Journal of Management World **2024**, 3: 128-145
DOI: 10.53935/jomw.v2024i4.827

The Effect of Coronavirus (COVID-19) on Purchasing Power, Unemployment, and Income in Indonesia: Reviewed from the Perception of Indonesian

Waspodo Tjipto Subroto[1*], Albrian Fiky Prakoso[2], Eka Hendy Andriansyah[3], Ardhita Eko Ginanjar[4], Zain Fuadi Muhammad Roziqifath[5]

[1,2,3,4,5]Faculty of Economics and Business, State University of Surabaya, Indonesia; waspodosubroto@unesa.ac.id (W.T.S.).

Abstract. The Covid-19 pandemic has tremendously impacted economic activity in many countries, including Indonesia. The impact greatly felt by the community is declined purchasing power, unemployment, and increased poverty. Therefore, this study aimed to describe the impact of the pandemic on the decline in people's purchasing power, unemployment, and increased poverty due to reduced economic activity in Indonesia. A survey method was used with a quantitative approach involving 850 selected respondents. Data were collected using a questionnaire distributed through google form media. The data analysis showed that Coronavirus positively and significantly affects purchasing power and unemployment but negatively and significantly affects income or poverty. Furthermore, Coronavirus and unemployment have a partial negative and significant effect on income, but purchasing power has a positive and significant effect. Therefore, purchasing power and unemployment mediate the positive and significant effect of Coronavirus on income.

Keywords: Covid-19 pandemic, Income, Purchasing power, Unemployment.

1. INTRODUCTION

In 2020, the world faced a major impact from the Covid-19 pandemic, which disrupted various aspects of life, including the global economy (S. M. Islam & Habib, 2022; Li & Fang, 2024; Yiming et al., 2024). The virus, which initially spread in Wuhan, China, spread rapidly around the world, causing a sharp decline in economic growth as seen in Japan and Singapore (Asthana et al., 2024; S. Liu & Yamamoto, 2022; Yap & Yong, 2021). The pandemic affected global supply chains, lowered commodity prices, and increased the risk of recession (Lucas et al., 2024; Meyer et al., 2023). To overcome the impact of Covid-19, steps that can be taken include adjustments to consumer needs, product and service innovation, research to improve crisis resilience, and online collaboration and marketing (Szabzon et al., 2024; Vai & Aarstad, 2024). The government has launched a range of policies, including school and workplace closures, mobility restrictions, as well as fiscal stimulus packages and monetary expansion (H. Hu et al., 2023; Pribadi et al., 2021; Suh et al., 2023). The successful implementation of this policy depends on the support of various parties such as the government, the media, non-governmental organizations, health professionals, communities, and individuals (Aguilera et al., 2024; Allen et al., 2020; Atalay et al., 2024; Fretheim et al., 2009; Wellalage et al., 2023).

In Indonesia, the government has prepared five schemes for economic protection and recovery to support its economic activities (Lyudmyla et al., 2024). Schemes such as special programs for ultra-micro business actors are prepared in the hope that they would survive the pandemic (Baporikar, 2021; Barik & Palit, 2024a; Suguna et al., 2022). The first scheme is intended for Micro, Small, and Medium Enterprises (MSME) considered poor and vulnerable to being affected by Covid-19. In this scheme, business actors seek to become recipients of social assistance such as the Family Hope Program, basic food packages, cash assistance, village direct cash assistance, exemption and reduction of electricity tariffs, and Pre-Employment Card (Barik & Palit, 2024b). The second scheme discusses tax incentives for MSME actors with an annual turnover of less than IDR 4.8 billion (Monachan et al., 2024; Tahar et al., 2023). The government has lowered the final Income Tax rate from 0.5 to 0% for six months, starting from April to September 2020 (Arvin et al., 2021). The third scheme relates to the relaxation and restructuring of MSME loans (Rajamani & Rekha, 2023; Supari & Anton, 2022). It includes postponement of installments and interest subsidies for recipients of People's Business Credit, Ultramicro Credit, Madani National Capital for Fostering Prosperous Families, Revolving Fund Management Institution, and capital assistance from several ministries (Goel et al., 2024; Zhao et al., 2024). In the fourth scheme, the government prepares emergency working capital assistance for MSME actors affected by Covid-19 (Nath & DasGupta, 2021).

Although the Indonesia government has launched various policies and protection schemes to overcome the negative impact of Covid-19, such as stimulus packages and tax incentives, the pandemic has still had a significant

* Correspondence: waspodosubroto@unesa.ac.id

impact on the national economy, especially in terms of unemployment, purchasing power, and people's income (Phelps & Rohde, 2024; Vasile & Vasile, 2024). The unemployment rate has soared sharply, people's purchasing power has decreased drastically, and people's incomes have also been disrupted, with many workers experiencing salary cuts and MSMEs facing a significant decline in income due to business restrictions and a decline in market demand (Cammeraat et al., 2023; Kawano & LaLumia, 2017; Liepmann & Pignatti, 2024).

Therefore, a study on the relationship between the impact of Covid-19 on purchasing power, unemployment, and people's income is very important and urgent. It is not only about discussing the influence between the variables mentioned but also how variables bridge complex relationships regarding the impact of Covid 19 in particular on people's incomes.

The impact of COVID-19 on people's purchasing power, unemployment, and income can be analyzed not only through real data but also through people's perspectives and concerns (Hafidz et al., 2022; Schnitzler et al., 2021; A. K. Sharma & Rai, 2024a). Understanding the impact from this perspective requires the incorporation of psychosocial, economic, and cultural factors that influence how individuals and communities perceive and respond to crises (Bernhardsdóttir, 2015; Falkheimer & Zhao, 2020; Kampe et al., 2021).

This is a further implication of Behavioral Economics Theory (Lisciandra, 2018) (Grewal et al., 2016), In a pandemic situation, this theory is relevant to understand how public perception of Covid-19 affects economic behavior (Oniku et al., 2023; Paradkar & Rani, 2024; Svabova et al., 2022a). All decisions and economic considerations made by a person in this condition certainly need to be studied because they can determine events in the field according to the consumer's perspective (Leonov et al., 2023; Ruggeri et al., 2021).

Many people feel anxious about the future of their economy. Uncertainty regarding job stability and the potential for economic recovery has led them to be more cautious about spending money (Al-Thaqeb & Algharabali, 2019). Fear of possible unemployment or a decrease in income leads to greater savings, even for basic needs (Craig et al., 2016).

In addition, instability in the labor market creates deep concerns regarding job security. Individuals who work in sectors that have been severely affected by the pandemic, such as tourism or hospitality, may feel uncertain about their future, triggering anxiety regarding their ability to support themselves and their families (Karsavuran, 2021; Lopes & Sargento, 2024; Radlińska & Gardziejewska, 2022).

People are often worried about the sustainability of their income in the long run (Hueting, 2013). Declining income due to pay cuts or job losses creates concerns about the ability to meet daily needs and pay financial obligations such as mortgages and debts (J.-H. Chen et al., 2024; Wong et al., 2023).

Seeing this phenomenon, research on the impact of COVID-19 on people's purchasing power, unemployment, and income must go beyond the causality analysis of real data and include public perceptions and concerns to provide a more comprehensive picture (Dui, 2022; Maiti, 2024; A. K. Sharma & Rai, 2024b). The need for this research is urgent because the pandemic has not only caused structural changes in the economy, but also triggered deep anxiety among people about their financial future (A. M. Islam, 2021; C. Liu et al., 2023).

Public perceptions of declining purchasing power, job uncertainty, and changes in income can significantly affect consumption behavior, mental well-being, and social stability. Research that delves into direct perception allows for a better understanding of the emotional and social impacts of this crisis (Jiménez-Solomon et al., 2024; Klug et al., 2021; Zamanzadeh et al., 2024). In addition, this kind of research can identify how social and economic policies can be adjusted to more effectively address the needs and uncertainties felt by society, thereby facilitating more responsive and inclusive policy formulation.

1.1. The Relationship of Perception of Covid-19 to People's Purchasing Power

In 2022, Indonesia began to experience a recovery in people's purchasing power after the major impact of the COVID-19 pandemic (Ananta et al., 2022; Ssenyonga, 2021). This is the impact of economic growth in Indonesia that year reached 5.31% (Musyawwiri & Üngör, 2019; Soegijoko, 2019). After mass vaccination and the easing of social restrictions, people began to feel safer and more optimistic about the economic recovery (Hansen & Mano, 2023; C.-T. A. Ma, 2024). These feelings have a positive impact on their consumption behavior, with many people returning to shopping and consuming goods and services that they previously cut back on during the pandemic (Dursun et al., 2023; Gupta & Mukherjee, 2024; Kivenzor et al., 2023). Increased confidence in economic stability drives greater spending, which in turn increases people's purchasing power (Q. Chen & Xu, 2022; Y. Guo & He, 2020; Kharlamova et al., 2021).

In addition, government policies designed to support economic recovery, such as fiscal stimulus and social assistance, play an important role in strengthening positive public perceptions (Y. Zhang et al., 2023). These programs not only help directly affected communities but also restore public confidence in the government's ability to handle crises (Leonov et al., 2024; M. Zhang et al., 2023). With the growing belief that these policies are

effective, people feel more secure in their spending, which supports increased purchasing power (Kang et al., 2023; Schober, 2023). Active participation in aid and stimulus programs shows that people feel that the support eases their financial burden and helps them return to normal consumption patterns (Baker et al., 2023).

This concept is in accordance with research from (Fauzia, 2021) which states that the existence of government policies during the pandemic presents a solution for the community in terms of economic improvement and can have an impact on purchasing power slowly (Agarwal et al., 2024; Molenaar et al., 2024). This is a further implication of monetary theory, making it easier to finance individuals and businesses, which in turn can improve people's purchasing power and support economic recovery (C. Ma et al., 2023; Tengfei & Ullah, 2024).

The increase in purchasing power in 2022 reflects a positive relationship between people's perception of COVID-19 and their economic conditions (Rai et al., 2021). Growing optimism about economic recovery and long-term stability encourages people to be more active in shopping and investing (Eichengreen et al., 2024; Yu & Ye, 2024). This shows that positive perceptions regarding the success of recovery measures and the government's ability to manage the impact of the pandemic contributed significantly to the increase in purchasing power (Beckles & Jackman, 2024; Gholipour et al., 2023). With greater confidence in economic recovery, the people of Indonesia are able to increase their spending, improve personal economic well-being, and support overall economic growth (Ahmad & Rangaraju, 2019; Elmassah et al., 2023).

H_1: Perception of Covid 19 has a positive ralation on people's purchasing power

1.2. The Relationship between Perception of Covid 19 to People's Perception of Unemployment

The number of Unemployment in 2020 in Indonesia due to Covid-19 touched the range of 7.07%. This can affect public perception in the economic field (Fitriadi et al., 2022; Permatasari et al., 2024). This can be seen from how people's views on the pandemic situation affect their confidence in the unemployment rate (Ambrocio, 2022; Castro & Martins, 2024). When people have negative perceptions about the economic impact of COVID-19, such as prolonged economic uncertainty or adverse impacts on key sectors, they tend to see unemployment as a more serious and prolonged problem (Pinilla et al., 2021). The perception that the pandemic will continue to worsen economic conditions and slow the recovery creates concerns about rising unemployment, as the public assumes that many companies may not be able to rehire laid-off workers or add new workers in the near future (Naqvi, 2022).

Conversely, if the public's perception of COVID-19 is that the crisis is in a significant recovery phase with widespread vaccination and effective economic recovery measures, they may expect a decrease in the unemployment rate in tandem with the recovery of the affected sectors (Kandpal, 2023). The belief that the government and the private sector are actively creating new job opportunities can improve people's views on the labor market (Mikhaeil & Okulicz-Kozaryn, 2024; Pervin, 2024). The perception that the pandemic is nearing an end or that recovery measures have been successful can reduce concerns about unemployment, with people more confident that labor market conditions will improve (A. Guo et al., 2023; Holzer et al., 2024). This is in accordance with the concept of the theory of hope, which can occur in the economic realm.

Overall, people's perception of COVID-19 tends to influence their view of unemployment in a consistent direction (Abdelwahab et al., 2024; Hohlova & Rivža, 2021). When people have a negative perception of the impact of the pandemic, they see unemployment as a worsening problem, while a positive perception of recovery efforts can increase their confidence that unemployment will decrease (Graham & Valen, 2024; Marchesi & De Luigi, 2022; Vargas et al., 2021). In other words, people's views on unemployment often reflect their hopes or concerns regarding the pandemic situation and the effectiveness of economic recovery measures (Bieszk-Stolorz & Markowicz, 2022).

