

## MODELING OF THE POLICY DESIGN TO BUILD PUBLIC CONFIDENCE FACING RECESSION ISSUES

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### ABSTRACT

*The condition of global economic uncertainty initiated the news that Indonesia is predicted to have the potential for recession. This study presents a model for designing policies to create public Confidence in East Java in the face of recession. The method used in this study begins with grounded theory and continues with modeling and policy simulation. Grounded theory is carried out with netnographic studies to find concepts and quantitative studies to test these concepts in the people of East Java. The netnography study was conducted by extracting sample data totaling 3,827 netizen comments using Nawala software and processed using NVIVO software. Quantitative studies are carried out by testing data collected with instruments in the form of questionnaires. The sample size amounted to 120, with respondents from East Java. Quantitative data were obtained using SPSS software to see how much influence factors affect public Confidence in East Java. Modeling is done using Powersim software, and policy simulation is done using Promethee software. The results show that low interest rates in optimistic simulations and Business as Usual (BAU) decisions can be made by Bank Indonesia (BI). The latest update in this research is that the modeling is carried out not only based on East Java's macroeconomic conditions but also on grounded theory studies in East Java community studies.*

**Keywords:** Model, Policy, Recession, Confidence

### ARTICLE INFO

Tanggal Masuk:

21 Agustus 2023

Tanggal Revisi:

23 September 2023

Tanggal Diterima:

24 September 2023

Tersedia Online:

6 Maret 2024

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### ABSTRAK

*Kondisi ketidakpastian perekonomian global memicu prediksi bahwa Indonesia berpotensi mengalami resesi. Kajian ini menyajikan model perancangan kebijakan untuk menciptakan kepercayaan diri masyarakat di Jawa Timur dalam menghadapi resesi. Metode yang digunakan dalam penelitian ini diawali dengan grounded theory dan dilanjutkan dengan pemodelan dan simulasi kebijakan. Grounded theory dilakukan dengan kajian kualitatif dengan netnografi untuk menemukan konsep dan dilanjutkan dengan kajian kuantitatif untuk menguji konsep tersebut pada masyarakat Jawa Timur. Kajian netnografi dilakukan dengan mengekstraksi data sampel sebanyak 3.827 komentar netizen menggunakan software Nawala dan diolah menggunakan software NVIVO. Studi kuantitatif dilakukan dengan menguji data yang dikumpulkan dengan instrumen berupa kuesioner. Ukuran sampel berjumlah 120, dengan responden masyarakat dari Jawa Timur. Data kuantitatif diolah dengan menggunakan software SPSS untuk melihat seberapa besar pengaruh faktor-faktor yang mempengaruhi kepercayaan diri masyarakat di Jawa Timur dalam menghadapi resesi. Pemodelan dilakukan dengan menggunakan software Powersim, dan simulasi kebijakan dilakukan dengan menggunakan software Promethee. Hasilnya menunjukkan bahwa suku bunga rendah pada simulasi optimis dan Business as Usual*

*(BAU) yang bisa diambil menjadi keputusan Bank Indonesia (BI). Keterbaruan dalam penelitian ini adalah pemodelan dilakukan tidak hanya berdasarkan kondisi ekonomi makro Jawa Timur tetapi juga pada kajian grounded theory pada studi masyarakat Jawa Timur.*

**Kata Kunci:** Model, Kebijakan, Resesi, Kepercayaan Diri

**JEL:** C54; E60

## Introduction

The year of 2023 is uncertain due to global economic conditions (USNews, 2023). This condition is complemented by the existence of countries in Europe that experienced a recession at the end of 2022 (Euronews, 2023). In Indonesia, the issue that Indonesia has the potential for recession is spread rapidly with the existence of electronic information media such as digital social. The government and stakeholders need to measure how prepared Indonesians are to face a recession so that policies can be made to prepare for the nation's resilience (Georgieva, 2022).

Bank Indonesia, as the central bank in Indonesia, needs data to formulate policies to prepare resilience in the face of the current world recession, crisis, and economic uncertainty. However, there has not been much research that discusses the readiness of the Indonesian nation to face the issue of recession in 2023. The recession issue is critical because it involves many aspects, such as Trust in government, society's attitude, macroeconomics, and others (Kose et al., 2020). An important thing to be raised in this study is to grow the confidence of the people of East Java in facing global economic uncertainty with various policies that Bank Indonesia can carry out as the central bank in Indonesia.

To address these issues, the present study presents dynamic modeling prepared based on East Java macro-economic data and the results of grounded theory (Constanza, 2023), so that it can produce dynamic grounding. Based on insight from this framework, the author presents a dynamic model that produces various policies and can be applied by Bank Indonesia.

The stages of writing this paper are as follows. The study was conducted with grounded theory to find a concept based on qualitative studies and proceed with quantitative testing. Qualitative studies were conducted with netnographic studies to get a concept obtained from the level of confidence of netizens in facing recession conditions. Followed by a quantitative study to test the concept with respondents from East Java. The last step is to create dynamic modeling to determine the policy direction that Bank Indonesia can take. The policy is made based on the results of grounded theory. It considers East Java macro-economic data such as inflation, Human Development Index (HDI), investment, interest rates, Gross Regional Domestic Product (GDP), labor market, unemployment, and Consumer Price Index (CPI).

Some research on handling recessions that have been done before is material in the preparation of novelty in this article. The way to handle recessions is to analyze input-output and interrelationships between sectors and provide stimulation to these sectors (Morrone, 2017). Another way that can be done in handling economic recession is with the SIR-macroeconomic model (Hunt et al., 2023).

