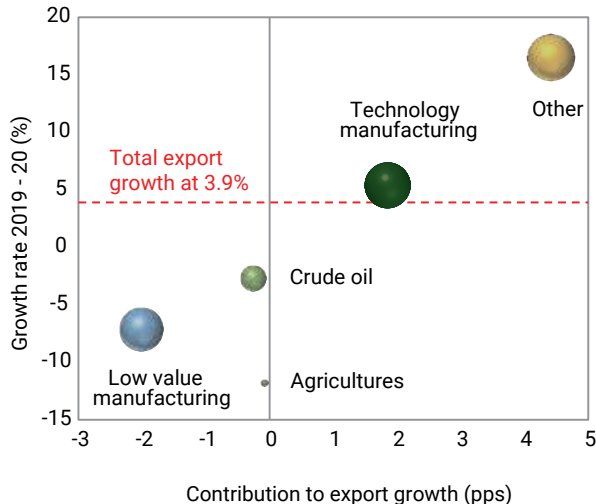
<sup>6</sup> <https://www.worldbank.org/en/news/press-release/2020/10/29/covid-19-remittance-flows-to-shrink-14-by-2021>.

**Figure I.8. Contribution to export growth by destination markets, 9M2019 - 9M2020**



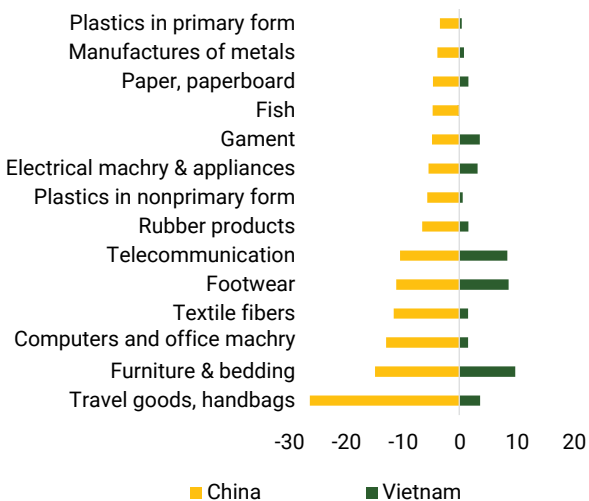
Source: Vietnam Customs. World Bank staff calculations. Note: Bubble size indicates export value in the first nine months of 2020.

**Figure I.9. Contribution to export growth by product types, 9M2019 - 9M2020**



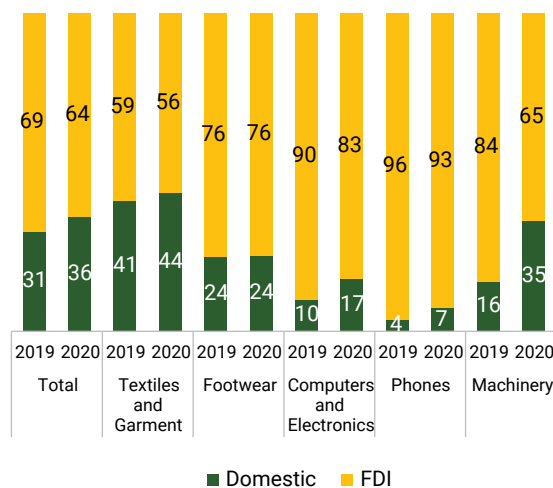
Source: Vietnam Customs. World Bank staff calculations. Note: Bubble size indicates export value in the first nine months of 2020.

**Figure I.10. Trade substitution between Vietnam and China, 9M2018-9M2020**



Source: Office of Trade and Economic Analysis, Industry and Analysis, International Trade Administration, U.S. Department of Commerce. Note: The figure shows change in share of U.S. imports (pps)

**Figure I.11. Domestic and FDI firms export - composition, 9M2019-9M2020 (%)**

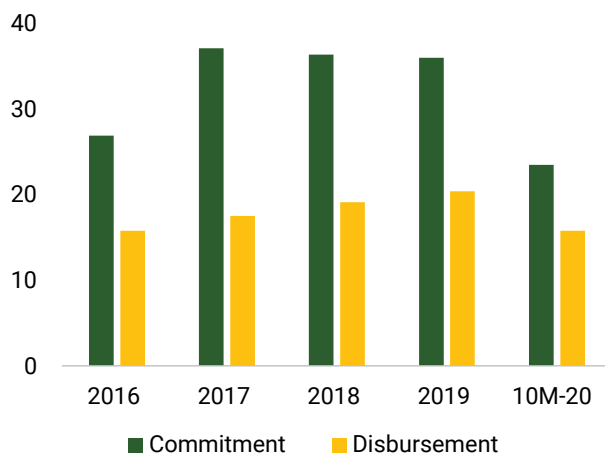


Source: Vietnam Customs.

**Continued strong FDI signals investor confidence in Vietnam’s economic prospects, bolstering the capital account.** In the first 10 months of 2020, the country attracted US\$23.5 billion in FDI, 19.4 percent lower than in the same period of 2019, but which remains a remarkable achievement, given the United Nations Conference on Trade and Development’s (UNCTAD’s) projection of a 30 to 45 percent decline in FDI inflows to East Asia in 2020 (Figure I.12). While greenfield investments continue to form the bulk of FDI, the drive for acquisition that marked 2018–2019 FDI appears to have waned, most likely due to the flight to safety

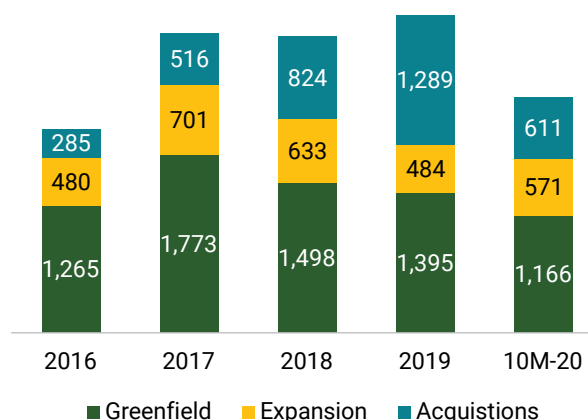
typical of capital movement in times of crisis, but also due to the impact of the crisis on global value chain networks (Figure I.13).

**Figure I.12. FDI inflows (US\$ bn)**



Source: Ministry of Planning and Investment.

**Figure I.13. Composition of FDI (monthly average, US\$ million)**



Source: Ministry of Planning and Investment.

### Shift in monetary policy has provided breathing space to the real sector

**Monetary policy has become more accommodative in the face of the crisis.** The State Bank of Vietnam has anchored its monetary policy on the objective to stabilize the value of the currency reflected by inflation. Domestic interest rates were stabilized, while credit expansion was regularly reviewed and adjusted by the monetary authorities. This prudent monetary policy was partly accommodated at the outset of the COVID-19 crisis, when the authorities decided to provide breathing space to the real sector. As part of the overall support plan, the SBV lowered policy rates in March by 100 basis points, in May by 50 basis points, and then again on October 1, by 50 basis points. It also granted flexibility to banks on provisioning requirements and forbearance to clients on loan terms to help banks and the banking system weather the crisis.

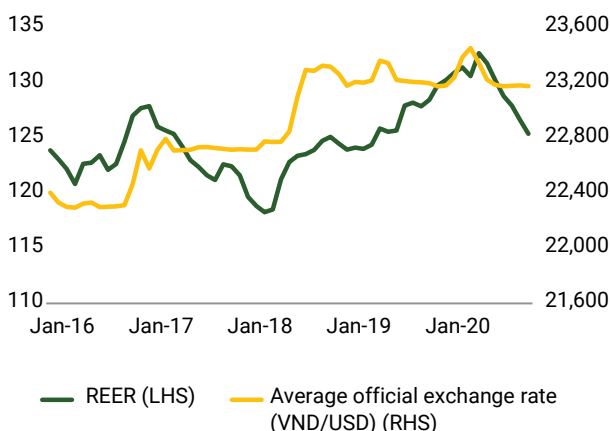
### This transition to more accommodative monetary policy was facilitated by better inflation performance.

The main risk with a countercyclical policy is increased inflationary leading to depreciation pressures.<sup>7</sup> Headline inflation was only 2.5 percent in October 2020, comparable to October 2019 (Figure I.15). It has been moderating since the first quarter of 2020 and has been relatively flat since June, reflecting the softening of the domestic demand in general and the record low oil price on international markets that was transmitted to domestic fuel and gasoline prices. Food prices, after a surge in the first quarter, started to decline in the second half of the year as uncertainties around food supplies during the crisis faded and increases in international rice prices moderated, with markets remaining well supplied. Since 2016, the SBV has operated and announced daily flexible exchange rate, managing the value of the local currency by using the following three criteria: (i) the weighted average interbank rate; (ii) currency movements in Vietnam's key trade and investment partner countries; and (iii) macro-economic balances. Meanwhile, after appreciating by 4.0 percent in 2018, 4.7 percent in 2019, and 1.9 percent in the first five months of 2020, the real effective exchange rate (as measured by the World Bank's methodology for a basket of major trade partners) depreciated by about 5.5 percent between May and November, mainly as the result of the depreciation of US dollar compared to other major currencies in recent months (Figure I.14).<sup>8</sup>

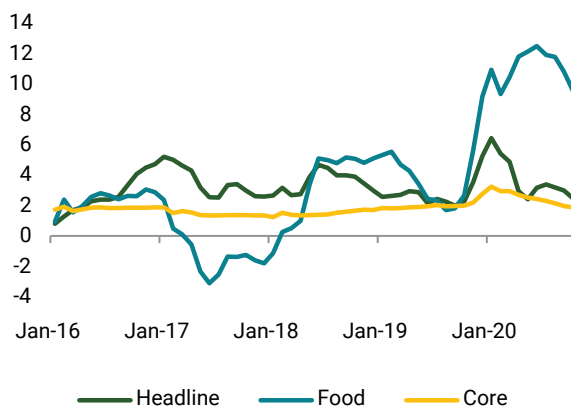
<sup>7</sup> For a review of international experience, see, for example, Gelos et al. (2020).

<sup>8</sup> US dollar index has experienced a 5 percent drop between March and October 2020 (<https://www.investing.com/indices/usdollar-historical-data>).

**Figure I.14. Evolution of the exchange rate**



**Figure I.15. Consumer price index (y/y, %)**



Source: World Bank Global Economic Monitor database, November 2020.

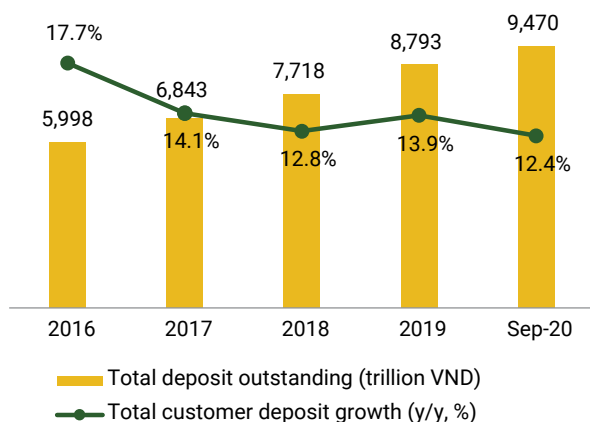
Sources: GSO and World Bank estimates.

Note: RHS = right-hand scale; LHS= left-hand scale; REER = real effective exchange rate.

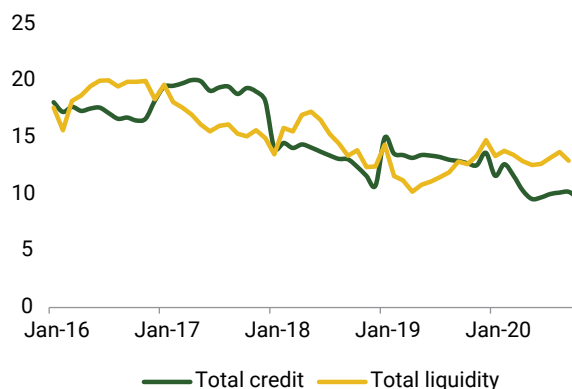
**The accommodative monetary policy and temporary financial relief measures have been partly successful.** On the one hand, it maintained the credit expansion 3 to 3.5 times higher than GDP growth and so channeled funds to companies and households to protect them from the fallout of the economic slowdown. On the other hand, the rate of expansion of credit slowed from above 11 to 12 percent (y/y) before the crisis, to 10.2 in September and 9.6 percent in October (Figure I.17). The lower credit expansion is associated with lower demand by firms and higher risk during the economic downturn.

**Another positive development is that customer deposits have continued to grow during the year.** Customer deposits registered 12.4 percent (y/y) in September, demonstrating the trust of customers in their financial institutions (Figure I.16). As a result, liquidity remains abundant in the domestic financial market. This abundance, together with the slower expansion of credit, may explain the active domestic issuance of corporate bonds recorded to date and the recent performance of the local stock market that climbed to a 10-month high in mid-November, despite a net foreign portfolio capital outflows in the equity market of about US\$565 million during the first 10 months of 2020.

**Figure I.16. Total customer deposits**



**Figure I.17. Credit and liquidity growth (% y/y)**



Sources: SBV, GSO, and FiinResearch.

Sources: SBV and Haver Analytics.



**However, the limitations of COVID-19 monetary policy have been discussed by many eminent scholars.<sup>9</sup>**

First, extreme monetary policies tend to limit the scope for future policy signaling and reduce the effectiveness of interest rates, which under normal conditions are powerful tools for influencing output and employment. Second, they could exacerbate the pre-pandemic vulnerabilities that were already threatening the world economy, not least the buildup of debt, the misallocation of credit, and excess liquidity in the corporate sector (where too many firms have problematic balance sheets). These concerns lead to the third point: the expansion of public-supported credit programs could push more debt onto firms that are in no position to turn it into value. Bankrupt “zombie” firms would be kept artificially alive. While these concerns apply to most countries, they are especially relevant for Vietnam, where debts are concentrated in a limited number of enterprises due to the low financial inclusion in the country. The quality of reporting should be improved to avoid exacerbating those risks, as well as the undercapitalization of several banks (as of December 2020, 78 out of 97 banks reported a capital adequacy ratio in line with the Basel II requirements).

**While the Vietnamese banking system remains globally sound, loan quality has started to show signs of deterioration in some banks.** These banks are exposed by their links to affected real sectors, including tourism, aviation and, possibly, real estate. The share of problematic loans (nonperforming loans) in bank portfolios grew to 2.01 percent in August 2020 from 1.63 percent in December 2019. While recorded nonperforming loans remain relatively low (and have been maintained artificially low by the SBV temporary measure allowing forbearance toward clients in difficulty), uncertainty and risks of increased default could increase financial sector stress over time. With falling demand, firms and individuals might find it increasingly difficult to meet their debt service obligations.

### ***A strong fiscal response is helping to jump-start the recovery***

**At the beginning of the COVID-19 crisis, former World Bank Chief Economist Pinelopi Goldberg, wrote:**

*“While the specifics vary from country to country, the clearly emerging consensus is that the tools of monetary policy are very limited at this point – aggressive fiscal measures are a must.”<sup>10</sup>* It is imperative that money reaches those most in need as quickly as possible to help jump-start the recovery. That is exactly what the Government of Vietnam has done over the past few months.

