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THE IMPACT OF THE PANDEMIC ON MACROECONOMIC STABILITY IN VIETNAM: SURVEY EVIDENCE AND POLICY IMPLICATIONS

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A B S T R A C T

This paper examines the impact of pandemics on macroeconomic stability in Vietnam, drawing on a survey of 569 respondents from the finance-banking, research, and business sectors. The survey is framed around three hypothetical future-pandemic scenarios (approximately equivalent to, more severe than, and much more severe than COVID-19) and uses a five-point Likert scale. The results indicate that pandemic shocks are perceived as severe and that they simultaneously weaken the main pillars of macroeconomic stability; growth and employment, as well as price stability, are viewed as the most sensitive components. In terms of transmission, disruptions in the real economy are seen as the dominant channel, followed by external shocks and fiscal pressures; the financial-credit channel stands out through rising bad-debt risk and more cautious credit supply, amplifying the shock with a lag. Regarding shock-absorbing mechanisms, healthcare capacity and social protection are considered the most important pillars, while policy delays and inconsistencies, uneven digital transformation, and fragmented communication are bottlenecks that undermine response effectiveness. Based on these findings, the paper proposes two groups of solutions focusing on prevention and response.

1. INTRODUCTION

1.1. Research Background

The experience of COVID-19 shows that pandemics are not merely public health crises but also multilayered socioeconomic shocks (Panneer et al., 2022). Specifically: *(i)* in the real economy, pandemics reduce labor supply through illness and mobility restrictions, interrupt production, disrupt logistics and supply chains, and suppress consumption and investment as incomes fall and uncertainty rises (Yu et al., 2022); *(ii)* regarding prices, combined supply-and-demand shocks, localized shortages of essential goods, and higher logistics costs can increase inflation volatility, making it more difficult for firms and households to plan their economic activities (Ivanov & Dolgui, 2022); *(iii)* on the fiscal side, the mechanism of "declining revenues and rising expenditures" puts pressure on budget balances, while recovery support can become fragmented and add to public-debt burdens (Elberry et al., 2023); *(iv)* in the monetary-financial sphere, heightened credit risk and risk-off sentiment can weaken policy transmission as banks become more cautious, funding costs rise, and non-performing loans tend to increase; and *(v)* in highly open economies, external shocks transmitted through exports, tourism, foreign direct investment, and international supply chains can rapidly spill over into the domestic economy, posing risks to the balance of payments, exchange rates, and foreign-reserve buffers (Government News (2020).

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In this context, macroeconomic stability is not merely the stability of a single variable but rather a state of relative equilibrium among core pillars such as economic growth and employment, price stability, fiscal sustainability, monetary stability, and external stability (Agénor et al. 2012; Pieloch-Babiarz et al., 2021; Roszko-Wójtowicz & Grzelak, 2020; . When a pandemic occurs, these pillars are affected simultaneously and may amplify one another. Therefore, the state plays the role of a shock absorber, meaning that the capacity to control the pandemic, coordinate policies, and maintain social and economic functioning determines the depth and duration of disruptions, thereby shaping the degree of macroeconomic instability (Ministry of Health 2023a; 2023b;2025; 2026).

1.2. Research Gaps, Approach, and Objectives

Assessing the impact of pandemics on macroeconomic stability using actual data often faces several limitations, including time lags in macroeconomic indicators, the simultaneity of multiple shocks (such as commodity price fluctuations, global monetary policy shifts, and geopolitical tensions), and the fact that pandemic impacts may vary across different phases (outbreak, adaptation, and recovery). Meanwhile, the perceptions and expectations of firms, households, and financial actors can strongly influence economic behavior (e.g., hoarding, postponing investment, scaling down production) and alter the effectiveness of policy measures. Therefore, expert surveys, especially among groups with hands-on experience and close observation of economic activity, provide an important complementary approach for identifying dominant transmission channels and policy priorities under conditions of uncertainty.

On this basis, this study focuses on three main objectives: *(i)* to describe and analyze survey results regarding the severity of pandemic shocks, the degree of macroeconomic instability, and the channels of impact transmission; *(ii)* to evaluate the shock-absorbing role of state capacity and identify key bottlenecks; and *(iii)* to discuss policy implications and propose priority solution groups for prevention and response. The structure of the paper is as follows: an overview of the research background, survey design, and objectives; analysis of survey results; discussion of findings and conclusions.