There are some novelties in this study. First, the modeling research carried out begins with grounded theory, which is compiled in sequence with the latest data so that it can promote the condition of public confidence in East Java. Second, the policy choices processed are based on the results of grounded theory related to East Java conditions and use macroeconomic variables. Research like this is rarely done because considerations are usually based on macroeconomic variables only.

## Literature Review

A recession is a condition with a decline in national output in two consecutive quarters. Recessionary conditions impact declining average per capita income (Kose et al., 2020). Macroeconomic and financial factors are the main factors that influence recession conditions. Nevertheless, non-macroeconomic factors also need to be considered. An example is news about the recession in the media blow-up, which also impacts the economy (Eggers et al., 2021).

Economic recession is important to watch out for because it has spillover effects that affect various economic sectors (Li et al., 2022), so silence is needed. Resilience is a process of adaptation and good survival in difficult conditions (Price et al., 2013). Resilience is needed to overcome the impact caused both internally and externally.

The initial way to overcome a recession is to take mitigation measures (Hunt et al., 2023). The effects of mitigation can be enhanced by complementary arrangements such as providing social protection and other measures that make economic development good. For recessionary conditions, a global recovery involving a broad-based rebound in macroeconomic and financial activity is needed (Kose et al., 2020). Appropriate policies are also needed so mitigation and recovery can run quickly (Kolodko, 2001), one of which is the policy issued by the central bank. Policies issued by central banks impact the sustainability of various firms and economic sectors (Okada & Horioka, 2008).

In addition to policy, a power law is also needed to overcome economic recession. However, economics is a social science field closely related to behavioral concepts determined by the interaction of various things (Ormerod & Mounfield, 2001). Thus, a combination of science is needed to overcome this recession problem.

A policy model is needed to overcome the recession (Hafezalkotob et al., 2023). The model that is compiled will provide strategy choices that are compiled based on empirical data. Policy models based on empirical research will provide precise policies with more predictable risks.

## Method

This research is divided into two steps, qualitative and quantitative, which is familiarly called the mixed method (Creswell, 2013). The first research was conducted with grounded theory and the second with dynamic modeling. Grounded Theory (GT) is a way to produce data to be observed, which can be done with qualitative studies and continued with quantitative (Jha & Chopra, 2022). Qualitative studies on GT aim to understand ongoing social phenomena and answer research questions (Burke et al., 2023). On GT, systematic theory discovering was taken based on data of social research (Glaser & Strauss, 1967). While quantitative studies carried out in the next stage are carried out to test the concept in the field.

The qualitative study in this study was conducted with netnography, a method to understand netizens by following social activities on the internet through technological media (Kozinets & Gambetti, 2020). In this study, the social media technology used was YouTube. The scope of this research only explores netizens' comments on YouTube on the case of the 2023 Global Economic Recession in Indonesia.

There are several steps taken in this study. The first stage in this research is to determine the research question. The research questions in this study are as follows;

1. How did netizens respond to the recession issue?

2. What are the topics of netizens' discussion related to the issue of recession?
3. What is netizens' confidence level in the face of a recession?

The second stage in the study is to determine a sample from the population. The population in this study is all comments on content-themed Global Economic Recession in Indonesia in 2023. The sampling technique in this study used purposive sampling techniques. Purposive sampling is a sampling technique using certain criteria (Cooper & Schindler, 2014). The criterion used for sample selection is that the number of viewers on the content must be more than 10,000. The reason used in using these criteria is that, with many views on social media, the media is considered to have a good reputation.

**Table 1: Sample Data**

No	Title of Content	View	Total Comment	Data Extracted	Source
1.	What You Need to Know about Indonesia's Recession and Economic Predictions in 2023	96,490	220	202	Kumparan
2.	Is Indonesia Ready to Face the Threat of Economic Recession in 2023?	138,646	259	250	CNN
3.	World Economy Experiencing Recession, What is Indonesia's Current Condition?	38,905	111	110	Kompas TV
4.	World Economy Nyungsep, Indonesia Ready to Face Recession	149,430	283	261	Asumsi
5.	Recession Makes World Economy Lose 4 Trillion US Dollars, How Is Indonesia?	144,705	343	332	Kompas TV
6.	Indonesia's Economy Resilient to the Threat of Recession?	88,022	316	302	CNBC
7.	Will Indonesia be entangled in a recession? This is what Sri Mulyani and economists say	808,981	2,570	2063	CNBC
8.	Oops! Indonesia Predicted to Be Exposed to Global Recession   tvOne News Today	24,598	118	118	TV One
9.	Optimistic Yet Alert in 2023	62,995	130	130	Metro TV
10.	Terrible, Indonesian Economy in 2023	41,455	59	59	Kompas TV
<b>Total</b>		<b>1,594,227</b>	<b>4,409</b>	<b>3,827</b>	

With sampling techniques, ten contents were selected with a total audience of 1,594,227. The total sample of data taken was 3,827. Data captured and processed, details of the data that are the object of this study are presented in Table 1.

The third step is to carry out the data mining process. The data mining process is carried out using NAWALA software. This web-based software is developed with PHP programming and an MYSQL database. Word extraction and computer are taken based on the KBBI database. The data mining process will be carried out on February 19, 2023.

The fourth stage in this study is data collection. Sorting of data that has been retrieved is done with the software NVIVO. The software can store ideas in rich document data, relate data to research and explore them in visual models. NVIVO software is used for qualitative analysis. The tools in this software help in analyzing qualitative studies.

