

# THE ROLE OF INTEREST RATES AND PROVINCIAL MONETARY AGGREGATE IN MAINTAINING INFLATION IN INDONESIA

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## Abstract

*Monetary policy may employ interest rate or money supply to derive the assigned national inflation target. In this manner, most studies investigate monetary policy effectiveness using national data. However, based on the idea that inflation is a regional phenomenon, the application of provincial data is more appropriate in explaining the relationship between monetary instrument and inflation. This study elaborates the impact of changes in provincial money supply, BI Rate (interest rates of central bank), and PUAB (money market interest rates) to regional inflation in Hybrid New Keynesian Phillips Curve (HNKPC) framework. This study employs Generalized Method of Moments (GMM) techniques on panel data of 32 provinces from 2005-III to 2013-III. The data is classified into 4 groups, which are Java-Bali (W1), Sumatera (W2), Kalimantan-Sulawesi (W3), and Papua-Maluku-Nusa Tenggara (W4). The estimation result shows that each monetary instrument has diverging effectiveness in different regions. Provincial monetary aggregate is only effective in Sumatera, while BI Rate can manage inflation in Sumatera and Kalimantan-Sulawesi. PUAB, on the other hand, is significantly affecting inflation in almost all Indonesian regions, except Kalimantan-Sulawesi. We conclude that interest rate (BI rate and PUAB) is a more appropriate instrument, compared to provincial monetary aggregate, to control provincial inflation in Indonesia.*

*Keywords: Monetary policy, regional inflation, hybrid NKPC*

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## I. INTRODUCTION

Inflation has become the main concern in monetary authorities since it influences purchasing power and business climate, which in turn will determine macroeconomic variables such as national output and unemployment. Bank Indonesia (BI) has been granted an ultimate goal of achieving and maintaining the stability of rupiah toward the prices of goods and services, which are reflected in inflation (internal stability), and the exchange rate (external stability). In order to achieve the goal, BI implemented a monetary policy framework with inflation as its main target (Inflation Targeting Framework (ITF)) and free floating as its exchange rate system. In ITF inflation target is publicly announced to the public and designed in a forward looking manner, meaning that changes in monetary policy stance is done through an evaluation whether the development of inflation is still in line with the inflation target.

In the ITF, the inflation target, the monetary policy operational target, and the measurement of success are all engaged in national level indicator. However, investigation for national data is inadequate, since Indonesia has a considerably large territory with different economic structures and performances among its regions. The application of regional data in assessing monetary policy effectiveness and inflation behavior is thus imperative. This regional approach is important since, currently, the aggregate national inflation is dominated by only several regions in Indonesia. The inflation in Java is weighted for 64.5% of the national indicator. Moreover, Java and Sumatera (two out of many regions in Indonesia) represented 84.3% of the national inflation (Bank Indonesia, 2009). It suggests that non-Java territory, which has 28 provinces and is appreciably larger in term of area, only has 35.5% of national inflation weight. Further, all provinces outside Java and Sumatera are only weighted for 15.7% of the national inflation. If we explore further we can find that the weighting of Jakarta-Bogor-Depok-Tangerang-Bekasi (known as Jabodetabek), as the main business district in Indonesia, have covered 37.65% of national inflation. Hence, based on this condition, if the inflation target, monetary adjustment, and policy evaluation are based on national inflation, they will dominantly be determined only by the condition of Java-Sumatera or Java, or particularly, Jabodetabek.

The monetary stance in the ITF is reflected in the determination of BI Rate, which is expected to influence interest rates in money market, banking deposit, and loan market. The implementation of interest rate policy, including BI Rate and money market interest rates or *Pasar Uang Antar Bank* (PUAB O/N)<sup>2</sup>, reflect an effort to achieve the targeted inflation using national inflation through a “nationally constructed” operational target. In consequence, considering the different weighting and idiosyncrasies of each region, questions arisen: Are the “nationally constructed” operational target (the interest rate instruments) effective for managing inflation in every region in Indonesia? Or are they only effective to manage inflation

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2 This is the operational target of the interest rate. Depending on inflation expectation and several sets of variables, Bank Indonesia will set the policy rate (BI Rate) to influence the interbank money market rate or PUAB O/N, which will affect the deposit and the lending rate within the banking. We will refer the PUAB O/N as PUAB for the rest of this paper.

in Java and Sumatera? Is it more appropriate to regulate the provincial money supply to directly influence inflation in each region? This research applies the framework of Hybrid New Keynesian Phillips Curve (NKPC) to learn whether BI Rate, PUAB, or money supply is the most effective instrument in managing regional inflation. We also identify the time lag of regional inflation responses toward these monetary instruments.

## II. THEORY

### 2.1. Controlling Inflation: Price or Quantity Based?

In the early stage of monetary policy development, money supply was widely accepted as an instrument to maintain price stability. The rationale which advocates the relationship between monetary aggregate and inflation is explained by the quantity theory of money (QTM). The theory asserts that if monetary authority decides to change the amount of money supply in the economy, in the long run it will change the price level in the same proportion. This preposition suggests the effectiveness of using monetary aggregate as the operational target of monetary policy.

Support for this approach is overlaid by Fisher hypothesis which conjectured constant state of real interest rate. Asserting certain commensurate movement between expected inflation and nominal interest rate, the preposition implies no real economic effect would occur by changes in the nominal interest rate. Fisher Hypothesis claims that there is no apparent relationship between expected inflation and real interest rate<sup>3</sup>. Michell-Innes (2006) stated that important studies regarding the Fisher Hypothesis are performed by Mishkin (1995) which provide comprehensive explanation for the transmission mechanism of monetary policy using monetary aggregate.

In the recent development, however, monetary authority in various countries have justified the adoption of short-term interest rate as their operational target rather than monetary aggregate. Policy models started to set aside the relationship between money supply and inflation, and focus more on the relationship between interest rate and inflation. This phenomenon was reviewed by MacCallum and Nelson (2010) who have shown that most publications which contributed to monetary handbook are minimizing the role of monetary aggregate in the theory and analysis of monetary policy.

Many economists had performed studies in order to identify the relationship between interest rate and inflation, one of them was Brzoza-Brzezina (2002). Later publication by Woodford (2003), based on the idea from Wicksellian, discussed the process of real interest rate and natural rates of interest<sup>4</sup> in influencing inflation.

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3 See Lucas (1980), Fried and Howitt (1983).

4 The level of interest rate which would maintain stable price.

According to Goto and Torous (2003), the aggressive policy of anti-inflation was pioneered by Taylor in 1995 who formulated the famously known Taylor Rule<sup>5</sup>. Taylor Rule explains that nominal short-term interest rate needs to move quicker than the expected inflation (move more than one-for-one) in order to maintain price stability. The monetary conduct, therefore, yield a positive relationship between inflation and real value of interest rate. This view becomes the cornerstone of ITF implementation (Handa, 2009).

The Taylor Rule contradicts Fisher Hypothesis which claimed the non-existent of more than one-for-one rule between inflation and interest rate. While Taylor Rule stated that changes in interest rate will determine the changes of inflation, Fisher Effect stated that it is money supply which cause the simultaneous changes between interest rate and inflation.

A view supporting the Fisher Hypothesis comes from Monnet and Weber (2001) who stated that, while the monetary authority is able to adjust the interest rate, it will only change the controllable instrument such as bank reserves. The changes in this instrument influences money supply and then money market reacts to it, reflected by the changes in the interest rate. The view of Monnet and Weber (2001) supports money supply as the key element which would determine the interest rate and inflation. Shresta et al. (2002) also contradict Taylor Rule by asserting a negative correlation between expected inflation and interest rate. Further, Handa (2009) also gives support to Fisher Hypothesis, arguing that in the long term, the relationship between money supply and interest rate is very high (with 0.7 or more as their correlation) indicating that changes in money supply will determine the changes in interest rate and in turn will influence inflation.

Moving to empirical aspect, there has been mixed results regarding the validity of Fisher Hypothesis. A study on developing country undertaken by Garcia (1993) in Brazil found that Fisher Hypothesis is occurring in the country. Other studies were conducted by Phylaktis and Blake (1993) and Carneiro et al. (2002) for Brazil, Mexico, and Argentina. While Phylaktis and Blake (1993) found that Fisher Effect is occurring in those three countries, Carneiro et al. (2002) only found the effect to be valid in Argentina and Brazil.