H_2 Perception of Covid 19 has a positive relation on people's perception of unemployment

1.3. The Impact of Perception of Covid 19 On Perceptions of People's Income

A survey by Price Waterhouse Cooper (PwC) revealed that the Covid-19 pandemic has depressed the household income of the people of Indonesia. It was recorded that as many as 65 percent of Indonesia people admitted that their income had decreased due to the Covid-19 pandemic. This is also a result of public perception of the economic impact of Covid 19.

The relationship between the two refers to how changes in people's views of the pandemic situation can affect their outlook on income (Furceri et al., 2022; Svabova et al., 2022b). When people have a very negative perception

of Covid 19, for example, they feel that the pandemic will be prolonged or that its impact on the economy will continue to worsen, they tend to feel pessimistic about their future income (Bruce et al., 2022; Lanz et al., 2021; Rothwell et al., 2024a). This negative perception can cause people to feel that their income opportunities will be depressed, with salaries or income that are likely not to increase or even decrease (Khalil et al., 2021; Qian et al., 2024). This is in accordance with the concept of Consumer Confidence, which allows people to estimate expenses depending on economic conditions (Matuszek et al., 2023).

Conversely, if people have a more positive perception of Covid 19, for example, they believe that the pandemic is nearing its end, the economic recovery is going well, and government policies are effective they may be more optimistic about their income prospects (Rothwell et al., 2024b). This perception can lead to confidence that income opportunities will increase as the economy recovers and the job market grows (Easterlin, 2023).

H^{3} Perception of Covid 19 positive relation perceptions of people's income.

1.4. The Effect of People's Purchasing Power on Perceptions of People's Income

The relationship between people's purchasing power and income perception is evident when an increase in purchasing power correlates with better confidence in income (Svavarsdottir & Asgeirsdottir, 2023). When people perceive that their purchasing power is increasing, they usually also develop a more positive perception of their income. This happens because increased purchasing power often reflects stability or income growth, which makes individuals feel more secure in their ability to meet needs and shop. For example, if people see that they can buy more goods and services than before, they may believe that their income is stable or even increasing, which increases their sense of satisfaction and optimism towards their personal financial situation (Mawad, 2023).

If purchasing power is declining, it often indicates that existing income is not enough to offset the rising cost of living or to meet basic needs. This leads to the perception that their income is inadequate. People may feel that their income is stagnant or not increasing in line with the rising cost of living, creating a sense of inadequacy (Kenworthy et al., 2011).

This condition is relevant to the Economic Wellbeing concept. Economic Welfare Theory can help explain how economic conditions and purchasing power affect the subjective well-being of individuals. Previous research from (John and Tate, 2020) revealed that the perception of future income can be predicted by individuals from the circulation they have now (Dean & Hall, 2024).

H_{4} People's Purchasing Power has a positive relation on perceptions of people's income

1.5. The Effect of Perception of Unemployment on Perceptions of People's Income

This context can be classified in the discussion of Business Cycle Theory explaining economic fluctuations in the cycle of expansion and contraction. During the economic expansion phase, which is characterized by a decline in unemployment and a recovery in the job market, individuals tend to feel an increase in income opportunities (Kohlscheen et al., 2024; Nam & Wang, 2019).

When people feel that the unemployment rate is declining or that the job market is recovering, they tend to develop a more positive perception of income (Monusova, 2020). Optimism regarding a decline in unemployment often reflects the belief that there is an increase in job opportunities and economic stability, which in turn raises their expectations about income (Knotz, 2020). The belief that more people will get jobs and the economy will improve can improve their outlook on the possibility of higher incomes in the future (Abeliansky et al., 2020; Ajayi-Obe, 2020).

Conversely, if people see the unemployment rate rising or remaining high, they may feel pessimistic about their income prospects (Zimmer, 2024). The perception that unemployment remains high is often related to the belief that job opportunities are limited and that salaries or incomes will not experience a significant increase (Maitah & Urbánková, 2015; Mueller et al., 2021). Uncertainty regarding the future of the labor market can lead to concerns that incomes will stagnate or decline, as individuals feel that a weak job market is hindering their chances of earning a better income (Kovalenko, 2024).

H_{5} perception of unemployment has a positive relation on perceptions of people's Income

1.6. The Role of People's Purchasing Power and Perception of Unemployment as Mediation Variables

The variables of people's purchasing power and perception of unemployment have the potential to mediate the relationship between perceptions of COVID-19 and perceptions of income in an interrelated way (Kuypers et al., 2022). When the public has a perception of the impact of COVID-19. For example, they feel that the pandemic

will continue to affect the economy badly, this may not directly affect their perception of income, but there is a contribution to purchasing power that can bridge the relationship between the two (Baber, 2020). Purchasing power can be a benchmark for people in determining their income perception (Shigeoka & Yamada, 2019).

In addition, the perception of unemployment also has the potential to be a mediator in this relationship. This fact can be seen from a situation where in the assessment stage of future income perception, the public not only directly assesses it from the covid 19 condition that occurred, but can also contribute to the aspect of unemployment perception. With the perception of unemployment, for some communities, it can be more reasonable to assess future income because it is related to how they get money (Hartigan & Wright, 2023).

H_6 Purchasing power and perception of unemployment play a role as mediating variables between the perception of covid 19 on perceptions of people's Income

Several previous researches have examined this phenomenon, Bhuiya et al., (2021) said that the perception of covid 19 leads to a perception of risk that affects people's income levels. Meanwhile, quantitatively, the perception of covid can also affect people's purchasing power and habits (Rosa et al., 2022). Meanwhile, according to Kawohl and Nordt, (2020) implies that Covid 19 is very significant in increasing the unemployment rate.

Moreover, people's perception of unemployment also affects their perception of future income during the Covid 19 pandemic (T.-C. Chen et al., 2021). The same thing was also expressed by Meiryani et al., (2021) with the results of research stating that the purchasing power aspect is also a consideration for the public in estimating future income. From the research studies conducted, there has not been much research that discusses the complex relationships between the variables mentioned to find out the broader reality.

From various previous studies that discuss the context of the same problem, there is a research gap in the form of a lack of research that tests various variables such as purchasing power and perception of unemployment that can affect a more complex relationship between the perception of Covid 19 in the economic realm on perceptions people's income. With this gap, this research aims to investigate the direct and indirect effects of the impact of perception of covid 19 in the economic realm on perceptions of people's income, as well as through the role of people's purchasing power and perceptions of unemployment in Indonesia as mediators.

The novelty of this research is reflected in the research model with the addition of the influence of variables on people's purchasing power and perceptions of unemployment which has the potential to mediate a more complex relationship between the perceptions of Covid-19 in the economic realm on perceptions of people's income in most provinces in Indonesia.

With this research, several contributions can be achieved, including 1) being able to fill research gaps related to various complex impacts related to the impact of Covid 19 on the economy, 2) as one of the basis of government policies and inspiration to determine the most appropriate economic recovery policy due to the turmoil from Covid 19, 3) as an inspiration for follow-up researchers to develop various research models and related variables that can explain in a complex way the impact and the relationship between various elements in the economy affected by Covid 19. 4) as a source of basic knowledge to overcome similar economic problems in the coming years.

2. METHODS

2.1. Approach, Type, and Design

This study used a survey method with an explanatory quantitative approach to test the causal relationship between the perceptions of the Covid-19 pandemic on people's purchasing power, perception of unemployment, and the perceptions of people's Income. It was conducted on randomly selected communities spread over 34 out of 38 provinces in Indonesia.

2.2. Population and Samples

The study population comprised Indonesians affected by the Covid-19 pandemic. The samples were determined using non-probability random sampling, resulting in 950 respondents from 38 provinces in Indonesia. Of these, there were 100 respondents from 4 provinces who did not meet the criteria for filling out the questionnaire, both from the authenticity of domicile, identity inconsistency to filling in errors. So that the sample used in this research is 850. The number of samples that fulfilled the requirements for the minimum number of data analyses using structural equation modeling (SEM) was 200 respondents. They were distributed across 34 provinces according to the population in each province, with respondents selected as samples based on their suitability. The number of samples in each province is shown in the following table.

Table 1.

No	Province Name	Number of Sample
1	Nanggroe Aceh Darussalam	25
2	Sumatera Utara	25
3	Sumatera Selatan	25
4	Sumatera Barat	25
5	Bengkulu	25
6	Riau	25
7	Jambi	25
8	Lampung	25
9	Bangka Belitung	25
10	Kalimantan Barat	25
11	Kalimantan Timur	25
12	Kalimantan Selatan	25
13	Kalimantan Tengah	25
14	Kalimantan Utara	25
15	Banten	25
16	DKI Jakarta	25
17	Jawa Barat	25
18	Jawa Tengah	25
19	DI Yogyakarta	25
20	Jawa Timur	25
21	Bali	25
22	Nusa Tenggara Timur	25
23	Nusa Tenggara Barat	25
24	Gorontalo	25
25	Sulawesi Barat	25
26	Sulawesi Tengah	25
27	Sulawesi Utara	25
28	Sulawesi Tenggara	25
29	Sulawesi Selatan	25
30	Maluku	25
31	Papua	25
32	Papua Tengah	25
33	Papua Selatan	25
34	Papua Barat Daya	25
Sample Total		850

2.3. Data Collection and Instrument

The study used primary data collected through a questionnaire with closed statements. The questionnaire was an instrument developed and tested using the Validity and Reliability Test. It was distributed via google form sent to the respondents' email. In the gform, there are 40 question items that reflect variable indicators with answers measured in the likert scale as follows:

Table 2.

Strongly agree	:	Score = 5
Agree	:	Score = 4
Neutral	:	Score = 3
Disagree	:	Score = 2
Strongly disagree	:	Score = 1

As indicators to measure the variables PERCEPTION OF COVID 19, it is measured by risk perception adjusted to the context of the impact of Covid-19, in the form of Perception of Covid-19 Dangers and Information Access. Meanwhile, the People's Purchasing Power Variable is measured through the Basic Needs during the Pandemic and Ability to buy basic materials during the pandemic indicators. The perception of unemployment variable is measured by 2 perception indicators related to unemployment, namely Perception of layoff rate and Perception of non-layoff unemployment rate. For the last variable, namely perceptions of people's Income measured by the perspective of perception in two indicators, namely Income Perception during the Pandemic and Perception of individual income

2.4. Data Analysis Technique

Data were analyzed using Structural Equation Modeling (SEM) with the Warppls approach. This technique was used because it contains a resampling method applicable to limited samples. The study conducted a factor analysis to determine the indicators with the highest contribution in each variable. Additionally, it examined the relationship between variables to ensure that SEM appropriately analyzes factors and paths.

Outline the stages in testing partial least square (PLS), can be done by Evaluation of the Measurement model (Outer Model). Research use SEM techniques, so that the evaluation carried out on two models, namely the outer model and inner model. The outer model specifies the relationship specification between the latent construct and its indicators. As for the test criteria in the outer model according to (B. Liu et al., 2015; Mohammadi Moghaddam et al., 2016). 1) Convergent Validity. Convergent validity value is the value of the loading factor on the latent variable with indicators. Expected value > 0.7 Loading factor. 2) Discriminant Validity. This value is a value Cross loading factors useful to know whether the construct has adequate discrimination namely by comparing the loading value on The intended construct must be greater than with a loading value with another construct. 3) Composite Reliability. Data that has Composite Reliability > 0.7 has a tall. 4) Average Variance Extracted (AVE). AVE Scores expected > 0.5 (Cao & Liang, 2024; Jordan & Spiess, 2019).

Next steps after conducting an evaluation measurement model (outer model), with criteria convergent validity, discriminant validity and composite realities and the results have met (Pretnar Žagar & Demšar, 2022). The requirement is to conduct a structural evaluation (inner model). The stages include R Square in endogenous constructs and Estimate for Path Coefficients (Rosseel & Loh, 2022).

3. RESULTS AND DISCUSSION

3.1. Model Fit

The goodness of fit test was performed to determine the index and measure the goodness of the relationship between latent variables of the model built. Table 3 shows the test results.