1.3. Survey Design and Measurement Scales

The survey included 569 respondents and was conducted by the author from December 2025 to January 2026. All statements were measured using a five-point Likert scale (1 = strongly disagree; 5 = strongly agree). Respondents first selected one future pandemic scenario from three alternatives: S1 (approximately equivalent to COVID-19), S2 (more severe than COVID-19), and S3 (much more severe than COVID-19). Subsequently, respondents evaluated the following constructs (higher scores indicate stronger perceived impacts and/or greater instability):

- Pandemic shock option (PSO), measured by four indicators: PSO1 - The pandemic spreads rapidly, disrupting socioeconomic activities on a large scale; PSO2 - The pandemic lasts longer than expected, complicating economic recovery plans; PSO3 - High pressure on the healthcare system increases costs and social instability; PSO4 - Strict travel restrictions and social distancing measures disrupt production and business operations.
- Macroeconomic instability (MAST), consisting of five components: *(i)* Economic growth and employment stability (GEST); *(ii)* Price stability (PST); *(iii)* Fiscal sustainability (FST); *(iv)* Monetary stability (MST); and *(v)* External stability (EXST). Each component is measured by three indicators.
- Perceived intensity of transmission channels, consisting of four components: *(i)* Disruptions in the real economy (RD), measured by eight indicators; *(ii)* Fiscal pressures (FIS), measured by four indicators; *(iii)* Financial stress and money (FMS), measured by four indicators; *(iv)* External sector effects (TFE), measured by four indicators.
- State resilience capacity (STATE), consisting of five pillars: Policy design and governance capacity (POA); Healthcare capacity and pandemic control (HEA); Digital transformation and operational continuity (DIR); Social security and support for vulnerable groups (SOS); Communication, public trust, and social coordination (TRU). Each component is measured by three or four indicators, including reverse-coded statements to test internal consistency (Vietnam Social Security, 2021).
- In addition, the survey includes a section for selecting the "most important transmission channel" and a section for ranking priority policy solution groups for prevention (before a pandemic) and response (after a pandemic occurs), to identify policy implications.

2. ANALYSIS OF SURVEY RESULTS

2.1 Characteristics of the Survey Sample and Level of Experience

The survey sample exhibits a relatively balanced gender structure, with a slight predominance of female respondents (57.3%), while males account for 42.7%. In terms of professional fields, respondents from the finance-banking sector represent 34.3%; researchers from universities and research institutes account for 27.9%; business representatives comprise 27.1%; the public sector (mainly central government agencies and policy-making bodies) accounts for 7.4%; and other groups represent approximately 3.4%. Thus, the sample is concentrated in three core groups, finance, banking, research, and business that typically have strong access to macroeconomic information, accounting for about 89.3% of respondents. Regarding professional experience, respondents with more than six years of experience account for approximately 80.5% (6-10 years: 29.2%; 10-15 years: 27.2%; over 15 years: 24.1%). This profile is advantageous because the survey requires

respondents to relate their experience across economic cycles and evaluate hypothetical pandemic scenarios.

The perceived level of impact during the COVID-19 period was predominantly rated as high: the "high/very high" group accounts for 70.3%, followed by the "moderate" group at 21.1%, the "low" group at 6.3%, and the "uncertain" group at 2.3%. At the same time, the level of attention to macroeconomic information over the past 12 months is also relatively high, with the "high/very high" group accounting for 62.0%, the "moderate" group at 33.4%, and the "low/very low" group at only 4.6%. These characteristics indicate that the data reasonably reflects the perceptions of groups with substantial experience and interest in macroeconomic management.

2.2 Selection and Validation of Hypothetical Pandemic Scenarios

The distribution of scenario choices shows that S1 and S2 are nearly balanced, with S1 accounting for 45.0% and S2 for 45.2%, while S3 accounts for only 9.8%. The low proportion of S3 can be interpreted as indicating that COVID-19 has been perceived by most respondents as a very large shock, and that a pandemic "much more severe" than COVID-19 lies beyond common expectations.