**The government was quick to accommodate its fiscal policy to the crisis because it was in a solid fiscal position before the COVID-19 outbreaks.** Its prudent fiscal policy helped improve its fiscal space as the public debt-to-GDP ratio was reduced from 63.7 percent of GDP in 2016 to an estimated 55.0 percent in 2019, below the legal threshold of 65 percent imposed by the National Assembly. Not only was the debt burden reduced, but the debt service was alleviated thanks to the lengthening of maturities and a rebalancing toward more domestic debt. In addition, the authorities had accumulated a substantial level of cash reserves by underspending on the public investment program between 2016 and the third quarter of 2019. While this low execution of public capital expenditures was partly the result of administrative bottlenecks around the implementation of the new Public Investment Law, it allowed the government to hold a “treasure chest” that proved to be decisive during the crisis. Finally, the fiscal rule to set aside 5 percent of the approved national budget for contingency risks provided an additional buffer to cope with the unexpected COVID-19 shock.

<sup>9</sup> See, for example, Krugman (2020) and Gourinchas (2020).

<sup>10</sup> Goldberg 2020.

**Confronted with the COVID-19 crisis, but armed with these three buffers, the government response was anchored in two main objectives.**

**The first objective was to help individuals, households, and firms weather the crisis.** In that respect, the fiscal policy measures adopted in early April have been on the mark by combining tax relief and financial assistance measures to support businesses and the most vulnerable. On the tax side, the authorities announced tax payments and social insurance deferrals to allow businesses to keep more cash at hand. On the expenditure side, the government offered direct financial assistance to employees and vulnerable households.

**The fiscal package was modest in magnitude by international and regional standards—two to three times lower than in Thailand, Malaysia, or China—but relatively ambitious in its coverage, aiming at assisting over 20 million people.**<sup>11</sup> Most of the tax relief measures were temporary, as they were mainly deferrals of payments rather than permanent reductions. This may explain to a large extent why many firms opted out of this package, as they had to pay their tax obligations only a few months later. This measure was also only useful to registered businesses, when over three-quarters of firms in Vietnam are operating in the informal sector. The financial assistance was estimated in the range of 1 percent of GDP, divided into the topping up of existing social programs and the creation of new ones. The new programs proved relatively difficult to implement, as the country lacks the basic social infrastructure to identify these new poor and to transfer cash to them. According to the most recent high-frequency survey conducted by the World Bank in August 2020, only 10 percent of households applied to the new COVID-19 relief programs, and only 1 of 10 households that applied received any money from the government (13 percent of households in urban areas received relief compared to 10.3 percent of households in rural areas). The receipt of new COVID-19 relief was also relatively even across the income distribution, which indicates that poor households were not necessarily prioritized in receiving relief.

**The second objective was to drive economic recovery by supporting domestic demand.** This has become the main priority of Vietnamese authorities who, as in China, have focused their attention on reactivating production facilities rather than providing cash to the most affected consumers. Their main instrument has been the speedier implementation of the public investment program, which has been plagued by slow disbursement in the last few years.<sup>12</sup> As a result, total public investment disbursements increased from 192 trillion dong in the first three quarters of 2019 to 269 trillion dong during the same period in 2020—a 40 percent increase. Such effort, principally from the central government, has translated into an increase of investment expenditures from 4.8 percent of GDP to 6.5 of GDP between the first 9 months of 2019 and 2020—an increase that is expected to continue until end-2020, supporting aggregate demand through the multiplier effects on suppliers and jobs over time.

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11 For an international comparison, see World Bank (2020a).

12 The factors affecting slow investment disbursement were discussed in the December 2019 issue of “Taking Stock.” They include a cap on borrowing, provisions of the 2014 Public Investment Law, complexity of the medium-term investment plan, and delays generated by the procedures to allocate and transfer funds. The government amended the 2014 Public Investment Law in mid-2019 to help address these factors.

**Box I.1. The potential effect of public expenditure on GDP**

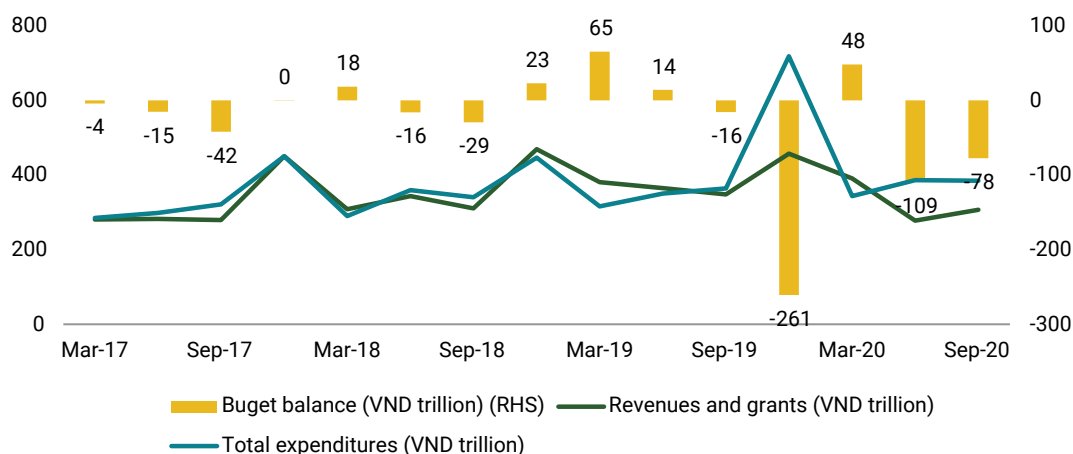
A well-established literature suggests that public spending—including public investment—can have a “multiplier effect” on output (or GDP); that is, changes in public spending lead to changes in output, though capturing the direct effect of such policies on growth is difficult. These fiscal multipliers tend to be larger during economic downturns than during expansion, because in downturns, public spending supports aggregate demand, while during expansion, public spending may crowd out private demand, leaving output unchanged.

The effects of public spending multipliers are usually country specific and depend on a number of structural factors that could amplify or reduce the impact of public expenditures. The positive or negative effect of these factors on the multiplier are identified by a +/- as follows: size of the economy (+), labor market rigidities (+), flexibility exchange rate regime (-), openness of the economy (-), existence of automatic stabilizers (-), effectiveness of monetary policy (-), debt level (-), efficiency of public expenditure management, and revenue administration (+).

There are alternative methods to assessing the effects of public spending on output. These include full macroeconomic models and demand-side models. A simple back-of-the-envelope method to estimate the short-term effects of public spending on growth is to use the “bucket method” (IMF, 2014).” Based on this method, given Vietnam’s level of public expenditure management and revenue administration, and that it is experiencing a negative output gap and has a crawling peg, it could be assessed as having a medium-range spending multiplier ranging from 0.3 to 0.6. This means that a 1,000 dong increase in public spending could have a VND300 to VND600 increase in GDP level.

**The government’s accommodative response to the COVID-19 crisis has channeled new funds into the local economy but reduced fiscal space.** The new funds have helped compensate to some extent the slowdown in private and external demand. However, this policy has reduced fiscal space, reversing the trend that had been observed at least until the last quarter of 2019. As illustrated in Figure I.18, the government collected less revenue since the beginning of 2020, while spending more. Total revenue in the nine months of 2020 declined by 10.8 percent compared to the same period in 2019 (Figure I.19). Tax revenue shortfalls in the corporate income tax, value-added tax, and trade taxes constitute the majority of this decline (Figure I.20 and Figure I.21). In the meantime, total expenditures rose by 8.1 percent compared to the first 9 months of 2019, including increased public investments discussed above (Figure I.22). Concurrently, the government was able to cut current expenditures due to the freeze on some salary increases and cuts in travel expenditures. The level of interest payment was also reduced, given low interest rates on both the domestic and international markets.

**Figure I.18. Fiscal space has been narrowing in recent quarters due to the fiscal response to COVID-19**

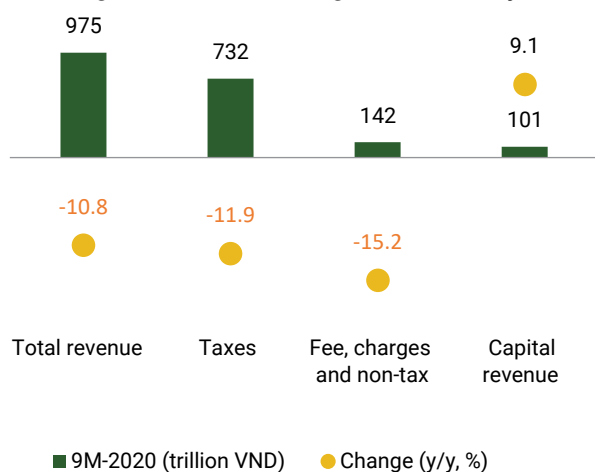


Source: MOF.

Note: RHS = right-hand scale.

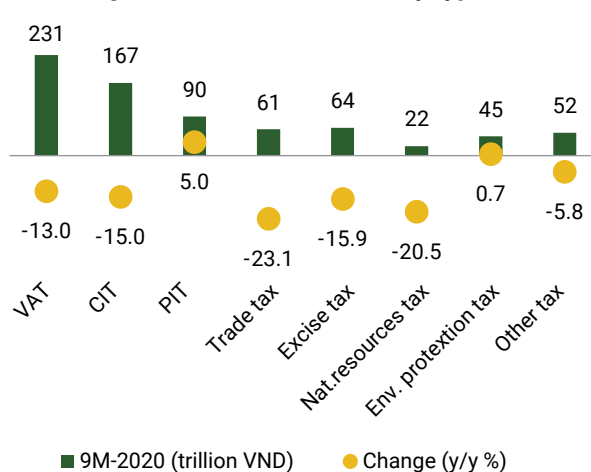
In light of these fiscal developments, the overall fiscal deficit is now estimated to reach about 6 percent of GDP in 2020. This is about 2 percentage points higher than initially anticipated in the approved national budget. As explained, the government should be able to finance this higher deficit by using the cash reserves accumulated in previous years. While the magnitude of these reserves is difficult to evaluate, they have been significant, as the authorities have not modified their borrowing strategy on either the international or domestic markets since the beginning of the COVID-19 crisis. Contrary to many developing and emerging economies, Vietnam did not use any special emergency financial support from international financial institutions or development partners even if those would be available in case of necessity in the future. The government has borrowed VND260 trillion on the domestic market since the beginning of the year, which is globally in line with its initial budget strategy. Ample liquidity in the domestic market has allowed the State Treasury to borrow at attractive rates, including on October 28, when the yields on Treasury bonds averaged 2.84 percent, or 0.29 percentage points lower than in September.

Figure I.19. State budget revenues by source



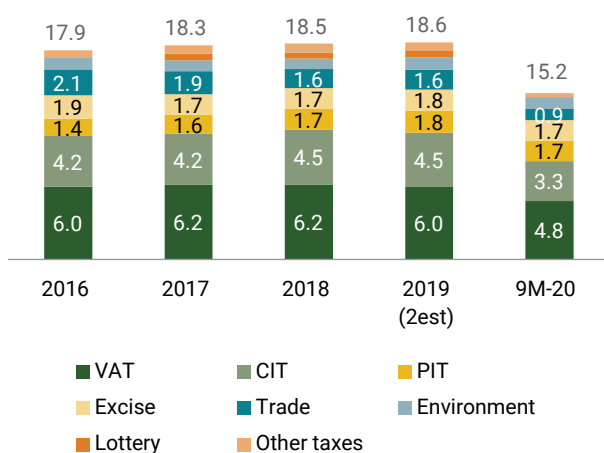
Sources: MOF and World Bank estimates.

Figure I.20. Tax collection by type of tax



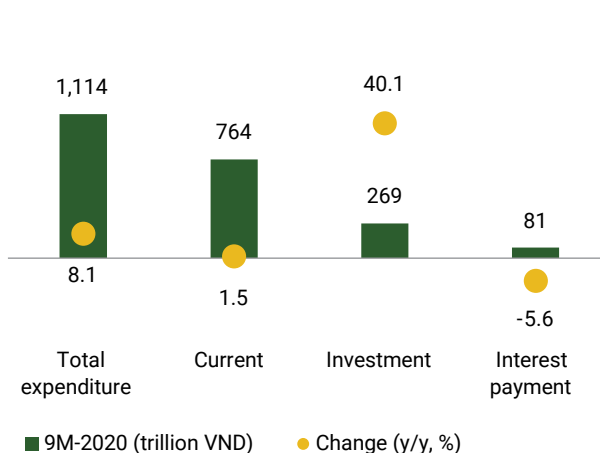
Sources: MOF and World Bank estimates.  
 Note: CIT = corporate income tax; PIT = personal income tax; VAT = value-added tax.

Figure I.21. Tax revenue composition (% of nominal GDP)



Sources: MOF, GSO, and World Bank estimates.  
 Note: CIT = corporate income tax; PIT = personal income tax; VAT = value-added tax.

Figure I.22. Budget expenditures



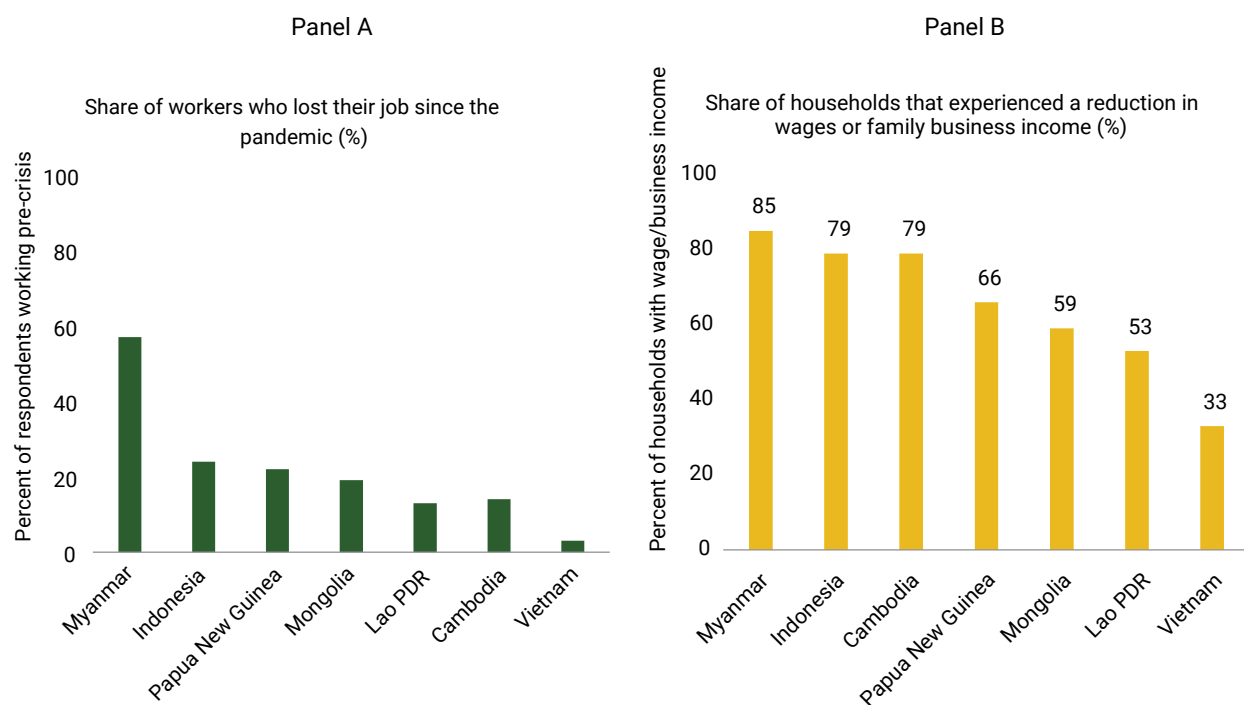
Sources: MOF and World Bank estimates.