Table 3: Goodness of fit

No.	Model fit and quality indices	Fit Criteria	Analysis Results	Description
1	Average path coefficient (APC)	P<0.05	0.235 (P<0.001)	Fulfill model fit requirements
2	Average R-squared (ARS)	P<0.05	0.093 (P<0.001)	Fulfill model fit requirements
3	Average adjusted R- squared (AARS)	P<0.05	0.091 (P<0.001)	Fulfill model fit requirements
4	Average block VIF (AVIF)	acceptable if <= 5, ideally <= 3.3	1.013	Ideal
5	Average full collinearity VIF (AFVIF)	acceptable if <= 5, ideally <= 3.3	1.208	Ideal
6	Tenenhaus GoF (GoF)	small >= 0.1, medium >= 0.25, large >= 0.36	0.243	Small
7	Sympson's paradox ratio (SPR)	acceptable if >= 0.7, ideally = 1	0.800	Ideal
8	R-squared contribution ratio (RSCR)	acceptable if >= 0.9, ideally = 1	0.966	Ideal
9	Statistical suppression ratio (SSR)	acceptable if >= 0.7	0.800	Accepted
10	Nonlinear bivariate causality direction ratio (NLBCDR)	acceptable if >= 0.7	0.800	Accepted

The results show that the relationship between variables meets the criteria. According to Solimun, Fernandes, and Nurjannah (2017), the model should fulfill the fit criteria depending on the study purpose. All criteria should be met when the purpose is to find the best model. Since this study aimed only to seek effect and not the best model, it could continue when one or two fit criteria are met (Khan et al., 2024).

3.2. Variable Profile

The test results for indicators used in each variable show the loading factors in Table 4.

Table 4: Variable profile.

No	Indicator	Loading Factor	Average Score	Advice For Government and the Community
1	Perception of Covid-19 Dangers (X1.1)	0.926	1.7	Enhance immediately
2	Covid-19 Information Access (X1.2)	0.930	2.5	Enhance immediately
3	Basic Needs during the Pandemic (Y1.1)	0.881	4.1	Need Enhacement
4	Ability to buy basic materials during the pandemic (Y1.2)	0.870	3.3	Need Enhacement
5	'erception of layoff rate (Y2.1)	0.872	2.7	Enhance immediately
6	Perception of non-layoff unemployment rate (Y2.2)	0.912	4.8	Need Enhacement
7	Income Perception during the Pandemic (Y3.1)	0.991	4.6	Need Enhacement
8	Perception of individual income (Y3.2)	0.911	6	Need Sustain

When the loading factor is greater, the indicator reflects more strongly or becomes important in that variable (Belland et al., 2022; Richters et al., 2024). The most important indicators of the several variables are:

a. The Perception of Covid-19 Variable (X1) has an important indicator of Covid-19 Information Access (X1.2). It has a loading factor of 0.930 in the less good condition, meaning it should be improved.

b. The People's Purchasing Power Variable (Y1) has an important indicator of Basic Needs during the Pandemic (Y1.1). It has a loading factor of 0.881, is in fairly good condition, and needs to be improved.

c. The Perception of Unemployment Variable (Y2) has an important indicator of Perception of the Non-layoff Unemployment Rate (Y2.2). It has a loading factor of 0.912, is in fairly good condition, and needs improvement.

d. The Perceptions of People's Income Variable (Y3) has an important indicator of Income Perception during the Pandemic (Y3.1) with a loading factor of 0.991 in a fairly good condition, meaning it needs improvement.

3.3. Hypothesis Test Results

3.3.1. Direct Effect

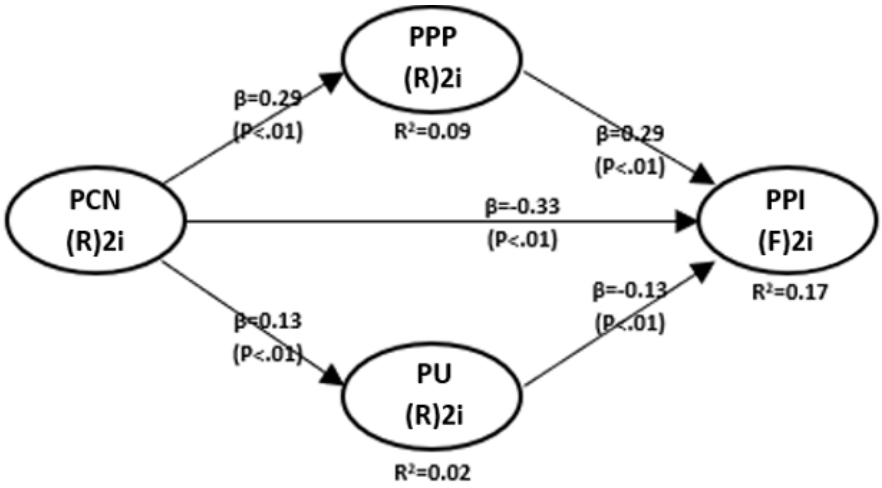

Figure 1.

Table 5: Relationship between variables.

No.	Relationship between Variables (Explanatory Variable → Response Variable)		Path Coeffic-ient	p-value	Description
1	PCN (X1)	PPP (Y1)	0.294	<0.001	Highly Significant
2	PCN (X1)	PU (Y2)	0.129	<0.001	Highly Significant
3	PCN (X1)	PPI (Y3)	-0.329	<0.001	Highly Significant
4	PPP (Y1)	PPI (Y3)	0.291	<0.001	Highly Significant
5	PU (Y2)	PPI (Y3)	-0.131	<0.001	Highly Significant

H_1: PCN (X1) affects PPP (Y1).

The effect of PCN (X1) on PPP (Y1) has a path coefficient of 0.294 and $p < 0.001$. Since p is smaller than 0.01, the effect is highly significant, and the hypothesis is accepted. The positive path coefficient (0.294) indicates that a better perception of Covid-19 (X1) increases the People's Purchasing Power (Y1).

These results are a relevant continuation of research from..... Which states that understanding the economic effects of Covid 19 that can be overcome is able to convince the public and increase purchasing power

H_2: PCN (X1) affects PU (Y2).

The effect of PCN (X1) on PU (Y2) has a path coefficient of 0.129 and $p < 0.001$. Since p is smaller than 0.01, the effect is highly significant, and the hypothesis is accepted. The positive path coefficient (0.129) indicates that a higher perception of Covid-19 (X1) increases the Perception of Unemployment (Y2).

These results are continuous with research.... Which implies that the public's perception of Covid 19 is in line with their assessment of the unemployment rate. If they have the perception that Covid 19 is worsening the economy, then their views tend to lead to soaring unemployment and vice versa

H_3: PCN (X1) affects PPI (Y3).

The effect of PCN (X1) on PPI (Y3) has a path coefficient of - 0.329 and $p < 0.001$, meaning it is highly significant, and the hypothesis is rejected. The negative path coefficient (-0.329) indicates that a higher perception of Covid-19 (X1) reduces the Perceptions of people Income (Y3).

Several other studies also suggest similar things. The perception of economic conditions due to Covid which is slowly improving has even reduced people's expectations to get a good income.

H_4: PPP (Y1) affects PPI (Y3).

The effect of PPP (Y1) on PPI (Y3) has a path coefficient of 0.291 and $p < 0.001$, meaning it is highly significant, and the hypothesis is accepted. The positive path coefficient (0.291) indicates that higher People Purchasing Power (Y1) increases the Perceptions of people Income (Y3).

Research from..... also supports this result, with the concept that if people's purchasing power increases, people will have better expectations in income generation.

H_5: PU (Y2) affects PPI (Y3).

The effect of PU (Y2) on PPI (Y3) has a path coefficient of -0.131 and $p < 0.001$. Since p is smaller than 0.01, the effect is highly significant, and the hypothesis is rejected. The negative path coefficient (-0.131) indicates that higher Perception of Unemployment (Y2) reduces the Perceptions of people Income (Y3).

This result is quite relevant to some previous research. The perception that unemployment has the potential to decrease due to economic assistance from the government during covid actually makes the perception of good income in the community disappear.

3.3.2. Indirect Effect

Table 6. Segment Mediation.

Explanatory variable	Mediating variable	Response variable	Path coefficient of the indirect effect	p -value	Desc
PCN (X1)	PPP (Y1) and PU (Y2)	PPI (Y3)	0.068	0.014	Mediation

H_6: PCN (X1) affects PPI (Y3) through PPP (Y1) and PU (Y2)

The path coefficient for the indirect effect of PCN (X1) on PPI (Y3) through PPP (Y1) and PU (Y2) is 0.068 with $p = 0.014$. The effect is significant, meaning PPP (Y1) and PU (Y2) are mediating variables, and H6 is accepted.

4. DISCUSSION

4.1. Perception of Covid-19 Condition on People's Purchasing Power

The hypothesis test estimation showed that the Covid-19 condition positively and significantly affects people's purchasing power with a coefficient of 0.294 (p-value < 0.001). This implies that a better perception of Covid-19 increases people's purchasing power. The results are consistent with the theory expressed by Laato et al. (2020), Larios-Gómez et al. (2021), and Vázquez-Martínez, Morales-Mediano, & Leal-Rodríguez (2021) that higher public understanding of the Covid-19 dangers increase their protection for themselves and their families through self-isolation, but it does not reduce their purchasing power for basic needs. The high public knowledge and purchasing power are supported by increased online information that changes people's perspective on the pandemic. This makes people know the importance of self-isolation and changes their shopping behavior (Oumlil & Balloun, 2015; Yurievna, 2022). The consumers' shopping behavior depends on their fear of the pandemic. When consumers are afraid, they are more likely to change their shopping behavior from offline to online (Masa'deh et al., 2023; Verma et al., 2023). However, this does not reduce their purchasing power for basic needs.

Other studies stated that people's purchasing power remains constant for basic needs by setting shopping hours from noon to evening or when the store is less crowded (Faisal et al., 2021). This finding shows that a higher public understanding of the Covid-19 dangers does not reduce the intention to buy basic needs. People buy these basic needs using customer hours estimated to be quiet at the store. They also utilize technological advances to fulfill their needs without leaving their homes. The high public understanding of the Covid-19 dangers increases the purchasing power for basic needs. The emergence of panic buying during the pandemic also affects people's purchasing power due to the declining psychology of survival (Dulam et al., 2020). Consumers make excessive purchases of one commodity considered important to reduce outdoor activities (Sheoran, 2024).

4.2. Perception of Covid-19 Condition on Unemployment

The hypothesis test estimation showed that the Covid-19 condition positively and significantly affects unemployment, with a coefficient of 0.129 (p-value < 0.001). It implies that a higher public perception of Covid-19 increases unemployment. These findings support the theory stated by previous studies that the pandemic increases unemployment in the community. The policies regarding restrictions on activities outside the home also impact the economic activities of a country (Falkowski et al., 2021). The pandemic has affected various countries' health and economic sectors (N. Sharma et al., 2024). Technological developments during the pandemic shift most people's shopping behavior to online platforms (Afonso et al., 2023; Galushko & Riabchyk, 2024). This decreases the need for offline shop assistants, increasing the unemployment rate. Digital technology development hinders the maximum growth of unemployment, which would decrease when technology expansion reaches a certain value (Mirzaei Abbasabadi & Soleimani, 2021; Sandri et al., 2022). Technological advances force companies to reduce the risk of employees crowding in production activity and substitute human labor with automatic machines (Jiang et al., 2024; Wei et al., 2024).

During the pandemic, companies stopped hiring high-skilled workers in low-skilled fields, while small companies stopped hiring their workers altogether (Guerrero-Amezaga et al., 2022; C. Y. Liu & Nazareno, 2024). Government policies are needed to intervene in job training and unemployment welfare to suppress the spread of Covid 19 for the community to be re-absorbed in the workforce (Irandoust, 2023; Zoundi, 2024). This step is necessary because many companies reduce permanent employees with less-satisfying performance. They recruit contract employees expected to provide better performance but could be dismissed when their performance declines (AdamusAdamus & Ballová MikuškováBallová Mikušková, 2023; Wangrow et al., 2018).

4.3. Perception of Covid-19 Condition on People's Income

The hypothesis test estimation showed that the Covid-19 condition negatively and significantly affects people's income, with a coefficient of -0.329 (p-value < 0.001). It implies that a higher perception of Covid-19 reduces people's income. This finding supports the theory of some other studies that Covid-19 makes companies reduce their labor market demand. Companies reduce their workforce due to activity restriction policies, resulting in lower sales turnover, services, and people's income (Chukwu & Essue, 2024; Trapani et al., 2024).