To test the consistency of perceptions, the survey included two validation statements. For the statement "the selected scenario is at least as severe as COVID-19," the agreement rate (scores 4-5) reached 75.6%, with a mean score of 3.82 out of 5. For the statement "the level of economic disruption in the scenario is equal to or greater than that of COVID-19," the agreement rate was 63.6%, with a mean score of 3.69 out of 5. This difference suggests that respondents show stronger consensus regarding the "severity of the pandemic" than the "degree of economic disruption," reflecting expectations that adaptive capacity, technological advances, and accumulated policy experience may help mitigate economic disruptions even under severe pandemic conditions.

2.3. Severity of Pandemic Shocks

The composite PSO score (average of four indicators) reaches 3.821 (SD = 0.593), indicating a perception that leans toward "agreement" regarding the severity of pandemic shocks. The mean scores of individual indicators fall within a narrow range of 3.789-3.840, and the agreement rates (scores 4-5) range from approximately 68.4% to 70.8% (Figure 1).

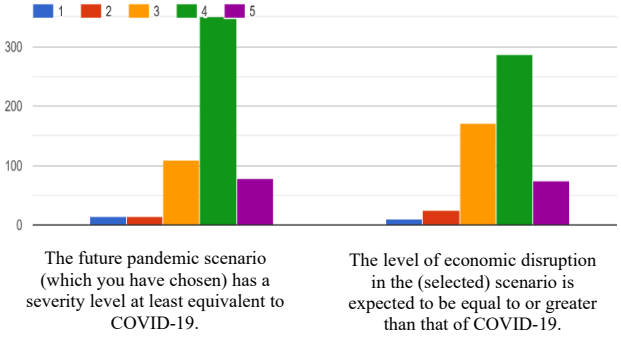

Figure 1. Future pandemic scenarios
Source: *Author's survey results.*

Among the indicators, the two characteristics receiving the strongest consensus are "rapid spread causing widespread disruptions" (Mean = 3.840) and "high pressure on the healthcare system increasing costs and social instability" (Mean = 3.830). The indicator "strict social distancing and travel restrictions" has the lowest mean score (3.789), though it remains at a relatively high level. This reflects both a shared perception of its disruptive effects and an expectation that more flexible measures may be applied in the future thanks to advances in technology and preventive healthcare.

2.4. Degree of Macroeconomic Instability (MAST)

All components of macroeconomic instability (MAST) record mean scores above 3.6, indicating that respondents tend to "agree" that pandemics weaken the pillars of macroeconomic stability. The two most prominent components are GEST and PST, reflecting the direct impacts on economic growth, employment, and the price level (Table 1). Specifically:

(1) Economic growth and employment stability (GEST). All three indicators show agreement rates (scores 4-5) of approximately 66%-70%, while the proportion of disagreement is very low (around 2%-3%). The most strongly emphasized aspect is the increase and persistence of unemployment/underemployment (Mean = 3.810), suggesting that respondents perceive the labor market as a "sensitive point" of macroeconomic instability during pandemics.

Table 1. Average scores of MAST components

No.	Indicator	Value	SD
1	Economic growth and employment stability (GEST)	3.790	0.575
2	Price stability (PST)	3.759	0.580
3	Fiscal sustainability (FST)	3.733	0.588
4	Monetary stability (MST)	3.662	0.594
5	External stability (EXST)	3.731	0.566

Source: *Author's survey results*

(2) Price Stability (PST). Instability in essental goods prices emerges as the most prominent issue (Mean = 3.830; agreement rate = 72.4%). This result is consistent with the mechanisms of logistics disruptions and supply-demand fluctuations during pandemics. Inflation expectations receive a lower level of consensus and a higher proportion of neutral responses, reflecting the technical nature of this issue and its dependence on the extent of information monitoring across respondent groups.

(3) Fiscal Sustainability (FST). Respondents show relatively high agreement regarding the "declining revenues - rising expenditures" pressure (Mean = 3.768; agreement rate = 68.2%), reflecting the typical fiscal mechanism during crises. Indicators related to budget

deficits, public debt, and financing costs exhibit slightly lower levels of consensus and higher neutrality, suggesting that assessments of fiscal sustainability may vary according to the knowledge and observational capacity of different groups.

(4) Monetary Stability (MST). This is the component with the lowest mean score (3.662) and a relatively high proportion of neutral responses. The aspects receiving agreement include liquidity pressures and weakened monetary policy transmission due to heightened risks and increased risk-off sentiment. This pattern suggests that, under pandemic shocks, the issue is not merely the level of nominal interest rates but also the distortion of transmission channels caused by weak credit demand and cautious banking behavior.