### Emerging vulnerabilities in an uncertain context

**The recent trends in macroeconomic, fiscal, and financial variables illustrate how Vietnam has coped with the COVID-19 crisis.** A similar success story also emerged from recent microdata and surveys of households and businesses. For example, only 3 percent of workers have lost their jobs in Vietnam, a much lower rate than in neighboring countries, and only one-third of Vietnamese households experienced a decline in income compared to more than one-half in other economies.

**Yet, the current crisis represents a major shock for the Vietnamese economy.** The estimated growth rate of 2.8 percent in 2020 will be approximately 4.2 percentage points lower than the recent growth trajectory. While this drop is smaller than in most countries, it is still a significant slowdown for a society that has been used to rapid growth and almost full employment over the past 25 years. This shock has significant implications for the functioning of the local labor market and for some workers, mainly women, and for households and businesses.

**Figure I.23. Workers and households have been on average less affected in Vietnam than in other East Asian countries**

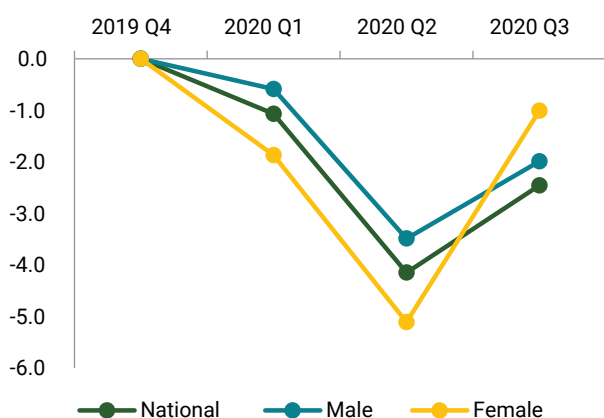


Source: East Asia and Pacific High-Frequency Household Phone Surveys, round 1.

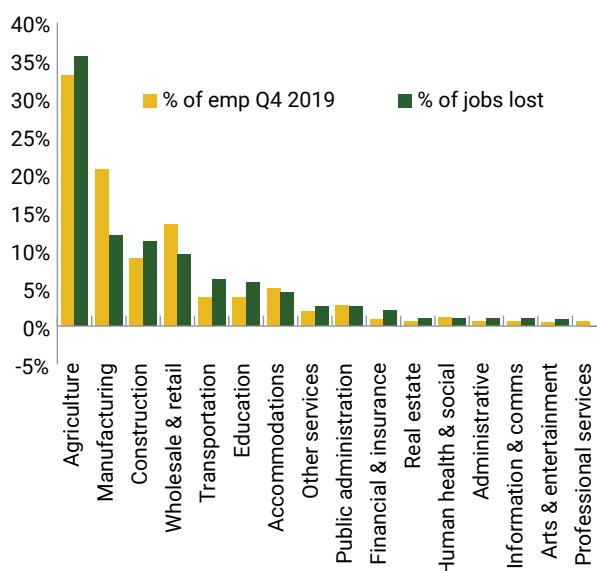
**The labor market was affected by the crisis.** While relatively few enterprises laid off workers, many reduced working hours and wages. Individuals and family businesses also experienced a decline in their activities. Those movements translated into an increase in unemployment and to the exit of some workers from the labor force. If the overall unemployment rate returned close to its pre-crisis level, after a temporary increase in the second quarter, this reflects mainly the opportunity for men to return to work. By contrast, the female unemployment rate has continued to rise to 3.9 percent at the end of the third quarter, resulting in a gap of 1.4 percentage points between male and female unemployment. The rise in unemployment is almost entirely an urban phenomenon. Even at the height of the pandemic’s impacts in the second quarter of 2020, those wishing to work in rural areas were able to find jobs.

**Labor force participation rates declined significantly and have not fully recovered to the pre-pandemic period, with women returning to the labor force more quickly than men.** The labor force participation rate declined by 4 percentage points between the final quarter of 2019 and the second quarter of 2020, with the bulk of this decline occurring in the second quarter (Figure I.24). Though participation has recovered, it remained 2.5 percentage points below pre-pandemic levels in the third quarter. Female participation dropped by more than 5 percentage points compared to a drop of 3.5 percentage points among men, but women returned to the labor force more quickly, with only 1 percentage point off pre-pandemic participation levels compared to a 2 percentage points for men.

**Figure I.24. Impact of COVID-19 on labor force participation rates overall and by gender**



**Figure I.25. Distribution of employment and job loss by sector**

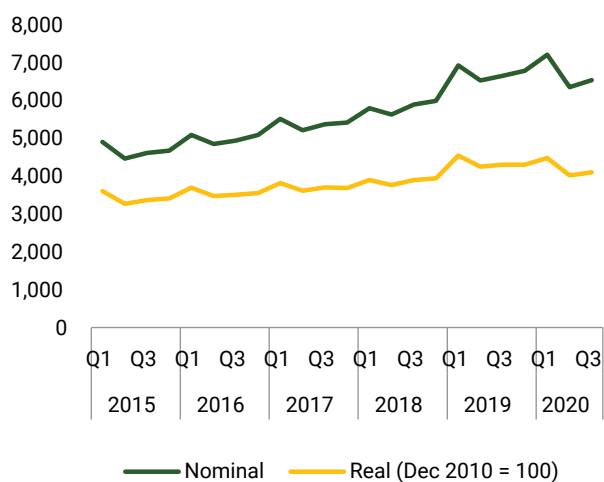


Source: Vietnam Labor Force Survey.

Note: The figure shows the percentage-point difference from Q4 2019.

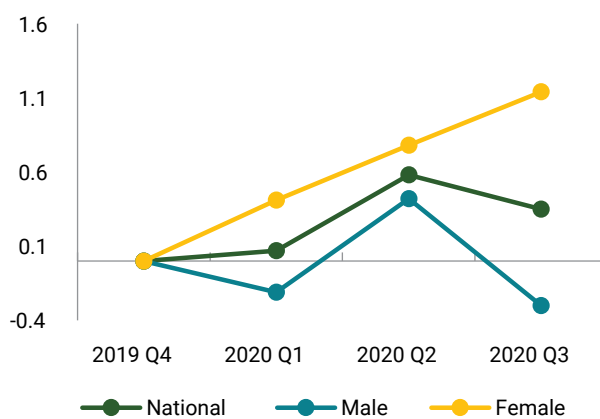
Source: Vietnam Labor Force Survey.

**Figure I.26. Average monthly wage (thousand VND)**



Sources: GSO and World Bank estimates.

**Figure I.27. Impact of COVID-19 on unemployment rates overall and by gender**



Source: Vietnam Labor Force Survey.

Note: The figure shows the percentage-point difference from Q4 2019.

**The crisis also has a differentiated impact on jobs across sectors.** If almost all sectors experienced jobs losses between the first and second quarters, the biggest impact was on wholesale and retail jobs, the second-largest sector by jobs, which was responsible for more than a third of jobs lost, though the sector represents only a fifth of urban employment. Disproportionately large jobs losses were also experienced in accommodations, financial services, education, transportation, and real estate (Figure I.25). The agricultural sector also shed a disproportionate number of jobs, but this is more amplification of a trend that was already in place before the pandemic. The sector was already shrinking at an average of 2 percent per quarter in recent years. The only exception was in professional services and in manufacturing, the largest sector by jobs in urban areas, where jobs actually grew between the end of 2019 and the second quarter of 2020.

**Real average wages fell sharply in response to the crisis.** Real average wages fell by 10.2 percent between the first and second quarter of 2020 and remained flat in the third quarter (Figure I.26). The fall erased most of the wage gain achieved since the fourth quarter of 2018 and reflects the slack in economic activities and the continued impact of the shock on the labor market.

**The crisis has also impacted households and businesses with significant variation.** If the immediate impact of the lockdown on households was almost uniformly negative, longer and differentiated effects were identified in the high-frequency household survey carried out by the World Bank in August, including:

- Almost a third of households reported still experiencing a decline in income in July/August compared to the previous month (Figure I.28).
- Across the six regions of Vietnam, the decline in income ranged from 29 percent in the Midlands and Northern Mountainous areas to 38 percent in the Northern and Coastal Central region.
- The incidence of income reduction was relatively even across urban and rural groups, and groups in the top and bottom of the distribution.
- Most households that did experience a decline in income saw less than half of their income shrink.
- However, about 2.5 percent of all households experienced a decline in household income of 50 percent or more (Figure I.29). Those in the Bottom 40 of the distribution were slightly more likely to report a larger magnitude of income loss than those in the Top 60.<sup>13</sup>
- Those with family businesses were the most likely to report declining household income, while respondents working in agriculture or the public sector were the least likely.

**On average, firms have also recovered from the initial lockdown with further reopening and lower revenue loss.**<sup>14</sup> About 94 percent of firms report being open in September/October 2020 compared to the same period in 2019 (Figure I.30). The median firm also reported a lower incidence of reduced hours worked, reduced demand, and input disruptions. However, the fall in sales is still steep (36 percent compared to last year), and net employment has not recovered, remaining significantly below the January level. Further, recovery has been mixed and uneven, including:

- The average decline in sales was more pronounced for small than big businesses (Figure I.31).
- Currently, reduced demand appears to be the most important channel of impact, with competitive pressures uneven across businesses.

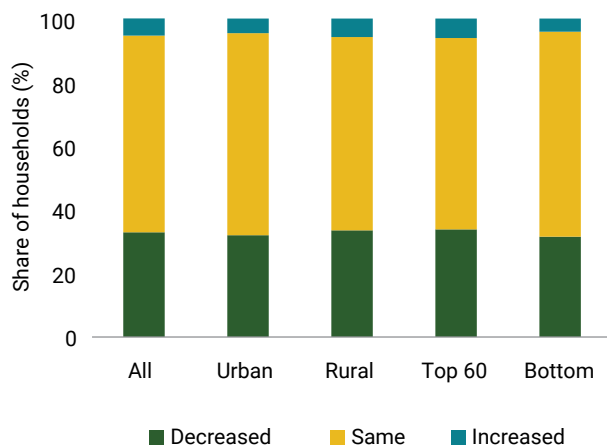
<sup>13</sup> Those in the Bottom 40 and Top 60 groups are in the bottom 40 percent and top 60 percent of the distribution based on pre-COVID distribution.

<sup>14</sup> These results are derived from the second Business Pulse Survey conducted end-September to mid-October.

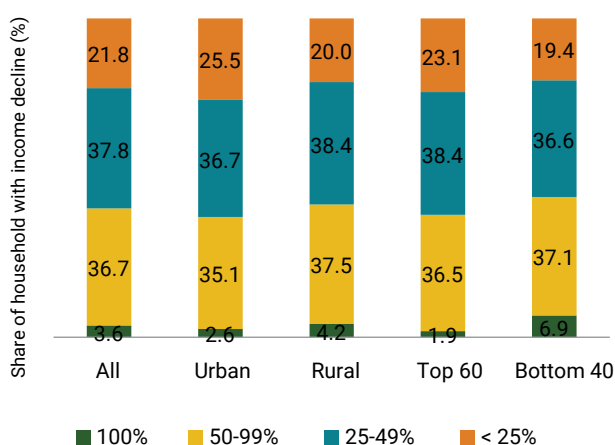
- Firms relying on foreign inputs are more likely to experience supply chain disruptions.
- Liquidity has improved, but firms are still at significant risk of arrears.

**The COVID-19 crisis has therefore created several inequalities by affecting workers, households, and businesses differently.** Looking ahead, as argued in the next section, the government should give more attention to these emerging fragilities to ensure sustainable economic growth in the medium to long term.

**Figure I.28. Change in household income since “last” month**



**Figure I.29. Magnitude of household income decline compared to “last” month**



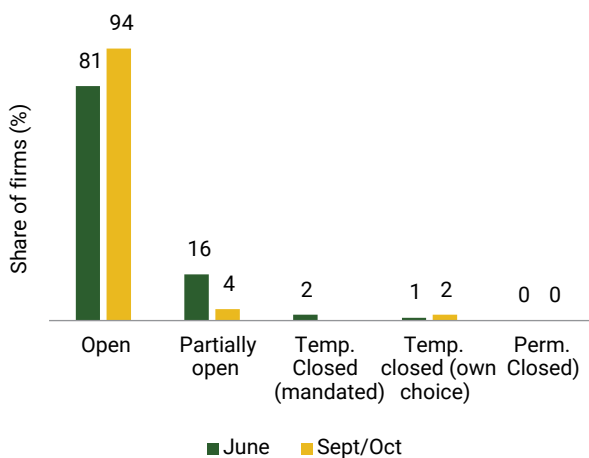
Source: World Bank High-Frequency Phone Surveys of Households in Vietnam.

Source: World Bank High-Frequency Phone Surveys of Households in Vietnam.

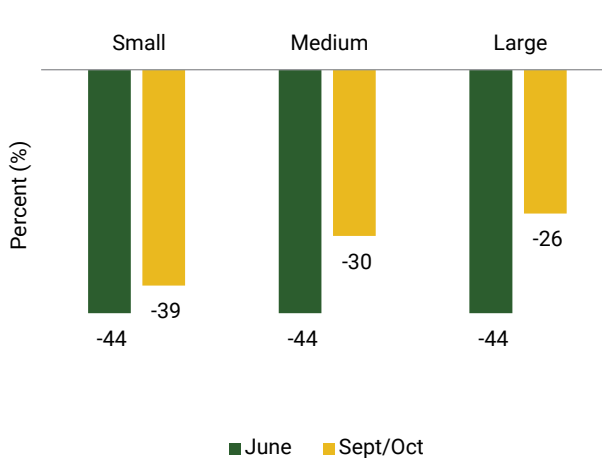
Note: Last month is June or July since interviews were conducted from July 27 to August 12.

Note: Last month is June or July since interviews were conducted from July 27 to August 12.

**Figure I.30. Operational status compared to a year ago**



**Figure I.31. Average change in sales during the past 30 days relative to last year**





## I.3. ECONOMIC OUTLOOK AND RISKS

**Vietnam's short- to medium-term economic prospects will depend as much on the speed of recovery of the local economy as on the evolution of the pandemic in the rest of the world.** The eventual timetable around the approval of a vaccine and the role of vaccination will determine the pace of global recovery. As discussed below, the GDP growth rate could reach 2.8 percent in 2020 and 6.8 percent in 2021, while stabilizing at around 6.5 percent in 2022 with favorable domestic and international conditions. These projections are, however, subject to great uncertainties in the global context and in the management of several risks that might emerge on the fiscal, financial, and social fronts.