Companies in the trading business and important sectors experience decreased labor use, but the number of production workers remains unchanged (Chakraborty et al., 2024; Nakamura, 2024; Wang et al., 2024). They use marketing strategies through digital technology, which is growing rapidly during the pandemic. In the service sector, low-wage workers are most affected by Covid-19 (Arceo-Gomez et al., 2023; J. Chen et al., 2024; Date et

al., 2024; Hamenoo, 2024). Those working in the service sector involving face-to-face and higher health risks are more vulnerable to reduced work time intensity and impact on their income (Ghimire et al., 2023; P. Hu et al., 2024). Studies show that the pandemic negatively affects the labor market in the service sector, reducing people's income (Ben Hassen & El Bilali, 2024; L. Liu et al., 2024). This condition could be overcome by identifying the types of work that could be done at home, especially for people with low economies (Lewis et al., 2024).

4.4. Perception of Purchasing Power on People's Income

The hypothesis test estimation showed that people's purchasing power positively and significantly affects income, with a coefficient of 0.291 (p-value < 0.001). This indicates that higher purchasing power increases people's income during the pandemic. Basic needs are the main priority for Indonesians despite the pandemic. Furthermore, their purchasing power is fulfilled because many people help each other. Donations from influencers and entrepreneurs are also a trend, especially through social media (Goette & Tripodi, 2024; Kim & Kim, 2024). The government also provides subsidies for people affected by Covid-19. The people's generosity and government intervention have enabled people to fulfill their basic needs even during the pandemic.

This finding supports Joffe (2017) that purchasing power is the influence of the amount of money a person possesses regardless of its source. A higher purchasing power allows people to buy more goods and services of higher quality. Reduction in household income is strongly associated with higher food purchase savings, a phenomenon also observed during other crises (Calderone et al., 2018; Etgeton et al., 2023). People's purchasing power grows or remains constant for food consumption and transportation. Students also utilize transportation services, even low incomes (Damari & Kissinger, 2024). According to Lubis (2018), the higher income level of the population in North Sumatra increases their purchasing power. Therefore, people's purchasing power is better when their income fulfills basic needs (Langridge, 2024).

4.5. Perception of Unemployment on People's Income

The hypothesis test estimation showed that unemployment positively and significantly affects people's income, with a coefficient of -0.131 (p-value <0.001). This indicates that higher unemployment reduces people's income. The pandemic contributes to unemployment by increasing layoffs, resulting in decreased income (Sun et al., 2022; Walsh et al., 2024).

Unemployment increases the potential for excess death due to the pandemic (Jeong & Fox, 2023; Martins et al., 2024). Death is closely related to hunger and the inability to seek treatment when sick due to people's low income. Moreover, the pandemic contributes to low household participation and unemployment (Makate & Makate, 2023; Rengarajoo & Tan, 2023). This study found that the decline in unemployment reduces income and household participation.

1. The Effect of Perception of Covid-19 Condition on People's Income through Purchasing Power and Unemployment

The coefficient for the indirect effect of Cornavir (X1) on Income (Y3) through Purpow (Y1) and Unempl (Y2) is 0.068 with p = 0.014. It is declared significant, meaning Purpow and Unempl are mediating variables. The direct effect of Cornavir on Income is negative and significant. However, the effect becomes positive and significant when Cornavir is mediated by Purpow and Unempl. This means that the higher the Cornavir mediated by Purpow and Unempl, the higher the Income.

Previous studies found that unemployment may amplify the impact of other events (Raftopoulou & Giannakopoulos, 2023). Social support reduces the psychological pressure on unemployment. It is given as general friendship and sympathy in solving other people's problems (Milner et al., 2016). When this is associated with the pandemic condition, unemployment mediates, where people's income increases due to social support from influencers, the government, and the community (Arena et al., 2024; Benitez et al., 2023). However, this finding contradicts Shao, Jr and Shao (2012) that Purpow reduces economic mobility. The difference occurs because this study was conducted during the pandemic. In the pandemic situation, Purpow makes Cornavir affect Income. People believing in Cornavir have an increased income because they have more Purpow supported by the generous culture of Indonesians and government assistance.

5. CONCLUSION

The results and discussion showed that the Coronavirus positively and significantly affects purchasing power and unemployment but negatively and significantly affects income or poverty. Coronavirus and unemployment

have a partially negative and significant effect on income. In contrast, purchasing power positively and significantly affects income or poverty. Therefore, purchasing power and unemployment positively and significantly mediate the effect of the Coronavirus on income. This study also provided theoretical implications in the form of new information on Indonesians' income based on their personal perceptions of the pandemic. Previous studies mostly took income data from the Central Statistics Agency and Bank Indonesia.

This study provides important advice for related parties regarding the pandemic in Indonesia, including the government and the community. Public figures such as religious leaders and artists or influencers need to take persuasive actions to ensure the community obeys the government's appeal regarding the prevention of Covid-19. This is important because many community and public figures campaign that the pandemic is only a conspiracy of certain parties. Furthermore, it is necessary to conduct charity campaigns for the affected people. These campaigns must be conducted by artists, influencers, and people with high incomes. The government must also accelerate aid to the affected people to ensure they receive timely assistance.

Acknowledgement:

We would like to thank the Institute for Research and Community Service, Universitas Negeri Surabaya, for funding this research in 2022.

REFERENCES

Abdelwahab, M. M., Abonazel, M. R., Semary, H. E., & Abdel-Rahman, S. (2024). Implications of labour market disruptions on subjective wellbeing during the COVID-19 pandemic in MENA countries. *Heliyon*, *10*(4). https://doi.org/10.1016/j.heliyon.2024.e25665

Abeliansky, A. L., Algur, E., Bloom, D. E., & Prettner, K. (2020). The future of work: Meeting the global challenges of demographic change and automation. *International Labour Review*, *159*(3), 285–306. https://doi.org/10.1111/ilr.12168

AdamusAdamus, M., & Ballová MikuškováBallová Mikušková, E. (2023). Gender discrimination and the backlash effect in recruitment and dismissal processes: experimental evidence from Slovakia. *Gender in Management*, *39*(1), 107–129. https://doi.org/https://doi.org/10.1108/GM-01-2022-0002

Afonso, A. P., Carneiro, J., & Azevedo, A. I. (2023). The Impact of COVID-19 on e-Commerce: A Systematic Review of the Literature on the Purchasing Behavior of Online Retail Consumers. *IBIMA Business Review*, *2024*, 1–9. https://doi.org/10.5171/2024.403212

Agarwal, P., Hunt, K., Jose, E., & Zhuang, J. (2024). Shutdown and compliance decisions in the face of a viral pandemic: A game between governments and citizens. *Decision Support Systems*, *178*, 114128. https://doi.org/https://doi.org/10.1016/j.dss.2023.114128

Aguilera, B., Donya, R. s., Vélez, C.-M., Kapiriri, L., Abelson, J., Nouvet, E., Danis, M., Goold, S., Williams, I., & Noorulhuda, M. (2024). Stakeholder participation in the COVID-19 pandemic preparedness and response plans: A synthesis of findings from 70 countries. *Health Policy*, *142*, 105013. https://doi.org/https://doi.org/10.1016/j.healthpol.2024.105013

Ahmad, N., & Rangaraju, S. K. (2019). Macroeconomic effects of consumer confidence shock – evidence for state dependence. *Journal of Economic Studies*, *46*(7), 1293–1308. https://doi.org/10.1108/JES-11-2017-0326

Ajayi-Obe, S. (2020). Key Determinants of Job Creation: A Comparative analysis between OECD Countries and Emerging Economies. *Economic Alternatives*, *26*(4), 619–647. https://doi.org/10.37075/EA.2020.4.08

Allen, P., Pilar, M., Walsh-Bailey, C., Hooley, C., Mazzucca, S., Lewis, C. C., Mettert, K. D., Dorsey, C. N., Purtle, J., Kepper, M. M., Baumann, A. A., & Brownson, R. C. (2020). Quantitative measures of health policy implementation determinants and outcomes: A systematic review. *Implementation Science*, *15*(1). https://doi.org/10.1186/s13012-020-01007-w

Al-Thaqeb, S. A., & Algharabali, B. G. (2019). Economic policy uncertainty: A literature review. *Journal of Economic Asymmetries*, *20*. https://doi.org/10.1016/j.jeca.2019.e00133

Ambrocio, G. (2022). Euro-area business confidence and COVID-19. *Applied Economics*, *54*(43), 4915–4929. https://doi.org/10.1080/00036846.2022.2038777

Ananta, A., Putranto, W. P. A., & Moeis, A. I. A. (2022). COVID-19 and the Economy: How Indonesia Responded. In *Revitalising ASEAN Economies in a Post-COVID-19 World: Socioeconomic Issues in the New Normal* (pp. 55–88). https://doi.org/10.1142/9789811228476_0003

Arceo-Gomez, E. O., Campos-Vazquez, R. M., Esquivel, G., Alcaraz, E., Martinez, L. A., & Lopez, N. G. (2023). The impact of COVID-19 infection on labor outcomes of Mexican formal workers. *World Development Perspectives*, *29*, 100488. https://doi.org/https://doi.org/10.1016/j.wdp.2023.100488

Arena, A. F., Collins, D., Mackinnon, A., Mobbs, S., Lavender, I., Harvey, S. B., & Deady, M. (2024). Job Loss Due to COVID-19: A Longitudinal Study of Mental Health, Protective and Risk Factors. *Psychological Reports*. https://doi.org/10.1177/00332941241248601

Arvin, M. B., Pradhan, R. P., & Nair, M. S. (2021). Are there links between institutional quality, government expenditure, tax revenue and economic growth? Evidence from low-income and lower middle-income countries. *Economic Analysis and Policy*, *70*, 468–489. https://doi.org/https://doi.org/10.1016/j.eap.2021.03.011

Asthana, S., Mukherjee, S., Phelan, A. L., Woo, J. J., & Standley, C. J. (2024). Singapore's COVID-19 crisis decision-making through centralization, legitimacy, and agility: an empirical analysis. *The Lancet Regional Health - Western Pacific*, *49*, 101137. https://doi.org/https://doi.org/10.1016/j.lanwpc.2024.101137

Atalay, M. A., Sevgili, H., Giannetto, D., Sarà, G., Kanyılmaz, M., Erkan, S., & Mangano, M. C. (2024). A stakeholders' perception: Turkish aquaculture sector under COVID-19 pandemic effect with consideration of anthropogenic stressors. *Marine Policy*, *164*, 106153. https://doi.org/https://doi.org/10.1016/j.marpol.2024.106153

Baber, H. (2020). Spillover effect of COVID19 on the Global Economy. *Transnational Marketing Journal*, *8*(2), 177–192. https://doi.org/10.33182/tmj.v8i2.1067

Baker, S. R., Farrokhnia, R. A., Meyer, S., Pagel, M., & Yannelis, C. (2023). Income, Liquidity, and the Consumption Response to the 2020 Economic Stimulus Payments. *Review of Finance*, *27*(6), 2271–2304. https://doi.org/10.1093/rof/rfad010

Baporikar, N. (2021). Handbook of research on strategies and interventions to mitigate COVID-19 impact on SMEs. In *Handbook of Research on Strategies and Interventions to Mitigate COVID-19 Impact on SMEs*. https://doi.org/10.4018/978-1-7998-7436-2

Barik, A., & Palit, S. (2024a). The impact of COVID-19 on women micro-entrepreneurs in Odisha: A case study of Cuttack. In *Sustainability and Equity: Economic Democracy and Social Empowerment* (pp. 129–145). https://www.scopus.com/inward/record.uri?eid=2-s2.0-85186051474&partnerID=40&md5=3c68fd6da533fa1a97130d2c72bf940f

Barik, A., & Palit, S. (2024b). The impact of COVID-19 on women micro-entrepreneurs in Odisha: A case study of Cuttack. In *Sustainability and Equity: Economic Democracy and Social Empowerment* (pp. 129–145). https://www.scopus.com/inward/record.uri?eid=2-s2.0-85186051474&partnerID=40&md5=3c68fd6da533fa1a97130d2c72bf940f

Beckles, J., & Jackman, M. (2024). Financial worry and government responses to the COVID-19 pandemic in 88 Countries: Did public confidence in National Governments matter? *Journal of Behavioral and Experimental Finance*, *43*. https://doi.org/10.1016/j.jbef.2024.100940