For the alternative instrument, the history of the United States monetary conduct provides evidence for the effectiveness of maintaining price stability through aggressive interest rate rule (Clarida et al., 2000). The pre-Volcker period (before 1979) with moderate monetary stance are found to be less stabilizing compared to Volcker-Greenspan period, which put forward an aggressive monetary conduct. In the earlier era, Federal Reserve typically alter nominal interest rate in a lesser extent than the increase in expected inflation, leading to a fall in the real interest rate. Contrarily, Volcker-Greenspan systematically raise real interest rate in dealing with increasing inflation expectation. The latter approach is found to provide an era of greater price stability.

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5 See Taylor (1995).

## 2.2. Regional Inflation Variation and The Impact Of Monetary Policy on Regional Inflation

Monetary policy is designed structurally and purposely for an ultimate national goal – price stability. Yet, the impact of monetary policy may differ among regions in a country. Differences may occur because of varying regional conditions, such as industrial competitiveness, financial structure, trading activities, and institutional environment. However, studies regarding the effectiveness of monetary policy are still commonly performed using national-level data. In this section, we review studies which exploits regional aspects in assessing monetary policy effectiveness.

Studies regarding the effectiveness of ITF in provincial level had been undertaken in China. Mehrotra et al. (2007) found that in 1978-2004 there is a variation of inflation among China provinces. They also found that there are 22 out of 29 provinces where forward looking inflation component is statistically significant in determining the actual inflation. In ITF, the significance of forward looking inflation component will increase the effectiveness of monetary policy.

Similar to China, Indonesia is a country with broad geographical territory and diverse social and economic condition. Ridhwan et al. (2011) shows that, while tight monetary policy might be conducive for the economy of Java, it may have a destructive effect on the economy of non-Java regions. This result indicates that one monetary conduct might bring about constructive effect on a region and a neutral or, even, destructive effect on the other.

Another research by Chaban and Voss (2012) found that there is inflation variation in 10 provinces in Canada. All of the provinces, aside from Alberta, indicated the existence of anchored inflation expectation which supported the effectiveness of ITF. They assert that the success measure of ITF can be exhibited by its capability to certainly determine the expected inflation to be strictly around the inflation target and that the deviation cannot be predicted. In provincial-level, we can question the deviation of provincial inflation to its national target. If there is a considerable gap between provincial and national deviation, the nationally constructed inflation target is not equally successful in each region.

## 2.3. Hybrid NKPC model

In this research, we estimate inflation using a theoretical framework developed by Gali and Gertler (1999) so called Hybrid NKPC model. According to Gali and Gertler, every firm adjust their prices in every periods with the fixed probability of  $(1 - \theta)$ . There are two types of firm,  $(1 - \omega)$  are firms with forward-looking behavior as Calvo (1983) stated in his study while the rest,  $\omega$ , are firms with backward-looking behavior. Based on this condition, aggregate price can be constructed as equation (1). If the price set by forward looking firm is  $p_i^f$  and backward looking firm is  $p_i^b$ , hence the new price is:

$$p_t^* = (1 - \omega)p_t^f + \omega p_t^b \quad (1)$$

Forward looking firms behave as Calvo's (1983) assertion, therefore  $p_t^f$  can be derived as

$$p_t^f = (1 - \beta\theta) \sum_{k=0}^{\infty} (\beta\theta)^k E_t \{mc_{t+k}^n\} \quad (2)$$

While  $p_t^b$ , equal to the average of adjusted price in the last period. The price can be denoted as

$$p_t^b = \bar{p}_{t-1}^* + \pi_{t-1} \quad (3)$$

Hence, the specification form of hybrid NKPC is

$$\pi_t = \lambda mc_t + \gamma_f E_t \{\pi_{t+1}\} + \gamma_b \pi_{t-1} \quad (4)$$

In empirical testing, equation (4) is estimated using non-linear instrumental variable (GMM) estimator. In their study, Gali and Gertler (1999) provided several strong findings regarding inflation behavior. First, the real marginal cost is statistically significant and is an important determinant of inflation (in this study we used output gap). Second, the behavior of forward looking is crucial because most of the firms have this kind of behavior. They found that 60-80% of the firms are forward looking behavior. Third, the behavior of backward looking is statistically significant. Therefore, even though forward looking behavior is plausible, pure forward looking model cannot be accepted. Last but not the least, it takes time for prices to change (sticky price).

### III. METHODOLOGY

In this research, we use quarterly panel data of 32 provinces in Indonesia covering the period of 2005-III to 2013-III. Most of the data are obtained in quarterly report of *Perkembangan Perekonomian Daerah* (Pekda) and *Kajian Ekonomi Regional* (KER) which are published by Kantor Bank Indonesia (K.BI) in provinces. Table 1 explains the definition of variable which are observed in this study.

Table 1. Proxy and Measurement of Variables

Variable	Sign	Measure	Explanation
Inflation	$\pi_{i,t}$	Percentage	Year-on-year inflation
Actual output	$y_{i,t}^a$	Trillion rupiah	Real regional output (base: year 2000)
Potential output	$y_{i,t}^*$	Trillion rupiah	Estimated using Hodric-Prescott Filter
Output gap	$y_{i,t}$	Percentage	$y_{i,t} = \frac{(y_{i,t}^a - y_{i,t}^*)}{y_{i,t}^*} \times 100\%$
Changes in real money supply	$m_{i,t}$	Trillion rupiah	$m_{i,t}$ is the changes in real currency money ( $\Delta K_{i,t}$ ) added by real demand depositin ( $\Delta G_{i,t}$ ). $\Delta K_{i,t}$ is the net flow of currency in regional office central bank. $\Delta G_{i,t}$ is the changes in demand deposit in each province's banking.
BI Rate	$r1_t$	Percentage	Central bank interest rate; national data
PUAB	$r2_t$	Percentage	Money market interest rate; national data

We use year-on-year inflation to compare the development of inflation among provinces based on inflation in the previous year. Inflation is calculated using provincial consumer price index (CPI). Even though the original data of CPI is the general price in city, Pekda and KER have provided provincial CPI data. For Papua and Papua Barat, including Banten and Jakarta, the CPI data or inflation is compounded in a particular proportion based on Pekda and KER.

For economic output indicator, we use real RGDP (Regional Gross Domestic Product) with year 2000 as its base year. Hodrick-Prescott Filter (HP Filter) is applied in order to obtain potential output,  $y_{i,t}^*$  based on the real PDRB data. The output gap,  $y_{i,t}$ , is the reduction of actual output to potential output, divided by potential output, multiplied by 100%.

Because of the unavailability of provincial money supply data, we use the net flow of currency in provincial central bank branch offices (Kantor Bank Indonesia) as proxy of currency changes. If the outflow is greater than inflow (net outflow), there is an increase of currency supply in the region, vice versa. We also use demand deposit changes in commercial bank (conventional and Islamic banking) as the proxy of provincial demand deposit changes. The sum of currency changes and demand deposit changes is utilized as the changes of money supply in each province.

For interest rate instruments, we use BI Rate,  $r1_t$ , and PUAB,  $r2_t$ . These variables are commonly used as the national monetary policy references. In contrast to  $m_{i,t}$ , which is a provincial level data,  $r1_t$  and  $r2_t$  is a national-level data therefore the value for these variables are identical for each period in every provinces.<sup>6</sup>

6 Depending on the covariance structure of the equation block representing the panel data, using SUR is plausible when the set of exogenous variables are uniform across equations. However, in this paper we simply use one equation while the possible correlation across provinces may be adjusted during the estimation (i.e. white cross section). We thank to the anonymous reviewer of this journal for a good discussion and suggestion on this issue.

To analyze the impact of policy variable toward provincial inflation we employ and modify Hybrid NKC framework developed by Gali and Gertler (1999):

$$\pi_{it} = \gamma_b \pi_{i,t-1} + \gamma_f \pi_{i,t+1} + \alpha_\lambda y_{it} + \varepsilon_{it} \quad (5)$$

We add policy variable,  $S_{it}$ , on the basic form of Hybrid NKPC, hence equation (5) become:

$$\pi_{it} = \gamma_b \pi_{i,t-1} + \gamma_f \pi_{i,t+1} + \alpha_\lambda y_{it} + \delta_m S_{it} + \varepsilon_{it} \quad (6)$$

where  $S_{it}$  may contain  $m_{it}$ ,  $r1_{it}$ , or  $r2_{it}$ . Adapting Gali and Gertler (1999), we applied Generalized Method of Moments (GMM) as the estimation technique and employ  $\pi_{i,t-2}$  and  $\pi_{i,t-4}$  as the instrument variable. Estimating equation (6), we can identify the backward looking and forward looking behavior impacts by referring to  $\gamma_b$  and  $\gamma_f$ . We can also analyze the influence of output gap,  $y_{it}$ , on inflation. In order to assess the impact of policy variable on inflation, we employ to  $\delta_m$ .

