



RESEARCH ARTICLE

The Effect of Strengthening Regional Economic Conditions on Job Opportunities, Income and Price Stability in Padang City

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ABSTRACT

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This research aims to analyze the role of the regional economy in increasing employment opportunities, income and price stability in Padang City. This research uses primary data from Bank Indonesia consumer survey publications for the period March 2011 to April 2020 using the Moderation Regression Analysis (MRA) approach. This research determines regional economic conditions as a pure independent variable. Meanwhile, employment opportunities, income and price stability have two functions, including as dependent and moderating variables. Next, each research model is grouped into real and projected conditions, except for price stability. The main finding obtained is that the classification of all moderation variables in the research is quasi moderation. Thus, these variables play a role in strengthening the relationship between regional economic conditions and employment opportunities, increasing income and price stability. The recommendation from this research is that the Padang City government needs to maintain a balance between regional economic conditions, employment opportunities, increased income and price stability to improve community welfare.

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INTRODUCTION

The city of Padang has potential in the field of trade because of its central role in economic activities in West Sumatra Province. Furthermore, the city also hosts various regional economic sectors, such as the cement industry, marine fisheries, and retail trade. Apart from that, the regional economic potential is also proven to be consistently higher when compared to the average economic growth rate in West Sumatra Province for the district and city aggregate (see Figure 1).

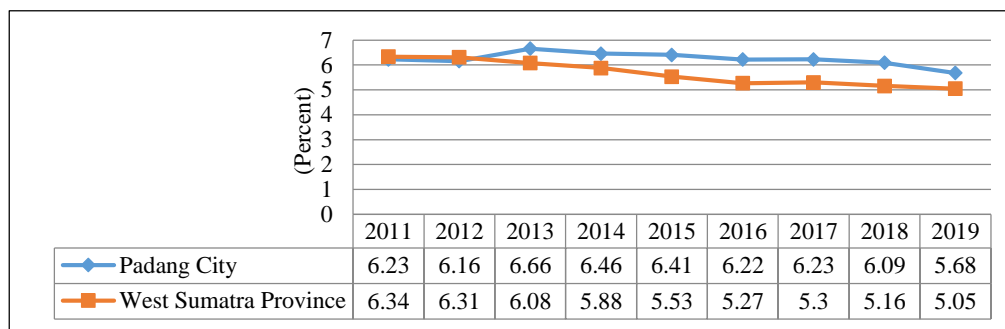


Figure 1: Comparison of regional economic growth in padang city and west sumatra province.

Source: West sumatra province central statistics agency.

Based on the information in Figure 1, it is known that the City of Padang has made a large contribution in supporting the provincial economy over the last few years. However, the growth trend tends to experience a continuous decline, the peak of which occurred in 2020 due to the COVID-19 pandemic. Padang City's economic growth experienced a significant slowdown in 2020, namely -1.86 percent compared to 5.65 percent in the previous year, which is still far below the national average. Based on PDRB data for Padang City in 2020, there were 8 sectors that recorded losses, namely the mining and quarrying sector, the electricity and gas supply sector, the construction sector, the wholesale and retail trade sector, car and motorbike repairs, as well as transportation, the warehousing sector, the accommodation sector, food/beverage sector, business services sector, other service sectors. Furthermore, the transportation and warehousing sector was the sector that experienced the largest decline from around 10,712 tons in 2019 to 9,743 tons in 2020, and a decrease of almost Rp. 1 ton is exactly Rp. 968.93 million or around 9.04 percent. This could be triggered by many regions in Indonesia implementing large-scale social restrictions which greatly limit air, sea and land travel.

The COVID-19 pandemic in Padang City has also reduced people's purchasing power, causing upstream problems in the form of large supplies of goods without buyers and the trade balance being in the red zone. Another sector that was significantly impacted was the accommodation and food and drink sector which recorded a decline of Rp. 935.09 million in 2019 to Rp. 745.82 million in 2020 or a decrease of around 20.24 percent. Then, it cannot be denied that the sector which includes tourism activities is the sector most affected with the highest level of decline because many have suffered losses due to the decline in the number of tourists, many of which have closed and are no longer operating.

On the other hand, there are several industries that have experienced significant growth and are increasingly successful, including the information and communications sector, which has increased from Rp. 4.608 trillion in 2019 to Rp. 5.112 trillion in 2020 or an increase of around 10.93 percent. Restrictions on community activities that encourage people to stay at home, online learning for school children and students, working from home, and virtual meetings are some of the activities that show a rapid increase in activity in this sector this year when compared to the previous year, which has resulted in extraordinary changes in the composition of GRDP distribution in 2020.

Based on this explanation, special policies are needed to improve economic conditions in Padang City because it will stimulate higher quantity and quality of production and provide positive benefits for various economic sectors. In general, high economic growth has a large multiplier effect on macroeconomic indicators. Furthermore, this research will study the relationship between regional economic growth and macroeconomic indicators in Padang City in the form of employment opportunities, increased income and price stability. To do this, this research uses consumer survey data from Bank Indonesia publications. The analysis is grouped into two time periods, namely real conditions and projected conditions, which are summarized in Figures 2 and 3.

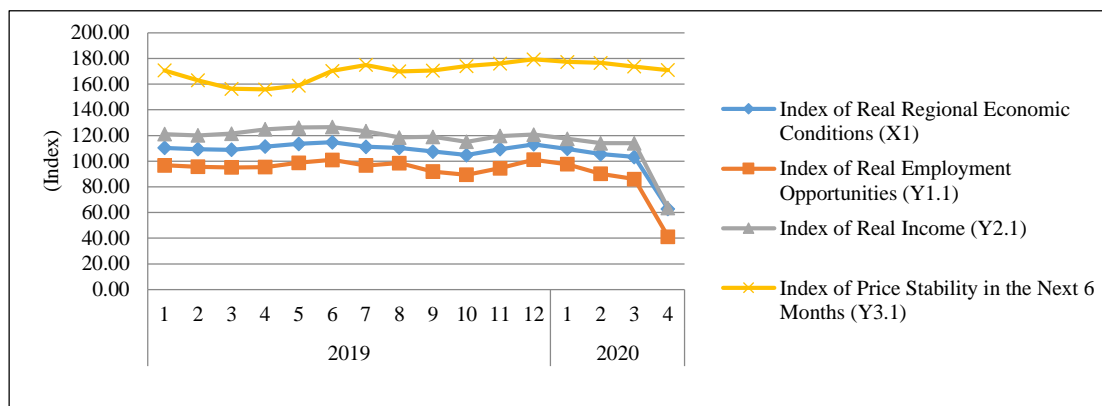


Figure 2: Real regional economic conditions, job opportunities, income and price stability in padang city.

Source: Consumer survey, bank Indonesia.