Belland, B. R., Kim, C., Zhang, A. Y., Lee, E., & Dinç, E. (2022). Classifying the quality of robotics-enhanced lesson plans using motivation variables, word count, and sentiment analysis of reflections. *Contemporary Educational Psychology*, *69*, 102058. https://doi.org/https://doi.org/10.1016/j.cedpsych.2022.102058

Ben Hassen, T., & El Bilali, H. (2024). Three years into the pandemic: Insights of the COVID-19 impacts on food security and nutrition in low and middle-income countries. *Heliyon*, *10*(7), e28946. https://doi.org/https://doi.org/10.1016/j.heliyon.2024.e28946

Benitez, J. A., Huang, H., & Johnson, P. L. (2023). The Relationship between Coronavirus Disease 2019 (COVID-19) Pandemic-linked Job Losses and Health Care Access and Household Financial Health in Medicaid Expansion and Nonexpansion States. *Medical Care*, *61*(12), 872–881. https://doi.org/10.1097/MLR.0000000000001933

Bernhardsdóttir, Á. E. (2015). Crisis-related decision-making and the influence of culture on the behavior of decision makers: Cross-cultural behavior in crisis preparedness and response. In *Crisis-Related Decision-Making and the Influence of Culture on the Behavior of Decision Makers: Cross-Cultural Behavior in Crisis Preparedness and Response*. https://doi.org/10.1007/978-3-319-20714-8

Bieszk-Stolorz, B., & Markowicz, I. (2022). The Impact of the COVID-19 Pandemic on the Situation of the Unemployed in Poland. A Study Using Survival Analysis Methods. *Sustainability (Switzerland)*, *14*(19). https://doi.org/10.3390/su141912677

Bruce, C., Gearing, M. E., DeMatteis, J., Levin, K., Mulcahy, T., Newsome, J., & Wivagg, J. (2022). Financial vulnerability and the impact of COVID-19 on American households. *PLoS ONE*, *17*(1 January). https://doi.org/10.1371/journal.pone.0262301

Calderone, M., Fiala, N., Mulaj, F., Sadhu, S., & Sarr, L. (2018). Financial Education and Savings Behavior: Evidence from a Randomized Experiment among Low-Income Clients of Branchless Banking in India. *Economic Development and Cultural Change*, *66*(4), 793–825. https://doi.org/https://doi.org/10.1086/697413

Cammeraat, E., Jongen, E., & Koning, P. (2023). The added-worker effect in the Netherlands before and during the Great Recession. *Review of Economics of the Household*, *21*(1), 217–243. https://doi.org/10.1007/s11150-021-09595-2

Cao, C., & Liang, X. (2024). The Impact of Ignoring Cross-loadings on the Sensitivity of Fit Measures in Measurement Invariance Testing. *Structural Equation Modeling*, *31*(1), 64–80. https://doi.org/10.1080/10705511.2023.2223360

Castro, V., & Martins, R. (2024). Lockdowns, vaccines, and the economy: How economic perceptions were shaped during the COVID-19 pandemic†. *Scottish Journal of Political Economy*, *71*(3), 439–456. https://doi.org/10.1111/sjpe.12376

Chakraborty, P., Mitra, D., & Sundaram, A. (2024). Import competition, labor market regulations, and firm outsourcing. *Journal of Development Economics*, *168*, 103272. https://doi.org/https://doi.org/10.1016/j.jdeveco.2024.103272

Chen, J., Wan, H., Zhang, W., & He, W. (2024). Guarantee employment or guarantee wage? Firm-level evidence from China. *China Economic Review*, *86*, 102174. https://doi.org/https://doi.org/10.1016/j.chieco.2024.102174

Chen, J.-H., Wu, C.-F., & Zheng, H. (2024). Who Stays Poor and Who Doesn't? An Analysis Based on Joint Assessment of Income and Assets. *Journal of Social Policy*, *53*(3), 595–616. https://doi.org/10.1017/S0047279422000563

Chen, Q., & Xu, X. (2022). Stabilizing economic growth: Growth target and government expenditure since World War II. *China Economic Quarterly International*, *2*(2), 98–110. https://doi.org/10.1016/j.ceqi.2022.05.003

Chen, T.-C., Kim, D.-H., & Lin, S.-C. (2021). Nonlinearity in the effects of financial development and financial structure on unemployment. *Economic Systems*, *45*(1). https://doi.org/10.1016/j.ecosys.2020.100766

Chukwu, O. A., & Essue, B. (2024). Addressing health workforce shortages as a precursor to attaining universal health coverage: A comparative policy analysis of Nigeria and Ghana. *Social Science & Medicine*, *355*, 117095. https://doi.org/https://doi.org/10.1016/j.socscimed.2024.117095

Craig, S. G., Hemissi, W., Mukherjee, S., & Sørensen, B. E. (2016). How do politicians save? Buffer-stock management of unemployment insurance finance. *Journal of Urban Economics*, *93*, 18–29. https://doi.org/10.1016/j.jue.2016.02.002

Damari, Y., & Kissinger, M. (2024). Changing food preferences and choices – A framework for analyzing households food purchases over time. *International Journal of Gastronomy and Food Science*, *36*, 100920. https://doi.org/https://doi.org/10.1016/j.ijgfs.2024.100920

Date, D., Kurozumi, T., Nakazawa, T., & Sugioka, Y. (2024). Heterogeneity and wage growth of full-time workers in Japan: An empirical analysis using micro data. *Journal of the Japanese and International Economies*, *73*, 101324. https://doi.org/https://doi.org/10.1016/j.jjie.2024.101324

Dean, J., & Hall, J. C. (2024). On the long-run properties of income and stock prices: the stability of the "golden ratios." *Journal of Financial Economic Policy*, *16*(3), 315–329. https://doi.org/10.1108/JFEP-12-2023-0388

Dui, H. (2022). COVID-19, income and gender wage gap: Evidence from the China family panel studies (CFPS) 2014 to 2020. *Frontiers in Public Health*, *10*. https://doi.org/10.3389/fpubh.2022.1066625

Dulam, R., Furuta, K., & Kanno, T. (2020). Quantitative decision-making model for consumer panic buying in disaster scenarios. *30th European Safety and Reliability Conference, ESREL 2020 and 15th Probabilistic Safety Assessment and Management Conference, PSAM 2020*, 1020–1026. https://www.scopus.com/inward/record.uri?eid=2-s2.0-85110292937&partnerID=40&md5=182f11c794e81b1ae95c2e0f06545d6f

Dursun, I., Kiliç, H. Y., & Aralik, E. (2023). Impulsive buying as a response to COVID-19-related negative psychological states. In *Perspectives on Stress and Wellness Management in Times of Crisis* (pp. 104–125). https://doi.org/10.4018/978-1-6684-8565-1.ch007

Easterlin, R. A. (2023). Why does happiness respond differently to an increase vs. decrease in income? *Journal of Economic Behavior and Organization*, *209*, 200–204. https://doi.org/10.1016/j.jebo.2023.03.005

Eichengreen, B., Park, D., & Shin, K. (2024). Economic resilience: Why some countries recover more robustly than others from shocks. *Economic Modelling*, *136*. https://doi.org/10.1016/j.econmod.2024.106748

Elmassah, S., Bacheer, S., & Hassanein, E. (2023). US consumers' confidence and responses to COVID-19 shock. *Review of Economics and Political Science*, *8*(3), 186–207. https://doi.org/10.1108/REPS-10-2021-0098

Etgeton, S., Fischer, B., & Ye, H. (2023). The effect of increasing retirement age on households' savings and consumption expenditure. *Journal of Public Economics*, *221*, 104845. https://doi.org/https://doi.org/10.1016/j.jpubeco.2023.104845

Faisal, T., Awawdeh, M., Habte, D., Berhanu, H., Kifle, K., Misghina, L., & Bashir, A. (2021). Smart Cart With Multi-shopping Solutions. *International Journal of Interactive Mobile Technologies*, *15*(24), 77–93. https://doi.org/10.3991/IJIM.V15I24.26397

Falkheimer, J., & Zhao, H. (2020). Intercultural and multicultural approaches to crisis communication. In *Crisis Communication* (pp. 523–539). https://doi.org/10.1515/9783110554236-026

Falkowski, M. J., Maskey, M., Sobue, S.-I., Campbell, G., Bawden, G., & Tadono, T. (2021). COIVD-19 IMPACT MONITORING OF ECONOMIC ACTIVITIES. *International Geoscience and Remote Sensing Symposium (IGARSS)*, 1366–1369. https://doi.org/10.1109/IGARSS47720.2021.9555044

Fitriadi, F., Jiuhardi, J., Busari, A., Ulfah, Y., Hakim, Y. P., Kurniawan, A. E., & Darma, D. C. (2022). Using Correlation Analysis to Examine the Impact of Covid-19 Pandemics on Various Socioeconomic Aspects: Case study of Indonesia. *Geographica Pannonica*, *26*(2), 128–141. https://doi.org/10.5937/gp26-37049

Fretheim, A., Munabi-Babigumira, S., Oxman, A. D., Lavis, J. N., & Lewin, S. (2009). SUPPORT tools for Evidence-informed policymaking in health 6: Using research evidence to address how an option will be implemented. *Health Research Policy and Systems*, *7*(SUPPL. 1). https://doi.org/10.1186/1478-4505-7-S1-S6

Furceri, D., Loungani, P., Ostry, J. D., & Pizzuto, P. (2022). Will COVID-19 Have Long-Lasting Effects on Inequality? Evidence from Past Pandemics. *Journal of Economic Inequality*, *20*(4), 811–839. https://doi.org/10.1007/s10888-022-09540-y

Galushko, V., & Riabchyk, A. (2024). The demand for online grocery shopping: COVID-induced changes in grocery shopping behavior of Canadian consumers. *PLoS ONE*, *19*(2 February). https://doi.org/10.1371/journal.pone.0295538

Ghimire, J., Nepal, R. M., Crowley, J., Ghimire, D., & Guragain, S. (2023). Vulnerabilities and risk perceptions of contracting COVID-19 among Nepali migrant workers. *Social Sciences & Humanities Open*, *7*(1), 100486. https://doi.org/https://doi.org/10.1016/j.ssaho.2023.100486

Gholipour, H. F., Tajaddini, R., & Farzanegan, M. R. (2023). Governments' economic support for households during the COVID-19 pandemic and consumer confidence. *Empirical Economics*, *65*(3), 1253–1272. https://doi.org/10.1007/s00181-023-02367-0

Goel, T., Telegdy, Á., Banai, Á., & Takáts, E. (2024). Subsidy-driven firm growth: Does loan history matter? Evidence from a European Union subsidy program. *Journal of Corporate Finance*, *87*. https://doi.org/10.1016/j.jcorpfin.2024.102592

Goette, L., & Tripodi, E. (2024). The limits of social recognition: Experimental evidence from blood donors. *Journal of Public Economics*, *231*, 105069. https://doi.org/https://doi.org/10.1016/j.jpubeco.2024.105069

Graham, S. M., & Valen, B. M. (2024). FINDING POSITIVES IN THE PANDEMIC: THE ROLE OF RELATIONSHIP STATUS, SELF-ESTEEM, MENTAL HEALTH, AND PERSONALITY. *Current Research in Social Psychology*, *33*. https://www.scopus.com/inward/record.uri?eid=2-s2.0-85195651828&partnerID=40&md5=304b82bdf69ff7da93e1d8ebff65c26b

Guerrero-Amezaga, M. E., Humphries, J. E., Neilson, C. A., Shimberg, N., & Ulyssea, G. (2022). Small firms and the pandemic: Evidence from Latin America. *Journal of Development Economics*, *155*. https://doi.org/10.1016/j.jdeveco.2021.102775

Guo, A., Krolikowski, P., & Yang, M. (2023). Displaced workers and the pandemic recession. *Economics Letters*, *226*. https://doi.org/10.1016/j.econlet.2023.111071

Guo, Y., & He, S. (2020). Does confidence matter for economic growth? An analysis from the perspective of policy effectiveness. *International Review of Economics and Finance*, *69*, 1–19. https://doi.org/10.1016/j.iref.2020.04.012

Gupta, A. S., & Mukherjee, J. (2024). Exploring personal savings versus hedonic consumption in the new normal. *International Journal of Retail and Distribution Management*, *52*(1), 107–124. https://doi.org/10.1108/IJRDM-07-2023-0422