Equation (6) is also used for the estimation of policies impact with, taking into account, regional aspect consideration. Since it is most likely that monetary policies need time lag in order to take effect on the economy, we try to determine the best time lag by repeating the estimation of equation (6) using different time lags. The criteria used in determining the best time lag are the conformity of the impact direction with the theory and policy objective, which are positive for  $r1_{it}$  and  $r2_{it}$ , and negative for  $m_{it}$ , and the swiftness of effect.<sup>7</sup> Based on equation (6) we construct an inflation model which takes into account the influence-differences among regions

$$\pi_{it} = \gamma_b \pi_{i,t-1} + \gamma_f \pi_{i,t+1} + \alpha_\lambda y_{it} + \delta_{m1} S_{it} + \delta_{m2} 2S_{it} d2_{it} + \delta_{m3} S_{it} d3_{it} + \delta_{m4} S_{it} d4_{it} + \varepsilon_{it} \quad (7)$$

where  $d_2$ ,  $d_3$ , and  $d_4$ , are dummy variables for Sumatera (W2), Kalimantan-Sulawesi (W3), and Papua-Maluku-Nusa Tenggara (W4). Furthermore,  $d_1$ , which represents Jawa-Bali region (W1), is not included in the model because of its role as the comparator and control dummy. Table 2 explains the classification of regions and its provinces.

7 The choice of exogenous policy lag impact is different from the autoregression process where the lag of the variable in question is the endogenous one; we use AIC or Schwartz on the letter.



**Table 2.**  
**Classification of Regions and Its Provinces<sup>8</sup>**

	Provinces		
Region 1 (W1)	Banten and Jakarta	Jawa Tengah	Bali
	Jawa Barat	Yogyakarta	Jawa Timur
Region 2 (W2)	Aceh	Sumatera Barat	Sumatera Selatan
	Sumatera Utara	Riau	Lampung
	Kepulauan Bangka Belitung	Jambi	
	Kepulauan Riau	Bengkulu	
Region 3 (W3)	Kalimantan Selatan	Kalimantan Tengah	Sulawesi Tenggara
	Kalimantan Timur	Sulawesi Utara	Sulawesi Tengah
	Kalimantan Barat	Sulawesi Selatan	Gorontalo
Region 4 (W4)	Nusa Tenggara Barat	Maluku	
	Nusa Tenggara Timur	Maluku Utara	
	Papua and Papua Barat		

Based on equation (7), the impact of monetary instruments on inflation in Region 1, 2, 3, and 4 are consecutively  $\delta_{m1}$ ,  $(\delta_{m1} + \delta_{m2})$ ,  $(\delta_{m1} + \delta_{m3})$ , and  $(\delta_{m1} + \delta_{m4})$ . In order to identify the significance of each policy impact coefficient, we run the Wald test. Using equation (7) we can identify the coefficient differences between Jawa-Bali region (W1) and the other regions by learning coefficient  $\delta_{m2}$ ,  $\delta_{m3}$ , and  $\delta_{m4}$ . However, we cannot identify the coefficient differences among regions except of using W1 as the comparator. For that purpose, we use Wald test in comparing the coefficient difference of each regions.

## IV. RESULT AND ANALYSIS

### 4.1. Provincial Inflation Model

Table 3 displays the estimation result of three equations using Hybrid NKPC framework. Each equation has different policy variable, which are money supply, policy rate (BI Rate), and interbank money rate (PUAB). The results indicate the existence of backward looking and forward looking behavior in the determination of Indonesian inflation. Forward looking tends to be more dominant, suggested by its significance and coefficient level. In concordance with the theoretical prediction, output gap has also a significant role in the construction of inflation.

<sup>8</sup> Jakarta and Banten is reported in the same account, and so, in this research, they are combined for all period. So do Papua and Papua Barat. Moreover, although Indonesia has 34 provinces in 2013, Kalimantan Utara and Sulawesi Barat are not included as observations because the data for those provinces are not available in all observation period (Sulawesi Barat was just established in 5th October 2004, while Kalimantan Utara was established in 25th October 2012). Table 2 shows the provinces included as observations in this research.

**Table 3.**  
**Estimation Result of Provincial Inflation Model**

	$\pi_t$		$\pi_t$		$\pi_t$	
	Coef.	Prob.	Coef.	Prob.	Coef.	Prob.
$\pi_{t-1}$	0.4429	0.0000	0.0887	0.0000	0.3252	0.0000
$\pi_{t+1}$	0.6330	0.0000	0.2992	0.0000	0.6579	0.0000
$y_t$	0.2020	0.0000	0.0364	0.0011	0.1063	0.0000
$S_t = m_t$	-1.4E-07	0.0001				
$S_t = r1_t$			1.5515	0.0000		
$S_t = r2_t$					0.4736	0.0000
N		900		900		900
Instrument rank		30		30		30.0000
J-stat.		29.96381		29.85828		29.6851
prob.		0.269113		0.273524		0.2809

Note: We never use the money supply, policy rate, and the interbank money rate simultaneously. Within this limitation, we compare the effect of these three variables on inflation.

On the role of money supply, BI Rate, and PUAB in determining the level of inflation, Table 3 shows significant contradictive directions. The result suggests that an increase in money supply would lower inflation, while an increase in interest rate raises inflation. We suspect this peculiar result is in accordance with Friedman's proposition on short-run monetary ineffectiveness. According to Friedman, monetary instruments need time in order to effectively affect the objective variable. Friedman argued that the long period of lag required by the economy to respond to monetary policy produce peculiar short-term relationship between monetary instrument and inflation. Batini and Nelson (2001) further confirm Friedman's proposition of monetary policy ineffectiveness in the short-run using data from 1953 to 2001 in the United States and United Kingdom.

Since the application of policy variables without time lag yield a conflictive result and that monetary policy need time to affect the economy, we try to re-estimate the model by adding time lag for the policy variables until we found each policy variable to have significant and corresponding effect to the policy objective. The lag would then demonstrate the nearest time in which monetary policy would produce the intended effect on inflation. The result is estimated and presented in Table 4.

In concordance with the earlier result, the estimations show that backward looking and forward looking behavior have positive significant effects on inflation, with forward looking having greater influence. In accordance with the theory, output gap is also found to have a positive effect on inflation. By adding time lag worth one quarter, the estimation results of

monetary policies influence have changed. Money supply is shown to have insignificant effect on inflation, while BI Rate a contradictive effect. However, the estimation result on PUAB has shown the expected result. PUAB has a negative significant effect on the future inflation, with a time lag of one quarter. It suggests that, different with the other two policies, PUAB will become an effective policy in three months after its implementation. The value of J-statistic probability professes that there is no over-identification in the model.

**Table 4.**  
**Estimation Result of Provincial Inflation Model with 1 Period Time Lag**

	$\pi_{i,t}$		$\pi_{i,t}$		$\pi_{i,t}$	
	Coef.	Prob.	Coef.	Prob.	Coef.	Prob.
$\pi_{i,t-1}$	0.444342	0.0000	0.202718	0.0000	0.468151	0.0000
$\pi_{i,t+1}$	0.636456	0.0000	0.615281	0.0000	0.618738	0.0000
$y_R$	0.158972	0.0000	0.165596	0.0000	0.155991	0.0000
$S_R = m_{i,t-1}$	-4.9E-09	0.7151				
$S_R = r1_{i,t-1}$			0.683177	0.0000		
$S_R = r2_{i,t-1}$					-0.07558	0.0000
N	900		900		900	
Instrument rank	30		30		30	
J-stat.	29.8360		29.7515		29.8454	
prob.	0.2745		0.2780		0.2741	

**Table 5.**  
**Estimation Result of Provincial Inflation using 2 and 3 Periods of Time Lag**

	$\pi_{i,t}$		$\pi_{i,t}$		$\pi_{i,t}$		$\pi_{i,t}$	
	Coef.	Prob.	Coef.	Prob.	Coef.	Prob.	Coef.	Prob.
$\pi_{i,t-1}$	0.5094	0.0000	0.5392	0.0000	0.4903	0.0000	0.5669	0.0000
$\pi_{i,t+1}$	0.4993	0.0000	0.5385	0.0000	0.5017	0.0000	0.5163	0.0000
$y_R$	-0.0582	0.0000	-0.0308	0.0369	-0.0036	0.6988	-0.0322	0.0063
$S_R = m_{i,t-2}$	-2E-07	0.0000						
$S_R = m_{i,t-3}$			2.1E-7	0.0000				
$S_R = r1_{i,t-2}$					0.0616	0.0000		
$S_R = r1_{i,t-3}$							0.12075	0.0000
N	870		840		870		840	
Instrument rank	30		30		30		30	
J-stat.	29.5054		29.6032		29.9087		29.4934	
prob.	0.2886		0.2844		0.2714		0.2891	

We applied two quarter and three quarter periods of time lag in order to find the best time lag for BI Rate and money supply. All of the estimation results indicate that inflation level in Indonesia is significantly affected by backward looking and forward looking behavior. In contrast with the earlier results, these estimation suggest that backward looking behavior has a greater impact on inflation, meaning that the economy take into account past inflation more considerably than expected future inflation in constructing their expected inflation. In Table 5, we show that money supply and BI Rate need 3 quarters to effectively influence the inflation.