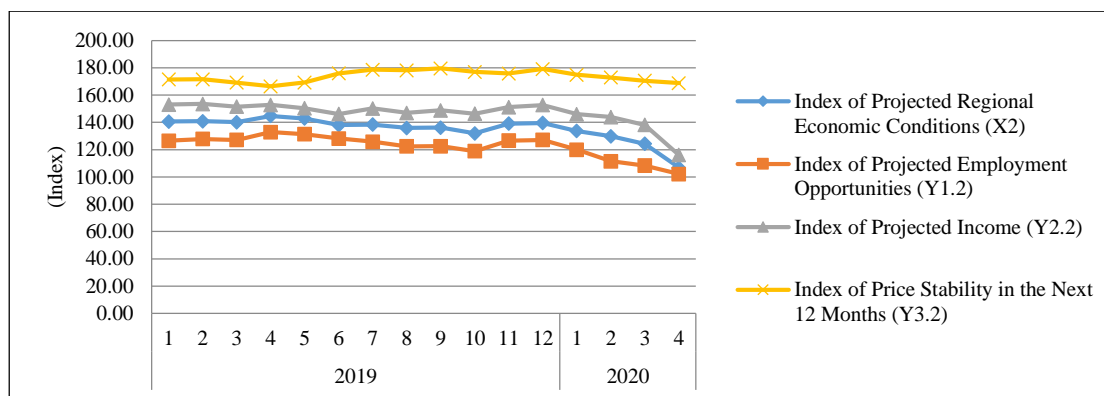


Figure 3: Projections of regional economic conditions, job opportunities, income and price stability in padang city.

Source: Consumer survey, bank Indonesia.

Figure 2 shows the monthly fluctuations in Padang City regarding regional economic conditions, employment opportunities, income and price stability in real conditions. The picture is relatively stable from January to December. However, in 2019 it experienced a decline in the period January to April 2020. Projections of regional economic growth, employment opportunities, income and price stability in Padang City are almost the same as real conditions, as seen in Figure 3. Likewise projected fluctuations are relatively stable in the period January to December 2019, while projected fluctuations in the period January to December 2019 are relatively stable. Economic conditions are projected to decline from January to April 2020.

The information in Figures 2 and 3 shows the decline in regional economic indices and macroeconomic indicators triggered by the corona virus (COVID-19) pandemic which caused economic turmoil in various regions, including the city of Padang. The corona virus certainly has an impact on the regional economy because the spread of this virus paralyzes various macroeconomic indicators. These indicators are influenced by government policies that seek to break the chain of transmission of COVID-19. These policies include social distancing, working from home, large-scale social restrictions, and online communication. These policies hamper regional economic growth because they result in an increase in layoffs which in turn results in a decrease in income and affects price stability. Reduced job opportunities have apparently increased unemployment (Chirwa dan Odhiambo 2016; Mukupa, Lungu, dan Chibangula 2016). Furthermore, decreasing income has an impact on lower levels of public consumption (Jayaraman 2013; Chu dkk. 2017). Meanwhile, shocks to price stability will have an impact on lower people's purchasing power (Bittencourt 2012; Totonchi 2011). These explanations show the relevance of this research because it aims to improve

community welfare. It aims to achieve this by optimizing the multiplier effect of regional economic growth on employment opportunities, increasing income and price stability.

2. LITERATURE REVIEW

This literature review provides an overview of empirical findings regarding the relationship between economic growth, employment, income, and price stability. Economic growth is an important condition for increasing employment. Empirical investigations regarding the effect of economic growth on employment in EU countries during the period 2000 to 2010 using a panel regression approach found that economic growth contributed to creating new jobs. Therefore, increasing the intensity of economic growth is very important (Herman 2011). Research in Germany in the period 1971 to 2016 using a vector error correction model showed similar findings. In particular, high economic growth will increase employment opportunities (Klinger and Weber 2019). However, other research finds that these effects do not occur completely immediately (Oloni and Funlayo 2014) using a time-varying parameter approach to study employment conditions in Nigeria over the period 2001 to 2012. Their study finds that economic conditions do not support increased employment opportunities if the government does not direct spending to labor-intensive industrial sectors.

Income distribution is a major determinant of employment opportunities. (Xue, Gao, and Guo 2014) studied the effect of income distribution on employment opportunities in China between 2005 and 2010. They used estimates of the proportion of informal employment compared to total non-agricultural employment in urban China. This study found that income distribution has a significant effect on the employment sector because there is no employment discrimination and employment regulations are an alternative way to reduce inequality. In addition, research in Indonesia for the 1997-2017 period using the Theil index found that endowment factors contributed to increasing income between informal and formal work opportunities. (Herzberg-druker and Stier 2019).

The relationship between income and employment is also visible from various empirical studies in the United States. For example, (Clemens and Wither 2019) used an error correction model to analyze the period 2007 to 2009. The research results recognized income growth as one of the most important factors determining the availability of job opportunities. In addition, (Escudero, López, and Pignatti 2020) studied economic conditions in Uruguay from 2005 to 2007 using a difference-in-differences approach. This study highlights that a combined approach consisting of income-enhancing and labor market policies can increase the availability of employment opportunities in a sustainable manner. Moreover, (Kochan and Riordan 2016) investigated the relationship between employment opportunities and income in the United States based on a review of several articles. Their study recognizes increased employment as one of the determinants of income levels. Furthermore, another study was conducted in America using an ordinary least squares approach. This study found that the availability of job opportunities increased due to increases in drivers' hourly wages during the period 2005 to 2016. (Wang and Smart 2020).

Various studies have investigated the effect of economic growth on income. For example, (Yang and Greaney 2017) studied this effect in four countries, namely China, Japan, South Korea, and the United States over the period 1960 to 2016 using the Engle-granger two-step error correction model. This study found a positive causal relationship in all four countries, meaning that increasing economic growth will increase income levels. Furthermore, economic growth increased in lower middle income countries during the period 1960 to 2014. These findings are based on the Granger causality test and the Generalized Method of Moments approach. (Vo et al. 2019). A study by (Niyimbanira 2017) has contrasting conditions in South Africa during the period 1996 to 2014. This research uses the Ordinary Least Square approach and finds that economic growth has no effect on income.

There is a clear correlation between income and price stability. A study in Bangladesh found a positive relationship between these variables. This research uses the Johanssen cointegration approach for the period 1990 to 2015 (Muhibullah and Rani 2019). In addition, research on ten OECD countries during the period 1971-2010 using a panel regression approach found that price stability was correlated with an increase in income (Monnin 2014). Furthermore, a large study analyzed 24 developed countries and 66 developing countries over 25 years using a vector error

correction approach. (Sima and Darren 2018) . This study finds a nonlinear relationship between price stability and income inequality although the pattern is different between developed and developing country groups. Finally, income analysis of the price stability of heterogeneous households in China using the Schumpeterian growth model finds that inequality in the distribution of household assets is a source of income inequality. This is because households have the same wage level. Thus, income has a positive influence on price stability (Zheng 2020).

