Analysis Levels of the Threat Anxiety to Employees, Students, and Traders for Global Recession In 2023

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Abstract: Recession is a condition in which real economic growth is negative for two consecutive quarters. The issue of the 2023 global recession recently blow up on the media and the trigger for this recession are increase in interest rates in almost all countries, war between Russia and Ukraine and problem in the supply chain for some commodity such as energy and food. The recent research conducted by IMF in October 2022 show that the projects global economy growth in 2022 is 3.2 percent and slow into 2.7 percent in 2023, then related research for the impact from recession causes mental health problems and shifts in diet. The data for this research collected from level of anxiety about the 2023 recession issue between men and women in the three categories which is students, traders and employees for determine whether the variable is independent or not. The result from chi-square test show that there is at least one dependent variable. Because at least one variable is independent, researcher do post-hoc test for two variable from three variable by separate into three segmentation and the result show that only between sex categorical and profession is dependent.

Keywords— Recession, anxiety, profession

INTRODUCTION

A recession is a condition in which real economic growth is negative for two consecutive quarters. A recession is marked by a weakening of the global economy and will affect the domestic economy of countries around the world. The possibility of a country experiencing a recession is getting stronger if the country's economy is dependent on the global economy(Miraza, 2019). So, if the country like Indonesia where can provide huge commodity, the possibility of a country experiencing a recession is getting weaker. The issue of the 2023 global recession has a trigger, namely a simultaneous increase in interest rates in almost all countries. A World Bank study shows that the global recession this time is more driven by production factors than consumption factors. This is because the supply chain has been disrupted while demand has increased because the pandemic has slumped.

In addition, this condition become more worse by the occurrence of war between Russia and Ukraine. This causes changes in the price or availability of food and energy which will have a direct impact on communities and countries around the world. Russia and Ukraine have an important role for the global energy, food and fertilizer markets so it is very important to anticipate emerging conflicts. The Russian invasion of Ukraine certainly disrupted the global economy which was prolonged plus the consequences of the COVID-19 pandemic. Although some of the country's economies have bounced back quickly after COVID-19.

Another cause of the recession is the rise in world oil prices, one of which is in Indonesia. The increase in fuel prices in Indonesia will certainly have an impact on increasing the inflation rate and decreasing people's purchasing power, the impact will be felt mainly by people with low purchasing power and the poor, including those in urban areas, and also for those in rural areas. In general, it can also be understood that an increase in fuel prices will have exponential implications for the Indonesian economy (Wardani et al. 2022). In addition, OPEC officially reduced oil production by 2 million barrels/day in early October, this step caused the world's oil supply to decrease in production and increased the price of oil which is a source of energy.

In this study, researchers discuss the concerns of three groups that play an important role in the present and the future for the Indonesian economy, namely workers, students and traders. Based on data from the Central Statistics Agency (BPS), the total Indonesian workforce reached 144.01 million in February 2022. This number reached 69.06% of the total working age population of 208.54 million. According to the BPS definition, "working age population" is the population aged 15 years and over.

REVIEW OF LITERATURE

The first literature is research conducted by the International Monetary Fund in October 2022. In this research it is stated that the global economy continues to face tough challenges shaped by the effects of three things that greatly affect the economy itself, namely, the Russian invasion of Ukraine, the cost of living crisis caused by persistent and widespread inflationary pressures, as well as the economic slowdown (especially the property sector) in Tiongkok. The latest IMF projects global economic growth in 2022 of 3.2 percent and slowing to 2.7 percent in 2023. More than a third of the global economy will contract this year or next.

Further related research is research entitled The impact of the Great Recession on health-related risk factors, behavior and outcomes in England (2017) by Mireia Jofre from the University of London. The study examines the

Vol. 6 Issue 12, December - 2022, Pages: 83-88

impact of the recession on individual health behaviors and risk factors such as smoking, alcohol consumption, and Body Mass Index in the UK for period 2001–2013. The findings from this study suggest that recession is associated with shifts in diet, increased consumption of drugs, suffering from diabetes and mental health problems. These effects are often stronger for those with less education and for women.

Based on studies from these competent experts, it is known that the threat of a 2023 recession is real and there is an influence on differences in behavior and health problems. Furthermore, in this study, the authors wanted to develop the Chi-square independence test to analyze whether there were differences between men and women from 3 groups, namely students, employees, traders on the level of anxiety regarding the 2023 recession issue.