## 4.2. Inflation Model with Regional Consideration

In order to identify which monetary policy is better in maintaining regional inflation, we estimate each monetary policy's impact on each region. We started by assessing monetary aggregate, followed by BI Rate and PUAB sequentially. In order to identify differences in each region's response, we use dummy variable on monetary policy. Wald test is executed in order to evaluate the significance of monetary policy in each region and to diagnose if the policy effect is different.

Table 6 shows the estimation result of Hybrid NKPC model with regional consideration and monetary aggregate as the policy variable. W1 is used as the base comparator in this equation. The estimation result suggest that forward looking and backward looking behavior have significant roles in determining future inflation, with forward looking being a slightly greater determinant. Output gap is found to have no significant effect in determining inflation.

	$\pi_{it}$	
	Coef.	Prob.
$\pi_{i,t-1}$	0.5200	0.0000
$\pi_{i,t+1}$	0.5515	0.0000
$y_{it}$	0.0142	0.5505
$m_{i,t-3}$	9.02E-08	0.1444
$m_{i,t-3}d2_{i,t}$	1.43E-06	0.0000
$m_{i,t-3}d3_{i,t}$	-3.8E-07	0.1934
$m_{i,t-3}d4_{i,t}$	-1.1E-06	0.0029
N	840	
Instrument rank	30	
J-statistic	29.32421	
Prob(J-statistic)	0.1698	

Table 7 displays the effect of monetary aggregate on each region's inflation. The Wald Test result shows that money supply is only significantly affecting the inflation of W2 (Sumatera) and W4 (Papua-Maluku-Nusa Tenggara) regions. While it has a positive effect on W2's inflation, it turns out to have negative effect on W4's. It suggests that employing monetary aggregate as the monetary instrument will only be effective for managing inflation in W2 region.

	Jawa-Bali	Sumatera	Kalimantan - Sulawesi	Papua - Maluku - Nusa Tenggara
Coef.	9.02E-08	1.52E-06	-2.87E-07	-1.00E-06
F - statistic	2.1345	76.9455	1.0900	8.4129
Prob.	0.1444	0.0000	0.2968	0.0038

		Jawa-Bali	Sumatera	Kalimantan - Sulawesi	Papua - Maluku - Nusa Tenggara
Jawa-Bali	F-Stat (Prob.)		75.3142 (0.0000)	1.6946 (0.1934)	8.9352 (0.0029)
Sumatra		75.3142 (0.0000)		30.1851 (0.0000)	40.8928 (0.0000)
Kal-Sul		1.6946 (0.1934)	30.1851 (0.0000)		4.3247 (0.0379)
Pap-Mal_Nusa		8.9352 (0.0029)	40.8928 (0.0000)	4.3247 (0.0379)	

Displayed by the estimation result in table 8, we found that money supply has no different impact on inflation in W1 and W3. The policy impact is especially unique in W2 and W4, where it is shown that there is no indifferent effect on other regions.

**Table 9.**  
**Estimation Result with BI Rate and Regional Response**

	$\pi_{it}$	
	Coef.	Prob.
$\pi_{i,t-1}$	0.5740	0.0000
$\pi_{i,t+1}$	0.5094	0.0000
$y_{it}$	-0.0463	0.0112
$r1_{i,t-3}$	1.3058	0.1258
$r1_{i,t-3}d2_{i,t}$	-1.6213	0.0396
$r1_{i,t-3}d3_{i,t}$	-2.1693	0.0722
$r1_{i,t-3}d4_{i,t}$	-1.4775	0.1761
N	840	
Instrument rank	30	
J-statistic	28.9268	
Prob. (J-statistic)	0.1827	

Moving to BI Rate policy, table 9 displays the estimation result of Hybrid NKPC model with BI Rate as the shock variable. Different from the previous estimation, while backward looking and forward looking behavior still significantly affecting inflation, it is found that backward looking behavior has a slightly greater role in determining inflation. Contradicting the theory, we also found that an increase in output gap will lower inflation level.

Depicted in table 10, we found that BI Rate as a monetary instrument is only significantly affecting W2 region (Sumatera). Furthermore, Table 11 suggests that BI Rate has indifferent effect on W1 and W4. It is also found that W2 has the same responses as W3 and W4 on BI Rate changes. The impact of BI Rate on W3's inflation is also indifference to W4's. While it indicates that BI Rate may be a better and fairer policy in managing regional inflation, the result in table 11 suggest that BI Rate is only effective to be implemented in Sumatera regions.

**Table 10.**  
**WaldTest: Effect of BI Rate on Each Region's Inflation**

	Jawa-Bali	Sumatera	Kalimantan-Sulawesi	Papua-Maluku-Nusa Tenggara
	(W1)	(W2)	(W3)	(W4)
Coef.	1.3058	-0.3155	-0.8635	-0.1717
F-statistic	2.3485	3.8237	4.4681	0.1852
Prob.	0.1258	0.0509	0.0348	0.6671

**Table 11.**  
**Wald Test: Diagnosis of BI Rate's Impact Differences between Regions**

		Jawa-Bali	Sumatera	Kalimantan-Sulawesi	Papua-Maluku-Nusa Tenggara
		(W1)	(W2)	(W3)	(W4)
Jawa-Bali	F Stat.		4.2467	3.2403	1.8336
	Prob.		0.0396	0.0722	0.1761
Sumatra		4.2467		1.1297	0.0741
		0.0396		0.2882	0.7855
Kal-Sul		3.2403	1.1297		2.0217
		0.0722	0.2882		0.1554
Pap-Mal_Nusa		1.8336	0.0741	2.0217	
		0.1761	0.7855	0.1554	

The other alternative for monetary policy operational target is PUAB. Table 12 shows the estimation result of Hybrid NKPC model with PUAB as the shock variable. In this estimation result, we found that backward looking and forward looking behavior are significant in determining the level of inflation. We found forward looking behavior to be a greater determinant of inflation. It indicates that the expected future inflation has a bigger role in determining inflation than the inflation track records. In this equation result, we also found that the output gap impact on inflation is in line with theory.

**Table 12.**  
**Inflation Model with PUAB and Regional Response**

	$\pi_{it}$	
	Coef.	Prob.
$\pi_{i,t-1}$	0.4697	0.0000
$\pi_{i,t+1}$	0.6145	0.0000
$y_{it}$	0.1463	0.0000
$r2_{i,t-1}$	-0.8723	0.0110
$r2_{i,t-1}d2_{i,t}$	0.6892	0.0555
$r2_{i,t-1}d3_{i,t}$	1.6945	0.0025
$r2_{i,t-1}d4_{i,t}$	0.2270	0.3969
N	900	
Instrument rank	30	
J-statistic	29.3568	
Prob(J-statistic)	0.1688	

Table 13 presents the impact of PUAB on each observed region's inflation. We found that PUAB stands as the best monetary instruments compared to the two others in this study. PUAB has significant and in-line-with-objective effect on W1 (Jawa-Bali), W2 (Kalimantan-Sulawesi) and W4 (Papua-Maluku-Nusa Tenggara) regions. Still to be put in our concern, PUAB has a positive effect on W3 region (Kalimantan-Sulawesi) which contradict the policy objective.

	Jawa-Bali	Sumatera	Kalimantan-Sulawesi	Papua-Maluku-Nusa Tenggara
	(W1)	(W2)	(W3)	(W4)
Coef.	-0.8723	-0.1830	0.8222	-0.6453
F-statistic	6.4851	11.4296	8.3421	4.7564
Prob.	0.0110	0.0008	0.0040	0.0295

Diagnosing the impact differences of PUAB between each region, we found that W1, W2, and W3 are having indifferent response toward the changes of PUAB (see table 14). On the other hand, we found that the impact of PUAB on inflation in W4 is only indifferent with its impact on W3. Considering the result, we assert that PUAB is a fair monetary instrument in controlling inflation level across regions in Indonesia.