The last stage of qualitative research is data analysis and concept formation. This concept is then derived from research variables, research indicators, and question items that can be used for quantitative research at a later stage.

After the qualitative study stage is carried out, the next stage is a quantitative study to test the concept in the field, namely in East Java society. The first stage of this research compiles a hypothesis based on research variables that have been compiled. Here are the hypotheses answered in this study.

H1: Information about the recession obtained by the people of East Java has a positive and significant effect on confidence in facing the recession

H2: The Trust of the people of East Java in the government has a positive and significant effect on confidence in facing the recession

H3: Resilience owned by the people of East Java positively and significantly affects confidence facing recession?

H4: East Javanese people's perception of dependence on foreigners has a positive and significant influence on confidence facing recession

H5: East Java people's perception of law enforcement positively and significantly affects confidence facing recession.

The second stage in this quantitative research is data collection. The respondents in this study were East Javanese people, with a sample size of 120 people. This quantitative research instrument is in the form of a questionnaire. The third stage in this quantitative research is regression data analysis using SPSS software. Data processing was carried out to examine the influence of factors that affect the level of confidence of the people of East Java in facing the recession. At this stage, it can be seen which factors are the biggest or smallest in influencing the confidence level of the people of East Java in facing the recession. This stage is useful to be considered for modeling in the next stage. Robustness test was taken using AMOS and examine exogenous and endogenous data.

The final part of this research is to create a model using Powersim Studio 10 as an analysis tool. The categories used as measuring parameters include interest rates, investment flows, unemployment, HDI, GDP, inflation, and the labor market as secondary data sourced from BPS East Java. This indicator can be seen in Table 2 below.

**Table 2: Measurement Indicators**

No.	Measurement Indicators	2018	2019	2020	2021	2022
1	Interest rate (%)	5.10	5.63	4.25	3.52	4.00
2	Investment Flows	51.20	58.50	78.30	79.50	110.30
3	Unemployment (%)	3.91	3.82	5.84	5.74	5.49
4	Human Development Index (%)	0.72	1.03	0.30	0.60	0.85
5	PDRB (%)	5.40	5.52	2.64	3.57	5.34
6	Inflation (%)	0.16	0.29	0.18	0.89	0.05
7	Labor Market (People)	277,063	929,557	2,226	308,929	270,092

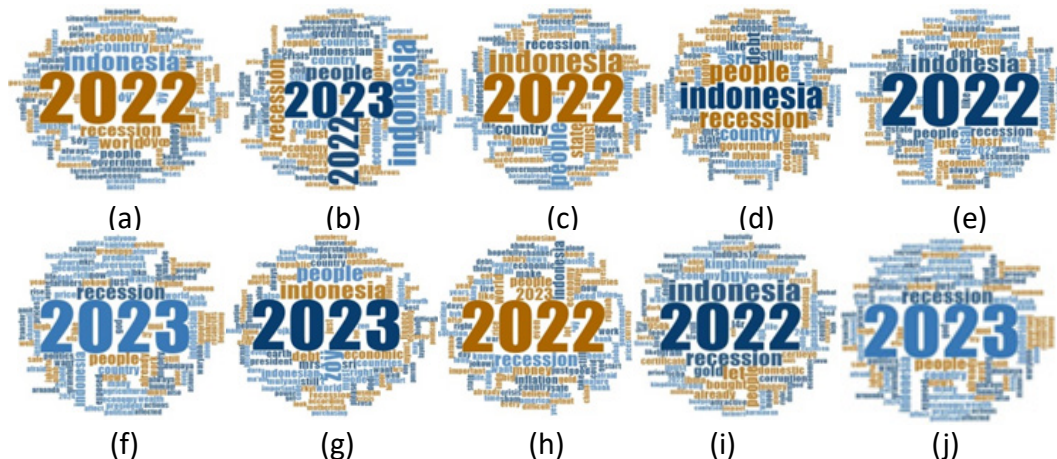
The next step after modeling is to choose an alternative policy using Promethee software. This software helps determine and generate decisions from several alternatives (da Cunha et al., 2022). The data is combined into one with the weight of the assessment obtained from the previous modeling.



## Result and Discussion

### ***Grounded Theory Analysis***

The initial stage in grounded theory is to conduct qualitative studies to discover the occurring phenomena and formulate a concept used as a basis for quantitative testing. There are several stages in the qualitative study conducted at the beginning. The results of this study can be seen from the number of words that often arise from the word frequency feature in NVIVO. This result shows that there will be a global economic recession in Indonesia in 2023. The Indonesian people are discussing this regarding the global economic recession in Indonesia in 2023. The words often appearing in netizen discussions in the comment section are *Resesi*, *Indonesia*, *Pemerintah*, *Ekonomi*, *Orang*, and *Negara*. Words that are often discussed in the comments column are presented in the form of a word cloud in Figure 1.



**Figure 1: Word Cloud from Comments in Youtube Video**

The results of the word cloud are used as a reference in coding. Three types of coding were carried out in this study: pen, axial, and selective. The results of this coding produce a conceptual map, which is then used to determine concepts, variables, and research indicators for quantitative studies. The conceptual map is presented in Figure 2.