Economic growth has a positive effect on price stability. This is the result of research by (Datta and Mukhopadhyay 2011) which found that economic growth contributed to long-term price stability in Malaysia during the period 1995 to 2011 based on the VECM approach. Other research in Pakistan in the period 1980 to 2010 using an autoregressive distribution lag approach found that economic growth was a determining factor in price stability. (Irfa 2013). Moreover, (Akinsola and Odhiambo 2017) conducted a literature study and found that economic growth had a positive effect on price stability in developed and developing countries. However, country-specific characteristics, data sets, and methodology influence the results of this study.

There is a clear relationship between price stability and employment. Three studies have investigated this in Indonesia. First, (Ruchba and Hadiyan 2019) focused on the period 1980 to 2016 and used a vector error correction model. This study finds that price volatility reduces employment opportunities. Second, (Sasongko and Huruta 2019) assessed the period from 1984 to 2017 using a vector autoregression approach. Their finding is that price increases cause employment shocks. Third, (Wulandari and Utomo 2019) used a vector error correction model to study the period from 1987 to 2018. They found that employment initially had a positive impact on price stability, with increasing price stability, but the effect decreased. An investigation of employment opportunities on price stability in South Africa over the period 1961 to 2011 using the Engle-granger error correction approach found a long-run positive cointegration relationship between employment opportunities and price stability (Vermeulen 2015). Furthermore, research in Iran in the period 1996 to 2012 using an autoregressive distribution lag approach found that employment opportunities would maintain price stability. (Mohseni and Jouzaryan 2016). Meanwhile, household surveys conducted by the Reserve Bank of India since 2005 using a sequential probit model estimate the dynamics of employment opportunities on price stability. This research finds that employment opportunities have a positive effect on price stability (Das, Lahiri, and Zhao 2019).

This overview summarizes the findings of a number of relevant studies on which the conclusions of this article are based. The novelty of this article is that the use of Moderated Regression Analysis is still rarely used in analyzing the role of regional economic conditions in stimulating employment opportunities, income and price stability. In addition, there has been no previous research that has conducted a comparative analysis of real and projected conditions in a time period. However, this research utilizes the results of previous research to determine the relationship between variables. Finally, this research uses three types of analysis models for two economic conditions: real and projected over a period of time.

3. METHODOLOGY

3.1 Data types and sources

This research focuses on strengthening regional economic growth and increasing employment opportunities and income while ensuring price stability in Padang City. The data used is monthly time series data from March 2011 to April 2020. Data was obtained from the publication of Bank Indonesia consumer surveys consisting of Regional Economic Conditions (X), Employment Opportunities (Y1), Income (Y2), and Price Stability (Y3). These are all used as variables in this research. This research carries out a comparative analysis of real and projected conditions for these variables. However, this study only analyzes price stability projections because data on real conditions is not yet available. The operational description of each variable is summarized in Table 1.

Table 1: Operational description of variables

Variable		Indikator
Regional Economic Conditions (X)	Real regional economic conditions (X1.1)	Regional economic real condition index
	Projection of regional economic conditions (X1.2)	Regional economic condition projection index
Job Opportunities (Y1)	Real job opportunities (Y1.1)	Real employment opportunity index
	projected job opportunities (Y1.2)	Employment opportunity projection index
Income (Y2)	Real income (Y2.1)	Real income index
	Revenue projection (Y2.1)	Income projection index
Price Stability (Y3)	Price stability for the next 6 months (Y3.1)	Price stability index for the next 6 months
	Price stability for the next 12 months (Y3.2)	Price stability index for the next 12 months

3.2 Model analytics

This research uses Moderation Regression Analysis (MRA) so that there are moderating variables. In particular, independent variables will strengthen or weaken the relationship between other independent variables and the dependent variable. There are three MRA testing models, namely interaction test, absolute difference value test, and residue test. This research uses an interaction test, namely using multiple linear regression in which there is an element of interaction (multiplication of two or more independent variables). The MRA approach consists of regression equations and equations involving moderating and interaction variables. The interpretation of the MRA approach focuses on the R-squared value, F-statistic significance, t-statistic significance, and classification of moderating variables. The moderating variable aims to determine the classification of the moderating variable obtained from the equation. The explanation is summarized in Table 2.

Table 2: Classification of moderating variables

Moderation Type	Description	Coefficient
Pure moderation	Moderation of the relationship between the independent variable and the dependent variable where the moderating variable purely interacts with the independent variable without becoming the independent variable itself	β_2 not significant β_3 significant
Quasi moderation	Moderation of the relationship between the independent variable and the dependent variable where the pseudo moderating variable interacts with the independent variable and becomes an independent variable in the process	β_2 significant β_3 significant
Homologer moderation	Does not interact with the independent variable and does not have a significant relationship with the dependent variable	β_2 not significant β_3 not significant
Predictor moderation	Has a role as an independent variable in the relationship model	β_2 significant β_3 not significant

Source : (Memon et al., 2019)

This research analyzes three models using the MRA approach, namely employment opportunities, income and price stability. Next, each model is grouped into two types of conditions, namely real conditions and projections. This is except for the price stability variable which only analyzes projected conditions because real condition data is not available. Thus, the econometric model is adjusted to the type of model and economic conditions. In this research, Regional Economic Conditions (X) are pure independent variables, while Employment Opportunities (Y1), Income (Y2) and Price Stability (Y3) have two functions, namely as dependent variables and as moderating variables. Further explanation can be seen in the conceptual framework as summarized in Figure 4.

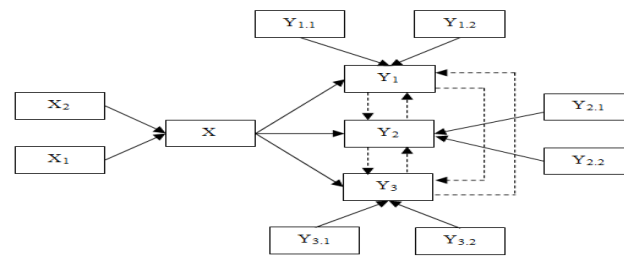


Figure 4: Conceptual framework of research

4. RESULTS AND FINDINGS

This section explains the influence of each variable and the role of moderating variables in the model. The research results are summarized in Tables 3 and 4 according to the type of economic conditions observed in this study. Equations 1, 4, and 7 were tested using linear regression analysis while the rest were tested using MRA. To enable interaction testing, interaction data has been prepared between the variables of real regional economic conditions and each moderating variable. Moderation 1 shows the interaction between income and regional economic conditions and employment opportunities in real conditions. Moderation 2 shows the interaction between price stability in the next six months and regional economic conditions on employment opportunities in real conditions. Moderation 3 shows that there is an interaction between real employment opportunities and real conditions of the regional economy on income in real conditions. Moderation 4 shows the interaction between price stability in the next 6 months and real regional economic conditions on real income conditions. Moderation 5 shows the interaction between real employment opportunities and real regional economic conditions on price stability in the next 6 months. Finally, moderation 6 shows the interaction between real income and real regional economic conditions on price stability in the next 6 months. The real condition analysis output is summarized in Table 3.