		Jawa Bali	Sumatra	Kal-Sul	Pap-Mal-Nusa
Jawa-Bali	F-Stat		3.6769	9.2163	0.7184
	Prob.		0.0555	0.0025	0.3969
Sumatra		3.6769		12.8614	1.9798
		0.0555		0.0004	0.1598
Kal-Sul		9.2163	12.8614		7.0423
		0.0025	0.0004		0.0081
Pap-Mal_Nusa		0.7184	1.9798	7.0423	
		0.3969	0.1598	0.0081	



## V. CONCLUSION

Designing an effective and reliable monetary policy is necessary to ensure national price stability. To achieve the desired level of inflation, monetary authority can employ quantity-based approach, which make use of monetary aggregate as its instrument, or price-based approach, which exploit interest rate. The utilization of interest rate as the monetary operational target may have its own advantages in directing national inflation, but then again interest rate is a one-for-all 'nationally-designed' instrument. Different from interest rate, money supply can be regulated in regional level, accommodating each region's economic needs. Since inflation is a regional phenomenon, a detailed assessment of each region's idiosyncrasy is a necessity. If authorities are concerned about the inflationary gap among regions, they need policy instrument(s) which is or are capable of managing regional inflation evenly. Through this study, we found that each region in Indonesia have different responses on monetary policy instruments.

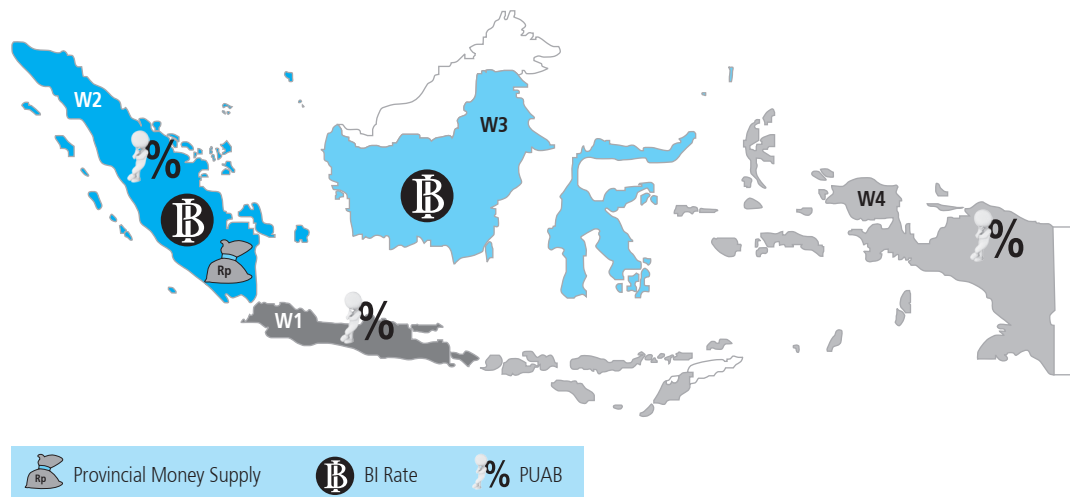
Using Hybrid NKPC model, we found that backward looking and forward looking behavior have significant roles in determining inflation in Indonesia. Further, our finding supports Gali and Gertler (1999) in asserting forward looking behavior to have greater influence than backward looking. It suggests the importance and effectiveness of inflation targeting framework in directing societies' expectation regarding future inflation. Conforming macroeconomics theory, output gap is also found to have a positive impact on inflation.

Through regional analysis, we found that both monetary instruments (money supply and interest rate) are incapable of influencing inflation in the short run. Monetary policy needs time to effectively influence regional inflation. Our analysis suggests that PUAB instrument needs the least time lag to yield desirable influence on inflation. PUAB needs 1 quarter to effectively influence inflation while money supply and BI Rate needs 3 quarters. Furthermore, the estimation of PUAB alone delivers consistent backward and forward looking and output gap influence to regional inflation.

Taking into account regional aspect in the model, we found that money supply has a significant impact on inflation in Sumatera (W2) and Papua-Maluku-Nusa Tenggara (W4). This instrument, however, is only effective in Sumatera region, since the estimation result suggests that it would have conflicting effect in Papua-Maluku-Nusa Tenggara.

Moving to the second instrument, we found that BI Rate is an effective instrument in controlling the inflation in Sumatera (W2) and Kalimantan-Sulawesi (W3). In addition, through Wald test we found indifferent impact of BI Rate to inflation in these regions.

Lastly, we found that PUAB is the most favourable instrument in controlling inflation in Indonesia. Based on the estimation result, we found that PUAB is potent to manage inflation in most of the observed regions, including Java-Bali (W1), Sumatera (W2), and Papua-Maluku-Nusa Tenggara (W4). In those regions, the influence of PUAB to inflation is in concordance with the policy objective. Figure 1 shows the favorable instrument(s) in controlling regional inflation in Indonesia.



**Figure 1**  
**Most Favorable Instrument in Controlling Regional Inflation in Indonesia**

Each region has their own favorable monetary instrument in controlling inflation. However, in Java-Bali (W1) and Papua-Maluku-Nusa Tenggara (W4), inflation can only be managed using PUAB, while Kalimantan-Sulawesi's (W3) inflation can only be controlled using BI Rate. Combining BI Rate and PUAB, monetary authority can effectively control inflation in every region in Indonesia. Hence, we conclude that the implementation of interest rate as the monetary instrument in Indonesia is more appropriate than money supply.

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# PENGARUH FINANSIALISASI TERHADAP KETIMPANGAN PENDAPATAN DI ASEAN: ANALISIS DATA PANEL

*Pihri Buhaerah*<sup>1</sup>

## Abstract

*This paper examines the impact of financialization on income inequality in ASEAN-5 countries for the period of 1990-2013 by employing panel data analysis. The data was collected from various secondary sources by undertaking fixed effect model and generalized method moment. The result shows that there is a significant relationship between all financialization indicators and income distribution. Generalized method moment analysis using Arellano-Bond estimator also shows that all financialization indicators have a significant relationship with income distribution. There is no different sign estimator both in fixed model effect and generalized method moment analysis. This paper revealed that financialization indicators such as stock market capitalization and return on assets contribute positively to worsen income inequality. In contrast, domestic private debt securities have a negative effect on gini coefficient in ASEAN-5 countries indicating that increasing domestic private debt securities will improve income distribution in the region.*

*Keywords: Financialization, inequality, fixed effect model, generalized method moment*

**JEL Classification: C23, D31**

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## I. PENDAHULUAN

Isu kesenjangan ekonomi baik antar kawasan dan negara maupun antar kelompok pendapatan dalam dalam satu negara tengah menjadi sorotan tajam dalam dua dekade terakhir. Terlebih lagi, saat ini situasi perekonomian global kian berisiko dan tidak pasti. Dalam batas dan konteks tertentu, beberapa pihak meyakini, ketimpangan bisa mendongkrak kinerja pertumbuhan ekonomi suatu negara. Namun, di sisi yang lain, ketimpangan justru cenderung berevolusi menjadi mesin yang merusak proses akumulasi modal fisik, pembangunan sumber daya manusia dan pertumbuhan ekonomi yang berkelanjutan. Bahkan, dalam beberapa kasus, ketimpangan terbukti telah memicu ketidakstabilan politik di mana ujungnya malah berdampak pada volatilitas ekonomi yang menyebabkan situasi perekonomian kian sulit diprediksi dari waktu ke waktu.

Sehubungan dengan hal itu, Laporan PBB Tahun 2013 mengungkapkan bahwa tingkat ketimpangan secara global masih tergolong tinggi. Alasannya, pada 2010, negara-negara berpendapatan tinggi ditaksir menikmati pendapatan 55 persen dari total pendapatan global. Padahal, negara-negara tersebut hanya didiami 16 persen dari total populasi dunia. Ironisnya, negara-negara berpendapatan rendah yang dihuni sekitar 72 persen dari populasi global justru hanya menikmati 1 persen dari keseluruhan pendapatan global. Laporan tersebut juga mengungkapkan bahwa nilai koefisien gini internasional sebagai refleksi ketimpangan internasional pada 2010 relatif tetap lebih tinggi dibandingkan nilai koefisien gini pada 1980.