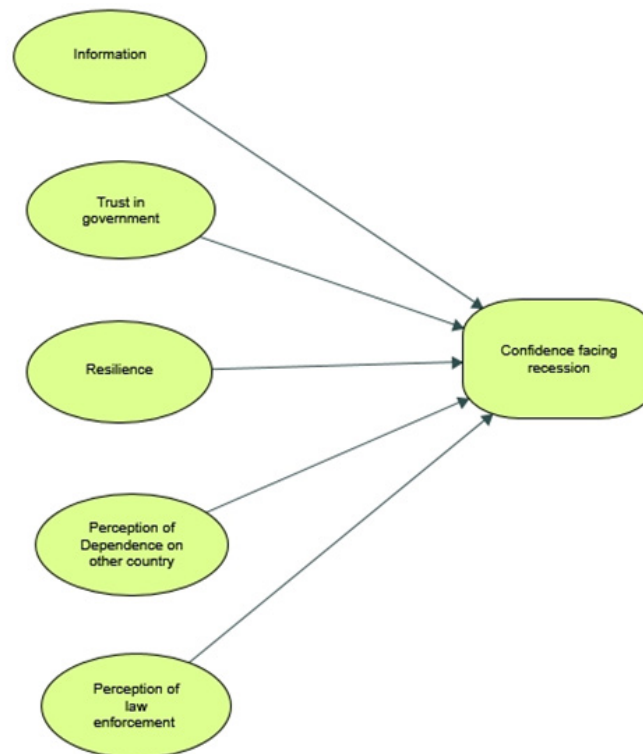
Five factors influence confidence facing economic recession. First is information. The development of technology makes information spread quickly. In this qualitative study, expert reviews and news about recessions also contribute to forming people's confidence in facing recessions. This is in line with several studies on media that news consumption habits affect public Confidence (Lueck & Callaghan, 2022).

The second factor that influences confidence facing recession is Trust in the government. Two indicators can be built from this qualitative study: perceptions about the capabilities of Indonesian leaders and perceptions about handling recessions. A study states that building Trust in government is important because it provides many benefits, such as making it a prevention strategy and being used as a basis for predicting community reactions to make mitigation steps (Shanka & Menebo, 2022).

The third factor that affects confidence facing recession is resilience. Resilience is defined as the ability of a country to rise from pressure in developing the economy (Lei et al., 2023). Three indicators are built into this variable: food resilience, energy resilience, and love for domestic products. According to netizens, if Indonesia has food security and energy security, and loves local products, then whatever happens to the macro-economy will not impact the community.

People's perception of dependence on other countries is the fourth-factor influencing confidence in facing recession. Netizens argue that the macroeconomic effects will be felt if Indonesia is too dependent on other countries. Two indicators are built into this variable: Indonesia's debt and dependence on foreign products. A study mentioned that dependence is closely related to economic growth (Filimonova et al., 2020).

Public perception of law enforcement is the fifth-factor influencing confidence in recession. There are two things that many netizens discuss and build into indicators in this variable. These two things are handling corruption and saving leaky state assets. Countries can lose out financially because of these two things.



**Figure 2: Conceptual Map**

This qualitative data processing produces five behavioral factors affecting confidence in a recession. These factors are information about the recession obtained, Trust in the government, resilience, perceptions of dependence on other countries, and perceptions of law enforcement. The results of qualitative data processing also help in finding indicators in research. The variables and indicators in this study are presented in Table 2.

**Table 2: Variable and Indicator**

No	Variable	Indicator
1	Information	Expert analysis
		News
2	Trust in government	Perception of Indonesian Leader capabilities
		Perception of recession handling
3	Resilience	Food resilience
		Energy resilience
		Love for domestic products

No	Variable	Indicator
4	Perception of dependence on other countries	Indonesian debt at a safe level
		Foreign products at a safe level
5	Perception of law enforcement	Corruption handling
		Saving state assets
6	Confidence facing recession	Readiness for crisis
		Not afraid to face a crisis

The question items in this study are arranged based on research indicators that have been compiled. Before conducting a regression test, a Keiser Meyer Olkin (KMO) test is carried out to determine the adequacy of the sample. Test results are presented in Table 3.

**Table 3: Sample Adequacy KMO and Bartlett Sphericity**

Testing	Value
Sample Adequacy KMO	0.847
Bartlett of Sphericity	0.000*

\*significant at  $\alpha=0.05$

The KMO and Bartlett Sphericity testing results of as many as 120 respondents showed that the KMO value of 0.847 was categorized as a medium value. The value of 0.847 is higher than the minimum limit of 0.5. This can be interpreted that factor analysis is feasible to examine data. The significant value of the Bartlett test of sphericity is 0.001 because  $\alpha = 0.005 > 0.000$ . This means that the matrix is not an identity matrix, so that factor analysis can be used.

In addition to the KMO test, validity and reliability tests were also carried out on research instruments. The results of this test are presented in Table 4. The test results show no indicator with a loading value of less than 0.6, so it can be said to be valid. Reliabilities are measured by calculating the Cronbach alpha value.