(5) External Stability (EXST). The EXST score is relatively high (3.731). Two aspects receive strong agreement: pressures on the balance of payments due to declines in exports, tourism, and capital inflows; and volatility in international capital flows, increasing external risks, and narrowing foreign reserve buffers. Meanwhile, exchange rate volatility is assessed at a slightly lower level with a higher neutrality rate, reflecting differences in the degree of direct exposure across professional groups.

Overall, the synthesis of components reveals a clear logic: instability emerges first in the real sector (growth and employment) and essential goods prices, then spreads to the external sector and fiscal conditions, while the monetary channel displays greater heterogeneity and is strongly influenced by risk perceptions.

2.5. Transmission Channels of Impact

All channels are evaluated at relatively high levels and with similar scores (Table 2), with RD and TFE slightly higher than the others, reflecting the perception that shocks are transmitted most strongly through the functioning of the real sector and the degree of economic openness. Specifically:

Table 2. Average scores of transmission channels

No.	Indicator	Value	SD
1	Disruptions in the real economy (RD)	3.807	0.599
2	Fiscal pressures (FIS)	3.764	0.549
3	Financial stress and money (FMS)	3.780	0.539
4	External sector effects (TFE)	3.803	0.549

Source: *Author's survey results*

(1) Disruptions in the Real Economy (RD). The two most prominent bottlenecks are the prolonged stagnation of tourism, services, and transportation (Mean = 3.866) and logistics disruptions causing congestion in goods circulation (Mean = 3.852). High levels of agreement are also observed for issues such as disruptions in imported input materials, shortages of goods, postponement or reduction of investment by firms, and declining incomes leading to reduced consumption. The indicator with a lower (though still high) mean score is labor shortages, suggesting that, in respondents' perceptions, logistics disruptions and input supply breakdowns are more salient drivers of economic disruption.

(2) Fiscal Pressures (FIS). Respondents particularly emphasize the risks of indiscriminate support measures (FIS3 records the highest agreement rate at 70.1%), implying that fiscal policy design should be well-targeted to avoid efficiency losses and rising debt risks. At the same time, pressures on budget balances limiting the capacity to respond to new shocks (FIS4) receive strong agreement, indicating that fiscal policy is both a shock-absorbing tool and a resource that can be quickly depleted in the absence of adequate buffers.

(3) Financial stress and money (FMS). The most salient issue is the rising risk of non-performing loans weakening banks' asset quality (Mean = 3.826; agreement rate = 73.1%). This suggests an adverse feedback loop: weakening of the real sector → rising NPLs → more cautious banking behavior → higher capital costs → greater difficulty in real-sector recovery. Indicators related to "difficulty in accessing capital" and "risk-off sentiment that reduces capital flows into productive sectors" display greater variation, reflecting differences in experiences between enterprise groups and external observers.

(4) External sector effects (TFE). Respondents highlight declines in exports due to falling global demand and supply chain disruptions, the slowdown of FDI and other cross-border investment, and the breakdown of international supply chains, which reduces the economy's capacity for production recovery. International volatility, heightened exchange-rate risks, and higher import costs are also rated highly but with greater dispersion, consistent with differences in import sensitivity across sectors and firms.

(5) Most Important Transmission Channel According to Respondents. When asked to select a single most important channel among the four, the distribution of responses is as follows: RD 40.6%; TFE 23.4%; FIS 21.3%; FMS 14.8%. This is a key finding, as it establishes a hierarchy of policy priorities when a pandemic occurs: the priority is preventing disruptions in the real sector; the second is mitigating external shocks and safeguarding growth drivers; the third is maintaining fiscal space; while the financial-credit channel, although important, tends to play a more pronounced amplifying role with time lags.

2.6. State Resilience Capacity (STATE)

Descriptive statistics for STATE indicate that healthcare capacity and pandemic control (HEA) and social security and support for vulnerable groups (SOS) are the two most prominent shock-absorbing pillars (both with a mean score of 3.723) (General Statistics Office, 2020).. Meanwhile, policy design and governance capacity (POA), digital transformation and operational continuity (DIR), and communication, public trust, and social coordination (TRU) record lower composite scores, mainly due to reverse-coded statements capturing

bottlenecks related to policy delays and inconsistencies (Table 3).