Lebih lanjut, tingkat kesenjangan ekonomi antar kawasan menurut laporan UNDP Tahun 2013 yang bertajuk "*Humanity Divided: Confronting Inequality in Developing Countries*", menyebutkan bahwa hampir seluruh kawasan mengalami peningkatan nilai koefisien gini terkecuali Kawasan Amerika Latin, Karibia, dan Afrika. Afrika menjadi kawasan yang mengalami penurunan tingkat ketimpangan yang paling tinggi yakni sebesar 7 persen, diikuti Kawasan Amerika Latin (Argentina, Brazil, dan Meksiko) dan Karibia (5 persen). Sementara itu, negara-negara di Zona Eropa dan Kelompok Negara Persemakmuran menjadi wilayah dengan peningkatan koefisien gini yang paling tinggi (35 persen) dibandingkan kawasan lainnya, diikuti Kawasan Asia dan Pasifik (13 persen). Menariknya, laporan tersebut juga mengungkapkan bahwa tingkat ketimpangan pendapatan rumah tangga di negara-negara berpendapatan tinggi justru terindikasi lebih rendah (9 persen) ketimbang negara-negara berpendapatan rendah dan menengah (11 persen).

Selain itu, penelitian yang mengupas tentang ketimpangan pendapatan dua dekade terakhir juga sudah tak terhitung banyaknya. Sejumlah kajian yang seringkali dirujuk oleh para akademisi dan praktisi pembangunan sejauh ini masih terpusat pada relasi antara pertumbuhan ekonomi dan ketimpangan (Dollar & Kraay (2002), Benhabib (2003), Adam (2003), Barro (2008), Berg & Ostry (2011), Dollar, Kleineber, & Kraay (2013), Kraay, Dollar, & Kleineberg (2014)). Dalam hal ini, perdebatan relasi antara keduanya terpolarisasi ke dalam dua kutub. Kutub pertama, relasi dari pertumbuhan menuju ketimpangan yang mengikuti hipotesis yang dibangun oleh

Kuznets. Kutub kedua, pengaruh ketimpangan terhadap pertumbuhan ekonomi sebagai anti tesis dari hipotesis yang dibangun oleh Kuznets.

Dari sejumlah kajian yang mengupas tentang ketimpangan ekonomi sejauh ini secara umum menyebutkan bahwa faktor-faktor penyebab kesenjangan ekonomi dapat dikelompokkan ke dalam dua hal, yakni faktor eksogen (dari luar negeri) dan faktor endogen (dari dalam negeri). Faktor eksogen yang memacu kesenjangan ekonomi meliputi globalisasi perdagangan, keuangan, dan perubahan teknologi (UNDP, 2013). Adapun faktor domestik (endogen) yang berkontribusi terhadap ketimpangan distribusi pendapatan adalah kebijakan ekonomi makro, kebijakan pasar tenaga kerja, ketimpangan kekayaan, kebijakan perpajakan dan transfer, dan belanja pemerintah.

Sementara itu, sejumlah kajian juga mencoba mengupas pertautan pembangunan keuangan dengan ketimpangan pendapatan (Clarke et.al (2003), Beck et.al (2004), Claessens & Perotti (2005), Canavire-Bacarreza & Rioja (2008), Demirgüç-Kunt & Levine (2009), Kappel (2010), Jauch & Watzka (2012), dan Park & Shin (2015)). Sayangnya, studi yang secara empiris mengkaji pengaruh finansialisasi terhadap kesenjangan pendapatan masih belum banyak dilakukan. Belum tersedianya data yang memadai baik dalam bentuk lintas negara maupun deret waktu menjadi salah satu faktor penyebab masih kurangnya kajian yang terkait dengan isu finansialisasi dan ketimpangan pendapatan.

Meski sedikit lebih kompleks, beberapa penelitian mencoba memulai membedah isu ini secara lebih sistematis dan mendalam. Sebagai contoh, hasil kajian Hou Lin dan Tomaskovic-Devey (2013) menunjukkan bahwa kenaikan ketergantungan terhadap pendapatan keuangan (*financial income*), dalam jangka panjang, menyebabkan penurunan porsi buruh atas pendapatan, peningkatan bagian eksekutif puncak atas kompensasi, dan pendapatan antar pekerja melebar di Amerika Serikat (AS). Dengan menggunakan data deret waktu mulai 1970 sampai 2008, Lin dan Tomaskovic-Devey (2013) menemukan bahwa finansialisasi menyebabkan porsi buruh atas pendapatan menurun lebih dari setengahnya, kenaikan pertumbuhan kompensasi eksekutif sebesar 9,6 %, dan peningkatan pertumbuhan perbedaan pendapatan antar pekerja sebesar 10,2 %.

Hal senada juga ditemukan dalam studi yang dilakukan oleh Kus (2012) tentang finansialisasi dan ketimpangan pendapatan di negara-negara OECD. Dengan menggunakan data 1995-2007 dari 20 negara OECD, hasil temuan Kus (2012) mengindikasikan bahwa finansialisasi terbukti berkontribusi secara positif terhadap kenaikan ketimpangan pendapatan. Kus (2012) juga menemukan bahwa pada negara yang memiliki serikat buruh yang lemah, efek finansialisasi cenderung lebih kuat dalam meningkatkan kesenjangan pendapatan ketimbang negara dengan serikat buruh yang lebih kuat. Hasil penelitian yang lebih terkini seperti Dunhaup (2014) juga mengkonfirmasi temuan ketiga hasil kajian sebelumnya yakni finansialisasi memainkan peran yang penting dalam meningkatkan ketimpangan di negara-negara maju.

Sayangnya, kesemua hasil penelitian tersebut pada umumnya hanya mengambil sampel dari negara-negara maju di Kawasan Eropa dan Amerika. Padahal, negara-negara lain seperti negara-negara di Kawasan ASEAN juga menarik untuk dikaji karena isu ini bukan hanya persoalan negara-negara maju. Kawasan ASEAN sendiri dianggap sebagai salah satu kawasan pertumbuhan yang relatif stabil dan dinamis dibanding Kawasan Amerika Latin, termasuk dalam hal pembangunan sektor keuangan di mana menunjukkan kinerja pertumbuhan yang cukup signifikan. Sayangnya, kawasan ini juga menyimpan potensi instabilitas politik dan sosial yang tinggi karena kesenjangan yang kian menganga dari tahun ke tahun.

Terkait hal itu, nilai koefisien gini negara-negara ASEAN seperti Singapura, Brunei, Malaysia, Thailand, Indonesia, dan Filipina terindikasi cukup bervariasi. Studi yang dilakukan oleh Bock (2014) menemukan bahwa Brunei, Malaysia, dan Singapura cenderung memiliki koefisien gini yang lebih tinggi dibanding negara ASEAN lainnya. Nilai koefisien gini ketiga negara tersebut telah menembus batas psikologis (0.40) karena telah mencapai angka 0.45. Adapun tren ketimpangan di Thailand, Indonesia, dan Filipina memiliki pola yang sedikit berbeda (Bock, 2014). Pada awalnya, Thailand dan Filipina memang identik dengan tingkat distribusi pendapatan yang tinggi karena nilai koefisien gininya mencapai 0.45. Namun, beberapa tahun terakhir, kedua negara tersebut berhasil menurunkan nilai koefisien gininya. Sebaliknya, Indonesia awalnya memiliki nilai koefisien gini yang tergolong rendah. Namun, nilai koefisien gini Indonesia belakangan cenderung mengalami peningkatan dari tahun ke tahun.

Karena ASEAN-5 identik dengan masalah ketimpangan yang tinggi dalam proses pertumbuhan ekonominya, maka analisis tentang faktor-faktor kunci yang memacu ketimpangan pendapatan di kawasan ini menjadi penting untuk dikaji. Berbeda dengan kajian-kajian ketimpangan sebelumnya yang lebih difokuskan pada hubungan antara instrumen kebijakan sosial dan fiskal terhadap ketimpangan, kajian ini lebih diarahkan pada relasi antara instrumen kebijakan keuangan dan distribusi pendapatan. Menariknya lagi, kajian ini juga akan mengupas secara khusus mekanisme transmisi dan dampak aktivitas finansialisasi korporasi terhadap distribusi pendapatan di Kawasan ASEAN khususnya di Singapura, Malaysia, Thailand, Indonesia, dan Filipina yang biasanya dikenal sebagai negara ASEAN-5.