### *A positive outlook for the next three years*

**In the baseline scenario, GDP is expected to grow by an estimated 2.8 percent in 2020 and to rise to 6.8 percent in 2021 and 6.5 percent in 2022** (Table I.1). The agriculture sector is expected to recover from the effects of swine flu that affected it in Q1 2020 and the damaging 2020 storm season. The services sector will continue on its recent recovery fueled by the projected elimination of most social distancing measures and by the growing demand from the domestic middle class. The bans on foreign visitors should be gradually lifted once a vaccine is approved and rolled out in the first half of 2021, helping to generate a return of foreign visitors and a gradual rebound in the tourism sector. Manufacturing activities will pick up further as the U.S. and EU economies recover and will drive an increase in demand for Vietnamese exports. This rebound will be enhanced by the recent adoption of regional agreements and by the expected development of synergies between multinationals and local firms.

**Table I.1. Selected economic indicators, Vietnam, 2017–22**

Indicator	2017	2018	2019e	2020f	2021f	2022f
GDP growth (%)	6.8	7.1	7.0	2.8	6.8	6.5
Consumer price index (average, %)	3.5	3.5	2.0	3.7	3.6	3.6
Current account balance (% of GDP)	-0.7	2.3	8.9	1.5	1.0	1.2
Fiscal balance (% of GDP)	-4.7	-4.4	-4.0	-6.0	-4.8	-4.0
Public debt (% GDP) <sup>a/</sup>	58.2	55.7	54.1	56.1	55.4	54.1

Sources: GSO, IMF, MOF, SBV, and World Bank.

Note: a. Excluding cross-debt among government entities.

**As the positive growth dynamics are confirmed, the expansionary fiscal and monetary policies will start to be unwound starting in mid-2021.** This is to ensure that they do not contribute overheating the economy. Therefore, inflation will remain below the 4 percent target set by the SBV. Increases in administrative prices and climatic shocks to food supply could lead to short-term price increases in food and specific services or utilities, but those are not expected to fundamentally change the dynamics of price expectations in the next few years.

**Monetary authorities are expected to revert to a prudent policy balancing between supporting economic growth and managing inflation.** The authorities will need to carefully monitor the rise of nonperforming loans to ensure financial sector health and push for the adoption of Basle II capital rules for all operating

banks. The development of digital banking and the emergence of a national e-payment system should enhance financial inclusion, with positive effects on small and informal businesses.

**With the gradual return to higher economic growth based on the strengthening of private sector activities and the expansion of the external sector, the government will be able to resume fiscal consolidation in the coming years.** The fiscal deficit should decrease from 6 percent of GDP in 2020 to 4.8 percent of GDP in 2021 and 4.0 percent of GDP in 2022, paving the way for a sustainable debt trajectory in the medium to longer term. To ensure that fiscal consolidation does not affect growth potential in the medium to long term, domestic revenues should be improved through administrative and policy reforms and used efficiently to finance the expected increase in infrastructure and quality social services that the economy will need in the next decade. Improving expenditure efficiency in service delivery and through better planning, selection, and implementation of the investment program will further support the overall fiscal objectives of the authorities. The use of public-private partnerships, building on the newly adopted law, should help not only attract further financing but also enhance the quality of investment projects through technology transports and an improved governance framework.

**The current account is expected to remain in surplus, driven by strong export performance and rising remittances.** Given the strong correlation between exports and imports, this surplus will be modest, at about 1 to 1.5 percent of GDP in the medium term. FDI inflow is expected to recover to pre-COVID levels, boosted by the revamping of global value chains and the demand by many governments and multinationals to diversify their sources of production. Going forward, the decision to continue the diversification of trading partners, and therefore economic opportunities, as recently reported by signing the massive Regional Comprehensive Economic Partnership (RCEP) agreement, will help the economy's productivity and resilience (Box I.2).

#### **Box I.2. Opportunities from regional trade agreements**

Vietnam has a long-standing practice of adopting global and regional trade agreements to integrate into the world economy and boost its economic development. Those agreements have been used to reduce duties and non-tariff barriers. Equally important, they have allowed the authorities to access international good practices that have, over time, helped them upgrade the legal and institutional framework, especially the one supporting the tradable sector.

This approach has been pursued in recent years and has resulted in the adoption of three major regional trade agreements: the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) with Asia-Pacific countries, in December 2018; the European Union Vietnam Free Trade Agreement (EVFTA) with the European Union, in June 2020; and the Regional Comprehensive Economic Partnership (RCEP) with 14 Asian neighbors, in November 2020. Together, these three agreements cover approximately 81 percent of Vietnam trade flows in 2019.

Beyond the obvious benefits of these three trade agreements (coming more from the size of the covered markets than the tariff reductions), they are also signaling Vietnam's strong commitment to globalization (or regionalization), when protectionism has been on the rise in other parts of the world. Such commitment is also a key priority embedded in the new national development strategy to be endorsed by the country's top leaders in early 2021. Furthermore, for a large proportion of Vietnamese stakeholders, the three free trade agreements can create strong motivation for building consensus about, and therefore accelerate the implementation of, difficult institutional reforms.

## *Managing external and domestic risks*

**The medium-term outlook is subject to several downside risks.** The main uncertainty is associated with the pandemic. If the approval and distribution of vaccines are delayed well into 2021, global economic recovery will be at risk, affecting Vietnam's economic rebound. In that case, exports, as well as domestic demand, will not rebound as expected. Nevertheless, barring new big shocks, the economy will still grow by 4.5 percent in 2021 and 5.5 percent in 2022 (low case scenario). Inflation will remain subdued, but the country's fiscal and external balances will not improve, as in the baseline scenario from 2021 onward.

**Several domestic risks have emerged from the current crisis and the associated government response, which will be exacerbated if the pandemic lasts longer than expected.**

**Watching for social risks.** The impact of COVID-19 on the labor market and households has lingered, with variations across sector, gender and geography. Labor participation has not fully recovered to the pre-COVID period, and household incomes have been affected. These effects are especially relevant to women, who have been more penalized by the recent adjustments in the labor markets. Also, about 2.5 percent of total households, or approximately 2.5 million people, who lost at least half their income in August compared to previous months. Lower household income would in turn affect consumption and investment decisions, and by extension, economic recovery. The authorities might wish to consider a review and improvement of the country's social protection programs to ensure that current and future victims of natural or economic shocks receive adequate support.

**Watching for financial sector risks.** Monetary authorities will need to be vigilant to the rising risks associated with nonperforming loans, closely monitoring the stability of the banking sector, which still has undercapitalized banks. A robust early warning system should be developed to identify potential threats to individual banks and the overall system. The authorities should establish a clear exit strategy for loan forbearance measures. The implementation of the forbearance measures, which could mask the full extent of vulnerability of the borrowers and the banks, must be closely monitored.<sup>15</sup> It would be useful to adopt early a resolution plan for nonperforming loans, thus not allowing the burden of bad loans to linger in the banking system as it could stifle the sector's role in supporting inclusive growth. Further, there should be a well-defined mechanism for dealing with weak and troubled banks, while recapitalization of banks to meet Basel II requirements should continue.

**Watching for fiscal sustainability risks.** Fiscal space is narrowing, with a significant increase in capital spending and lower revenues. If global economic recovery is delayed, the government may need to balance supporting the economy through aggregate demand with the need to ensure medium- to long-term fiscal sustainability. As premature fiscal austerity may affect the pace of economic recovery, the authorities may wish to consider the alternative timelines to achieving their fiscal/debt sustainability goals. On the policy front, in the short term, improving efficiency and targeting of expenditure, as well as improved debt management, will help. In the medium term, improvements in tax collection will be key to increasing fiscal space.

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<sup>15</sup> COVID-19: The Regulatory and Supervisory Implications for the Banking Sector: A Joint IMF-World Bank Staff Position Note. <https://www.imf.org/en/Publications/Miscellaneous-Publication-Other/Issues/2020/05/20/COVID-19-The-Regulatory-and-Supervisory-Implications-for-the-Banking-Sector-49452>

## I.4. ALIGNING THE COVID-19 RECOVERY TO LONG-TERM DEVELOPMENT PRIORITIES

**Early next year, Vietnamese leaders will agree on a new strategy for the next phase of economic development for 2021–30.** Despite the success achieved over the past few decades, the authorities have recognized that they should adjust their growth model because of changes in the domestic and international contexts. If the road from a poor to a middle-income economy occurred through the accumulation of more physical and human capital and the use of natural resources, the transition from middle to high income will be mainly through the efficient use of existing resources. Workers must become more skilled, businesses more innovative, and the government smarter in its management of the economy. This shift toward more efficiency was behind Korea's success in the early 1990s, when the country was able to shift its main drivers of economic growth from physical capital accumulation to human capital development and productivity gains.

**The new strategy will define Vietnam's priorities for the coming years.** The emphasis is expected to be on the integration of local firms in regional and global markets, innovation and digitalization, and the improved management of the country's natural resources. These three priorities are not entirely new but have been accelerated by the COVID-19 crisis. The pandemic has strengthened and will continue to strengthen forces that were already acting on the world economy, accelerating changes in trade, technology, and economic policy.

**If well-managed, Vietnam can emerge stronger after the COVID-19 crisis than before.** The excellent management of the pandemic has already enabled the country to increase its footprint in the world economy by capturing a larger share of global trade and FDI during 2020. The revamping of global value chains provides Vietnam a unique opportunity to position itself, as international firms and governments are increasingly seeking to diversify their sources of production. This move has already started, as several existing multinationals have moved part of their production facilities to Vietnam, while new ones have expressed their interest in relocating in one of the most dynamic economies in the world. The challenge for Vietnam would not necessarily be to attract more investors, but to optimize the synergies with domestic suppliers and distributors for the growing local market, and so facilitate the diffusion of technologies and competencies.

**The economy of tomorrow will be contact-free.** While Vietnam was arguably lagging more advanced countries in digitization, the COVID-19 crisis has been a catalyst. Over the past few months, local firms have accelerated their digital development as their customers switch from physical retail toward e-commerce. More than half have increased their use of digital tools and platforms. The government has also fast-tracked its efforts, and between March and November 2020, increased elevenfold the number of e-services integrated into the National Portal.

**Policymakers have also increasingly recognized that Vietnam's future will require greater attention to the management of the country's natural resources and climate-related risks.** However, despite high-level commitment, and contrary to integration and digitalization, Vietnam has yet to speed up implementation of this critical agenda. The next section will explore the reasons behind this lack of urgency and propose several actions, derived from the successful COVID-19 experience, to address the country's environmental and climate challenges.





## SECTION II

WHAT ARE THE LESSONS FROM COVID-19 THAT CAN BE APPLIED TO THE ENVIRONMENTAL AND CLIMATE CHALLENGE

**Tropical thunderstorms Linfa, Nangka, Ofel, and Molave hit Vietnam's Central region in October 2020, causing devastation and death.** By the end of the month, they had killed over 243 people, collapsed and flooded an estimated 243,000 houses, and caused around US\$1.3 billion in infrastructure damage.<sup>16</sup> Every year, many suffer from climate-related catastrophes that leave deep and indelible scars. Vietnam is one of the most hazard-prone countries in the East Asia and Pacific region, with frequent typhoons, storm surges, riverine flooding, coastal erosion, drought, or saline intrusion and landslide responsible for substantial economic and human losses.<sup>17</sup> And this year, such impacts added to the stress imposed on society and the economy by the COVID-19 pandemic. While the biggest and most far-reaching, viral outbreaks that affect humans and livestock are not new to the country.

**So far, Vietnam has managed the COVID-19 crisis extremely well, with low infection and casualty rates, and has contained economic pain.** However, it has not yet demonstrated the same commitment to addressing the pressing environmental issues and risks from climate change. While the perception might be that the impacts of environmental and climate change issues are less imminent, the long-term consequences are severe.

**There are many positive lessons from Vietnam's response to the COVID-19 crisis that can inspire decisionmakers in their efforts to better address the country's growing vulnerability to environmental, climate, and disaster risks.** The current health crisis is a useful paradigm for those who advocate early preparation and bold actions to deal with environmental and climate challenges. The COVID-19 crisis has also created a new sense of urgency by shining a spotlight on the fragility of human life in the face of catastrophes. Today, Vietnam is a vulnerable country and faces high disaster risk levels, ranked 91 out of 191 countries by the 2019 INFORM Risk Index, driven particularly by its exposure to hazards. Vietnam has extremely high exposure to flooding, ranked 1st with Bangladesh, including, riverine, flash, and coastal flooding. Vietnam also has high exposure to tropical cyclones and their associated hazards.<sup>18</sup> Its cities are among the most polluted in the world, the Mekong Delta region is on the verge of ecological disaster, and its coastal provinces are exposed to regular windstorms and chronic flooding.

**Therefore, the first lesson for Vietnam would be to position itself as the champion of green and resilient recovery in the aftermath of the pandemic.** This would not only lead to obvious environmental gains in both the short and longer terms, but also, through the smart combination of taxes and investments, would restore fiscal space and boost economic activity.

**The second lesson is that the government already has the tools to move quickly and decisively.** The successful implementation of COVID-19 measures has relied on Vietnam's traditional strengths such as leadership and planning capacity. More surprisingly, it has also been enhanced by the creation of additional space for innovation and experimentation, using digital platforms and instruments that, in turn, have boosted individual and collective accountability. Such a combination can be applied to both the environment and the climate and disaster risk agenda, as it will help generate the changes in behavior that are so fundamental to the fight against any viral and, arguably, environmental, threats, and to climate and disaster threats.

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16 According to the Vietnam Disaster Management Authority of the Ministry of Agriculture and Rural Development.

17 For a full report on Vietnam's vulnerability to rising sea level and flooding, see World Bank (2020b). The average annual disaster losses are about US\$2.7 billion, of which 60 percent are concentrated along the coast.

18 Inform risk index from World Bank Group Climate Change Knowledge Portal (<https://climateknowledgeportal.worldbank.org/country/vietnam/vulnerability#:~:text=Vietnam%20faces%20high%20disaster%20risk,by%20its%20exposure%20to%20hazards.&text=Vietnam's%20overall%20ranking%20on%20the,of%20vulnerability%20and%20coping%20capacity>).

**This second part of the Taking Stock report is divided into four sections.** The first recalls that Vietnam’s economic success over the past quarter century has come at a cost to its natural resources. The second section discusses why Vietnam—like many other countries—is lagging in taking action to manage its climate and disaster challenges despite the increasing recognition of their importance. The third section focuses on the reasons behind the successful implementation of COVID-19-related measures in Vietnam. The fourth section concludes by proposing how the lessons from the COVID-19 policy response could help Vietnam better address environmental and climate challenges.