Hafidz, F., Fachiroh, J., Bintoro, B. S., Wicaksana, A. L., Qaimamunazzala, H., Rosha, P. T., Pratama, K. G., Nurvitasari, R. I., & Wardani, R. K. (2022). Economic Impact of the Coronavirus Disease-2019 Pandemic: Sleman Health and Demographic Surveillance System Individual Panel Secondary Data Analysis. *Malaysian Journal of Medicine and Health Sciences*, *18*, 18–25. https://www.scopus.com/inward/record.uri?eid=2-s2.0-85142096777&partnerID=40&md5=a1ca7d1a5beac35af11e4ec0ade03832

Hamenoo, E. S. (2024). Social workers' perspective on the impact of Covid-19 on clients' vulnerability in Ghana. *Children and Youth Services Review*, *160*, 107552. https://doi.org/https://doi.org/10.1016/j.childyouth.2024.107552

Hansen, N.-J. H., & Mano, R. C. (2023). COVID-19 Vaccines: A Shot in the Arm for the Economy. *IMF Economic Review*, *71*(1), 148–169. https://doi.org/10.1057/s41308-022-00184-6

Hartigan, L., & Wright, M. (2023). Monitoring Financial Conditions and Downside Risk to Economic Activity in Australia*. *Economic Record*, *99*(325), 253–287. https://doi.org/10.1111/1475-4932.12706

Hohlova, V., & Rivža, B. (2021). The impact of the covid-19 pandemic on the unemployment rate in Latvia. *Research for Rural Development*, *36*, 137–143. https://doi.org/10.22616/rrd.27.2021.020

Holzer, H. J., Hubbard, G., & Strain, M. R. (2024). Did pandemic unemployment benefits increase unemployment? Evidence from early state-level expirations. *Economic Inquiry*, *62*(1), 24–38. https://doi.org/10.1111/ecin.13180

Hu, H., Xiong, S., Zhang, X., Liu, S., Gu, L., Zhu, Y., Xiang, D., & Skitmore, M. (2023). The COVID-19 pandemic in various restriction policy scenarios based on the dynamic social contact rate ††In memory of our beloved colleague Dr. Yuantong Shen, who passed away from COVID-19. Thanks for his kind efforts for this paper. *Heliyon*, *9*(3), e14533. https://doi.org/https://doi.org/10.1016/j.heliyon.2023.e14533

Hu, P., Li, Z., Hu, A., Gong, Y., Huang, X., Zhong, M., Li, X., Zhong, C., Liu, S., Hong, J., Zhang, W., Wang, Y., & Huang, Y. (2024). Are workers also vulnerable to the impact of ambient air pollution? Insight from a large-scale ventilatory exam. *Science of The Total Environment*, *947*, 174634. https://doi.org/https://doi.org/10.1016/j.scitotenv.2024.174634

Hueting, R. (2013). Environmentally sustainable national income: Indispensable information for attaining environmental sustainability. *Environmental Values*, *22*(1), 81–100. https://doi.org/10.3197/096327113X13528328798318

Irandoust, M. (2023). Active labor market as an instrument to reduce unemployment. *Journal of Government and Economics*, *9*, 100065. https://doi.org/https://doi.org/10.1016/j.jge.2023.100065

Islam, A. M. (2021). Impact of Covid-19 pandemic on global output, employment and prices: an assessment. *Transnational Corporations Review*, *13*(2), 189–201. https://doi.org/10.1080/19186444.2021.1936852

Islam, S. M., & Habib, A. (2022). How impact investing firms are responding to sustain and grow social economy enterprises in light of the COVID-19 pandemic. *Journal of Business Venturing Insights*, *18*, e00347. https://doi.org/https://doi.org/10.1016/j.jbvi.2022.e00347

Jeong, S., & Fox, A. M. (2023). Enhanced unemployment benefits, mental health, and substance use among low-income households during the COVID-19 pandemic. *Social Science & Medicine*, *328*, 115973. https://doi.org/https://doi.org/10.1016/j.socscimed.2023.115973

Jiang, H., Ge, Y., Yang, C., & Yu, H. (2024). How automated machines influence employment in manufacturing enterprises? *PLoS ONE*, *19*(3 March). https://doi.org/10.1371/journal.pone.0299194

Jiménez-Solomon, O., Irwin, G., Melanie, W., & Christopher, W. (2024). When money and mental health problems pile up: The reciprocal relationship between income and psychological distress. *SSM - Population Health*, *25*.

https://doi.org/10.1016/j.ssmph.2024.101624
Jordan, P., & Spiess, M. (2019). Rethinking the Interpretation of Item Discrimination and Factor Loadings. *Educational and Psychological Measurement*, *79*(6), 1103–1132. https://doi.org/10.1177/0013164419843164
Kampe, L., Goehlich, V., & Wüst, K. (2021). The Impact of Culture on the Perception of Young Japanese and Germans in the Management of the Corona Crisis by their Government. *Public Organization Review*, *21*(4), 759–778. https://doi.org/10.1007/s11115-021-00592-8
Kandpal, V. (2023). Impact analysis of global COVID-19 crisis – a review. *International Journal of Business Excellence*, *31*(1), 113–125. https://doi.org/10.1504/IJBEX.2023.133556
Kang, J. W., Tayag, M., & Sy, D. (2023). Consumption Response to Government Income Subsidies: Korea's Case. *Journal of Asian and African Studies*, *58*(6), 941–974. https://doi.org/10.1177/00219096221077488
Karsavuran, Z. (2021). The effects of COVID-19 on tourism and hospitality employment. In *Handbook of Research on the Impacts and Implications of COVID-19 on the Tourism Industry* (pp. 539–557). https://doi.org/10.4018/978-1-7998-8231-2.ch026
Kawano, L., & LaLumia, S. (2017). How income changes during unemployment: Evidence from tax return data. *Journal of Human Resources*, *52*(2), 418–456. https://doi.org/10.3368/jhr.52.2.0414-6319R2
Kenworthy, L., Epstein, J., & Duerr, D. (2011). Generous Social Policy Reduces Material Deprivation. In *Progress for the Poor*. https://doi.org/10.1093/acprof:oso/9780199591527.003.0004
Khalil, E. L., Aimone, J. A., Houser, D., Wang, S., Martinez, D., & Qian, K. (2021). The aspirational income hypothesis: On the limits of the relative income hypothesis. *Journal of Economic Behavior and Organization*, *182*, 229–247. https://doi.org/10.1016/j.jebo.2020.12.003
Khan, A. U., Ma, Z., Li, M., Hu, W., Khan, M. N., Sohu, J. M., & Aziz, F. (2024). Beyond bookshelves, how 5/6G technology will reshape libraries: Two-stage SEM and SF-AHP analysis. *Technology in Society*, *78*, 102629. https://doi.org/https://doi.org/10.1016/j.techsoc.2024.102629
Kharlamova, G., Stavytskyy, A., & Chernyak, O. (2021). Modelling of Population Consumption in Conditions of Instability. *Springer Proceedings in Business and Economics*, 101–119. https://doi.org/10.1007/978-3-030-50676-6_9
Kim, M., & Kim, J. (2024). From empathetic hearts to digital hands: A study of compassion and donation behavior in social media advertising. *Journal of Retailing and Consumer Services*, *79*, 103855. https://doi.org/https://doi.org/10.1016/j.jretconser.2024.103855
Kivenzor, G. J., de Mesquita, J. M. C., Kostelijk, E., Reutskaja, E., & Ivchenko, A. (2023). The Pandemic Crisis Effects on Subjective Well-Being and Consumer Behavior: An Abstract. In *Developments in Marketing Science: Proceedings of the Academy of Marketing Science* (pp. 151–152). https://doi.org/10.1007/978-3-031-24687-6_57
Klug, K., Selenko, E., & Gerlitz, J.-Y. (2021). Working, but not for a living: a longitudinal study on the psychological consequences of economic vulnerability among German employees. *European Journal of Work and Organizational Psychology*, *30*(6), 790–807. https://doi.org/10.1080/1359432X.2020.1843533
Knotz, C. M. (2020). Does Demanding Activation Work? A Comparative Analysis of the Effects of Unemployment Benefit Conditionality on Employment in 21 Advanced Economies, 1980-2012. *European Sociological Review*, *36*(1), 121–135. https://doi.org/10.1093/esr/jcz041
Kohlscheen, E., Moessner, R., & Rees, D. M. (2024). The shape of business cycles: A cross-country analysis of Friedman's plucking theory. *Kyklos*, *77*(2), 351–370. https://doi.org/10.1111/kykl.12370
Kovalenko, T. (2024). Uncertainty shocks and employment fluctuations in Germany: The role of establishment size. *Oxford Economic Papers*, *76*(2), 451–468. https://doi.org/10.1093/oep/gpad013
Kuypers, S., Marx, I., Nolan, B., & Palomino, J. C. (2022). Lockdown, Earnings Losses and Household Asset Buffers in Europe1. *Review of Income and Wealth*, *68*(2), 428–470. https://doi.org/10.1111/roiw.12594
Langridge, N. (2024). Unconditional basic income and a degrowth transition: Adding empirical rigour to radical visions. *Futures*, *159*, 103375. https://doi.org/https://doi.org/10.1016/j.futures.2024.103375
Lanz, M., Sorgente, A., Vosylis, R., Fonseca, G., Lep, Ž., Li, L., Zupančič, M., Crespo, C., Relvas, A. P., & Serido, J. (2021). A Cross-National Study of COVID-19 Impact and Future Possibilities Among Emerging Adults: The Mediating Role of Intolerance of Uncertainty. *Emerging Adulthood*, *9*(5), 550–565. https://doi.org/10.1177/21676968211046071
Leonov, Y., Dangadze, S., Chorna, O., Smentyna, N., & Fialkovska, A. (2024). Examination of strategies and tactics for crisis response in emergency situations. *Multidisciplinary Reviews*, *7*(Special Issue). https://doi.org/10.31893/multirev.2024spe018
Leonov, Y., Nakonechnyi, O., Khalimanenko, V., Nikolaiko, H., & Heraimovych, V. (2023). Analysis of the Influence of Psychological Factors on Consumer Behavior and the Decision-making Process. *Economic Affairs (New Delhi)*, *68*(3), 1643–1651. https://doi.org/10.46852/0424-2513.3.2023.29
Lewis, B. A., Schuver, K., Dregney, T., Terrell, C., & Stang, J. (2024). The effect of a remote physical activity intervention on postpartum depressive symptoms and stress among low income women: The healthy mom III randomized trial. *Mental Health and Physical Activity*, *27*, 100623. https://doi.org/https://doi.org/10.1016/j.mhpa.2024.100623
Li, J., & Fang, Z. (2024). Navigating COVID-19 disruptions for resilience and green growth in mineral resource trade. *Resources Policy*, *90*, 104720. https://doi.org/https://doi.org/10.1016/j.resourpol.2024.104720
Liepmann, H., & Pignatti, C. (2024). Welfare effects of unemployment benefits when informality is high. *Journal of Public Economics*, *229*. https://doi.org/10.1016/j.jpubeco.2023.105032
Lisciandra, C. (2018). The role of psychology in behavioral economics: The case of social preferences. *Studies in History and Philosophy of Science Part A*, *72*, 11–21. https://doi.org/10.1016/j.shpsa.2018.01.010
Liu, B., Huo, T., Liao, P., Gong, J., & Xue, B. (2015). A group decision-making aggregation model for contractor selection in large scale construction projects based on two-stage partial least squares (PLS) path modeling. *Group Decision and Negotiation*, *24*(5), 855–883. https://doi.org/10.1007/s10726-014-9418-2
Liu, C., Sun, X., Feng, Q., & Yao, X. (2023). How did the macroeconomic sectors respond under the pandemic in China? Evidence from FAVAR model. *Procedia Computer Science*, *221*, 488–492. https://doi.org/10.1016/j.procs.2023.08.005
Liu, C. Y., & Nazareno, L. (2024). State responses during the COVID-19 pandemic and their impacts on small businesses. *Small Business Economics*. https://doi.org/10.1007/s11187-024-00923-1
Liu, L., Pollock, N. J., Contreras, G., Xu, Y., & Thompson, W. (2024). Hospitalizations and emergency department visits for self-harm in Canada during the first two years of the COVID-19 pandemic: A time series analysis. *Journal of Affective Disorders*, *355*, 505–512. https://doi.org/https://doi.org/10.1016/j.jad.2024.03.123
Liu, S., & Yamamoto, T. (2022). Role of stay-at-home requests and travel restrictions in preventing the spread of COVID-19 in Japan. *Transportation Research Part A: Policy and Practice*, *159*, 1–16. https://doi.org/https://doi.org/10.1016/j.tra.2022.03.009
Lopes, A. S., & Sargento, A. (2024). Quitters from Hospitality Industry: Misfit or Just Looking for Better Conditions? *Administrative*