**Table 4: Convergent Validity and Reliability Test**

Item	Loading
<b>Information (CR=0.794)</b>	
I pay attention to the analysis of economic experts in analyzing economic conditions facing the issue of global economic uncertainty/crisis/recession	0.892*
I pay attention to reports in the media (print and electronic) regarding economic conditions facing global economic uncertainty/crisis/recession	0.896*
<b>Trust in Government (CR=0.545)</b>	
I am confident that the Indonesian government can deal with global economic uncertainty/crisis/recession issues.	0.900*
I have confidence in the Indonesian government having a series of steps in dealing with the issue of global economic uncertainty/crisis/recession.	0.892*
<b>Resilience (CR=0.741)</b>	
Indonesia (especially East Java) has good food security.	0.897*
Indonesia has good energy security.	0.893*
Indonesian people (especially East Java) have a love for domestic products.	0.895*
<b>Dependence with other countries (CR=0.811)</b>	
In my opinion, Indonesia's debt is still at a safe level.	0.891*



Item	Loading
In my opinion, foreign products entering Indonesia are still at a reasonable level.	0.890*
<b>Law Enforcement (CR=0.875)</b>	
The handling of corruption in Indonesia is quite good.	0.891*
Rescuing state assets in Indonesia is quite good.	0.887*
<b>Confidence facing recession (CR=0.746)</b>	
I am in a state of being prepared to face the issue of global economic uncertainty/crisis/recession that I have recently heard about	0.891*
I am not afraid to face the global economic uncertainty/crisis/recession that I have heard about recently.	0.890*

\*Valid (loading>0.7)

\*\*reliable (Cronbach alpha>0.7)

Regression test results are presented in Table 5. This table presents the determinant coefficient, adjusted R Square, the result of the t-test, and the F-test. In the R test of 0.691, which is a correlation between Information variables, then a large R result of 0.496 is a correlation between Trust in government variables, a large R result of 0.550 is a correlation between Resilience variables, a large R result of 0.468 is a correlation between Dependence variables with other countries. For a large R result of 0.535 is a correlation between Law Enforcement variables to confidence facing recession. The correlation value is categorized as medium and positive values are shown as positive connecting directions.

**Table 3: Determinant Coefficient and Adjusted R Square, Result of T-test, and F-test**

	X <sub>1</sub>	X <sub>2</sub>	X <sub>3</sub>	X <sub>4</sub>	X <sub>5</sub>
R	0.691	0.496	0.550	0.468	0.535
R <sup>2</sup>	0.477	0.246	0.295	0.219	0.287
Adjusted R Square	0.472	0.239	0.295	0.211	0.279
Standardized Coefficient Beta	0.691	0.496	0.550	0.468	0.535
T	9.597	5.746	6.613	5.294	6.369
Sig.	0.000p	0.000*	0.000*	0.000*	0.000*
F	92.111	33.019	43.732	28.027	40.568
Sig.	0.000*	0.000*	0.000*	0.000*	0.000*

R<sup>2</sup> is the percentage of variation of the dependent variable described by the independent variable. If R<sup>2</sup> is 1, then the independent variable fully describes the dependent variable. In the hypothetical section, the value of R<sup>2</sup> is 0.477, owned by the Information variable; the second R<sup>2</sup> is obtained by the value of 0.246, owned by the Trust in government variable. The third R<sup>2</sup> is obtained by the value of 0.295, owned by the Resilience variable; the fourth R<sup>2</sup> has a value of 0.219, owned by the Dependence variable with other countries, and the last fifth R<sup>2</sup> has a value of 0.287, owned by the Law Enforcement variable.

The t-test is performed for two hypothesis tests. From the first hypothesis regression test, a regression coefficient of 0.691 was obtained with a calculated t-value of 9.597 with a significant value of 0.000 and a significant degree of 0.05. So it can be interpreted that information affects confidence facing a recession. Second, the regression coefficient is 0.496 with a calculated t-value of 5.746 with a significant value of 0.000 and a significant degree of 0.05. So it can be interpreted that Trust in Government affects confidence facing a recession.

Third, the regression coefficient is 0.550 with a calculated t-value of 6.613 with a significant value of 0.000 and a significant degree of 0.05. So it can be interpreted that resilience affects confidence facing recession. Fourth, the regression coefficient is 0.468 with a calculated t-value of 5.294 with a significant value of 0.000 and a significant degree of 0.05. So it can be interpreted that dependence on other countries affects confidence facing recession. Finally, a regression coefficient of 0.535 is obtained with a calculated t-value of 6.369 with a significant value of 0.000 and a significant degree of 0.05. So it can be interpreted that Law Enforcement affects confidence facing a recession. The regression equation in this study is as follows:

$$\gamma = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 \quad (1)$$

$$\gamma = 0.488 + 0.691X_1 + 0.496X_2 + 0.550X_3 + 0.468X_4 + 0.535X_5 \quad (2)$$

From the results of this quantitative test, it can be understood that all independent variables in this study have an influence and are significant on the dependent variable. From the results of this study, it can also be seen that the influence of each independent variable on Public Confidence in East Java is different. The results of this test are used as a basis for analyzing so that the choice of model to be used is divided into three, namely optimistic, Business as Usual (BAU), and pessimistic. The modeling results are presented in the next section.

Robustness is done to know that the model is fit. The first step is to see the Regression weigh which will be presented in Table 4. From the table, it can be interpreted that information (X1) is a useful variable for predicting confidence facing recession (Y) because the value is smaller than 0.05.

**Table 4: Regression Weight**

Estimate	S.E.	C.R.	P	Label			
Y1	<---	X1	0.686	0.192	3,568	***	par_8
Y1	<---	X2	-0.158	0.341	-0.465	0.642	par_9
Y1	<---	X3	0.488	0.253	1,926	0.054	par_10
Y1	<---	X4	-0.212	0.216	-0.985	0.324	par_11
Y1	<---	X5	0.303	0.182	1,668	0.095	par_12
X1.2	<---	X1	1				
X1.1	<---	X1	1,098	0.145	7,579	***	par_1
X2.2	<---	X2	1				
X2.1	<---	X2	0.867	0.186	4,652	***	par_2
X3.3	<---	X3	1				
X3.2	<---	X3	1,035	0.177	5,835	***	par_3
X3.1	<---	X3	0.909	0.164	5,548	***	par_4
X4.2	<---	X4	1				
X4.1	<---	X4	1,002	0.117	8,53	***	par_5
X5.2	<---	X5	1				
X5.1	<---	X5	1,179	0.115	10,236	***	par_6
Y1.1	<---	Y1	1				
Y1.2	<---	Y1	0.989	0.129	7,653	***	par_7

The next step is to measure the exogenous and endogenous variables presented in Table 5 and Table 6. In the exogenous test, it can be known that in addition to data (X1), the variable perception of dependence on other country (X4) is also fit in predicting confidence facing recession (Y).