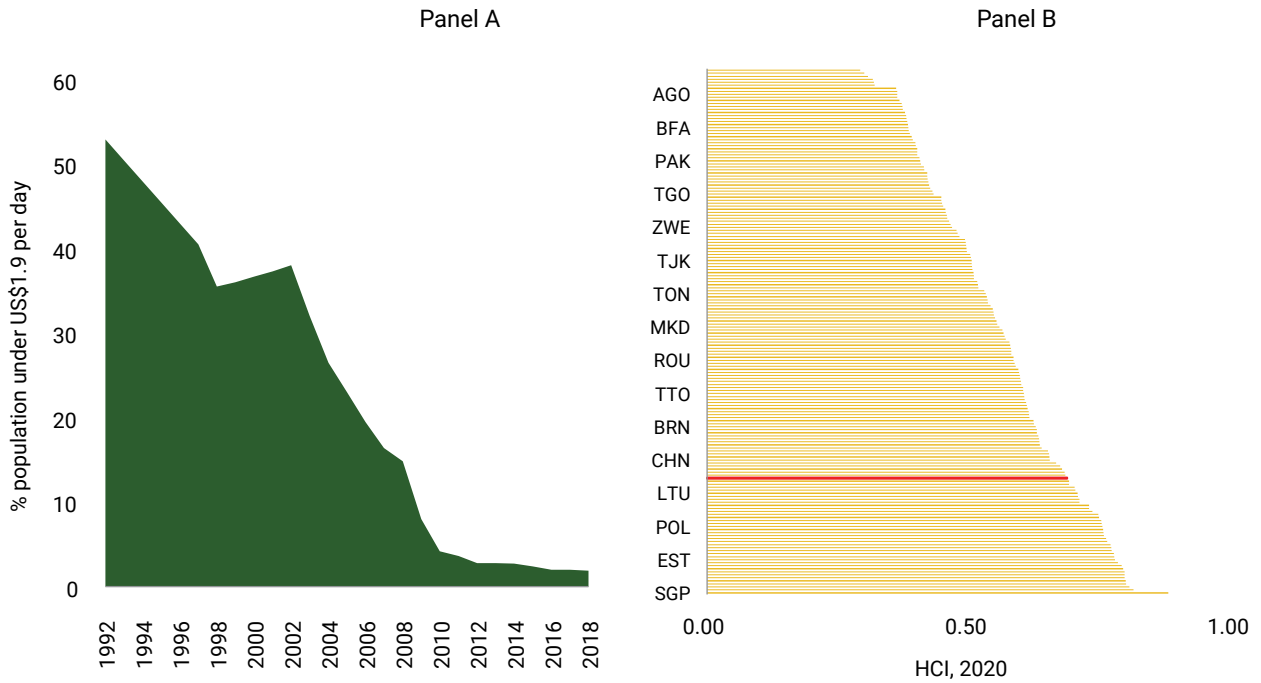
## II.1. VIETNAM'S DEVELOPMENT SUCCESS STORY HAS COME WITH AN ENVIRONMENTAL COST

**O**ver the past 25 years, Vietnam has been a success story of economic development. The median household income has quadrupled, and extreme poverty dropped from 50 percent to about 2 percent during this period. Great strides have been made to revitalize the private sector, increase life expectancy, and expand schooling, including learning outcomes. Progress has been built along with beneficial domestic and global trends. A young population expanded the labor force, and the country took advantage of the boom in global trade. Agricultural commodity exports were the first to take off thanks to a relative abundance of fertile land and water, followed by labor-intensive manufacturing sectors like textiles, and, most recently, electronics. This success has been translated into improvements in almost all indicators of productive, physical, and human capital, as illustrated in Figures II.1 and II.2, which emphasize some of the impressive gains achieved in human capital, and in access to basic infrastructure services in electricity, maritime transport, and communication.

**However, this success was partly obtained at the expense of the country's natural capital.** Like most low-income countries, Vietnam relied heavily on its natural resources, using its extensive stocks of agricultural, mineral, and marine resources. There is nothing wrong with Vietnam using its natural advantages to enhance rapid and inclusive growth during its first phase of development. After all, the country is blessed with abundant agricultural land, water resources, and mineral reserves. However, such a model has gradually become unsustainable over time. As captured in Figure II.3, the country's forests are being exhausted, while air pollution has been on the rise. At the same time, the rapid expansion of gross fixed capital formation has been unplanned and without consideration of climate and disaster risks, leading to the rapid growth in people and assets exposed to adverse natural events. When all this environmental damage is combined, it is estimated to cost between 4 to 8 percent to GDP every year due to a combination of direct negative effects on the stock of natural capital and of indirect externalities on labor productivity and on the quality of physical infrastructure.<sup>19</sup>

19 <https://www.adb.org/sites/default/files/institutional-document/33916/files/viet-nam-environment-climate-change.pdf>.

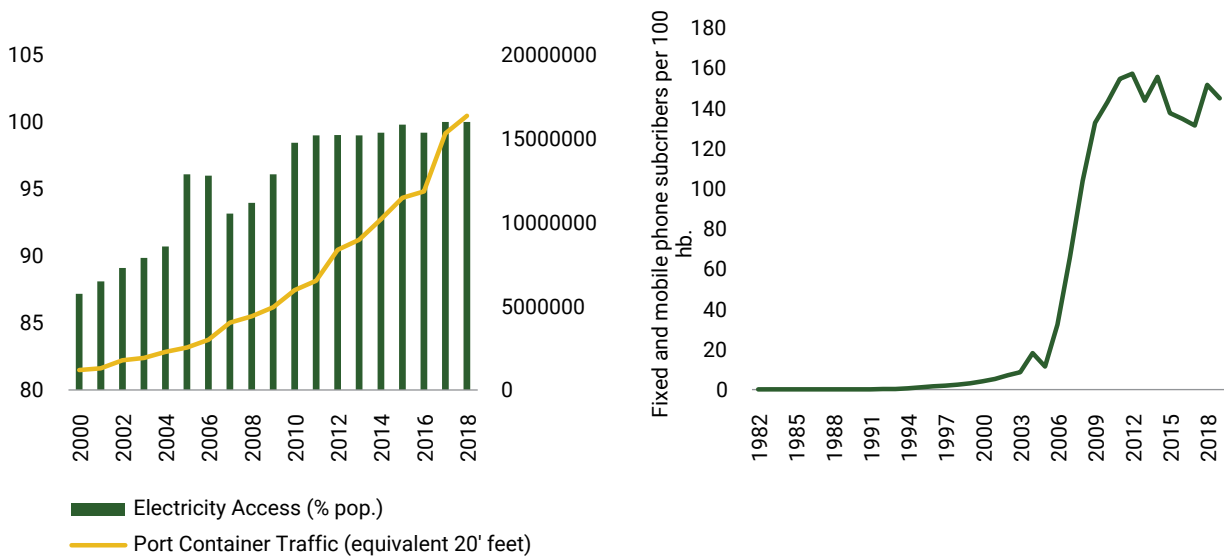
**Figure II.1. Fast-declining poverty rates and rising human capital are signs of inclusive growth**



Source: World Bank.

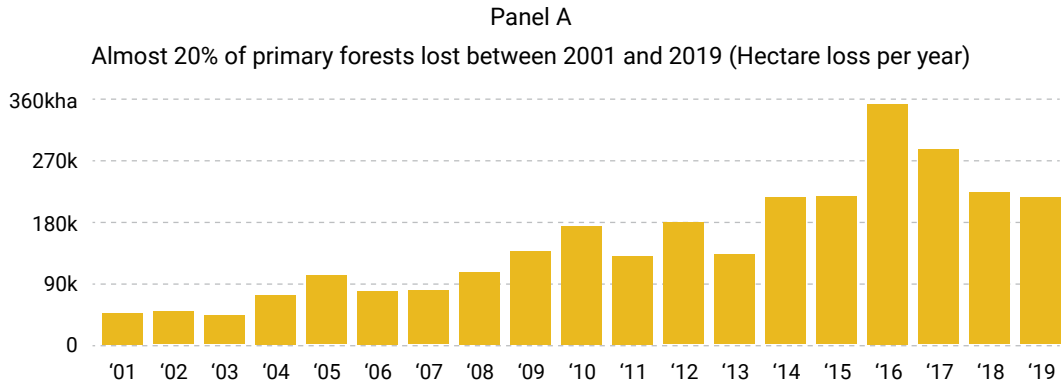
Source: World Bank.

**Figure II.2. Greater access to electricity and communication tools and a surge in transport demonstrate an improved business environment and living conditions...**

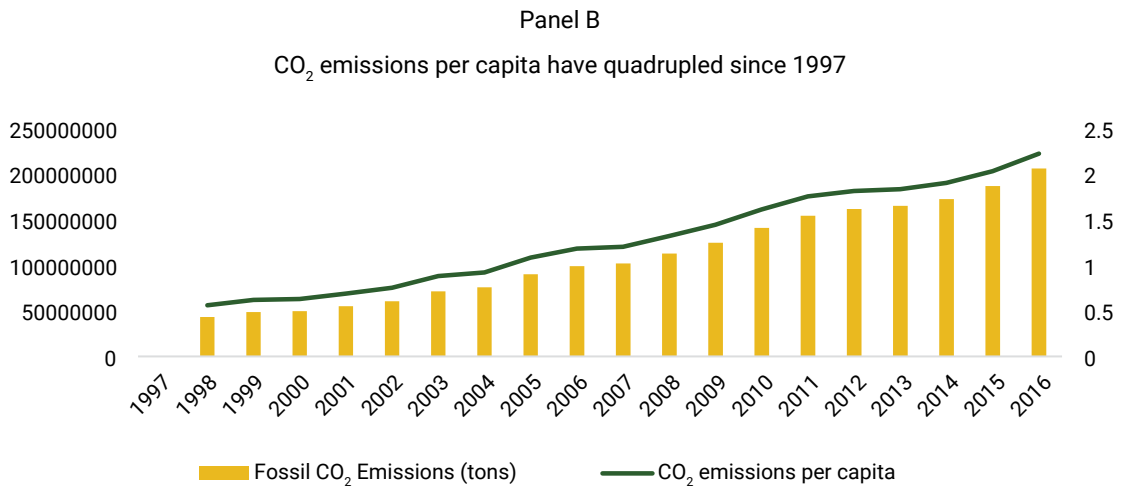


Source: World Bank.

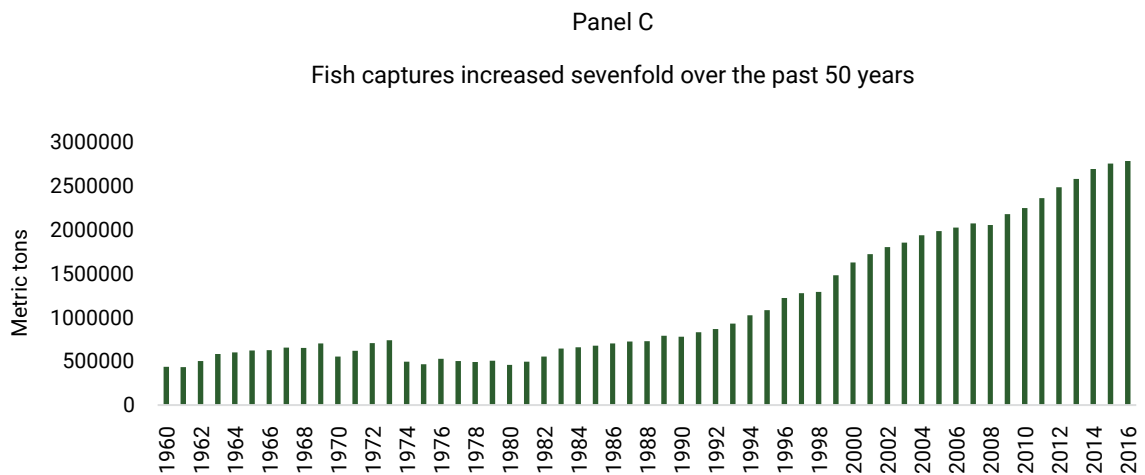
**Figure II.3. ...But almost all measures of natural capital have been in secular decline since the early 2000s**



Source: Forest Global Watch.



Source: <https://www.worldometers.info/co2-emissions/vietnam-co2-emissions/>.



Source: World Bank.

**Looking ahead, as Vietnam's natural capital continues to degrade, and the environment becomes more exposed and vulnerable to disasters and climate risks, the future potential for growth will be undermined.**

In addition, these trends will only accelerate with climate change. Already, Vietnam has been ranked among the top six countries likely to be most affected by climate change and among the nine countries where at least 50 million people will be exposed to impacts of climate change.<sup>20,21</sup> The country is especially vulnerable to rising ocean levels and higher frequency of climate variations. While the precise location, magnitude, and timing of future climate impacts cannot be fully predicted, what can be estimated is the rise in sea level and increase in storm surge which, combined with changing rainfall patterns, can significantly slow, or even reverse, development achievements. For instance:

- The ocean level has already risen 20 centimeters over the past three decades and could increase by a further 75 centimeters to 1 meter by 2050 compared to 1980–1999. This could lead to the flooding of 40 percent of the Mekong Delta area, 11 percent of the Red River Delta, 3 percent of coastal provinces, and over 20 percent of Ho Chi Minh City. This would directly impact about 10 to 12 percent of Vietnam's population and 10 percent of GDP.<sup>22</sup>
- The frequency of climate variations has increased. The average temperature has increased by 0.5 degrees Celsius to 0.7 degrees Celsius in the last decade. In 2016, the severe drought in the Mekong Delta region offered a potential preview of what may become the new normal. The excessive rainfall in the central region and the simultaneous lack of precipitation further south demonstrate how seasonal variations can wreak havoc on agricultural production and infrastructure (Box II.1).

**Box II.1. Heavy rains fell in the central region during October 2020**

The central region of Vietnam has experienced multiple storms and prolonged heavy rains that have caused severe and widespread flooding. In addition, there was the increasing incidence of landslides due to deforestation, which reduced subsoil coherence and water absorptive capacity upstream.

Ha Tinh, Quang Binh, Quang Tri, Thua Thien Hue, Da Nang, Quang Nam, Quang Ngai, and Binh Dinh Provinces have been impacted by significant flooding and landslides. The Hieu River (Quang Tri) and Bo River (Hue) have reached historically high levels.

According to official numbers, these hazards caused over 240 casualties. An estimated 243,000 houses have been damaged or destroyed, 375,000 people evacuated, and 1.5 million people directly affected.

**Although Vietnam is a small contributor to global greenhouse gas emissions, emissions have increased fivefold in the country since the early 2000s.** The country has become one of the most energy-intensive user in the world, with demand for energy jumping by a factor of 1.5 for each percentage increase in GDP, relying to a large extent on coal-power generation. Consequently, the air quality has deteriorated quickly in the country's main urban centers (Figure II.4). In Vietnam, air pollution was estimated by the World Health Organization to have caused the equivalent of 60, 000 deaths in 2018. Around 40 percent of these deaths which were linked to the use of fossil fuels.<sup>23</sup> Air pollution is a risk factor for many of the leading causes of death including heart disease, stroke, lower respiratory infections, lung cancer, diabetes, and chronic obstructive pulmonary disease. In addition to working days lost due to illness and its cost to labor productivity, reduced health can place a higher burden on the health system.<sup>24</sup>

20 <http://gain.nd.edu/our-work/country-index-rankings>.