Table 3. Average scores for the STATE pillars

No.	Indicator	Value	SD
1	Policy design and governance capacity (POA)	3.396	0.383
2	Healthcare capacity and pandemic control (HEA)	3.723	0.563
3	Digital transformation and operational continuity (DIR)	3.405	0.362
4	Social security and support for vulnerable groups (SOS)	3.723	0.596
5	Communication, public trust, and social coordination (TRU)	3.399	0.392

Source: *Author's survey results*

(1) Healthcare capacity and pandemic control (HEA). Respondents highly evaluate the role of preventive healthcare, epidemiological surveillance, and vaccination, considering them foundational factors in reducing the degree of disruption. However, assessments of the capacity to "respond adequately and avoid prolonged overload" are lower and more heterogeneous, reflecting disparities in capacity across levels and regions.

(2) Social Security and support for vulnerable groups (SOS). Indicators related to timely social protection, support for workers and small enterprises, and social safety nets mitigating domestic demand contraction show very similar scores. The results imply that social security is not merely a social policy but also a macroeconomic stabilization tool through anchoring expectations, reducing social instability, and sustaining aggregate demand.

(3) Policy design and governance capacity (POA). Positive aspects such as "timeliness" and "policy coordination" are rated highly; however, the reverse-coded statement that "policies are issued slowly and lack consistency" receives substantial agreement in raw responses, resulting in lower adjusted scores and pulling down the overall POA composite score. This suggests that the shock-absorbing effectiveness of governance can be weakened by delays and inconsistencies in policy design and implementation.

(4) Digital transformation and operational continuity (DIR). The benefits of online public services, digital payments, e-commerce, and infrastructure for remote working and learning receive strong agreement. Nevertheless, the perception that "digital transformation remains slow" is widespread, indicating that the shock-absorbing effectiveness of digital channels is constrained by uneven levels of readiness across regions, sectors, and industries.

(5) Communication, public trust, and social coordination (TRU). Transparent communication and social compliance are assessed as shock-absorbing assets. However, perceptions of "inconsistent information" remain relatively common, implying that this is a sensitive area: when information is inconsistent, negative expectations and defensive behavior intensify, distorting policy transmission mechanisms and potentially amplifying instability.

2.7. Policy Priorities

2.7.1. Preventive Priorities before a Pandemic Occurs

Within the prevention group, the most frequently selected options focus on "maintaining operations" under disruptive conditions, ensuring supply-chain and logistics continuity (77.9%), and accelerating digital transformation to sustain economic activity (71.0%). Building fiscal buffers and rapid activation mechanisms for support packages is selected by 68.0% of respondents, strengthening financial-system resilience by 61.2%, and improving contingency planning and inter-agency coordination by 59.1%. However, when respondents are required to choose a single "top priority," enhancing preventive healthcare capacity and epidemiological surveillance ranks first (31.8%). This finding reveals an important logic: although multiple solutions are considered necessary and appear in the "top five," the ultimate priority remains controlling the health shock to prevent prolonged disruptions.

2.7.2. Response Priorities after a Pandemic Occurs

Within the response group, the highest priority based on selection frequency is supporting enterprises in maintaining employment and cash flows (80.7%), followed by ensuring uninterrupted logistics (67.0%). Macroeconomic policy instruments, including flexible monetary policy, targeted fiscal measures, external stability management, and targeted credit are selected at relatively similar rates, ranging from approximately 54% to 58%. Social security measures also receive high levels of selection (53.6%).

Evidence-based pandemic control records a lower selection rate (41.5%) when considering the "top five," but ranks first when considering the "top priority" (27.8%). This result reinforces the view that pandemic control constitutes the fundamental condition, while economic and financial measures serve as instruments to maintain momentum, mitigate the depth of economic downturns, and support recovery.