MATERIALS AND METHODS

This research was conducted by online distributing questionnaires to respondents who are the object of research according to a predetermined. The questionnaires starts from 6 November 2022 to 20 November 2022.

The data source in this study is primary data collected through data collection using online survey methods. Primary data were obtained from workers, students and traders in Indonesia. Primary data collection activities aim for researchers to obtain accurate information regarding the level of anxiety of students, workers and traders about the threat of a global recession in 2023.

This research has one variable, namely the level of anxiety of respondents in Indonesia regarding the threat of a global recession in 2023. The categorization of the level of anxiety of respondents is as follows.

Table 1. Research Variables and Variable Categories

Research variable	Variable Category	Anxiety Level
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Respondents' level of	Worried	10-13
anxiety about the threat of a global	Neutral	14-16
recession in 2023	No worries	17-20

By determining the variable category based on the choice of each respondent in the given questionnaire.

The analysis technique used in this study is the Chi-Square test. Chi-Square is used to analyze the relationship of independence between 3 variables in the form of categories (ordinal). These variables are the level of anxiety, gender, and work. In the process of data analysis in this study also assisted with SPSS software.

The data analysis procedure in this study is as follows:

- Conduct validity test and reliability test on research data.
- 2. Arranging research data into contingency tables based on respondents' choices on the questionnaire.
- 3. Performing Chi-square test analysis to determine the relationship between the two variables.
- a. Compare calculated Chi-Square values with table or Chi-Square values $X^2_{\alpha(r-1),(c-1)}$
- b. Make a test decision based on the results of calculating the Chi-square test statistic with critical areas:

Reject, if
$$H_0 X^2 > X^2_{\alpha(r-1),(c-1)}$$

- c. Draw conclusions regarding the Chi-square test analysis.
- 4. Interpretation of research results and conduct analysis.

The contingency table that the researcher uses is a contingency table for 3 variables with row variables (b), column variables (k), and layer variables (l). This contingency table is called a three-dimensional contingency table $b \ x \ k \ x \ l$ with the following form.

Table 2. Research Contingency Table

		Perception				
Profession	Anxious		Neuter		Not Anxious	
	Male	Female	Male	Female	Male	Female
Collegian						
Employee						
Dealer						

Vol. 6 Issue 12, December - 2022, Pages: 83-88

RESULTS

Validity test

Validity test is a test of the accuracy of a measuring instrument in measuring what is the object being measured,

in this study what is meant by validity test is measuring the accuracy of the questions on the questionnaire used in the study. Based on the test results on the SPSS software, the output is shown in the table below.

Table 3. Output Validity Test

Correlations													
			a	b	ε	d	0	- 1	9	h	1	J	total
Spearman's rho	3	Correlation Coefficient	1.000	.184	.029	.018	.106	.221	.072	.063	.196	.055	.366
		Sig. (2-tailed)		.117	.804	.877	.369	.058	.544	.593	.094	.644	.001
		N	74	74	74	74	74	74	74	74	74	74	7
	b	Correlation Coefficient	.184	1.000	.209	.258	224	.174	.056	.092	015	.219	.462
		Sig. (2-tailed)	.117		.074	.026	.055	.139	.633	.434	.902	.060	.00
		N	74	74	74	74	74	74	74	74	74	74	7
	c	Correlation Coefficient	.029	.209	1.000	460	.158	.267°	232	.054	.197	.082	.587
		Sig. (2-tailed)	804	.074	060	.000	.178	.021	.047	.649	.092	.489	.00
		N	74	74	74	74	74	74	74	74	74	74	7
	d	Correlation Coefficient	.018	.258	.460	1.000	085	.183	.143	.235	.225	.173	,525
		Sig. (2-tailed)	.877	.026	.000	- 1	.473	.120	.223	.044	.054	.140	.00
		14	74	74	74	74	74	7.4	74	74	74	74	7
	0	Correlation Coefficient	.106	224	.158	085	1.000	.064	089	.156	.125	.099	.254
		Sig. (2-tailed)	.369	.055	.178	473	727	.588	.451	.184	.287	.400	.02
		N	74	74	74	74	74	74	7.4	7.4	74	74	7
	f	Correlation Coefficient	.221	.174	.267	183	.064	1.000	.063	.141	045	.020	.467
		Sig. (2-tailed)	.058	.139	.021	.120	.588		.591	232	.701	.866	.00
		N	74	74	74	74	74	74	74	74	74	74	7
	· a	Correlation Coefficient	.072	.056	232	.143	089	.063	1.000	- 002	.079	.043	.386
		Sig. (2-tailed)	.544	633	.047	223	.451	.591		987	503	714	.00
		N	74	74	74	74	74	74	74	74	74	74	7
	h	Correlation Coefficient	.063	.092	.054	.235*	.156	.141	002	1.000	.093	.270*	.387
		Sig. (2-tailed)	.593	.434	.649	.044	.184	232	.987		.432	.020	.00
		N	74	74	74	74	74	74	74	74	74	74	7
	31	Correlation Coefficient	.196	015	.197	.225	.125	045	.079	.093	1.000	.346	.467
		Sig. (2-tailed)	.094	.902	.092	.054	.287	.701	.503	432		.003	.000
		N	74	74	74	74	74	74	74	74	74	74	7.
	1	Correlation Coefficient	.055	.219	.882	.173	.099	.020	.043	.270	.346"	1.000	.535
		Sig. (2-tailed)	.644	.060	.489	.140	.400	.866	.714	.020	.003		.000
		N	74	74	74	74	74	74	74	74	74	74	7
	total	Correlation Coefficient	366"	.462**	.587**	.525**	254	.467"	.386"	387**	467"	.535"	1.00
		Sig. (2-tailed)	.001	.000	.000	.000	.029	.000	.001	001	.000	.000	
		N	74	74	74	74	74	74	74	74	74	74	74