**Table 5: Exogenous Data**

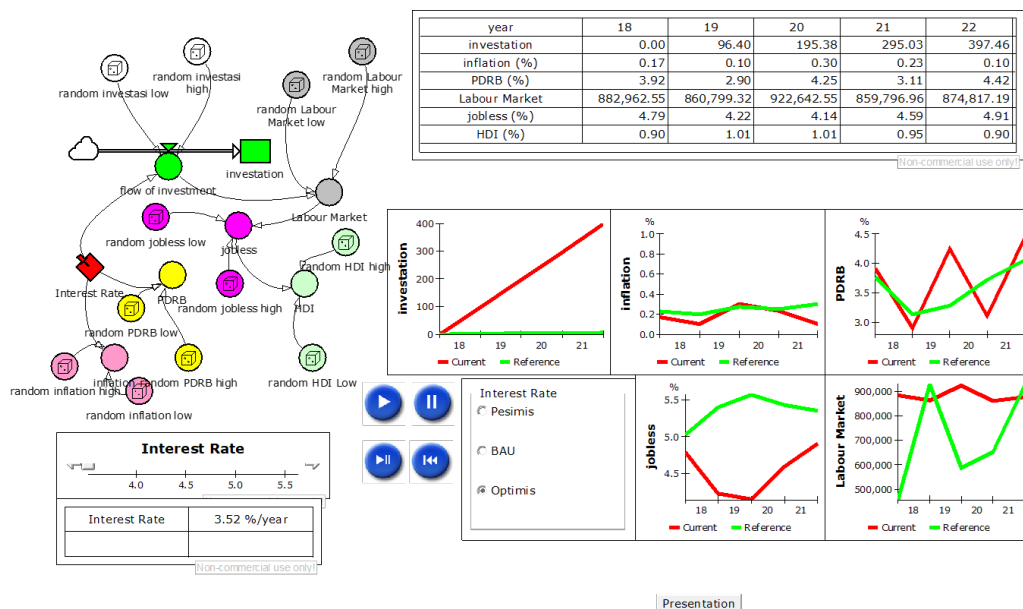
		Exogenous X1		Exogenous X2		Exogenous X3		Exogenous X4		Exogenous X5	
	Table	Amos	Interpretation	Amos	Interpretation	Amos	Interpretation	Amos	Interpretation	Amos	Interpretation
Chi Square	3.841.458	3	No Fit	0	No Fit	3,684	FIT	9,632	FIT	0	No Fit
RMSEA	0.08	0.151	FIT	0	No FIT	0	No FIT	0.291	FIT	0	No FIT
Cmin	2	3	FIT	0	No Fit	1	No FIT	9,632	FIT	0.009	No Fit

**Table 6: Endogeneous Data**

	Table	Amos	Interpretation
Chi Square	4.860.236	72	FIT
RMSEA	0.08	0.105	FIT
Cmin	2	2.12	FIT

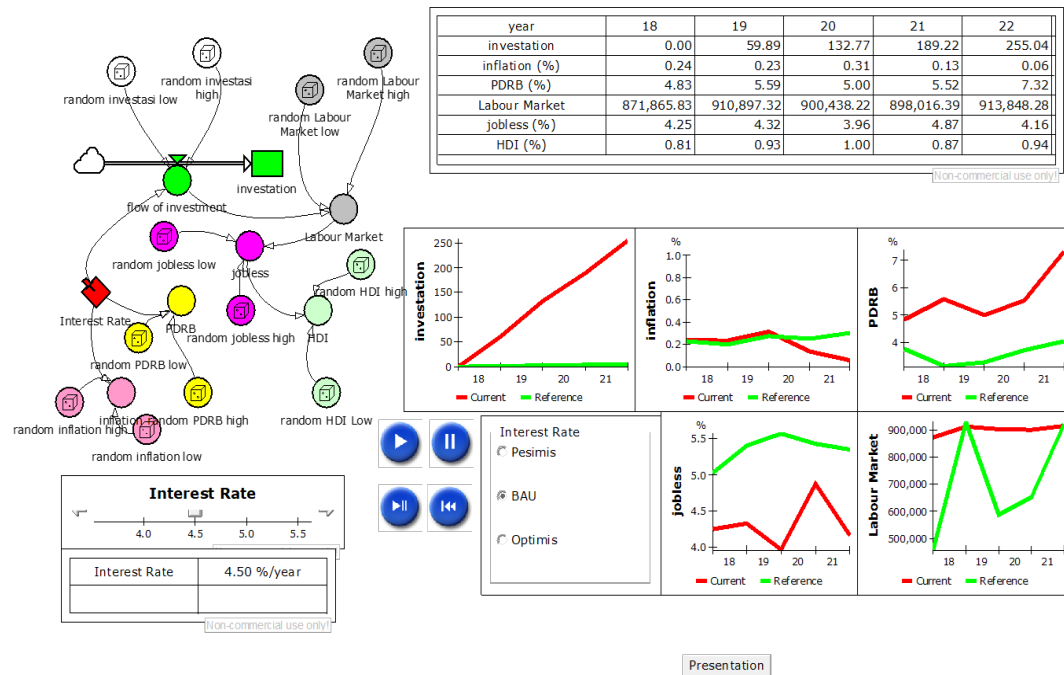
### Modeling and Simulation of Policy Options in Improving Public Confidence Facing Recession Issues