Table 3: Real condition for analysis results

Equation	Econometric Models	F-Statistic	R-square
1	$Y_{1,t} = -23,933 + 1,086 X_{1t} + \epsilon_t$ (0,000) (0,000)	(0,000)	0,902
2	$Y_{1,t} = -75,572 + 1,759 X_{1t} + 0,3977 Y_{2,t} + 0,052 X_{1t} * Y_{2,t} + \epsilon_t$ (0,001) (0,000) (0,000) (0,004)	(0,000)	0,912
3	$Y_{1,t} = -36,472 + 1,261 X_{1t} + 0,068 Y_{3,t} + 0,097 X_{1t} * Y_{3,t} + \epsilon_t$ (0,024) (0,008) (0,005) (0,042)	(0,000)	0,983
4	$Y_{2,t} = -37,196 + 0,799 X_{1t} + \epsilon_t$ (0,000) (0,000)	(0,000)	0,602
5	$Y_{2,t} = -11,302 + 2,503 X_{1t} + 1,576 Y_{1,t} + 0,018 X_{1t} * Y_{1,t} + \epsilon_t$ (0,000) (0,000) (0,000) (0,000)	(0,000)	0,743
6	$Y_{2,t} = -69,719 + 3,476 X_{1t} + 2,487 Y_{3,t} + 0,246 X_{1t} * Y_{3,t} + \epsilon_t$ (0,000) (0,005) (0,003) (0,000)	(0,000)	0,647
7	$Y_{3,t} = -15,691 + 0,198 X_{1t} + \epsilon_t$ (0,000) (0,041)	(0,041)	0,836
8	$Y_{3,t} = -17,354 + 0,187 X_{1t} + 0,980 Y_{1,t} + 0,077 X_{1t} * Y_{1,t} + \epsilon_t$ (0,000) (0,009) (0,045) (0,049)	(0,048)	0,861
9	$Y_{3,t} = -29,863 + 1,649 X_{1t} + 1,054 Y_{2,t} + 0,014 X_{1t} * Y_{2,t} + \epsilon_t$ (0,000) (0,002) (0,006) (0,000)	(0,000)	0,904

() shows the probability value $\alpha = 5\%$.

Equation 1 produces an R-squared value of 0.902. Thus, the real condition of the regional economy influences real employment opportunities by 90.2%. Furthermore, the significance value of the F-statistic is 0.000 (<0.05). Thus, the real conditions of the regional economy have a significant influence on real employment opportunities. Meanwhile, the t-statistical significance value is 0.000 (<0.05). Thus, the real conditions of the regional economy have a positive and significant effect on real employment opportunities. This finding is in line with the findings of (Alani 2012; Näätänen 2015; Jung et al. 2016).

Testing equation 2 resulted in an increase in R-squared to 0.912 after moderation 1. Thus, real regional economic conditions, real income, and moderation 1 influenced real employment opportunities by 91.2%. Thus, real income strengthens the influence of real regional economic conditions on real employment opportunities. Apart from that, the significance value of the F-statistic is 0.000 (<0.05). Thus, real regional economic conditions, real income, and moderation 1 have a significant effect on real employment opportunities. The t-statistical significance value for the real condition of the regional economy is 0.000 (<0.05). This means that the real conditions of the regional economy have a positive and significant influence on real employment opportunities. The t-statistical significance value for real income is 0.004 (<0.05). Thus, real income has a positive and significant effect on real employment opportunities. The t-statistical significance value for moderation 1 is 0.001 (<0.05), which means that moderation 1 has a positive and significant influence on real employment opportunities. Moderation 1 (real income) is classified as quasi-moderation. This finding is in line with the results of research by (Qi et al. 2012; Rong et al. 2020; Ioan 2014).

The result of testing equation 3 is that there is an increase in R-squared to 0.983 after moderation 2. Thus, the real condition of the regional economy, price stability in the next six months, and moderation 2 affect real employment opportunities by 98.3%. Therefore, price stability in the next 6 months will strengthen the influence of real regional economic conditions on real employment opportunities. Furthermore, the significance value of the F-statistic is 0.000 (<0.05). This means that the real condition of the regional economy, price stability in the next six months, and moderation 2 have a significant effect on real employment opportunities. Meanwhile, the t-statistical significance value for the real condition of the regional economy is 0.008 (<0.05). Therefore, the real conditions of the regional economy have a positive and significant influence on real employment opportunities. The t-statistical significance value for price stability in the next six months is 0.005 (<0.05). This means that price stability in the next 6 months will have a positive and significant effect on real employment opportunities. The t-statistical significance value for moderation 2 is 0.042 (<0.05) which indicates that moderation 2 has a positive and significant influence on real employment opportunities. Moderation 2 (price stability in the next six months) is classified as quasi-moderation. This finding is in line with the results of research by (Jin and Ra 2017; Mehic 2018; Vázquez, Esquivel, and Hernández 2017).

The results of equation 4 obtained an R-squared value of 0.602. Thus, the real condition of the regional economy has an influence on real income of 60.2%. Furthermore, the significance value of the F-statistic is 0.000 (<0.05), which means that real regional economic conditions have a significant effect on real income. Meanwhile, the significance value of the t-statistic is 0.000 (<0.05), so that real regional economic conditions have a positive and significant influence on real income. This finding is in line with research results (Binatli 2012; Luo and Xie 2020; Alisa 2015).

The result of equation 5 is that there is an increase in R-squared to 0.743 after moderation 3. Therefore, real regional economic conditions, real employment opportunities, and moderation 3 influence real income by 74.3%. Thus, real employment opportunities strengthen the influence of real regional economic conditions on real income. Furthermore, the significance value of the F-statistic is 0.000 (<0.05), so that real regional economic conditions, real employment opportunities, and moderation 3 have a significant effect on real income. Meanwhile, the t-statistical significance value of regional real economic conditions is 0.000 (<0.05), which means that regional real economic conditions have a positive and significant influence on real income. The t-statistical significance value for real employment opportunities is 0.000 (<0.05) so that real employment opportunities have a positive and significant effect on real income. The t-statistical significance value for moderation 3 is 0.000 (<0.05). Thus, moderation 3 has a positive and significant influence on real income. Moderation

3 (real job opportunities) is classified as quasi-moderation. This finding is in line with the results of previous research (see Gabriel, Sanchez, and Segarra 2020; Soe and Kakinaka 2017; Cingano 2014).