Sciences, *14*(6). https://doi.org/10.3390/admsci14060111

Lucas, T. C., Guimarães, R. D., Vasconcellos, M. S. G., Lins, I. D., Moura, M. J. das C., & de Siqueira, P. G. S. C. (2024). Resilience of critical supply chains in pandemics: A model proposal for health personal protective equipment socially optimal distribution. *Operations Research for Health Care*, *40*, 100420. https://doi.org/https://doi.org/10.1016/j.orhc.2024.100420

Lyudmyla, A., Oksana, T., Bohdan, F., Volodymyr, T., Viktoriia, T., & Liudmyla, A. (2024). Informational Support for Communication of Reinvestment Recovery of the Economy. *Lecture Notes in Networks and Systems*, *927 LNNS*, 193–205. https://doi.org/10.1007/978-3-031-54009-7_18

Ma, C., Cheok, M. Y., & Chok, N. V. (2023). Economic recovery through multisector management resources in small and medium businesses in China. *Resources Policy*, *80*, 103181. https://doi.org/https://doi.org/10.1016/j.resourpol.2022.103181

Ma, C.-T. A. (2024). Vaccination equilibrium: Externality and efficiency. *Socio-Economic Planning Sciences*, *95*. https://doi.org/10.1016/j.seps.2024.102001

Maitah, M., & Urbánková, E. (2015). Economic performance and unemployment in the czech republic. *Asian Social Science*, *11*(16), 240–245. https://doi.org/10.5539/ass.v11n16p240

Maiti, A. (2024). Heterogeneous impact of COVID-19 pandemic on individual income across industries. *Applied Economics Letters*, *31*(7), 646–653. https://doi.org/10.1080/13504851.2022.2141438

Makate, M., & Makate, C. (2023). Leaving No Women Behind: Evaluating the Impact of the COVID-19 Pandemic on Livelihood Outcomes in Kenya and Ethiopia. *International Journal of Environmental Research and Public Health*, *20*(6). https://doi.org/10.3390/ijerph20065048

Marchesi, A., & De Luigi, N. (2022). Risk Perception and COVID-19 During Lockdown: Evidence from an Italian Sample. *Italian Sociological Review*, *12*(2), 545–563. https://doi.org/10.13136/isr.v12i2.562

Martins, S. S., Segura, L. E., Marziali, M. E., Bruzelius, E., Levy, N. S., Gutkind, S., Santarin, K., Sacks, K., & Fox, A. (2024). Higher unemployment benefits are associated with reduced drug overdose mortality in the United States before and during the COVID-19 pandemic. *International Journal of Drug Policy*, *130*, 104522. https://doi.org/https://doi.org/10.1016/j.drugpo.2024.104522

Masa'deh, R., Almajali, D. A., Almajali, M. R., Almajali, E. R., & Alshurideh, M. T. (2023). Factors Influencing Online Shopping During Fear of Covid-19 Pandemic in Jordan: A Conceptual Framework. In *Studies in Computational Intelligence* (Vol. 1056, pp. 305–315). https://doi.org/10.1007/978-3-031-12382-5_16

Matuszek, J., Kaczmar-Kolny, E., & Byrdy, Ł. (2023). The Method of Determining the Technical Costs of Manufacturing Products. *Foundations of Management*, *15*(1), 101–114. https://doi.org/10.2478/fman-2023-0008

Mawad, J. L. (2023). Does good financial behavior reduce the negative impact of financial fragility on individuals' financial optimism? The never-ending Lebanese crisis case. *International Journal of Innovative Research and Scientific Studies*, *6*(3), 553–561. https://doi.org/10.53894/ijirss.v6i3.1581

Meyer, B. H., Prescott, B. C., & Sheng, X. S. (2023). The impact of supply chain disruptions on business expectations during the pandemic. *Energy Economics*, *126*, 106951. https://doi.org/https://doi.org/10.1016/j.eneco.2023.106951

Mikhaeil, E., & Okulicz-Kozaryn, A. (2024). Public-private Job Satisfaction Differential: The Case of Egypt. *Public Organization Review*. https://doi.org/10.1007/s11115-024-00774-0

Milner, A., Krnjacki, L., Butterworth, P., & LaMontagne, A. D. (2016). The role of social support in protecting mental health when employed and unemployed: A longitudinal fixed-effects analysis using 12 annual waves of the HILDA cohort. *Social Science and Medicine*, *153*, 20–26. https://doi.org/10.1016/j.socscimed.2016.01.050

Mirzaei Abbasabadi, H., & Soleimani, M. (2021). Examining the effects of digital technology expansion on Unemployment: A cross-sectional investigation. *Technology in Society*, *64*. https://doi.org/10.1016/j.techsoc.2020.101495

Mohammadi Moghaddam, T., Razavi, S. M. A., Taghizadeh, M., & Sazgarnia, A. (2016). Sensory and instrumental texture assessment of roasted pistachio nut/kernel by partial least square (PLS) regression analysis: effect of roasting conditions. *Journal of Food Science and Technology*, *53*(1), 370–380. https://doi.org/10.1007/s13197-015-2054-2

Molenaar, J., Robinson, H., & Van Praag, L. (2024). "A beacon of hope": A qualitative study on migrants' mental health needs and community-based organisations' responses during the COVID-19 pandemic in Antwerp, Belgium. *SSM - Qualitative Research in Health*, *5*, 100402. https://doi.org/https://doi.org/10.1016/j.ssmqr.2024.100402

Monachan, S., Hameed, A., Babu, T., Nair, R. R., Sharma R, R., Chinnaiyan, R., & Sungheetha, A. (2024). Challenges and Opportunities: Assessing the Impact of GST on MSMEs and the Need for Ongoing Support. *4th International Conference on Innovative Practices in Technology and Management 2024, ICIPTM 2024*. https://doi.org/10.1109/ICIPTM59628.2024.10563390

Monusova, G. A. (2020). Perception of unemployment by europeans. *World Economy and International Relations*, *64*(4), 84–95. https://doi.org/10.20542/0131-2227-2020-64-4-84-95

Mueller, A. I., Spinnewijn, J., & Topa, G. (2021). Job Seekers' perceptions and employment prospects: Heterogeneity, duration dependence, and bias. *American Economic Review*, *111*(1), 324–363. https://doi.org/10.1257/aer.20190808

Musyawwiri, A., & Üngör, M. (2019). An Overview of the Proximate Determinants of Economic Growth in Indonesia Since 1960*. *Bulletin of Indonesian Economic Studies*, *55*(2), 213–237. https://doi.org/10.1080/00074918.2018.1550251

Nakamura, D. (2024). Is part-time employment an adjusting valve?: Business cycle analysis on the labor market in Japan by dual search and matching model. *Japan and the World Economy*, *71*, 101270. https://doi.org/https://doi.org/10.1016/j.japwor.2024.101270

Nam, D., & Wang, J. (2019). Mood Swings and Business Cycles: Evidence from Sign Restrictions. *Journal of Money, Credit and Banking*, *51*(6), 1623–1649. https://doi.org/10.1111/jmcb.12568

Naqvi, H. A. (2022). Role of government policies to attain economic sustainability amid COVID-19 environment. *Frontiers in Environmental Science*, *10*. https://doi.org/10.3389/fenvs.2022.983860

Nath, S., & DasGupta, M. (2021). Pandemic effect and remedial business model in micro, small and medium enterprises: A study in India with special reference to West Bengal. In *New Business Models in the Course of Global Crises in South Asia: Lessons from COVID-19 and Beyond* (pp. 151–161). https://doi.org/10.1007/978-3-030-79926-7_9

Oniku, A., Okunnu, O. R., & Kuye, O. (2023). COVID-19: Effects on Buying Decisions and Patterns Among Urban Dwellers in a Sub-Sahara African Market, A Case of Lagos Metropolis. *Springer Proceedings in Business and Economics*, 11–21. https://doi.org/10.1007/978-3-031-26121-3_2

Oumlil, A. B., & Balloun, J. L. (2015). Relationship of Perceived Economic Fluctuations to Consumer Adaptive Shopping Behavior: An Exploratory Study. In *Developments in Marketing Science: Proceedings of the Academy of Marketing Science* (pp. 31–35). https://doi.org/10.1007/978-3-319-16943-9_7

Paradkar, S., & Rani, M. (2024). Impact of COVID-19 on Brick-and-Mortar Retail and the Future Ahead. In *Pandemic Perspectives: Praxis, Policy and Pedagogies* (pp. 158–176). https://doi.org/10.4324/9781003480297-10

Permatasari, E. O., Ratnasari, V., & Nurfadila, A. M. (2024). Panel data regression approach for analysis of the open unemployment rate in Indonesia. *AIP Conference Proceedings*, *3049*(1). https://doi.org/10.1063/5.0195839

Pervin, S. (2024). Effects of Government Jobs on the Labour Market in Bangladesh. *Journal of Development Studies*. https://doi.org/10.1080/00220388.2024.2374068

Phelps, R., & Rohde, R. E. (2024). COVID-19 and Uncertain Times. In *Signals and Communication Technology: Vol. Part F3121* (pp. 143–159). https://doi.org/10.1007/978-3-031-61117-9_8

Pinilla, J., Barber, P., Vallejo-torres, L., Rodríguez-mireles, S., López-valcárcel, B. G., & Serra-majem, L. (2021). The economic impact of the SARS-CoV-2 (COVID-19) pandemic in Spain. *International Journal of Environmental Research and Public Health*, *18*(9). https://doi.org/10.3390/ijerph18094708

Pretnar Žagar, A., & Demšar, J. (2022). Model Evaluation: How to Accurately Evaluate Predictive Models. In *Tourism on the Verge: Vol. Part F1051* (pp. 253–274). https://doi.org/10.1007/978-3-030-88389-8_13

Pribadi, D. O., Saifullah, K., Putra, A. S., Nurdin, M., Iman, L. O. S., & Rustiadi, E. (2021). Spatial analysis of COVID-19 outbreak to assess the effectiveness of social restriction policy in dealing with the pandemic in Jakarta. *Spatial and Spatio-Temporal Epidemiology*, *39*, 100454. https://doi.org/https://doi.org/10.1016/j.sste.2021.100454

Qian, J., Zhang, T., Sun, X., & Chai, Y. (2024). Diminishing the Perception Bias in the Working Environment Using a Network Generation-Based Framework. *Tsinghua Science and Technology*, *29*(3), 671–683. https://doi.org/10.26599/TST.2023.9010011

Radlińska, K., & Gardziejewska, B. (2022). The Seasonal Labor Hoarding in Tourist Enterprises—Choice or Necessity? *Sustainability (Switzerland)*, *14*(12). https://doi.org/10.3390/su14126995

Raftopoulou, A., & Giannakopoulos, N. (2023). Unemployment and health: a panel event study. *Applied Economics Letters*, *30*(10), 1275–1278. https://doi.org/10.1080/13504851.2022.2044993

Rai, S. S., Rai, S., & Singh, N. K. (2021). Organizational resilience and social-economic sustainability: COVID-19 perspective. *Environment, Development and Sustainability*, *23*(8), 12006–12023. https://doi.org/10.1007/s10668-020-01154-6

Rajamani, K., & Rekha, A. G. (2023). COVID-19 and MSMEs: Basic insights from India on revival through financial inclusion backed by digital technologies. *World Review of Science, Technology and Sustainable Development*, *19*(3), 214–224. https://doi.org/10.1504/WRSTSD.2023.131931

Rengarajoo, S., & Tan, S. T. (2023). Household Income and its Correlation with Child Hunger During the COVID-19 Pandemic: A Cross-Sectional Study. *Journal of Hunger and Environmental Nutrition*, *18*(6), 921–927. https://doi.org/10.1080/19320248.2022.2157693

Richters, C., Stadler, M., Radkowitsch, A., Behrmann, F., Weidenbusch, M., Fischer, M. R., Schmidmaier, R., & Fischer, F. (2024). Fostering collaboration in simulations: How advanced learners benefit from collaboration scripts and reflection. *Learning and Instruction*, *93*, 101912. https://doi.org/https://doi.org/10.1016/j.learninstruc.2024.101912

Rosseel, Y., & Loh, W. W. (2022). A Structural After Measurement Approach to Structural Equation Modeling. *Psychological Methods*. https://doi.org/10.1037/met0000503