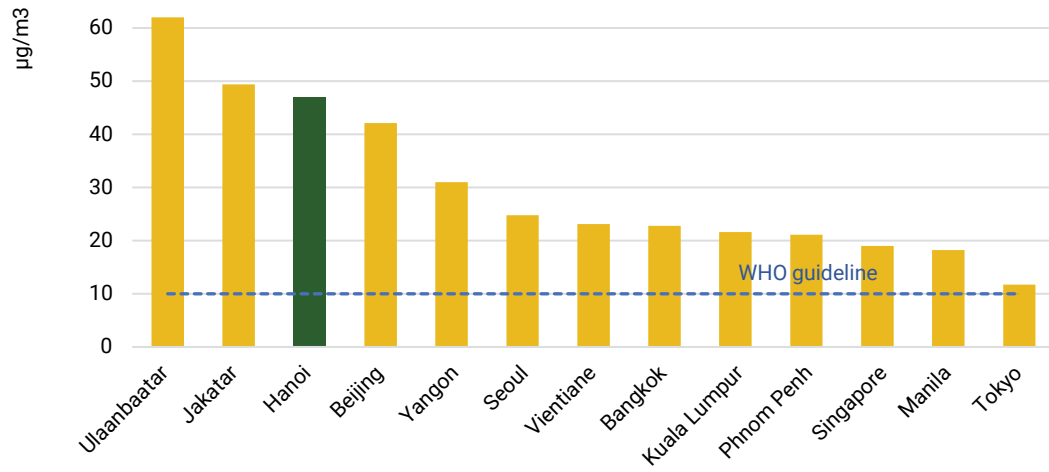
21 IPCC 2018.

22 MONRE 2016.

23 <https://www.who.int/vietnam/vi/health-topics/air-pollution>; and Lelieveld et al. 2020.

24 Pollutants from agriculture (nitrogen, phosphorus, and pesticides, among others) and pollutants from industrial waste, which includes metals, arsenic, and a variety of other toxins, are also a major threat.

**Figure II.4. Vietnam’s cities are among the most polluted in the world**



Source: IQAir 2020.

Note:  $\mu\text{g}/\text{m}^3$  = micrograms (one-millionth of a gram) per cubic meter air.

## II.2. WHY HAS PROGRESS BEEN SO SLOW IN ADDRESSING THE CLIMATE CHANGE CHALLENGE?

**Disaster and climate challenges have become a top priority for policymakers in Vietnam.** This is evidenced in national and sector strategies, and these challenges are identified as one of the key pillars of the new national development plan for the next decade.<sup>25</sup> Internationally, the government has also championed the cause of the environment, including at the Paris Conference on the Climate in 2015.

**Climate and disaster risks are now recognized as a direct threat to Vietnam's aspiration to become a high-income economy.** Direct and indirect disaster losses are affecting not only the economy's resilience (coping with catastrophes) and sustainability (don't harm the future), but also its capacity to maintain rapid and inclusive growth. For instance, rapid infrastructure development in the absence of the consideration of disaster and climate risks is leading to rapidly growing exposure and vulnerabilities to adverse natural events. With an anticipated growth of 265 percent over the next 10 years, annual average direct disaster losses on the coast alone are expected to grow to US\$4.2 billion a year. Also, development gains could be undermined by the loss of human life; destruction of commercial property, cultivable land, and infrastructure; reduction in agricultural yields and labor productivity; loss of tax revenue; and strained public budgets from spending on relief and reconstruction. For example, farmers in the Mekong region have already recorded declining agricultural yields caused by poor development practices, including water mismanagement and land exhaustion.

**The impacts of environmental degradation on the population are also becoming more apparent.** Many workers, and students, are becoming less productive because of the negative impacts of air and water pollution on their health, including, in October 2019, when over 1 million people were affected by water poisoning in Hanoi. Both the impacts of disasters and environmental degradation are expected to disproportionately affect the poor and marginalized, who have limited coping mechanisms—such as financial resources—to protect themselves, and have a higher likelihood of living in hazard-prone areas. For instance, over 400,000 people in Vietnam could fall back into extreme poverty by 2030 because of unintended effects associated with climate change.<sup>26</sup>

**Despite high-level commitment, measurable progress remains elusive.** Many ambitious reforms identified in the strategies have not yet led to fully concrete actions and tangible results. On the contrary, most environmental indicators continue to deteriorate, as highlighted by the continuous overexploitation of forests and fisheries, as well as rising pollution levels in recent years depicted in Figure II.3. Equally worrisome is that Vietnam's ambition to reduce greenhouse gas emissions as part of its commitment under the Paris Climate Agreement has recently been revised downward (despite strong evidence that the previously set target could be achieved by continued investments in cleaner energy production). Also, the

<sup>25</sup> For example, see the National Climate Change Strategy (NCCS), approved in 2011, and the Vietnam Green Growth Strategy (VGGS), approved in 2012, which lay out a vision through 2050. Also, the government adopted a Support Program to Respond to Climate Change (SP-RCC) for 2016–2020 that supports policy reform, capacity building, and increased investment for prioritized climate change and green growth actions in key sectors, including energy, transport, forestry, and water resource management. In the energy sector, for instance, Vietnam adopted a Law on Energy Efficiency and Conservation and a National Energy Efficiency Program (NEEP3) for 2019–2030, which sets targets for different economic sectors.

<sup>26</sup> Rozenberg and Hallegatte 2016.

prices of most infrastructure services (energy, water, waste) have not been adjusted to their supply costs, leading to wasteful behaviors from both suppliers and consumers.

**Similarly, annual disaster losses are rising rapidly due to unplanned and unregulated development and poor management of natural resources.** For instance, mismanagement of water resources in the Mekong Delta region is creating higher levels of saltwater intrusion, with significant damage to the flora and agricultural land—a trend that is almost certainly to continue. While risk cannot be eliminated as development expands, incorporating climate and disaster risk into future development can help flatten the loss curve. To do so, Vietnam needs to walk the talk and not only commit to, but also implement, serious and transformational changes and reforms in a manner that will reduce the continued environmental degradation and slow the growth of annual disaster losses. While this will require financial resources commensurate with the challenge, it is also an opportunity to be innovative and leverage the country's human and productive capital in a more forward-looking and climate-resilient manner.

**There are many reasons for the slow implementation of the climate and disaster risk agenda in Vietnam.**<sup>27</sup>

The most obvious is the slow uptake of climate mitigation due to the time inconsistency in the sense that the benefits of interventions will increase over time, while their costs are immediate. For example, most of the impacts of emissions do not fall on those conducting the activities; instead, they fall on future generations, and this future cost is not reflected in current prices. The adverse effects of greenhouse gases are, therefore “external” to the market, which means there is usually only an ethical, rather than an economic, incentive for businesses and consumers to reduce their emissions. As a result, the market fails by overproducing greenhouse gases, and individuals maintain the status quo or postpone their decisions to be more environment/climate aware, especially when the cost of inaction is still uncertain.<sup>28</sup> In Vietnam, many individuals may not invest upfront in new and cleaner technologies because of financial constraints or regulatory barriers. While this logic may have been relevant 10 or 20 years ago, the mounting evidence that climate change is already happening and affecting productivity and health of communities around the world, while causing them significant financial losses (such as those in Vietnam's central coast in 2020). These losses are being absorbed by households or municipalities and are already having a cascading effect on future generations.

**Another market failure is that individuals are likely to invest less than what is required from a collective perspective, because private benefits are lower than social benefits.** For example, a household will not invest in solar energy because the benefits to itself are lower than the benefits to the broader public. Alternatively, the same household can wait for others to move first and invest in these modern technologies so it can also benefit from cleaner air. Because environmental challenges do not stop at a country's border, (for example, trashed plastics travel across the oceans), there is also an international dimension to the green economy. An obvious related market failure is that many individuals have limited access to public information or may lack the capacity to analyze it. In short, all these market failures justify government intervention because the management of natural resources and the environment is both a public and a global good.

**A third failure is that the market does not always accurately account for the right price of natural resources due to the difficulty capturing the risks associated to natural disasters or other events.** For example, land and real estate markets should reflect the exposure of an area to adverse natural events. In some cases, particularly in poorer neighborhoods, the price of land and real estate is commensurate with the exposure

<sup>27</sup> For more details, see World Bank (2020c), in particular, chapter 5, which is devoted to the challenge of the green economy.

<sup>28</sup> Baranzini, Chesney, and Morisset 2003.

to natural hazards and environmental hazards. However, it is often the case that the exposure of new land development to adverse natural events is not considered in site selection or real estate prices. In fact, in many circumstances, the opposite is true, where the most disaster-prone land is the cheapest to develop due to low existing population density—low due to the high risk to floods and windstorms.

**While the three “market failures” discussed above can help us understand why individuals (households and firms) have failed to fully adapt their behaviors to the disaster risk, they cannot be the only explanation.**

Because these failures are by now well-known by governments, the real question is why they have not yet been corrected. We believe that part of the response can be found in the government’s own behavior, such as lack of political will and urgency. In Vietnam, the authorities are missing the effective mechanisms required to coordinate their decision-making process, even though climate and disaster policies often require close collaboration across ministries at the central level and between central and local authorities. The slow and uneven implementation of climate and disaster reforms is also linked to weak regulations that are often poorly enforced due to limited controls and sanctions. Finally, the state has not followed “green rules” in its investments, most notably in state-owned enterprise, which are among the main source of air pollution, and in the selection of projects and contractors.



## II.3. UNDERSTANDING THE IMPLEMENTATION SUCCESS OF COVID-19-RELATED MEASURES

**In contrast to the climate and disaster challenges, the COVID-19 pandemic has been handled extremely well by Vietnam, with proactive and timely actions.** This is not an exaggeration as, in late July when the second wave of the disease hit Vietnam, it successfully flattened the curve of COVID-19 infections again by implementing three weeks of targeted lockdown, tracking, and testing. This experience in implementing the right measures at the right time deserves more attention, as it can inspire policymakers in their commitment to address the environmental and climate challenges.

**The specific measures taken by Vietnamese authorities to fight the coronavirus have deservedly received a great deal of attention from local and international media.** The media have highlighted the combination of (i) the level of preparedness before the crisis, (ii) the government's ability to react quickly and decisively at the outset of the crisis by closing schools and borders, and (iii) the smart strategy of targeted tracing and testing to the most affected areas.<sup>29</sup> The objective here is to better understand why the government has been so effective in implementing the above measures with great determination and effectiveness, when many other countries have struggled. The recent economic literature on institutions has linked the implementation ability of a government to three main factors: (i) vision (leadership and planning), (ii) capacity (financial and technical resources as well as coordination), and (iii) motivation (using accountability and information sharing).<sup>30</sup> Intuitively, the clearer the vision is, and the higher the capacity and the motivation are, the greater the chances are that the measures will be implemented effectively.

**During the management of the COVID-19 crisis, the government has performed equally well on all three factors** (Table II.1). The vision was shaped by strong leadership early in the process when, only one week after the first case was confirmed in late January, the Prime Minister formed the National Steering Committee to coordinate a "whole-of-government" response to the COVID-19 outbreak. This committee, led by a Deputy Prime Minister, was anchored on the participation of technical (Health) and financial (Finance and Planning) ministries, so the government could coordinate actions and planning at the central level. Overall, the government was well prepared thanks to experience accumulated during previous pandemics, especially the SARS epidemic in 2003. At end-2019, Vietnam was ranked 59th out of 190 countries by the Global Health Security Index, which was much higher than other countries at a similar level of economic development.<sup>31</sup>

**With respect to the second factor, capacity, the authorities were able to identify the appropriate financial and human resources.** They were able to quickly mobilize internal resources to fight the pandemic thanks to the accumulation of large cash reserves and to contingent funds set aside from the national budget every year. These resources were allocated to finance the consolidation of the health response and the fiscal package that was adopted in early April to protect the most affected people and businesses. Increasingly, a larger fraction of these reserves has been used to fund the accelerated execution of the public investment program that has become the main policy instrument to stimulate the recovery in Vietnam. To build up human capacity during the crisis, the government acted on two fronts. First, it created economies of scale by grouping medical specialists around a few hotspots—compensating smartly for the limited number of

29 See for example, Dabla-Norris, Gulde-Wolf, and Painchaud 2020; Vu and Tran 2020; Our World Data 2020.

30 See, for example, Andrews, Pritchett, and Woolcock (2012).

31 See Global Health Security Index; <https://www.ghsindex.org>.

experts available in the country (for example, there are three times fewer physicians per capita in Vietnam than in Japan). Second, the authorities mobilized help from all over the society, including the military and students. Soldiers were encouraged to become public servants and to help supervise those who were coming back from quarantine areas. The private sector also undertook initiatives, such as the famous “rice ATMs,” which provided food to the most-needy households in major urban centers.

**Capacity has also been enhanced through the effort to coordinate actions between the central and provincial authorities.** The national Task Force has given authority to provinces to lock down villages and communes, following advisory notices from the Ministry of Health. They were also allowed to enforce checkpoints in and out of the localities and to set up local medical facilities for testing and treatment. These pragmatic measures have supplanted the lengthy and not always effective standard mechanisms of communication between central and local authorities.

**Table II.1. The quality of the COVID-19 response was a combination of vision, capacity, and motivation**

	Category	Description
<b>Vision</b>	Leadership	Engagement at the top from policy leaders, including the Prime Minister Creation of Special Task Force led by Deputy Prime Minister
	Design and planning	Interventions built on the lessons from previous experience Early bold measures including border and school closures from the end of January Effective targeted testing, tracing, and quarantine
<b>Capacity</b>	Coordination	Horizontal coordination (across ministries) was facilitated by the Special Task Force Special authority and autonomy devolved to provinces such as lockdown and controls under the guidance of the Special Task Force
	Capacity	Available financial resources thanks to cash reserves and contingent funds Rapid reallocation of public resources to spending priorities in health and rescue package Reallocation of critical staff around hotspots and hospitals Partnerships with the business community and civil society
<b>Motivation</b>	Accountability	Online and just-in-time reporting of Ministry of Health to monitor suspected and confirmed cases Strict enforcement through communities and penalties
	Communication	Far-reaching outreach campaign through traditional and new social media Publication of COVID-19 cases and tracing, with many details and almost in real time on Ministry of Health website

**Motivation—the third factor—was addressed through the government’s traditional strengths of solidarity and enforcement, and a demonstrated willingness to innovate through modern digital technologies.** Early in the process, the authorities recognized the need to develop a good reporting mechanism to monitor suspected and confirmed cases. This was achieved thanks to a new online reporting system through which all the information was collected almost in real time by the Ministry of Health. This initial effort was consolidated in mid-April, when one Vietnamese cybersecurity firm launched a Bluetooth-enabled mobile app that notifies users if they have been within approximately 6 feet (2 meters) of a confirmed case within 14 days. When users were notified of exposure, they were encouraged to contact public health officials immediately.

**Box II.2. While the Government has been very effective, the implementation of new social programs has been slow**

While the government has been highly effective in implementing most of the measures to control the COVID-19 pandemic, such positive assessment does not apply to the new programs that were adopted to financially support the most affected businesses and people. Indeed, by mid-August, only 1 percent of people surveyed by the World Bank had received financial help from the government, while the initial objective in April was to reach over 10 million, or approximately 10 percent of the population.<sup>a</sup>

The reason behind this slow implementation can be found in the same determinants that explain the success of the overall program: limited capacity and low motivation. On capacity, the government faced two technical issues: (i) how to identify the most affected people and businesses, and (ii) how to transfer the money to them. The first issue was linked to the absence of a comprehensive ID register in the country and the difficulty harmonizing information across existing databases and between local and central authorities. The second issue arose from the fact that most people affected by COVID-19 do not own a bank account, thereby limiting the options for authorities to transfer money to them.