The result of testing equation 6 is that there is an increase in R-squared to 0.647 after moderation 4. Thus, real regional economic conditions, price stability in the next six months, and moderation 4 influence real income by 64.7%. Therefore, price stability in the next six months strengthens the influence of real regional economic conditions on real income. Furthermore, the significance value of F-statistics is 0.000 (<0.05), so that the real condition of the regional economy, price stability in the next six months, and moderation 4 have a significant effect on real income. Meanwhile, the t-statistical significance value of regional real economic conditions is 0.005 (<0.05), which means that regional real economic conditions have a positive and significant influence on real income. The t-statistical significance value for price stability in the next six months is 0.003 (<0.05) which shows that price stability in the next six months has a positive and significant effect on real income. The t-statistical significance value for moderation 4 is 0.000 (<0.05). Thus it has a positive and significant influence on real income. Moderation 4 (price stability in the next six months) is classified as quasi-moderation. These findings support the results of research by (Akhmad, Alyas, and Amir 2018; Chu et al. 2017; Delbianco, Dabús, and Caraballo 2014).

The results of testing equation 7 obtained an R-squared value of 0.836. Thus, the real conditions of the regional economy affect price stability in the next 6 months by 83.6%. The remaining 16.4% is influenced by other variables not included in the model. Furthermore, the significance value of the F-statistic is 0.041 (<0.05). Thus, the real conditions of the regional economy have a significant influence on price stability in the next six months. Meanwhile, the t-statistical significance value is 0.041 (<0.05), which means that the real condition of the regional economy has a positive and significant influence on price stability in the next six months. This finding is in line with the results of (Vinayagathan 2013; Shin 2012; Lederman 2018).

The result of testing equation 8 is that there is an increase in the R-squared value to 0.861 after moderation 5. Thus, the real conditions of the regional economy, real employment, and moderation 5 influence price stability in the next six months by 86.1%. Meanwhile, the remaining 13.9% is influenced by other variables not included in the model. Thus, real employment opportunities will strengthen the influence of real regional economic conditions on price stability in the next six months. Furthermore, the significance value of F-statistics is 0.048 (<0.05), which means that the real condition of the regional economy, real employment opportunities, and moderation 5 have a significant effect on price stability in the next six months. Meanwhile, the significance value of the t-statistic for real regional economic conditions is 0.009 (<0.05), so that real regional economic conditions have a positive and significant influence on price stability in the next 6 months. The t-statistical significance value for real employment opportunities is 0.045 (<0.05) which indicates that there is a positive and significant influence of real employment opportunities on price stability in the next six months. Furthermore, the t-statistical significance value for moderation 5 is 0.049 (<0.05). This means that moderation 5 has a positive and significant influence on price stability in the next six months. Moderation 5 (real job opportunities) is classified as quasi-moderation. These findings are in line with previous research (see Ayd, Esen, and Bayrak 2016; Su et al. 2019; Coibion et al. 2020).

The result of testing equation 9 is that there is an increase in R-squared to 0.904 after moderation 6. Thus, real regional economic conditions, real income, and moderation 6 influence price stability in the next six months by 90.4%. As a result, real income strengthens the influence of real regional economic conditions on price stability in the next six months. Furthermore, the significance value of the F-statistic is 0.000 (<0.05), which means that real income and moderation 6 have a significant effect on price stability in the next six months. Meanwhile, the t-statistical significance value for the real condition of the regional economy is 0.002 (<0.05). This value shows that the real conditions of the regional economy have a positive and significant influence on price stability in the next six months. The t-statistical significance value for real income is 0.006 (<0.05). This means that there is a positive and significant influence of real income on price stability in the next six months. The t-statistical significance value for moderation 6 is 0.000 (<0.05). Therefore, moderation 6 has a positive and significant influence on price stability in the next six months. Moderation 6 (real income) is classified as quasi-moderation. These findings support the results of various previous studies (see Gärling, Gamble, and Christandl 2013; Baqae 2019; Chang et al. 2015).

Equations 10, 13, and 16 were tested using linear regression analysis while the rest were tested using MRA. To carry out interaction testing, interaction data has been prepared between projected regional economic conditions and each moderating variable. Moderation 7 shows the interaction between projected income and regional economic conditions on projected employment opportunities. Moderation 8 shows the interaction between price stability in the next 12 months and projected regional economic conditions on projected job opportunities. Moderation 9 shows the interaction between projected employment opportunities and regional economic conditions on income projections. Moderation 10 shows the interaction between price stability in the next 12 months and projected regional economic conditions on income projections. Moderation 11 shows the interaction between projected employment opportunities and regional economic conditions on price stability in the next 12 months. Finally, moderation 12 shows the interaction between income projections and regional economic conditions on price stability in the next 12 months. The results of the condition projection analysis are presented in Table 4.

Table 3: Projection condition for analysis results

Equation	Econometric Models	F-Statistic	R-square
10	$Y_{1,2t} = -39,253 + 1,187 X_{2t} + \epsilon_t$ (0,000) (0,000)	(0,000)	0,925
11	$Y_{1,2t} = -32,089 + 0,246 X_{2t} + 2,331 Y_{2,2t} + 0,013 X_{2t} * Y_{2,2t} + \epsilon_t$ (0,000) (0,030) (0,000) (0,000)	(0,000)	0,961
12	$Y_{1,2t} = -25,635 + 3,049 X_{2t} + 1,337 Y_{3,2t} + 0,011 X_{2t} * Y_{3,2t} + \epsilon_t$ (0,021) (0,001) (0,048) (0,003)	(0,000)	0,978
13	$Y_{2,2t} = -23,244 + 0,696 X_{2t} + \epsilon_t$ (0,000) (0,000)	(0,000)	0,833
14	$Y_{2,2t} = -34,134 + 0,563 X_{2t} + 1,529 Y_{1,2t} + 0,075 X_{2t} * Y_{1,2t} + \epsilon_t$ (0,000) (0,009) (0,000) (0,000)	(0,000)	0,909
15	$Y_{2,2t} = -20,711 + 0,563 X_{2t} + 0,858 Y_{3,2t} + 0,718 X_{2t} * Y_{3,2t} + \epsilon_t$ (0,044) (0,026) (0,018) (0,024)	(0,000)	0,877
16	$Y_{3,2t} = -19,322 + 0,167 X_{2t} + \epsilon_t$ (0,000) (0,017)	(0,017)	0,651
17	$Y_{3,2t} = -18,105 + 0,610 X_{2t} + 1,310 Y_{1,2t} + 0,895 X_{2t} * Y_{1,2t} + \epsilon_t$ (0,304) (0,049) (0,027) (0,000)	(0,034)	0,784
18	$Y_{3,2t} = -16,624 + 0,225 X_{2t} + 0,609 Y_{2,2t} + 0,356 X_{2t} * Y_{2,2t} + \epsilon_t$ (0,037) (0,044) (0,043) (0,006)	(0,037)	0,852

() shows the probability value $\alpha = 5\%$.