^{**.} Correlation is significant at the 0.01 level (2-tailed).

Reliability Test

In addition to testing the level of effectiveness of the measuring the questions, it must also be tested whether the data is reliable and remains consistent when the measurements are carried out repeatedly. The test that can be done is the reliability test. In the reliability test, the method used is the Cronbach Alpha method. Based on the test results on the SPSS software, the output is shown in the image below.

Table 4. Output Realibility Test

is in the form of an identification score of the level of anxiety regarding the 2023 recession issue. The categories $\frac{1}{2}$

Reliability Statistics

Cronbach's Alpha	N of Items
.574	10

Chi-Square Independence Test

The Chi-Square test was conducted to analyze the relationship between gender and 3 profession groups with anxiety levels regarding the 2023 recession issue. Respondents in this study were spread throughout Indonesia with a total of 76 respondents. In this survey, the data obtained for each variable are written in the contingency table as follows.

Table 5. Contingency b x k x l

^{*.} Correlation is significant at the 0.05 level (2-tailed).

ISSN: 2643-9603

Vol. 6 Issue 12, December - 2022, Pages: 83-88

		Perception				
Profession	Anxious		Neuter		Not Anxious	
	Male	Female	Male	Female	Male	Female
Collegian	1	7	2	15	2	2
Employee	3	4	8	4	2	5
Dealer	1	5	4	7	2	2

Post-Hoc Test

Based on the results of the Chi-square test on the b x k x l contingency table, it can be concluded that the job variable, perception variable (anxiety level), and gender variable are not mutually exclusive (dependent). Due to this, So that the researcher tried to test the independence between the two variables by using the b x k contingency table.

Table 6. Contingency b x k Profession of Respondents and Gender

IC	sponucius and oc	nuci
Profession	Gene	der
Profession	Male	Female
Collegian	5	24
Employee	13	13
Dealer	7	14

Table 7. Contingency Table b x k Perception (Anxiety Level) and Occupational Variables

	Perception				
Profession	Anxious	Neuter	Not Anxious		
Collegian	8	17	4		
Employee	7	12	7		
Dealer	6	11	4		

Table 8. Contingency Table b x k Perception (Anxiety Level) and Gender Variables

LC	ver) and Gender va	labics
Description	Gen	der
Perception	Male	Female
Anxious	5	16
Neuter	14	26
Not Anxious	6	9

Policy Recommendations

Based on the results of calculations that have been carried out, recommendations can be given to local and central governments, namely that the government should provide a positive and optimistic narrative regarding the 2023 recession issue. Furthermore, the government can also provide reserves of primary needs such as food and fuel so that scarcity does not occur. In addition, monetary policy by Bank Indonesia and fiscal policy by the Ministry of Finance must go hand in hand for the country's resistance from recession. An applicable example is reducing mortgage interest payments for the middle class, increasing interest rates in line with The Federal

Reserve raising interest rates, and maintaining people's purchasing power for a normal economic cycle by providing direct cash aid to the poor.