Bagian kedua dari paper ini mengulas kerangka konseptual yang digunakan untuk membedah peran finansialisasi terhadap distribusi pendapatan. Bagian ketiga menguraikan model ekonometrik yang digunakan untuk mengestimasi kaitan finansialisasi dengan ketimpangan. Bagian kelima menampilkan hasil temuan beserta pembahasan. Bagian terakhir akan menyarikan poin-poin kunci dalam penelitian beserta implikasi kebijakan dari penelitian ini.

## **II. TEORI**

Finansialisasi dalam arti luas didefinisikan sebagai peningkatan peran industri keuangan dalam kegiatan perekonomian, yang meliputi pengendalian keuangan dalam pengelolaan perusahaan, aset keuangan terhadap total aset, surat berharga yang diperdagangkan dan khususnya ekuitas



terhadap total aset keuangan, pasar saham sebagai pasar untuk kontrol perusahaan dalam menentukan strategi perusahaan, dan fluktuasi di pasar saham sebagai penentu siklus bisnis (Dore, 2000 dikutip Falkowski, 2011).

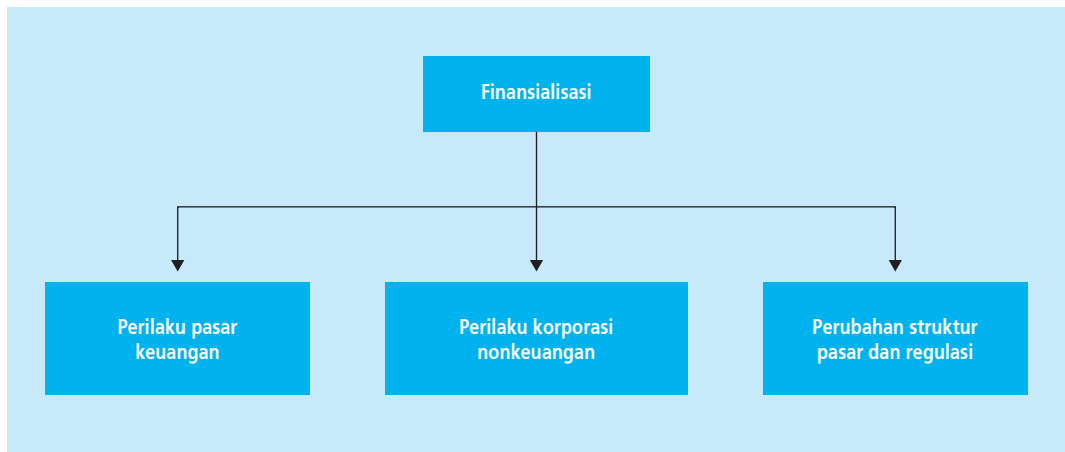
Finansialisasi lebih populer dipahami sebagai meningkatnya pola akumulasi keuntungan yang diperoleh terutama melalui saluran keuangan daripada melalui perdagangan dan produksi komoditas (Krippner, 2005; Arrighi, 2009). Finansialisasi juga didefinisikan sebagai dua proses yang saling terkait (Hou Lin & Tomaskovic-Devey, 2013). Proses pertama, melalui peningkatan dominasi sektor keuangan dan juga kontrol sektor tersebut dalam perekonomian. Proses kedua, melalui peningkatan partisipasi industri non-keuangan dalam jasa keuangan dan pasar investasi. Artinya, finansialisasi merujuk pada peningkatan peran dan dominasi industri keuangan termasuk pasar keuangan dan institusi keuangan dalam menjalankan roda perekonomian (Davis & Kim, 2015).

Meski beragam, secara sederhana, istilah finansialisasi menjadi populer untuk menandai adanya pergeseran perubahan peran dan ketergantungan antara sektor keuangan dan sektor riil dalam perekonomian. Untuk memudahkan, definisi finansialisasi yang digunakan dalam penelitian ini merujuk pada definisi finansialisasi yang dibangun oleh Epstein. Epstein (2005) mendefinisikan finansialisasi sebagai berikut.

*“Financialization means the increasing role of financial motives, financial markets, financial actors and financial institutions in the operation of the domestic and international economies.”*

Dalam perspektif Epstein (2005), finansialisasi dipersepsikan sebagai peningkatan peran motif keuangan, pasar keuangan, dan aktor serta institusi keuangan dalam aktivitas perekonomian domestik dan internasional. Dengan demikian, secara umum, finansialisasi dapat dipahami dan diasosiasikan sebagai peningkatan peran sektor keuangan ketimbang sektor riil dalam perekonomian baik dalam level perekonomian domestik maupun dalam tataran perekonomian global.

Menurut Palley (2009), saluran finansialisasi dapat dibagi ke dalam tiga saluran utama yakni melalui perilaku pasar keuangan, perilaku korporasi non-keuangan, dan perubahan struktur pasar dan regulasi. Saluran pertama melalui perubahan dalam pasar keuangan yang memberikan dampak terhadap perekonomian secara makro yang mencakup perubahan dalam nilai ekuitas, peningkatan akses terhadap utang, kredit, dan lain-lain. Saluran kedua melalui perubahan perilaku korporasi non-keuangan yang mencakup perubahan kebijakan keuangan korporasi terkait pembayaran kepada para pemegang saham dan perubahan dalam leverage perusahaan dan perilaku pembiayaan. Saluran ketiga melalui perubahan kebijakan ekonomi untuk kepentingan sektor keuangan yang meliputi deregulasi pasar keuangan dan tenaga kerja serta globalisasi. Perubahan kebijakan ekonomi tersebut pada gilirannya mempengaruhi parameter struktur yang penting seperti pembagian keuntungan dan komposisi gaji.



Pengaruh finansialisasi terhadap distribusi pendapatan dirangkum dan dikelompokkan oleh Stockhammer (2010) menjadi tiga saluran. Saluran pertama, adanya peningkatan pendapatan dari aktivitas ekonomi rente. Saluran kedua, adanya kenaikan pendapatan dalam sektor keuangan, yang biasanya berbentuk bonus, menyebabkan jurang distribusi pendapatan menjadi melebar. Saluran ketiga, finansialisasi telah menggeser perimbangan kekuatan antara pemodal dan pekerja dalam berbagai cara mulai dari perubahan dalam pengaturan korporasi hingga peningkatan kesempatan yang dibuka ke perusahaan-perusahaan akibat globalisasi keuangan.

Hal senada juga dikemukakan oleh Hou Lin dan Tomaskovic-Devey (2013). Hasil studi mereka menunjukkan bahwa proses ketimpangan pendapatan melalui finansialisasi perekonomian dapat dilihat dari tiga hal. Pertama, meningkatnya ketergantungan pendapatan dari sektor keuangan melalui penurunan porsi kontribusi buruh dalam sektor inti seperti manufaktur, transportasi, dan konstruksi terhadap pendapatan nasional. Kedua, meningkatnya ketergantungan pendapatan dari sektor keuangan melalui peningkatan yang signifikan dalam pemberian kompensasi eksekutif puncak. Terakhir, meningkatnya ketergantungan pendapatan dari sektor keuangan melalui peningkatan kesenjangan pendapatan diantara pekerja seperti ketimpangan pendapatan antara pekerja di divisi manajerial dan keuangan dibandingkan dengan pekerja produksi dan penjualan.

Sementara itu, Kus (2012) membagi efek finansialisasi terhadap ketimpangan pendapatan ke dalam empat saluran. Saluran pertama, perkembangan industri keuangan dalam beberapa dekade terakhir dibiayai oleh pengorbanan sektor riil yang produktif. Artinya, telah terjadi penurunan tingkat profitabilitas sektor non-keuangan yang mengakibatkan penurunan upah bersih kelas menengah dan pekerja kerah biru yang bekerja di sektor industri produktif. Saluran kedua, adanya perpindahan sumber utama pencetak laba dari sektor riil ke sektor keuangan telah melemahkan pengaruh kebijakan dan lembaga tertentu dalam mengurangi ketimpangan

ekonomi seperti undang-undang serikat pekerja dan upah minimum. Saluran ketiga, adanya ketergantungan yang tinggi perusahaan non-keuangan terhadap sektor keuangan menyebabkan pengaturan perusahaan lebih ditujukan untuk melayani kepentingan pemilik modal dan manajer perusahaan yang cenderung berorientasi pada pencarian keuntungan jangka pendek. Implikasinya, ongkos pengeluaran untuk pekerja akan dipotong sementara pada saat yang sama eksekutif puncak diganjar dengan bonus yang tinggi.