The initial stage before simulating policy models is that BI can be carried out; modeling with dynamic modeling is carried out to see different models (da Silva, 2018). Modeling is carried out using several indicators mentioned in Table 2. The analysis process uses Powersim 10, with three scenarios of interest rates developed, namely the Optimistic, BAU (Business as usual), and Pessimistic sides. The benchmark used in this modeling is the interest rate because, from several existing indicators, the interest rate is a monetary instrument of Bank Indonesia. In other words, interest rates are a policy area that Bank Indonesia can handle. The results of this scenario can be seen in the image below.



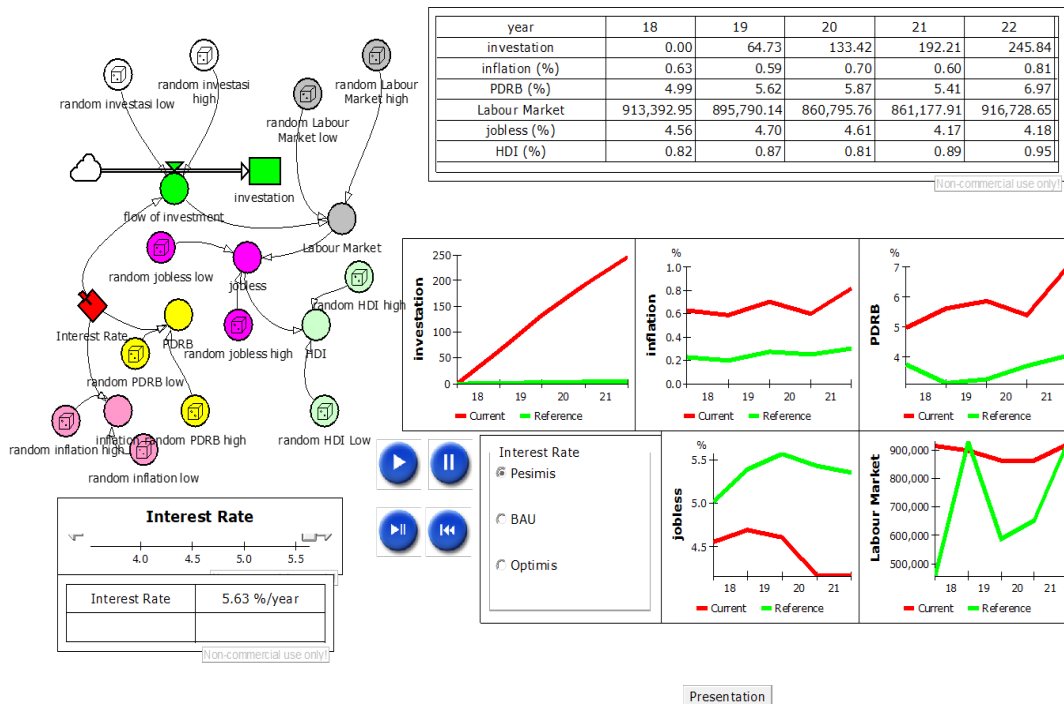
**Figure 3: Optimist Scenario**

Figure 3 presents modeling with an optimistic scenario. The results of this modeling show that interest rates will work well at 3.52% per year. The second model builds on the Business as Usual (BAU) scenario presented in Figure 4. This second model illustrates the Business as Usual (BAU) side when interest rates are 4.5% yearly.



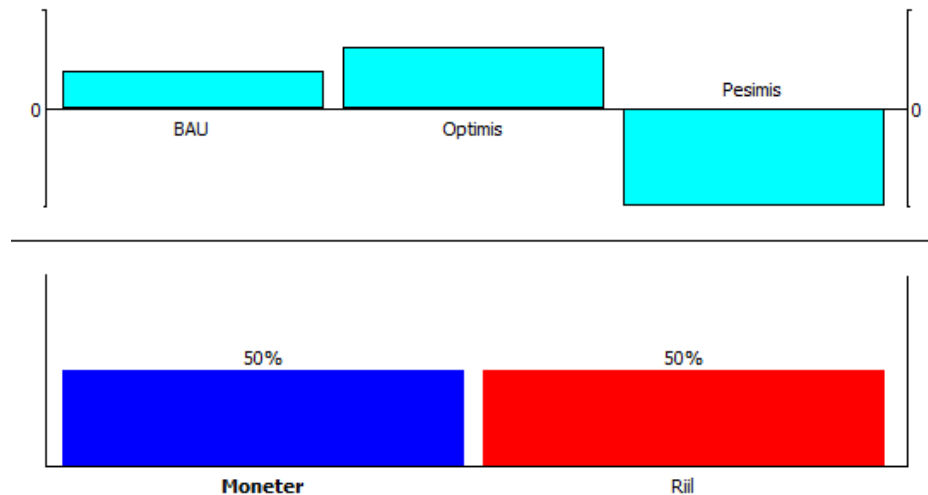
**Figure 4: Business as Usual (BAU) Scenario**

The third model uses a pessimistic scenario. This third model illustrates the pessimistic side of interest rates are 5.5% annually. This third model is presented in Figure 5.