These technical issues were compounded by the declining motivation on the part of the authorities. While they demonstrated their willingness to move quickly early in the nationwide lockdown in April, they gradually lost momentum when the economy rebounded in the following months and the economic costs associated with the pandemic started to decline over time. Initially, the central government moved quickly to collect information on affected people through its network of party representatives at the local and provincial levels. Concurrently, it worked on a new decree to launch an e-payment system thanks to a coordinated effort led by the SBV with other ministries and agencies, and with phone providers. The decree was signed by the Prime Minister, but only in September, authorizing the experiment of such a system on a relatively large scale. All in all, progress is real but slow, as only a small fraction of potential beneficiaries has so far received the promised financial help from the government.

a) Source: World Bank High-Frequency Phone Surveys of Households in Vietnam. Survey of over 4500 households. See <https://microdata.worldbank.org/index.php/catalog/3813>.

**Beyond good monitoring and internal reporting, motivation has been strengthened by the smart combination of incentives and sanctions.** In terms of incentives, the authorities shared the information collected through the internal reporting system with a broad audience, including through the Ministry of Health’s website. This step, unusual for Vietnam, helped send the right signals to the population, which accepted the measures and modified their behavior accordingly. By disseminating information on the evolution of the outbreak, the government has created a greater sense of accountability and solidarity, which was reinforced by the good results achieved by the measures. As expected in Vietnam, to enforce social distancing and quarantine measures, the authorities have relied on the traditional entrenched system of neighborhood party cadres and local networks. This surveillance system was complemented on March 16, 2020, by the requirement that everyone wear a face mask when going into public spaces to protect

themselves and others. This was not a recommendation but a strict regulation to be followed by every citizen. Close monitoring of social media was introduced, and penalties instituted to curb fake news and dissident behavior.

**Smart communication has contributed to the implementation of the COVID-19 measures.** In line with tradition, the state framed the virus as a common foreign enemy and called on the unity of the population to defeat it, echoing the enduring history of a nation always threatened by foreign invaders. Yet, the authorities have also been highly innovative, using nontraditional methods to incentivize people, such as a song that has been viewed more than 32 million times on YouTube. The authorities continuously updated the citizens by sending over 6 billion mobile phone messages and launching the mobile application “NCOVI.” The e-health declaration forms via the government digital platform were made available early in the process. By being transparent and innovative in communicating with the public, the government was able to gain and maintain trust in its ability to cope with the crisis. In a Dalia Research survey of 45 countries asking about public opinion on government responses to the pandemic, Vietnam rated better than other “model” countries such as Singapore and the Republic of Korea, with 62 percent of Vietnamese participants holding the view that the government is doing the “right amount.”<sup>32</sup>

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32 <https://daliaresearch.com/blog/dalia-assesses-how-the-world-ranks-their-governments-response-to-covid-19/>.

## II.4. WHAT ARE THE LESSONS FROM COVID-19 FOR THE ENVIRONMENTAL AND CLIMATE CHALLENGES?

**Today, Vietnam stands at a crossroads of post-COVID-19 recovery.** It needs to choose between business as usual path or a green recovery path to help address the impacts of future pandemics or climate and disaster risks and build a resilient future. While the COVID-19 experience can inspire other countries in their fight against the pandemic, two lessons stand out for Vietnam. First, it is better to be ready and act promptly when facing health and climate catastrophes; and second, the effective implementation of measures depends on strong leadership, adequate capacity, and motivation to experiment and communicate. These lessons can be applied to the environmental and climate challenges.

### *Lesson 1: Green recovery should be a top priority for Vietnam*

**The COVID-19 crisis has arguably enhanced the path toward a greener or cleaner economy in most parts of the world.**<sup>33</sup> A stronger sense of fragility has made governments and people increasingly aware of high-impact shocks such as pandemics and climate-related disasters. The pandemic has also demonstrated that states can intervene decisively once the scale of an emergency is clear and public support is present.<sup>34</sup>

**Today, many countries are making “green” recovery measures a central part of their stimulus packages.** This is because they recognize that the longer-term impact of the coronavirus crisis on climate will depend ultimately on choices made regarding how we all want our economies to look when they recover—and, in particular, how much they will continue to rely on fossil fuels and unsustainable practices (see examples in Box II.3). And just as for COVID-19, the decisive action taken by leaders today can have a positive effect on future generations who either benefit from an effective response or bear the consequences of a botched one.

**Beyond the obvious environmental gains associated to a green recovery, green policies and investments could also boost job creation and economic activity and restore fiscal space.** An example is the well-established finding that a carbon tax can reduce air pollution and help garner more revenue for the government.<sup>35</sup> Equally important is that fiscal policies that combine green investments with fuel taxation engender a multiplier effect on the economy.<sup>36</sup> A recent survey of 230 finance ministry and central bank officials reflects the view that green investments can have a larger impact on GDP and employment growth

33 In the short term, the COVID-19 crisis might have negatively affected the climate change agenda by postponing international events such as the Glasgow conference in April, when 196 countries were expected to introduce revamped plans to meet the emission reduction goals established under the 2015 Paris Agreement. Pandemics have also supplanted climate change as the main risk perceived by people, when, according to the AXA Future Risks Report 2020 (<https://www.axa.com/en/press/press-releases/axa-future-risks-report-2020-the-covid-19-pandemic-eclipses-climate-risk>), they ranked eighth during the previous year. Several polluting industries such as fossil fuels, plastics, airlines, and automobiles have been scrambling for fiscal and financial advantages, including less stringent environmental constraints on their activities and investments.

34 See, for example, Cameron et al. (2020); and OECD (2020).

35 Taxing carbon is not only the most effective way to curb carbon emissions but is also a large and mostly unused tax base—a massive exemption, contradicting the principle that countries should have a broadened tax base and low as well as uniform tax rates.

36 Many examples can be found in OECD (2020). See also the new analysis commissioned by the We Mean Business coalition and conducted by Cambridge Econometrics that shows that green recovery plans boost income, employment, and GDP better than return-to-normal stimulus measures, with the added benefit of reducing emissions (<https://www.wemeanbusinesscoalition.org/wp-content/uploads/2020/10/Green-Recovery-Assessment-v2.pdf>).

(owing to their often deeper labor content) than emissions-intensive investments.<sup>37</sup> For example, in the United States, it has been found that for each dollar spent, public clean transit projects created 70 percent more job hours than highway networks. Similarly, investments in renewable energy, energy efficiency, and land restoration can generate as much as double the jobs per dollar spent as investments in fossil fuels. With any stimulus program, the role of public investment is not just to directly stimulate the economy, but also to crowd in private investment. The same is true for green stimulus programs that raise the ability of finance ministries to leverage private sector co-financing to green public investment, even if the fuel tax revenues are not earmarked for the green investments.<sup>38</sup>

### Box II.3. Green recovery: recent initiatives

Many governments have already announced their commitment to use a fiscal stimulus in response to the COVID-19 health and economic crisis, of which about one-third is expected to be spent in sectors that impact the environment. The European Union is at the greener end of the spectrum, with about 30 percent of its €750 billion (US\$891 billion) package dedicated to climate-friendly investments over the next decade. Many countries are also investing in decarbonizing electricity (Colombia, France, Italy, the Republic of Korea, Morocco, and Nigeria), energy efficiency (France and the UK), sustainable transportation, (Australia, Austria, France, Germany, Korea, and Sweden), nature-based solutions (Ethiopia, India, and New Zealand), and the digital and circular economy (China and Myanmar).

An example is Korea's Green New Deal of July 2020, which is part of a wide national strategy to create 659,000 jobs and help the country overcome the economic crisis while addressing climate and environmental challenges. Korea will commit approximately US\$61 billion over five years (2020–25) to boost renewable energy capacity to 42.7 gigawatts by 2025 from 12.7 gigawatts in 2019 and expand the green mobility fleet to 1.33 million electric- and hydrogen-powered vehicles. The plan also promises refurbishment of public rental housing and schools to make them zero energy, and transformation of urban areas into smart green cities.

Sources: OECD 2020; World Meteorological Organization 2020.

**Building on this vision, Vietnam should become the world champion of green recovery.** It would be an economically sound policy decision, as the increased focus on the environment will put Vietnam on a sustainable path to achieve its long-term target of becoming a high-income economy by 2045. International experience reveals seven policies and actions that could potentially be both economic multipliers and improve climate impact metrics<sup>39</sup>:

1. Prioritize investments in cleaner energy, or condition assistance to businesses, especially in carbon-intensive sectors, on drastic cuts in emissions.
2. Adjust pricing of nonrenewable or polluting resources to encourage responsible behaviors, including by removing subsidies and/or introducing taxes (for example, a carbon tax).
3. Extend grants, loans, and tax relief for sustainable transport and mobility, water treatment, waste management, the circular economy, and clean energy research, including through the financial system, by requiring banks to invest less in fossil fuel and more in climate change mitigation and resilience efforts.
4. Provide financial support to households for improved energy efficiency and renewable energy installations (with a focus on improved insulation, heating, and domestic energy storage systems).
5. Support measures to foster the restoration of ecosystems as vital green infrastructure (for example,

37 Network for Greening the Financial System 2020.

38 For fuller arguments, see Estevao 2020.

39 For more details, see Stern and Stiglitz et al. (2020); and OECD (2020).

intact mangroves that dampen storm surges), including carbon-rich habitats and climate-friendly agriculture (many such investments can also help boost and transform the tourism sector as part of post-COVID recovery efforts).

6. Ensure new infrastructure developments are informed about disaster and climate risk to avoid high-hazard areas, and ensure that design standards can withstand the impact of disasters in order to avoid the creation of new risks.
7. Invest in adaption measures through investment in a combination of green and gray protection strategies to reduce the risk of people and assets to climate and disaster risks.

**Front-loading these seven policies and actions and associated investment priorities should help Vietnam stabilize its economy now, reduce investment needs during the coming austerity period, and achieve climate targets in both the short and longer terms.** To illustrate, the government needs to act early to avoid investment in technology and infrastructure that will lock the country in carbon-intensive industries and lock in infrastructure vulnerabilities.<sup>40</sup> In a recent analysis, the World Bank estimated that the new investments in the energy and transport sectors necessary to substantially reduce greenhouse gas emissions by 2030 would cost around US\$30 billion.<sup>41</sup> Yet, combined with the gradual introduction of a carbon tax on major polluting industries, this line of action could, from 2021 to 2030, generate an increase in GDP of approximately US\$50 billion through direct and indirect effects, including on people's health and existing infrastructure. The focus on cleaner energy would also help create jobs, as investments in wind could create 2.3 times as many jobs per megawatt installed as fossil fuel and coal. Undoubtedly, the gains would be worth the costs of the initial investments for Vietnam.

**Another priority area for Vietnam should be the tourism sector, given its current weight in the national economy—close 10 percent of GDP in 2019.** Tourism is driven by human needs, and COVID-19 will result in a change in the daily habits of everyone adjusting lifestyles with surroundings, providing opportunities for businesses to think further about sustainable smart tourism. Front-loading green initiatives will be welcomed because tourism has already contributed to the environmental degradation and deterioration of biodiversity in the country. Given that 42 percent of coastal hotels are located near eroding beaches, attention should be paid to coastal protection investments that stabilize the coastal areas, while also protecting them from windstorms and storm surge. Greater attention to the environmental agenda will also influence the tourist industry, as visitors are generally willing to pay more for community or cleaner services.<sup>42</sup> This has become even more important as several tourism attractions - such as lakes, mountains, and beaches - are suffering from high level of pollution. For example, plastics are found in many locations in Vietnam. A green orientation in the tourism sector will not only reduce the industry's environmental footprint, but also develop more quality tourism, with a greater multiplier impact on local jobs and businesses. This strategic move has become even more important for the future of this industry because mass tourism is unlikely to rebound rapidly in the post pandemic era.

**An additional priority should be to integrate risk information into spatial plans and new town and industrial development.** Currently, over half of all industrial zones are directly exposed to the threat of intense flooding.

40 Such a shift toward greener energy will require prerequisites including (i) capacity increase and modernization of the power grid to be ready to integrate renewables; (ii) regulations and infrastructure required for new opportunities such as decentralized solar-based generation and electric mobility; and (iii) need for system-balancing investments to get rid of coal, such as moving toward gas as a bridging fuel.

41 For details, see World Bank (2020).

42 Research from Trip Advisor showed that 34 percent of tourists are willing to pay more for environmentally friendly hotels, while 50 percent of international visitors are willing to pay more for companies that can provide benefits to the local community and conservation activities (see Yu and Jai 2017).

The impact of floods and windstorms can be significant to the ability of industry to operate and to the integrity of supply chains. The 2011 Bangkok flood is an example of the high cost that the government paid to restore private industrial protection that was specifically promoted in flood-prone areas. For Vietnam, a green recovery would be ultimately a smart business decision. It would support the country's growth model to participate further in global value chains by attracting multinationals that will help it acquire new technologies and increase local content. It would be smart because many of these multinationals have already incorporated environmental concerns as part of their corporate responsibility under the growing pressure of their customers.<sup>43</sup> By getting ahead of competitors thanks to its good management of the COVID-19 crisis, Vietnam has created a competitive edge that can be maintained or even increased by moving faster than others toward a clean or green economy.

## ***Lesson 2: Implementation matters for success, or “walking the talk”***

**While it is important to define upfront what needs to be done to promote a green recovery in Vietnam, most above-described actions have already been included in some form or other as part of many recent sectoral and national strategies.** Therefore, the remaining and bigger challenge for the authorities is to implement these actions with a greater sense of urgency.

**With COVID-19, the Vietnamese authorities have faced their sternest test in recent decades, dealing with a pandemic that few anticipated.** They have been forced to make crucial decisions under severe pressure, which required them to combine vision, capacity, and motivation. By now, it can be argued that the implementation of the environmental agenda is not constrained by the absence of vision and capacity, even if there is still room for improvement.<sup>44</sup> Rather, the main bottleneck appears to be the limited motivation of local stakeholders to adjust their behaviors to the environmental and climate challenges because, as explained earlier, of both market and government failures.

**Drawing on COVID-19 lessons, the immediate priority for the government should be to create additional space for experimentation and innovation through the application of four principles.** First, smart incentives should be used to motivate people, businesses, and government officials. Second, fear of sanctions matters. Third, people need to trust policymakers, policymaking, and institutions, which, in turn, depends on the government's own behavior. Fourth, there should be clear, broad, and transparent communication about actions and results, so they are seen to be in the best interest of the citizenry.

### ***Create incentives by adjusting prices***

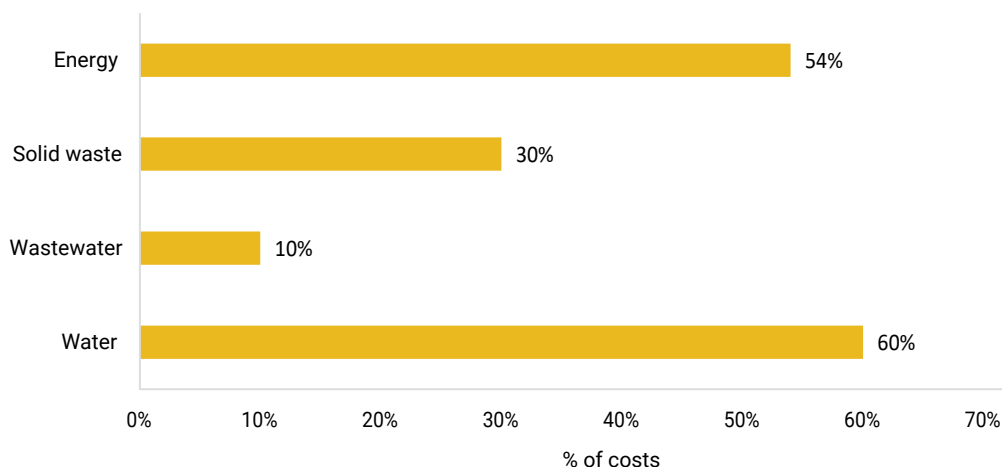
**Motivation is about finding smart instruments to encourage economic agents to do the right thing at the right time.** In economics, the textbook instrument to use is prices. In the environmental area, the use of user fees that are too low results in the unsustainable management of nonrenewable resources. Today, in Vietnam, most infrastructure services fees are only equivalent to a fraction of their costs, leading to irresponsible behaviors (Figure II.5).