The results of testing equation 10 obtained an R-squared value of 0.925 so that projected regional economic conditions influence projected employment opportunities by 92.5%. The remaining 7.5% is influenced by other variables not included in the model. Furthermore, the significance value of the F-statistic is 0.000 (<0.05), so that projected regional economic conditions have a significant effect on projected employment opportunities. Meanwhile, the significance value of the t-statistic is 0.000 (<0.05), so that projected regional economic conditions have a positive and significant effect on projected employment opportunities.

The result of testing equation 11 is that there is an increase in R-squared to 0.961 after moderation 7. Thus, projections of regional economic conditions, income projections, and moderation 7 influence projected employment opportunities by 96.1%. Thus, income projections strengthen the influence of projected regional economic conditions on projected employment opportunities. Furthermore, the significance value of F-statistics is 0.000 (<0.05) so that projections of regional economic conditions, income projections, and moderation 7 have a significant effect on projected employment opportunities. Meanwhile, the t-statistical significance value for projected regional economic conditions is 0.030 (<0.05). This means that projected regional economic conditions have a positive and significant effect on projected employment opportunities. The t-statistical significance value for income projections is 0.000 (<0.05). Thus, income projections have a positive and significant effect on projected employment opportunities. The t-statistical significance value for moderation 7 is 0.000 (<0.05), which means that moderation 7 has a positive and significant influence on job opportunity projections. Moderation 7 (income projection) is classified as quasi-moderation.

The result of testing equation 12 is that there is an increase in R-squared to 0.978 after moderation 8. Therefore, projections of regional economic conditions, price stability in the next 12 months, and moderation 8 affect the projected employment opportunities by 97.8%. Therefore, price stability in the next 12 months strengthens the influence of projected regional economic conditions on projected employment opportunities. Furthermore, the significance value of F-statistics is 0.000 (<0.05), which means that projections of regional economic conditions, price stability in the next 12 months, and moderation 8 have a significant effect on projected employment opportunities. Meanwhile, the t-statistical significance value of projected regional economic conditions is 0.001 (<0.05) indicating that there is a positive and significant influence of projected regional economic conditions on projected employment opportunities. The t-statistical significance value for price stability in the next 12 months is 0.048 (<0.05), meaning that price stability in the next 12 months has a positive and significant effect on projected employment opportunities. Finally, the t-statistical significance value for moderation 8 is 0.003 (<0.05), which means that moderation 8 has a positive and significant influence on job opportunity projections. Moderation 8 (price stability for the next 12 months) is classified as quasi-moderation.

The results of testing equation 13 obtained an R-squared value of 0.833. Thus, projected regional economic conditions influence projected income by 83.3%. Furthermore, the significance value of the F-statistic is 0.000 (<0.05), which means that projected regional economic conditions have a significant effect on income projections. Meanwhile, the significance value of the t-statistic is 0.000 (<0.05), so the projected regional economic conditions have a positive and significant effect on income projections.

The result of testing equation 14 is that there is an increase in R-squared to 0.909 after moderation 9. Thus, projections of regional economic conditions, projected job opportunities and moderation 9 influence projected income by 90.9%. which is not included in the model. As a result, job opportunity projections strengthen the influence of projected regional economic conditions on income projections. Furthermore, the significance value of F-statistics is 0.000 (<0.05), which means that projected regional economic conditions, projected employment opportunities, and moderation 9 have a significant effect on income projections. Meanwhile, the t-statistical significance value for projected regional economic conditions is 0.009 (<0.05). Thus, projected regional economic conditions have a positive and significant influence on income projections. Meanwhile, the t-statistical significance value for job opportunity projections is 0.000 (<0.05), which means that job opportunity projections have a positive and significant effect on income projections. Finally, the t-statistical significance value for moderation 9 is 0.000 (<0.05) which indicates that moderation 9 has a positive and significant influence on income projections. Moderation 9 (projected employment opportunities) is classified as quasi-moderation.

The result of testing equation 15 is that there is an increase in R-squared to 0.877 after moderation 10. Thus, projections of regional economic conditions, price stability in the next 12 months, and moderation 10 influence income projections by 87.7%. Therefore, price stability in the next 12 months strengthens the influence of projected regional economic conditions on income projections. Furthermore, the significance value of F-statistics is 0.000 (<0.05), so that projections of regional economic conditions, price stability in the next 12 months, and moderation 10 have a significant effect on income projections. Meanwhile, the t-statistical significance value for projected regional economic conditions is 0.026 (<0.05). This means that projected regional economic conditions have a positive and significant influence on income projections. The t-statistical significance value for price stability in the next 12 months is 0.018 (<0.05) which shows that there is a positive and significant influence of price stability in the next 12 months on income projections. Finally, the t-statistical significance value for moderation 10 is 0.024 (<0.05). Thus, moderation 10 has a positive and significant influence on income projections. Moderation 10 (price stability for the next 12 months) is classified as quasi-moderation.

The results of testing equation 16 obtained an R-squared value of 0.651. Thus, the projected regional economic conditions influence price stability in the next 12 months by 65.1%. Furthermore, the significance value of the F-statistic is 0.017 (<0.05), which means that the projected regional economic conditions have a significant influence on price stability in the next 12 months. Meanwhile,

the t-statistical significance value is 0.017 (<0.05), so that the projected regional economic conditions have a positive and significant effect on price stability in the next 12 months.

The result of testing equation 17 is that there is an increase in R-squared to 0.784 after moderation 11. Thus, projections of regional economic conditions, projections of employment opportunities, and moderation 11 influence price stability in the next 12 months by 78.4%. Therefore, employment projections strengthen the influence of projected regional economic conditions on price stability in the next 12 months. Furthermore, the significance value of F-statistics is 0.034 (<0.05), so that projections of regional economic conditions, projections of employment opportunities, and moderation 11 have a significant influence on price stability in the next 12 months. Meanwhile, the t-statistical significance value for projected regional economic conditions is 0.049 (<0.05). This implies that projected regional economic conditions have a positive and significant influence on price stability in the next 12 months. The significance value of the t-statistic for job opportunity projections is 0.027 (<0.05), which means that job opportunity projections have a positive and significant effect on price stability in the next 12 months. Finally, the t-statistical significance value for moderation 11 is 0.000 (<0.05). Thus, moderation 11 has a positive and significant influence on price stability over the next 12 months. Moderation 11 (projected employment opportunities) is classified as quasi-moderation.