Rothwell, J. T., Cojocaru, A., Srinivasan, R., & Kim, Y. S. (2024a). Global evidence on the economic effects of disease suppression during COVID-19. *Humanities and Social Sciences Communications*, *11*(1). https://doi.org/10.1057/s41599-023-02571-4

Rothwell, J. T., Cojocaru, A., Srinivasan, R., & Kim, Y. S. (2024b). Global evidence on the economic effects of disease suppression during COVID-19. *Humanities and Social Sciences Communications*, *11*(1). https://doi.org/10.1057/s41599-023-02571-4

Ruggeri, K., Friedemann, M., Krawiec, J. M., Jarke, H., Quail, S. K., Paul, A. F., Folke, T., Rubaltelli, E., & Gladstone, J. J. (2021). Economic, financial, and consumer behavior. In *Psychology and Behavioral Economics: Applications for Public Policy* (pp. 50–70). https://doi.org/10.4324/9781003181873-4

Sandri, S., Alshyab, N., & Sha'ban, M. (2022). The effect of digitalization on unemployment reduction. *New Medit*, *2022*(4). https://doi.org/10.30682/nm2204c

Schnitzler, L., Janssen, L. M. M., Evers, S. M. A. A., Jackson, L. J., Paulus, A. T. G., Roberts, T. E., & Pokhilenko, I. (2021). The broader societal impacts of COVID-19 and the growing importance of capturing these in health economic analyses. *International Journal of Technology Assessment in Health Care*, *37*(1). https://doi.org/10.1017/S0266462321000155

Schober, G. S. (2023). Policy feedback via economic behavior: A model and experimental analysis of consumption behavior. *Policy Studies Journal*, *51*(3), 607–627. https://doi.org/10.1111/psj.12474

Sharma, A. K., & Rai, S. K. (2024a). COVID-19 and Sectoral Employment in India: Impact and Implications. *Indian Journal of Labour Economics*, *67*(1), 177–196. https://doi.org/10.1007/s41027-024-00486-5

Sharma, A. K., & Rai, S. K. (2024b). COVID-19 and Sectoral Employment in India: Impact and Implications. *Indian Journal of Labour Economics*, *67*(1), 177–196. https://doi.org/10.1007/s41027-024-00486-5

Sharma, N., Kakulapati, V., & Ashalatha, T. (2024). Effects of economic stability during epidemics. In *Social Determinants Trends in Cognitive Analysis of Healthcare Analytics Using Artificial Intelligence* (pp. 19–35). https://www.scopus.com/inward/record.uri?eid=2-s2.0-85199747042&partnerID=40&md5=df8dd906b5665d2bdda928cf78ab7efd

Sheoran, N. (2024). Measuring the Impulse Buying Behaviour of Consumers: Special Reference to Food and Beverages. *Space and Culture, India*, *11*(4), 102–113. https://doi.org/10.20896/saci.v11i4.1332

Shigeoka, H., & Yamada, K. (2019). Income-comparison attitudes in the United States and the United Kingdom: Evidence from discrete-choice experiments. *Journal of Economic Behavior and Organization*, *164*, 414–438. https://doi.org/10.1016/j.jebo.2019.06.012

Soegijoko, I. B. T. (2019). National urban development strategy in Indonesia- case study: Jabotabek. In *East West Perspectives on 21st Century Urban Development: Sustainable Eastern and Western Cities in the New Millennium* (pp. 125–144). https://doi.org/10.4324/9780429458293-5

Ssenyonga, M. (2021). Imperatives for post COVID-19 recovery of Indonesia's education, labor, and SME sectors. *Cogent Economics and Finance*, *9*(1). https://doi.org/10.1080/23322039.2021.1911439

Suguna, M., Shah, B., Sivakami, B. U., & Suresh, M. (2022). Factors affecting repurposing operations in Micro Small and Medium Enterprises during Covid-19 emergency. *Operations Management Research*, *15*(3–4), 1181–1197. https://doi.org/10.1007/s12063-022-00253-z

Suh, J., Na, S., Jung, S., Kim, K. H., Choo, S., Choi, J., & Kim, J. (2023). Family caregivers' responses to a visitation restriction policy at a Korean surgical intensive care unit before and during the coronavirus disease 2019 pandemic. *Heart & Lung*, *57*, 59–64. https://doi.org/https://doi.org/10.1016/j.hrtlng.2022.08.015

Sun, Y.-Y., Li, M., Lenzen, M., Malik, A., & Pomponi, F. (2022). Tourism, job vulnerability and income inequality during the COVID-19 pandemic: A global perspective. *Annals of Tourism Research Empirical Insights*, *3*(1), 100046. https://doi.org/https://doi.org/10.1016/j.annale.2022.100046

Supari, S., & Anton, H. (2022). The Impact of the National Economic Recovery Program and Digitalization on MSME Resilience during the COVID-19 Pandemic: A Case Study of Bank Rakyat Indonesia. *Economies*, *10*(7). https://doi.org/10.3390/economies10070160

Svabova, L., Kramarova, K., & Chabadova, D. (2022a). Impact of the COVID-19 Pandemic on the Business Environment in Slovakia. *Economies*, *10*(10). https://doi.org/10.3390/economies10100244

Svabova, L., Kramarova, K., & Chabadova, D. (2022b). Impact of the COVID-19 Pandemic on the Business Environment in Slovakia. *Economies*, *10*(10). https://doi.org/10.3390/economies10100244

Svavarsdottir, G., & Asgeirsdottir, T. L. (2023). The relationship between perceived economic standing and happiness. *Applied Economics Letters*, *30*(17), 2413–2419. https://doi.org/10.1080/13504851.2022.2097626

Szabzon, F., Bruhn, L., Abarca Brown, C., Cabrini, D. R., Miranda, E., Santana, G. L., & Andrade, L. H. (2024). Reframing the method: Report on the adaptation of an ethnographic study to virtual collaborative research on mental health in a low-income neighbourhood during the COVID-19 pandemic in Sao Paulo, Brazil. *SSM - Qualitative Research in Health*, *5*, 100417. https://doi.org/https://doi.org/10.1016/j.ssmqr.2024.100417

Tahar, A., Yunianto, A., Sofyani, H., Simorangkir, P., Remalya, V. D., & Az-Zahro, S. F. (2023). The impact of perceptions of corruption and trust in government on indonesian micro, small and medium enterprises compliance with tax laws. *Journal of Tax Reform*, *9*(2), 278–293. https://doi.org/10.15826/jtr.2023.9.2.142

Tengfei, L., & Ullah, A. (2024). Impact of fiscal policies and green financing on firm innovation and firm value for green economic recovery. *Heliyon*, *10*(9), e30145. https://doi.org/https://doi.org/10.1016/j.heliyon.2024.e30145

Trapani, D., Murthy, S. S., Hammad, N., Casolino, R., Moreira, D. C., Roitberg, F., Blay, J.-Y., Curigliano, G., & Ilbawi, A. M. (2024). Policy strategies for capacity building and scale up of the workforce for comprehensive cancer care: a systematic review. *ESMO Open*, *9*(4), 102946. https://doi.org/https://doi.org/10.1016/j.esmoop.2024.102946

Vai, F. J., & Aarstad, J. (2024). How eco-innovative firms were affected by and responded to the unexpected external shock of the COVID-19 pandemic. *Cleaner Production Letters*, *6*, 100057. https://doi.org/https://doi.org/10.1016/j.clpl.2024.100057

Vargas, A. N., Maier, A., Vallim, M. B. R., Banda, J. M., & Preciado, V. M. (2021). Negative Perception of the COVID-19 Pandemic Is Dropping: Evidence From Twitter Posts. *Frontiers in Psychology*, *12*. https://doi.org/10.3389/fpsyg.2021.737882

Vasile, V., & Vasile, R. (2024). Preliminary Comments. A Scientometric Dimension of the Economic and Social Impact of COVID-19. In *Contributions to Economics: Vol. Part F2367* (pp. 1–18). https://doi.org/10.1007/978-3-031-47780-5_1

Verma, A., Joshi, G., Shri, C., Chaturvedi, A., & Gupta, S. (2023). Role of Fear on Consumers' Buying Tendencies: Mediating Role of Social Media Usage. *FIIB Business Review*. https://doi.org/10.1177/23197145231186281

Walsh, T. B., Hoffmeister, M., Zimmerman, L., Pate, D., & Davidson, D. (2024). "I found the power of my presence": Low income and noncustodial fathers' experiences and insights from parenting young children through the COVID-19 pandemic. *Children and Youth Services Review*, *160*, 107568. https://doi.org/https://doi.org/10.1016/j.childyouth.2024.107568

Wang, H., Liu, C., Shi, P., & Wang, Y. (2024). The social effects of energy regulation: Energy-consuming rights trading system and corporate labor demand. *Journal of Environmental Management*, *366*, 121842. https://doi.org/https://doi.org/10.1016/j.jenvman.2024.121842

Wangrow, D. B., Schepker, D. J., & Barker, V. L. (2018). Power, performance, and expectations in the dismissal of NBA coaches: A survival analysis study. *Sport Management Review*, *21*(4), 333–346. https://doi.org/https://doi.org/10.1016/j.smr.2017.08.002

Wei, X., Xu, J., & Cao, H. (2024). Production automation upgrades and the mystery of workers' overwork: Evidence from a manufacturing employer-employee matching survey in China. *Journal of Asian Economics*, *91*. https://doi.org/10.1016/j.asieco.2024.101711

Wellalage, N., Reddy, K., & Wallace, D. (2023). Environmental performance and the role of government support: Evidence from the recent COVID-19 pandemic. *Finance Research Letters*, *58*, 104318. https://doi.org/https://doi.org/10.1016/j.frl.2023.104318

Wong, Z. Y., Kusairi, S., & Abdul Halim, Z. (2023). The nexus between households' indebtedness and consumption: the role of gender, geographical area and income groups. *International Journal of Development Issues*, *22*(1), 72–90. https://doi.org/10.1108/IJDI-07-2022-0155

Yap, F. F., & Yong, M. (2021). Implementation of a real-time, data-driven online Epidemic Calculator for tracking the spread of COVID-19 in Singapore and other countries. *Infectious Disease Modelling*, *6*, 1159–1172. https://doi.org/https://doi.org/10.1016/j.idm.2021.10.002

Yiming, W., Xun, L., Umair, M., & Aizhan, A. (2024). COVID-19 and the transformation of emerging economies: Financialization, green bonds, and stock market volatility. *Resources Policy*, *92*, 104963. https://doi.org/https://doi.org/10.1016/j.resourpol.2024.104963

Yu, M., & Ye, X. (2024). Improving the economic recovery by flexibility, natural resource performance, and resilience. *Resources Policy*, *89*. https://doi.org/10.1016/j.resourpol.2023.104595

Yurievna, S. I. (2022). Economic Changes And Their Impact On Consumer Behaviour: An Empirical Study In The Recent Economic Scenario. *ECS Transactions*, *107*(1), 18165–18174. https://doi.org/10.1149/10701.18165ecst

Zamanzadeh, A., Cavoli, T., Ghasemi, M., & Rokni, L. (2024). The effect of actual and expected income shocks on mental wellbeing: Evidence from three East Asian countries during COVID-19. *Economics and Human Biology*, *53*. https://doi.org/10.1016/j.ehb.2024.101378

Zhang, M., Crow, D. A., Dai, S., & Ma, B. (2023). Crisis as Opportunities for Robust Government: A Systematic Review of Policy Process Literature. *Journal of Homeland Security and Emergency Management*. https://doi.org/10.1515/jhsem-2022-0043

Zhang, Y., Wang, Q., & Zhao, M. (2023). Negativity bias in welfare policy feedback effects on mass publics. *Governance*, *36*(4), 1015–1043. https://doi.org/10.1111/gove.12718

Zhao, L., Liu, X., Tang, Y., & Zhang, W. (2024). Functional subsidies, selective subsidies and corporate investment efficiency: Evidence from China. *Emerging Markets Review*, *61*. https://doi.org/10.1016/j.ememar.2024.101162

Zimmer, D. M. (2024). The long-run effects of recessions on fertility. *Review of Economics of the Household*. https://doi.org/10.1007/s11150-024-09713-w

Zoundi, Z. (2024). Wells or Welfare? Macroeconomic implications of the Canadian oil subsidy. *Economic Modelling*, *139*, 106794. https://doi.org/https://doi.org/10.1016/j.econmod.2024.106794.