DISCUSSION

Validity Test

Based on the results of the validity test, it was found that all p-values for each question were smaller than the significance level which is 0.05 or the r-score value is more than r-table with $r_{0.05;\,72}$ with an r-table value of 0.1927. From these results it can be said that all questions on the questionnaire were declared valid based on the validity test.

Reliability Test

From the output of the SPSS software, the Cronbach Alpha value is 0.565. So it can be concluded that the question variables from the questionnaire have fulfilled the assumption of reliability.

Descriptive Statistics

Respondents from this study were dominated by female sex with a percentage of 66% or as many as 50 respondents. For male gender, the percentage obtained from the respondent's profile is 34% or as many as 26 respondents. Judging from the type of profession, the percentage of respondents as employees was obtained by 34% or as many as 26 respondents. While the work of students and traders respectively obtained a percentage of 38% or as many as 29 respondents and 28% or as many as 21 respondents.

From the results of the research that has been carried out, the results regarding the knowledge of all respondents regarding the 2023 global recession issue and understanding of the meaning of recession with the percentage of respondents' answers regarding knowledge of the 2023 global recession issue were obtained by 86% for knowing answers to the 2023 global recession issue and 14% for the answer does not know about the 2023 global recession issue. From this it can be seen that 65 respondents know about the 2023 global recession issue and 11 respondents do not know about the 2023 global recession issue. Then on the variable respondents' understanding of the meaning of recession, a percentage of 67% or as many as 51 respondents understand about the meaning of recession 33% or as many as 25 respondents did not understand the meaning of recession itself.

With the issue of a global recession in 2023, there will certainly be anxiety for the Indonesian people if this happens. This anxiety arises because it is caused by the effects brought by the recession itself. Data obtained from respondents regarding anxiety in facing a recession based on two variables, namely the respondent's sense of security regarding income and anxiety in facing the 2023 global recession issue with the percentage of answers from respondents regarding the variable feeling of security regarding income owned. As much as 62% or as many as 47 respondents chose to feel insecure about the income they have. It can be said that this supports anxiety in facing the issue of the 2023 global recession which is supported by the respondents' unpreparedness with the income they have in the event of a recession. Then obtained a percentage of 38% or as many as 29 respondents who feel safe with the income they have. For the next variable, namely anxiety in facing the 2023 global recession issue, a percentage of 58% or as many as 44 respondents chose to feel anxious in facing the 2023 global recession issue. In addition, 42% or as many as 32 respondents chose not to feel anxious in facing the recession issue global 2023.

One of the easiest ways to deal with a recession is to cut expenses. From the research that has been done, data is obtained regarding the respondent's spending savings with a percentage of 82% or as many as 62 respondents choosing to save on their expenses to deal with a recession. From this it can be seen that by making spending savings, respondents have anxiety about the issue of the 2023 global recession. From the test it is obtained that the percentage of respondents choosing not to make savings on their expenses is 18% or as many as 14 respondents.

Chi Square test

Based on the calculation, the test statistic is 50.21, while the table that determines the critical area is 21.02 so that the test results in a decision to reject because the test statistic $> \chi 2$ table which concludes that at least there is one variable that is not mutually exclusive (dependent), so we get the decision that the profession variable, perception variable (anxiety level), and gender variable are not mutually exclusive (dependent).

Post-Hoc Test

Based on the three outputs of the Chi-square test calculations using the SPSS software, there is a relationship between the two variables that are not mutually independent (dependent) which is the job variable and the gender variable. Therefore, the Chi-square test of independence for the three variables in the contingency table $b \times k \times l$ results in a decision to reject which concludes that at least one variable is not independent (dependent).

CONCLUSION

Based on the results of the analysis that has been carried out, several conclusions are obtained, namely as follows:

- 1. Based on descriptive statistics, it was found that 64% understood the meaning of recession and 88% had heard about the 2023 recession issue, besides that 82% percent of respondents chose to save money in the next few months.
- 2. Based on the Chi-Square test, it was found that there is at least one independent variable. This indicates that there are differences in the level of anxiety about the 2023 recession issue between men and women in the three categories, namely students, traders and employees.
- 3. Based on the post-hoc test conducted, there is a relationship between the two variables that are not mutually independent (dependency) which is variable of profession and the variable of gender. Therefore, the Chi-square test of independence for the three variables in the contingency table b x k x l results in a decision to reject Ho which concludes that at least one variable is not independent (dependent).

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