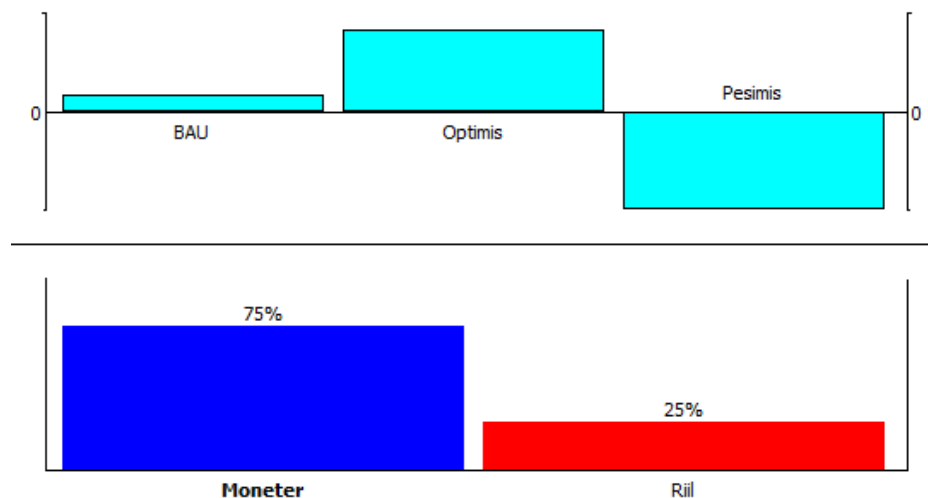
**Figure 5: Pesimist Scenario**

Bank Indonesia (BI) can take many issues and policies as the monetary authority. Still, in this study, interest rate instruments remain important to maintain optimism in the existing economic situation. The indicators used remain about seven macroeconomic indicators; the results obtained from this Promethee analysis illustrate and strengthen the model formed in Powersim analysis. The following are the results of Promethee's analysis in Figure 6 below.



**Figure 6: Promethee Analysis with Made Equal 50%**

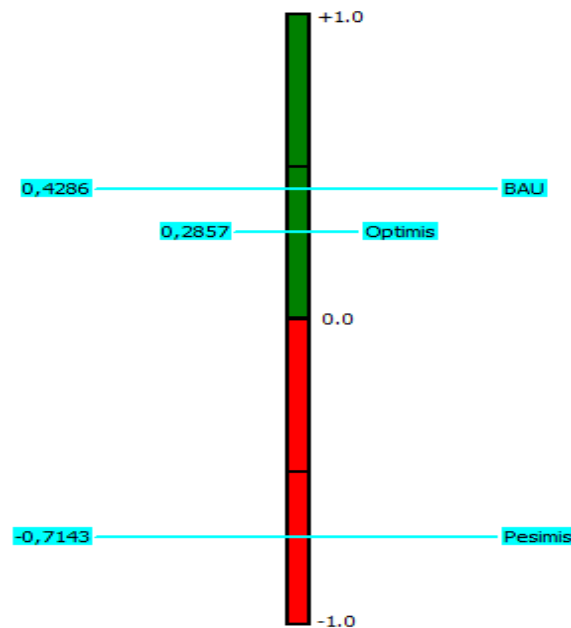
This analysis illustrates that if the balance between the monetary sector and the real sector is made equal at the position of 50% each, then the interest rate is optimistic, and the BAU can be seen in a position above the standard line while the pessimistic side is below the standard line. If the monetary sector is added and made at 75%, then the condition of interest rates and criteria of Optimism and BAU will change, and vice versa if the real sector is elevated; for example, if the monetary sector is increased to 75%, then the figure will change and be presented in figure 7.



**Figure 7: Promethee Analysis with Monetary Sector Increased to 75%**

The results of the interest rate process in an optimistic position are the main choice to continue existing policies and build public optimism. These results can be seen in Figure 8 below.

Rank	Phi	Phi+	Phi-
1	0.4286	0.7143	0.2857
2	0.2857	0.6429	0.3571
3	-0.7143	0.1429	0.8571



**Figure 8: Interest Rates in An Optimistic, BAU, and Pesimistic Position**

Based on the results of policy simulations, the color red should not be taken as a policy, i.e., a pessimistic option. While the green ones can be taken as policies, namely BAU options and optimistic options. Low-interest rates must still be maintained because the real sector can run well. In other words, if the interest rate is safe, the economy will grow (Del Negro et al., 2019). A simple study shows how a recession can cause a shortage of bank liquidity, which can be forced to acquire additional obligations and increase interest rates (Vera, 2004). It can be concluded that interest rates are closely related to the recession, and the strategy that Bank Indonesia can do to build public confidence is to maintain the interest rate.

## Conclusion

The results of grounded theory studies are divided into qualitative studies using netnography and quantitative studies to test concepts made in the East Java community. The qualitative study presents data on three types of public confidence in facing a recession: optimism, business as usual, and pessimism. The three types of public confidence are influenced by several factors: information received, Trust in government, resilience, perception of dependence on other countries, and perception of law enforcement.

The second result of this study is the modeling and simulation of policy options for improving public confidence facing recession issues. In modeling, several indicators are used: interest rates, investment flows, unemployment, HDI, GDP, inflation, and the labor market. The benchmark used in modeling is the interest rate because the indicator is a monetary instrument of Bank Indonesia. In this modeling and simulation process, the results of the interest rate process in the optimistic position become the main choice to continue existing policies and build public optimism.

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