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43 This topic was part of the main theme of the last Vietnam Development Forum organized jointly by the Government of Vietnam and the World Bank in late September 2020.

44 For example, there is still a need to be more ambitious on nationally determined contribution targets for Vietnam and to coordinate them better with the upcoming power sector master plan, which should translate the vision into actionable roadmaps.



**Figure II.5. User fees are lower than supply costs in infrastructure sectors**

Source: World Bank staff calculations based on government data.

**The rationale should therefore be to raise user fees in energy, water, or waste so that customers will be more careful in their use** (see Box II.4). To the extent that the gradual increase in fees will be realized through the elimination of subsidies, it will also encourage suppliers to become more cost-effective over time. Such an approach could also be used to charge polluters by taxing them on their carbon emissions, water poisoning, or both.

#### Box II.4. How pricing mechanisms can lead to new behaviors

As shown in Figure II.5, user fees on infrastructure services are today low in Vietnam—far from the supply costs and even more distant from total social costs when all externalities are taken into account. While subsidized fees were justified in the country's effort to increase access to these services, the main challenge is now to increase responsible behaviors. Vietnam has now reached almost universal coverage for electricity and water services.

In the energy sector, current tariffs cover the cost of supply but do not reflect the future investments and potential externalities (for example, from pollution). In addition to gradually raising tariffs, the government could also incentivize the use of renewable energies by making their prices more attractive or by making available concessional credit lines or a guarantee facility.

Carbon pricing should be a valuable tool for the government to promote cost-effective greenhouse gas mitigation. It helps internalize the societal costs of greenhouse gas emissions while leveling the playing field between polluters and nonpolluters. Firms with low-carbon technologies benefit from past and current mitigation investments, while high-emitters are incentivized to efficiently reduce emissions to avoid carbon payments. Vietnam has been implementing the environmental protection tax (EPT) since 2012, and the tax now accounts for 2 to 3 percent of the public budget. The existing tax, which is narrowly focused on hydrochlorofluorocarbons (HCFCs), should be broadened to include other fluorinated greenhouse gases, as in several other countries.

In the water sector, progress has been made on the principle that pricing should be close to full cost recovery, but there is still room for improvement. Recent experience has shown that user willingness to pay and to use limited water resources more efficiently are closely correlated with the quality of services.

An area of concern is waste generation where the fees paid by households are extremely low (less than 0.5 percent of spendable income, while international practice is 1 to 1.5 percent). Vietnam currently has an environmental tax, although low, on importers and producers of shopping bags. This tax generates revenue but is yet to stimulate much-needed behavior change.

**While few will disagree with the effectiveness of using pricing environmental policies to change behaviors, raising prices or taxes can be politically and socially challenging in the short term.** There have sometimes been strong negative reactions by consumers around the world against the introduction of carbon taxes or the reduction of subsidies that were going to increase fuel and gasoline prices for the final consumer. For that reason, such policies should be introduced gradually, with smart information campaigns explaining the longer-term benefits. The government can also consider reducing other taxes and thus alleviate the overall fiscal burden on firms and households. The use of targeted subsidies on most vulnerable groups, partly cross-subsidized by the revenues of environmental taxes paid by more affluent groups, is also an option that has been implemented by Germany and Sweden to reduce energy prices for certain households.

### ***Fear of sanctions through enforcement of regulations***

**Regulations can often complement incentives to bring about behavioral change.** Incentives are an efficient way to motivate changes in individual and collective behaviors, as they do not require strict monitoring or sanctions by the government. However, they are not always effective. Often, they must be complemented by regulations that bring about a change in behaviors. The purpose here is not to present a lengthy list of the potential regulations that the Vietnamese government could consider, but rather to emphasize the need to balance between the use of soft and hard regulations.

**The authorities should consider using soft regulations because they require less monitoring and attention by the authorities.** Soft regulations can include labels with information on the energy efficiency of appliances, cars, buildings, and organic food, as is commonly done in Organization for Economic Cooperation and Development (OECD) countries. Concurrently, harder regulations are necessary to balance between “carrots and sticks.” The sticks could be the introduction of targets or ceilings on, for example, the quality of water or gasoline. They could also aim at controlling or prohibiting the use of products that are detrimental to the environment—the use of permits for pesticides and chemicals, for example—or protecting citizens against natural dangers such flooding or rising ocean waters.

**The power of regulations depends, to a large extent, on the state’s capacity to monitor them and its willingness to enforce them and sanction trespassers.** As demonstrated by COVID-19, this requires a good reporting system, effective controls, and an efficient justice system. Unfortunately, many environmental regulations are not fully enforced, as it is difficult to identify trespassers and to punish them, as illustrated in Box II.5 for sand mining permits.

### Box II.5. Enforcement of sand mining permits

Illegal sand mining has become common and indiscriminate due to rapid economic development and the subsequent growth of construction activities in Vietnam in recent decades. Sand mining from rivers has, however, led to a number of adverse environmental impacts, such as riverbank and coastal erosion, lowering of water tables, loss of the aquatic population's habitat, and destruction of bridges, dikes, and roads along the river and the coast. Despite the negative impacts of sand mining, local authorities and residents have seemingly exerted inadequate and ineffective efforts to control it, as evidenced by the mushrooming of sand mining activities in most or all rivers in Vietnam.

Recognizing the problem, the Government of Vietnam issued several regulations to stop illegal sand mining. For instance, the Law on Dike Protection in 2006 bans any activities on the dike protection corridor (that is, 20 meters from the dike footing toward the river), including sand mining. More recently, in April 2020, the government adopted a new decree to control further sand mining, with the objective of protecting riverbanks and alluvial grounds.

However, the development of illegal sand mining has continued because the laws and regulations have not been properly enforced. This could to some extent be due to the existence of vested interests and to the limited surveillance capacity of provincial authorities. It would also require further transparency on the identity of the main trespassers that could be published on a regular basis, as done for the monitoring and reporting of COVID-19 cases. The application of fines to trespassers would also be an important element of the government strategy, as would proper coordination between the central and provincial governments and across provinces. The authorities should also consider the development of alternative economic activities or training for illegal miners who voluntarily stop their activities.

### *Build trust by example*

**The government should act through incentives and sanctions to modify behaviors of businesses and households.** Yet, the state is not only a regulator but also a key actor by investing in, producing, or consuming a number of products that have a direct impact on natural resources and the environment. If the authorities want to create a virtuous circle in favor of environmental measures, it should most certainly start with its own operations, paving the way and creating a higher degree of trust in the reforms.

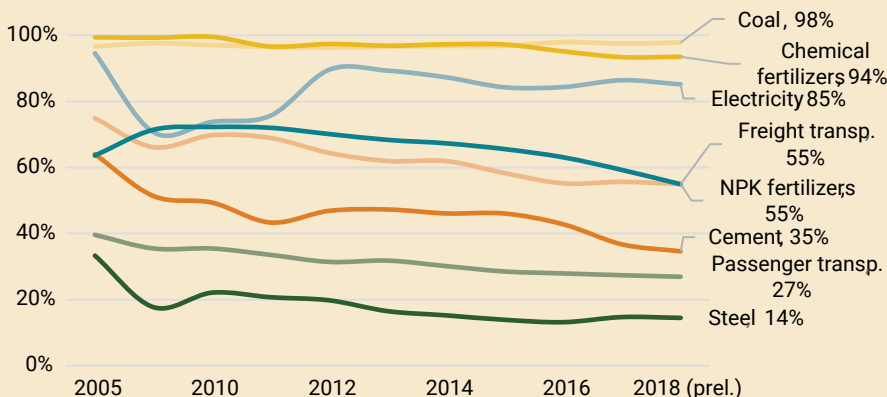
**Showing the way can take several forms.** The state can internalize environmental concerns in its investment program. As is done in an increasing number of countries, environmental and/or disaster and climate risk criteria can be incorporated into the selection of investment projects in strategic sectors such as tourism, energy, and agriculture, or in the design of partnerships with the private sector. This could include mandating and conducting ex-ante policy reviews, or the requirement to show how new infrastructure or commercial development can help mitigate exposure to climate and disaster risks, as is now required in the Philippines. Specific criteria could be considered for the public procurement of relevant projects or the issuance of public bonds (so-called green bonds). The central government could adapt the criteria currently used to allocate fiscal transfers to provinces, as has been done in Brazil, France, Germany, Portugal, and other European Union countries. In Brazil, where protection of forests is an important public service, ecological fiscal transfers were made to municipalities to compensate them for the opportunity costs associated with a protected area that is subject to land-use restrictions.

**The government can also make its own buildings energy efficient.** This can include possible use rooftop solar panels to power their daily operations. These changes can be as easy as using LED bulbs or energy efficient air conditioners, as improving energy efficiency is the best and lowest-cost option to improve energy security, reduce pollution, and mitigate climate change. Finally, as emphasized in Box II.6, state-owned enterprises (SOEs) have a significant role to play in the implementation of environmental policies, especially but not only in the power sector.

**Box II.6. Showing the way by example: the role of SOEs in the power sector**

Carbon dioxide (CO<sub>2</sub>) emissions have increased exponentially in Vietnam in recent decades from 45 million tons in 2005 to over 205 million tons in 2016. While there are many reasons behind this surge, about two-thirds of gas emissions are caused by the energy sector. If the rapid economic growth compounded by the expanding population has been the underlying factor behind the increase in energy consumption, Vietnam has also been an unusually high user of energy. Overall, it is estimated that for each percentage increase in GDP, energy consumption rises by 1.5 to 2.0 percent, which is twice as high as the elasticity reported in most OECD countries. Such a difference is also visible at the industry level; for example, Vietnam’s iron and steel plants use twice as much energy as similar plants around the world to produce the same amount of steel.

**Figure BII.6.1. Evolution of SOE’s output share in Vietnam’s carbon-intensive industrial sectors**



The demand for more energy has been met to a large extent by increasing hydro and coal generation, which represented 37 percent and 35 percent, respectively, of the total energy produced in the country at end-2019. Power generation from coal has been the main source of carbon dioxide emissions, as it produces over 99 million tons of CO<sub>2</sub> every year. Three-quarters of these coal power plants are located next to Hanoi and Ho Chi Minh City, and are therefore one of the main sources of air pollution in these two cities.

The coal power generation industry, like most high carbon-intensive sectors, is dominated by SOEs (Figure BII.6.1). If these SOEs are part of the problem, they can also be part of the solution. The state could incentivize or mandate them to “clean” their current operations and to invest in renewable energy over time. At the international level, there are an increasing number of governments (Germany, India, China) and companies (General Electric) that have increased their commitment to move away from coal power generation in the foreseeable future.

**Think about communication and information sharing mechanisms**

**The COVID-19 pandemic has demonstrated that just-in-time and transparent information can be a game changer for increasing accountability to, and the awareness of, the population.** Unfortunately, Vietnam still does not have an effective and comprehensive communication strategy around the environmental and climate agenda, or efficient data collection and sharing mechanisms.

**Using the Ministry of Health’s approach to COVID-19, the government could start by creating an interoperable and interactive digital platform of the natural environment and the built environment, where the level of disaster and climate risk can be modeled and quantified for options of new developments.** Such a platform can be used to visualize and georeference damage to assets following a disaster event, as is done in Mexico by FONDEN (the Fund for Natural Disasters), in order to accelerate recovery and reconstruction. The online reporting system has proved to be determinant in tracking suspected and confirmed COVID-19 cases over time. At a more operational level, specific information systems need to support sector planning

and policymaking. For example, investments in land information systems will facilitate environmentally sustainable rural land-use planning and will also improve the transparency of transactions in land markets. In addition, the transition to e-payments would enable the government to quickly and directly support the poor and vulnerable through cash transfers after disaster strikes.

**Making these data available to a broad range of stakeholders through conventional and innovative channels builds trust through example.** Again, citizens have adjusted their behaviors when they could see the evolution of the pandemic and the results of the actions taken by the authorities. Transparency also contributed to increasing trust in the public actions and contributed to creating a greater sense of individual and collective responsibility. Imagine how powerful an online dashboard would be where, similar to existing air quality monitoring platforms, citizens could assess and quantify the vulnerability of assets to climate and disaster risks in Vietnam, including at the national, provincial, and household levels.

**If the state should push for open data, the private sector should also play its part.** Mark Carney, former Governor of the Bank of England, called for all companies to provide clear information to customers, the public, and investors about how they plan to move to net-zero greenhouse gas emissions by 2050.<sup>45</sup> The Extractive Industries Transparency Initiative could be a model to adopt, as the regular reporting and publication of gas emissions by individual companies will not only increase their compliance, but also encourage more transparency from the authorities on the implementation of the actions taken to curb these emissions.<sup>46</sup>

**Communication has been an effective tool for fighting the COVID-19 crisis.** The government can use the same innovative approach by combining traditional and social media campaigns. It should also consider strengthening environmental education to promote greener habits and create opportunities to promote research and development on topics such as green technology. Education, at multiple levels, on subjects such as greener habits, green engineering, and green technology will be important to increase the locally available competencies to assist with greening growth. Information on greener habits can help increase the awareness of citizens regarding their right to clean air, water, and soil, as well as their responsibility for maintaining them. Building local constituencies can take time. Local constituencies, however, will outlast changes in administration and foster continuous environmental mainstreaming. Similarly, early warning systems to alert citizens of the real-time occurrence of flood and windstorm events and direct them to shelters and other types of government support following an event, would save lives and kickstart recovery.

**The optimal and perhaps most straightforward way for Vietnam to communicate the urgency of the environmental and climate challenges would be to reconsider using gross domestic product as its metrics of economic performance or to broaden it to include natural capital as suggested by the World Bank.**<sup>47</sup> Traditional indicators, by failing to account for environmental damage and degradation, provides an excessively rosy picture of the economy. As stated by former World Bank Chief Economist and Nobel Laureate Joseph Stiglitz: *“Getting the measure right – or at least a lot better—is crucially important, especially in our metrics- and performance-oriented society. If we measure the wrong thing, we will do the wrong thing. If our measures tell us everything is fine when it really isn’t, we will be complacent.”*<sup>48</sup>

**There is no more time for complacency in Vietnam.**

45 <https://www.theguardian.com/environment/2019/oct/13/firms-ignoring-climate-crisis-bankrupt-mark-carney-bank-england-governor>.

46 <https://eiti.org>.

47 For more details, see The World Bank,

48 Stiglitz 2019. <https://www.worldbank.org/en/topic/natural-capital>

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