The result of testing equation 18 is that there is an increase in R-squared to 0.852 after moderation by other variables not included in the model. As a result, income projections strengthen the influence of projected regional economic conditions on price stability in the next 12 months. Furthermore, the significance value of the F-statistic is 0.037 (<0.05). This means that projections of regional economic conditions, income projections and moderation have a significant influence on price stability in the next 12 months. Meanwhile, the t-statistical significance value for projected regional economic conditions is 0.044 (<0.05). This shows that the projected regional economic conditions have a positive and significant influence on price stability in the next 12 months. The significance value of the t-statistic for income projections is 0.043 (<0.05), which means that income projections have a positive and significant effect on price stability in the next 12 months. Finally, the t-statistical significance value for moderation 12 is 0.006 (<0.05). This means that moderation 12 has a positive and significant influence on price stability over the next 12 months. Moderation 12 (real income) is classified as quasi-moderation.

5. CONCLUSION

This article uses an MRA approach to reveal the influence of moderating variables applied to three types of analysis models. Job opportunities, income and price stability are tested under real and projected conditions. Based on estimates, all moderating variables used in this research are classified as quasi moderated, so that these moderating variables play a role in strengthening the relationship between economic conditions and the dependent variable. This article contains the following policy recommendations. The Padang City Government should stimulate economic conditions by creating jobs or developing existing jobs based on the potential of Padang City with a labor-intensive system. Furthermore, a policy that can be implemented to increase income is to periodically review income based on inflation and economic growth with the aim of readjusting income to the price of living necessities. Meanwhile, price stability can be improved by creating synergy between macroeconomic policies which include fiscal, monetary and sectoral policies because price stability is reflected in low and stable inflation which is needed to support sustainable economic growth.

This study recommends that the Padang City Government should stimulate economic conditions by creating jobs or developing existing jobs based on the potential of Padang City with a labor-intensive system. Furthermore, policies that can be implemented to increase income are by conducting periodic income reviews based on inflation and economic growth with the aim of readjusting income with the price of living necessities. Meanwhile, price stability can be improved by creating synergy between macroeconomic policies that include fiscal, monetary and sectoral policies because price stability is reflected in low and stable inflation which is needed to support sustainable economic growth.

REFERENCES

- Akhmad, Akhmad, Alyas Alyas, and Amir Amir (2018), "The Effect of Economic Growth And Income Inequality on Poverty In Indonesia," *Journal of Economics and Finance (IOSR-JEF)* 9 (4), 20–26.
- Akinsola, Foluso A, and Nicholas M Odhiambo (2017), "Inflation and Economic Growth: A Review of The International Literature," *Comparative Economic Research* 20 (3), 41–56.
- Alani, Jimmy (2012), "Effects of Productivity Growth on Employment Generation, Capital Accumulation and Economic Growth in Uganda," *International Journal of Trade, Economics and Finance* 3 (3), 25–38.
- Alisa, Maximova (2015), "The Relationship between Inflation and Unemployment : A Theoretical Discussion about the Philips Curve," *Journal of International Business and Economics* 3 (2), 89–97.
- Ayd, Celil, Ömer Esen, and Metin Bayrak (2016), "Inflation and Economic Growth: A Dynamic Panel Threshold Analysis for Turkish Republics in Transition Process," *Procedia - Social and Behavioral Sciences* 2(9), 196–205.
- Baqae, David Rezza (2019), "Wages and Asymmetric Business Cycles," *Journal of Monetary Economics* 3(2), 1–20.
- Binatli, Ayla Ogus (2012), "Growth and Income Inequality: A Comparative Analysis," *Economics Research International* 3(1), 1–7.
- Bittencourt, Manoel (2012), "Inflation and Economic Growth in Latin America : Some Panel Time-Series Evidence," *Economic Modelling* 29 (2), 333–340.
- Chang, Wen-ya, Hsueh-fang Tsai, Mei-lie Chu, and Juin-jen Chang (2015), "On the Employment, Investment and Current Account Effects of Infation: A Revisit," *Journal of Macroeconomics*.
- Chirwa, Themba G, and Nicholas M Odhiambo (2016), "Macroeconomic Determinants of Economic Growth : A Review of International Literature," *South East European Journal of Economics and Business* 11 (2), 33–47.
- Chu, Angus C, Guido Cozzi, Yuichi Furukawa, and Chih-hsing Liao (2017), "Inflation and Economic Growth in a Schumpeterian Model with Endogenous Entry of Heterogeneous Firms," *European Economic Review* 9 (8), 392–409.
- Cingano, Federico (2014), "Trends in Income Inequality and Its Impact on Economic Growth."
- Clemens, Jeffrey, and Michael Wither (2019), "The Minimum Wage and the Great Recession : Evidence of Effects on the Employment and Income Trajectories of Low-Skilled Workers," *Journal of Public Economics* 1 (7), 53–67.
- Coibion, Olivier, Yuriy Gorodnichenko, Saten Kumar, and Mathieu Pedemonte (2020), "Inflation Expectations as a Policy Tool?," *Journal of International Economics*.
- Das, Abhiman, Kajal Lahiri, and Yongchen Zhao (2019), "Inflation Expectations in India: Learning from Household Tendency Surveys," *International Journal of Forecasting* 35 (3), 980–993.
- Datta, Kanchan, and Chandan Kumar Mukhopadhyay (2011), "Relationship between Inflation and Economic Growth in Malaysia - An Econometric Review," *International Conference on Economics and Finance Research* 4 (1), 415–419.
- Delbianco, Fernando, Carlos Dabús, and María Ángeles Caraballo (2014), "Income Inequality and Economic Growth : New Evidence From Latin America," *Cuadernos de Economía* 33 (63), 381–398.
- Escudero, Verónica, Elva López, and Clemente Pignatti (2020), "Joint Provision of Income and Employment Support : Evidence From a Crisis Response in Uruguay," *World Development* 13 (4), 1–15.
- Gabriel, Juan, Edgar J Sanchez, and Verónica Segarra (2020), "Clustering and Regime Dynamics for Economic Growth and Income Inequality," *Structural Change and Economic Dynamics* 5 (2), 99–108.
- Gärling, Tommy, Amelie Gamble, and Fabian Christandl (2013), "Income Increases Do Not Compensate for Perceived Inflation-A Price-Consumption Anomaly," *Journal of Socio-Economics* 4 (7), 11–15.
- Herman, Emilia (2011), "The Impact of Economic Growth Process on Employment in European Union Countries," *The Romanian Economic Journal* XIV (4), 47–67.