3. DISCUSSION AND CONCLUSION

3.1. Discussion of Research Findings

(1) Why is the real sector the core transmission channel, and why does the external sector act as an amplifier? The result that RD is selected as the most important channel (40.6%) indicates that, during pandemics, macroeconomic stability is fundamentally about preventing disruptions in real economic operations. This finding is consistent with the fact that the highest-scoring RD indicators relate to logistics disruptions and prolonged stagnation in services. When logistics are congested, and services and tourism are paralyzed, both supply and demand decline simultaneously, leading to rising unemployment, falling incomes, and reduced consumption. This mechanism explains why GEST

becomes the most prominent component and why PST increases due to volatility in essential goods prices. In this context, fiscal and monetary measures that are not directly linked to the objective of "maintaining operations" may prove less effective, as inactive firms have limited capacity to absorb capital and households facing uncertainty tend to cut consumption.

The external sector serves as an "amplification" channel because Vietnam has a high degree of economic openness and strong dependence on trade, FDI, and global supply chains. When global demand declines, supply chains are disrupted, and capital flows slow, external shocks are rapidly transmitted to the domestic real sector, reducing orders, halting production, and weakening investment incentives. This explains why TFE records high scores and ranks second among the most important channels.

Fiscal policy is perceived as the third most important channel, but it also functions as a "buffer that can be quickly depleted." Fiscal stress is reflected not only in rising public debt but also in the design of support packages: if policies are overly dispersed, effectiveness declines and debt risks increase, as emphasized by respondents in FIS3. Therefore, fiscal space should be created in advance and complemented by rapid, well-targeted activation mechanisms.

The financial credit channel is assessed as having a high level of impact but is less frequently selected as the most important channel. This can be interpreted as the financial channel playing an amplifying role with time lags: rising non-performing loans, higher capital costs, and tighter credit conditions typically become more evident after the real sector has already been damaged. However, if this channel is not effectively managed, economic recovery will remain weak and systemic risks will increase.

(2) State capacity as a shock-absorbing pillar and a bottleneck of expectations. Survey results indicate that HEA and SOS are evaluated as the strongest pillars, implying that: *(i)* controlling health shocks is a fundamental condition for shortening disruption periods, reducing social costs, and enhancing recovery capacity; and *(ii)* social security functions as a macroeconomic stabilization tool by sustaining aggregate demand and maintaining social stability. In other words, during pandemics, protecting public health and safeguarding livelihoods represent two sides of the same macroeconomic stabilization strategy.

In contrast, the three bottlenecks POA, DIR, and TRU reflect society's "governance expectations." Policy delays and inconsistencies reduce effectiveness and increase costs; slow digital transformation limits the ability to maintain operations during disruptions; and inconsistent information undermines trust, triggers defensive behavior, and distorts policy transmission mechanisms. These are "soft" factors but exert strong influences on economic behavior and therefore should be considered integral components of the "infrastructure of macroeconomic stability."

3.2. Conclusion

The survey results show that respondents perceive pandemic shocks as severe and identify disruptions in the real sector (logistics, supply chains, services-tourism, and production) as the most critical transmission channel, followed by external shocks and fiscal pressures. This implies a clear hierarchy of policy priorities: *(i)* controlling health shocks to shorten disruption periods; *(ii)* maintaining the functioning of the real sector and protecting employment and cash flows; *(iii)* coordinating fiscal, monetary, credit, and external policies under the principle of flexibility with clear targeting to avoid dispersion; and *(iv)* strengthening state capacity as a shock-absorbing mechanism through reducing policy delays, enhancing consistency, and ensuring transparent risk communication.

The author's survey indicates that pandemics are perceived as severe shocks to macroeconomic stability, with the strongest spillover effects transmitted through disruptions in the real sector, followed by external shocks and fiscal pressures, while the financial-credit channel plays an amplifying role with time lags. On the state side, healthcare capacity and social security emerge as the most prominent shock-absorbing pillars, whereas policy delays and inconsistencies, uneven digital transformation, and fragmented communication constitute bottlenecks that undermine the effectiveness of responses.

Based on these findings, to mitigate the future impact of pandemics on macroeconomic stability, the paper proposes two groups of solutions focusing on prevention and response. Specifically: (1) prevention, emphasizing systemic preparedness (preventive healthcare, logistics, digital transformation, fiscal space, financial resilience, and coordination mechanisms); and (2) response, emphasizing evidence-based pandemic control and maintaining economic functioning through protecting employment and cash flows, stabilizing essential goods markets, strengthening social security, coordinating monetary-fiscal-credit policies, and mitigating external shocks. This prioritization helps avoid a fragmented approach and shifts the focus toward shortening disruptions and sustaining economic operations, thereby reducing costs and accelerating recovery.