- Herzberg-druker, Efrat, and Haya Stier (2019), "Family Matters : The Contribution of Households ' Educational and Employment Composition to Income Inequality," *Social Science Research* 8 (2), 221–239.
- Ioan, Done (2014), "Employment-Cause and Effect of the Economic Growth," *Procedia Economics and Finance* 8 (14), 268–274.
- Irfa, Muhammad (2013), "Inflation , Economic Growth and Government Expenditure Of," *Procedia Economics and Finance* 5 (13), 58–67.
- Jayaraman, T K (2013), "Inflation and Growth in Fiji : A Study on Threshold Inflation Rate Hong Chen and Markand Bhatt," *The Empirical Economics Letters* 12 (2), 164–171.
- Jin, Jangik, and Peter Ra (2017), "Does Congestion Negatively Affet Income Growth and Employment Growth? Empirical Evidence from US Metropolitan Regions," *Transport Policy* 55 (5), 1–8.
- Jung, Sungmoon, Jeong-dong Lee, Won-sik Hwang, and Yeongjun Yeo (2016), "Growth Versus Equity : A CGE Analysis for Effects of Factor-Biased Technical Progress on Economic Growth and Employment," *Economic Modelling*, no. 4.
- Klinger, Sabine, and Enzo Weber (2019), "GDP-Employment Decoupling in Germany," *Structural Change and Economic Dynamics*.
- Kochan, Thomas A, and Christine A Riordan (2016), "Employment Relations and Growing Income Inequality : Causes and Potential Options for Its Reversal," *Journal of Industrial Relations* 58 (3), 419–440.
- Lederman, Daniel (2018), "Inequality and Economic Growth The Role of Initial Income."
- Luo, Weixiang, and Yu Xie (2020), "Economic Growth, Income Inequality and Life Expectancy in China," *Social Science & Medicine* 25 (16), 1–9.
- Mehic, Adrian (2018), "Industrial Employment and Income Inequality: Evidence from Panel Data," *Structural Change and Economic Dynamics* , 1–30.
- Memon, Mumtaz Ali, Jun-hwa Cheah, T Ramayah, Hiram Ting, Francis Chuah, Tat Huei Cham, Universiti Tunku, and Abdul Rahman (2019), "Moderation Analysis : Issues and Guidelines," *Journal of Applied Structural Equation Modeling* 3 (1), 1–11.
- Mohseni, Mehrnoosh, and Feizolah Jouzaryan (2016), "Examining the Effects of Inflation and Unemployment on Economic Growth in Iran (1996-2012)," *Procedia Economics and Finance* 36 (16), 381–389.
- Monnin, P. (2014). Inflation and income inequality in developed economies. *CEP Working Paper Series*.
- Muhibbullah, Md, and Das Mala Rani (2019), "The Impact of Inflation on the Income Inequality of Bangladesh: A Time Series Analysis," *International Journal of Business and Technopreneurship* 9 (2), 141–150.
- Mukupu, George M, Agness Lungu, and Stephen Chibangula (2016), "An Empirical Analysis of The Determinants of Economic Growth In Zambia: 1973-2013," *World Journal of Research and Review* 2 (5), 69–73.
- Näätänen, Ari-matti (2015), "The Impact of Economic Globalization on the Employment Policies in 19 Western Democracies from 1985 to 2010. Limited Change or Radical Shift towards Workfare?," *Social Sciences* 4, 700–717.
- Niyimbanira, Ferdinand (2017), "Analysis of the Impact of Economic Growth on Income Inequality and Poverty in South Africa: The Case of Mpumalanga Province," *International Journal of Economics and Financial Issues* 7 (4), 254–261.
- Oloni, Oloni, and Elizabeth Funlayo (2014), "The Impact of Economic Growth on Employment in Nigeria," *International Business and Management* 6 (1), 113–119.
- Qi, Tianyu, Li Zhou, Xiliang Zhang, and Xiangkun Ren (2012), "Regional Economic Output and Employment Impact of Coal-to-Liquids (CTL) Industry in China : An Input-Output Analysis," *Energy* 46 (1), 259–263.
- Rong, Shu, Kai Liu, Si Huang, and Qi Zhang (2020), "China Economic Review FDI , Labor Market Flexibility and Employment in China," *China Economic Review* 61 (9), 1–16.
- Ruchba, Sarastri Mumpuni, and Fakhry Hadiyan (2019), "Analysis on Unemployment and Inflation in Indonesia for The Periode of 1980 -2016 Using Philipps Curve Approach," In *Proceeding of The 3rd International Conference on Accounting, Business & Economics*, 111–122.

- Sasongko, Gatot, and Andrian Dplfiandra Huruta (2019), "The Causality Between Inflation and Unemployment : The Indonesia Evidence," *VEerslas: Teorija Ir Praktika / Business: Theory and Practice* 20 (1), 1–10.
- Shin, Inyong (2012), "Income Inequality and Economic Growth," *Economic Modelling* 29 (5), 2049–2057.
- Sima, Siami-Namini, and Hudson Darren (2018), "Inflation and Income Inequality in Developed and Developing Countries," *Journal of Economic Studies*, 1–38.
- Soe, Than Than, and Makoto Kakinaka (2017), "Inflation Targeting and Income Velocity in Developing Economies: Some International Evidence," *North American Journal of Economics and Finance* 6: 1–18.
- Su, Zhi-fang, Xiao-xiang Ma, Wei Xiao, and Mei-yuan Chen (2019), "Marginal Effects of Public Employment on Unconditional Distribution of Wage Income in China," *North American Journal of Economics and Finance*, no. June, 1–9.
- Totonchi, Jalil (2011), "Macroeconomic Theories of Inflation," In *International Conference on Economics and Finance Research* 4, 459–462.
- Vázquez, Raymundo M Campos, Gerardo Esquivel, and Alma S Santillán Hernández (2017), "The Impact of the Minimum Wage on Income and Employment in Mexico," *CEPAL Review* 122, 190–216.
- Vermeulen, C (2015), "Inflation , Growth and Employment in South Africa : Trends and Trade-Offs,"
- Vinayagathan, Thanabalasingam (2013), "Inflation and Economic Growth: A Dynamic Panel Threshold Analysis for Asian Economies," *Journal of Asian Economics* 2 (6), 31–41.
- Vo, Duc Hong, Thang Cong Nguyen, Ngoc Phu Tran, and Anh The Vo (2019), "What Factors Affect Income Inequality and Economic Growth in Middle-Income Countries ?," *Journal of Risk and Financial Management* 12 (40), 1–12.
- Wang, Sicheng, and Michael Smart (2020), "The Disruptive Effect of Ridesourcing Services on For-Hire Vehicle Drivers' Encome and Employment," *Transport Policy*.
- Wulandari, Dwi, and Sugeng Hadi Utomo (2019), "Nexus Between Inflation and Unemployment : Evidence from Indonesia," *Journal of Asian Finance, Economics and Business* 6 (2): 269–275.
- Xue, Jinjun, Wenshu Gao, and Lin Guo (2014), "China Economic Review Informal Employment and Its Effect on the Income Distribution in Urban China," *China Economic Review* 3 (1).84–93.
- Yang, Yiwen, and Theresa M Greaney (2017), "Economic Growth and Income Inequality in the Asia-Pacific Region : A Comparative Study of China, Japan, South Korea, and the United States," *Journal of Asian Economics* 48, 6–22.
- Zheng, Zhijie (2020), "Inflation and Income Inequality in a Schumpeterian Economy With Menu Cost," *Economics Letters* 18 (6), 1–5.