Since the data are based on perception-based surveys, the results reflect the expectations and assessments of groups with experience and close monitoring of macroeconomic developments. Future research may combine time-series macroeconomic data, sectoral data, and micro-level financial data to quantify the magnitude and amplification mechanisms of transmission channels, as well as to further test the shock-absorbing role of state capacity under different pandemic scenarios.

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References:

Agénor, P. R., & Pereira da Silva, L. A. (2012). Macroeconomic stability, financial stability, and monetary policy rules. *International Finance*, *15*(2), 205-224.

General Statistics Office (2020). Report on socioeconomic situation in the fourth quarter and the whole year of 2020. URL: https://www.nso.gov.vn/du-lieu-va-so-lieu-thong-ke/2020/12/baocao-tinh-hinh-kinh-te-xa-hoi-quy-iv-va-nam-2020

Government News (2020). Effective implementation of the VND 62 trillion support package to the right beneficiaries. URL: https://baochinhphu.vn/trien-khai-hieu-qua-goi-ho-tro-62000-ty-dong-den-dung-doi-tuong-102274982.htm (Published: July 2, 2020).

Elberry, N. A., Naert, F., & Goeminne, S. (2023). Optimal public debt composition during debt crises: A review of theoretical literature. *Journal of Economic Surveys*, *37*(2), 351-376.

Ivanov, D., & Dolgui, A. (2022). The shortage economy and its implications for supply chain and operations management. *International Journal of Production Research*, *60*(24), 7141-7154.

Ministry of Health (MOH) (2025). Eight unforgettable milestones during three years of Vietnam's fight against COVID-19. URL: https://moh.gov.vn/tin-lien-quan/-/asset_publisher/vjYyM7O9aWnX/content/-infographic-8-dau-moc-khong-the-nao-quen-suot-3-nam-viet-nam-chong-dich-covid-19 (Accessed: January 20, 2026).

Ministry of Health (MOH) (2026). Health statistics. URL: https://moh.gov.vn/thong-ke-y-te (Accessed: January 26, 2026).

Ministry of Health (MOH) (June 20, 2023b). COVID-19 prevention and control bulletin in Vietnam. URL: https://moh.gov.vn/tin-tong-hop/-/asset_publisher/k206Q9qkZOqn/content/ban-tin-phong-chong-dich-covid-19-tai-viet-nam (Accessed: January 21, 2026).

Ministry of Health (MOH) (October 20, 2023a). From October 20, COVID-19 is officially classified as a Group B infectious disease. URL: https://moh.gov.vn/hoat-dong-cua-dia-phuong/-/asset_publisher/gHbla8vOQDuS/content/tu-20-10-covid-19-chinh-thuc-thanh-benh-truyen-nhiem-nhom-b (Accessed: January 22, 2026).

Panneer, S., Kantamaneni, K., Palaniswamy, U., Bhat, L., Pushparaj, R. R. B., Nayar, K. R., ... & Rice, L. (2022, April). Health, economic and social development challenges of the COVID-19 pandemic: strategies for multiple and interconnected issues. In *Healthcare* (Vol. 10, No. 5, p. 770). MDPI.

Pieloch-Babiarz, A., Misztal, A., & Kowalska, M. (2021). An impact of macroeconomic stabilization on the sustainable development of manufacturing enterprises: the case of Central and Eastern European Countries. *Environment, Development & Sustainability*, *23*(6).

Roszko-Wójtowicz, E., & Grzelak, M. M. (2020). Macroeconomic stability and the level of competitiveness in EU member states: a comparative dynamic approach. *Oeconomia Copernicana*, *11*(4), 657-688.

Vietnam Social Security (2021). More than VND 27 trillion disbursed to support workers and enterprises after one month of implementing support from the unemployment insurance fund. URL: https://baohiemxahoi.gov.vn/tintuc/Pages/linh-vuc-bao-hiem-xa-hoi.aspx?CateID=52&ItemID=17588& (Published: November 2, 2021).

Yu, Z., Razzaq, A., Rehman, A., Shah, A., Jameel, K., & Mor, R. S. (2022). Disruption in global supply chain and socio-economic shocks: a lesson from COVID-19 for sustainable production and consumption. *Operations Management Research*, *15*(1), 233-248.

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