Saluran terakhir, pasar saham mendorong terjadinya konsentrasi pendapatan pada kelompok masyarakat yang berpendapatan tinggi terutama ketika pasar saham mengalami masa keemasan. Kelompok tersebut memiliki kemampuan keuangan untuk berinvestasi secara besar-besaran pada periode awal masa keemasan pasar saham. Sementara itu, kelompok masyarakat berpendapatan lebih rendah baru bisa memasuki pasar saham belakangan ketika periode keemasan sudah berlangsung cukup lama yang mengakibatkan mereka menderita kerugian. Hal ini terkonfirmasi dari naiknya proporsi pendapatan dari investasi, properti, dan modal dalam beberapa dekade terakhir. Ironisnya, sebagian besar pendapatan itu terindikasi justru hanya dikenakan dikenakan pajak di bawah tarif pajak yang seharusnya dibayarkan sebagaimana yang dikenakan pada sumber-sumber pendapatan lainnya.

### III. METODOLOGI

#### 3.1. Pemilihan Variabel dan Sumber Data

Untuk mengukur pengaruh finansialisasi terhadap distribusi pendapatan, studi ini menggunakan data panel dengan periode tahunan dari 1999 sampai 2013. Adapun indikator yang digunakan dalam studi ini adalah indikator pembangunan keuangan dan indikator distribusi pendapatan. Indikator distribusi pendapatan yang digunakan dalam studi ini adalah koefisien gini. Data koefisien gini didapat dari beberapa sumber antara lain *ILO Global Wage Database*, *UN World Income Inequality Database* (WIID), *World Development Indicators* (WDI) Bank Dunia, *Global Financial Development Database* (GFDD), Singapore Department of Statistics, National Statistical Office of Thailand, Philippine Statistics Authority, Economic Planning Unit of Malaysia, dan Badan Pusat Statistik Indonesia.

Adapun variabel, definisi, satuan, dan sumber data yang digunakan dalam studi ini ditunjukkan pada Tabel 1 di bawah ini.

**Tabel 1.**  
**Jenis dan Sumber Data**

Variabel	Definisi	Satuan	Satuan
GINI	Gini coefficient	%	WDI, WIID, ILO, Singapore Department of Statistics, National Statistical Office of Thailand, Philippine Statistics Authority, Economic Planning Unit of Malaysia, dan Badan Pusat Statistik Indonesia
ROA	Bank return on assets before tax	%	GFDD 2016
SMC	Stock market capitalization	% of GDP	GFDD 2016
DPDS	Outstanding domestic private debt securities	% of GDP	GFDD 2016
UNEM	Unemployment rate	% of total labor force	WDI 2016
EMPA	Employment in Agriculture	% of total employment	WDI 2016
VEM	Vulnerable Employment	% of total employment	WDI 2016

### 3.2. Model Ekonometrika

Menurut Afsar et.al (2014), proses dan hasil finansialisasi dapat diukur dengan menggunakan tiga indikator yakni rasio nilai kapitalisasi pasar terhadap PDB, tingkat profitabilitas bank yang dinyatakan sebagai pendapatan bank sebelum pajak, dan nilai efek dari aset perbankan. Sementara itu, Kus (2012) menggunakan variabel nilai keseluruhan saham yang diperdagangkan, tingkat profitabilitas bank sebelum pajak, dan sekuritisasi atas aset perbankan untuk mengukur proses finansialisasi dalam perekonomian.

Selanjutnya, karena pertimbangan ketersediaan data antar negara di kawasan ASEAN, maka variabel yang digunakan dalam studi mengalami perubahan sedikit. Sebagai gambaran, variabel yang dianggap bisa mewakili proses finansialisasi antara lain *bank return on assets before tax* (ROA), *stock market capitalization to gdp* (SMC), dan *outstanding domestic private debt securities* (DPDS). Selain keempat variabel tersebut, studi ini juga menggunakan tiga variabel tambahan yakni *unemployment rate*, *employment in agriculture*, dan *vulnerable employment*.

Lebih lanjut, guna menganalisis pengaruh finansialisasi terhadap distribusi pendapatan, studi ini menggunakan variabel koefisien gini (GINI) sebagai variabel dependen dan sejumlah indikator pembangunan di sektor keuangan seperti ROA, SMC, DPDS, dan beberapa variabel kontrol (VC) sebagai variabel independen. Model ekonometrika dasar yang digunakan dalam penelitian ini untuk mengukur pengaruh finansialisasi terhadap distribusi pendapatan sebagai berikut:

$$\text{LogGini}_{it} = \beta_1 + \beta_2 \text{LogGini}_{2it-1} + \beta_3 \text{ROA}_{3it} + \beta_4 \text{LogSMC}_{4it} + \beta_5 \text{Log DPDS}_{5it} + \beta_6 \text{LogVC}_{7it} + \epsilon_{it}$$

Model di atas diadaptasi dari model yang dikembangkan oleh Kus (2012) dan Afsar et.al (2014) dan diestimasi dengan menggunakan analisis data panel. Kesemua variabel yang digunakan terkecuali ROA diestimasi dalam bentuk log linear untuk mendapatkan gambaran elastisitas. Adapun ringkasan statistik untuk variabel-variabel yang digunakan dalam model di atas ditunjukkan pada Tabel 2.

**Tabel 2.**  
**Ringkasan Statistik**

Variabel	Obs	Mean	Std.Dev	Min	Max
LGINI	77	3,724035	0,1315671	3,427515	3,88609
ROA	95	0,7568719	2,97577	-16,44494	3,55372
LSMC	130	4,151707	0,939095	0,1909509	5,581855
LDPDS	111	1,80002	1,906348	-3,479916	4,173406
LUNEM	120	1,329995	0,7050554	-0,356675	2,476538
LEMPA	119	2,933082	1,535888	-1,609438	4,198705
LVEM	100	3,436741	0,7306146	2,104134	4,268298

Teknik estimasi yang digunakan adalah analisis data panel yang memberikan kemudahan dan fleksibilitas dalam melakukan pemodelan antar waktu dan antar individu secara bersamaan. Implikasinya, hasil estimasi akan lebih akurat karena data panel secara struktur lebih mendekati realita dibandingkan data runtun waktu atau data silang saja. Selain itu, secara teoretis, dengan jumlah observasi yang semakin banyak (N) sehingga memperbesar derajat kebebasan dan menurunkan kemungkinan adanya kolinearitas antar variabel bebas (Greene, 2005; serta Hsio, 2003 dan Klevmarken, 1989 dalam Baltagi, 2005).

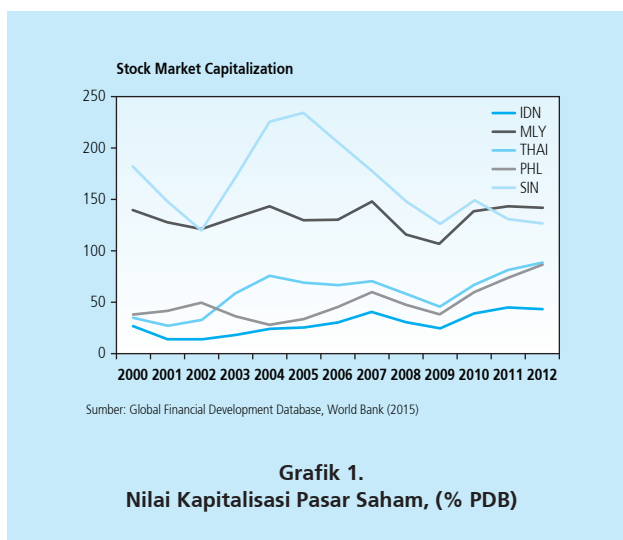
Tergantung pada struktur matriks kovarian dan sifat variabel yang ada dalam model, kita harus memilih model terbaik diantara pilihan Pool Least Square (PLS), Fixed Effect Model (FEM), dan Random Effect Model (REM). Langkah selanjutnya adalah kembali model tersebut untuk kemungkinan satu atau beberapa variabel independen yang tidak betul-betul bersifat eksogen. Untuk mengatasi masalah tersebut, teknik estimasi Generalised Method of Moment (GMM) diperlukan. Karenanya, dalam penelitian ini akan digunakan model data panel dinamis Arellano-Bond. Teknik ini dianggap cocok untuk mengecek estimator yang memiliki variabel independen yang bersifat tidak eksogen, bermodel efek tetap, dan berpola heteroskedastisitas dan serial korelasi yang spesifik per individu (Roodman, 2006).

## IV. HASIL DAN ANALISIS

### 4.1. Deskripsi Anatomi Finansialisasi ASEAN - 5

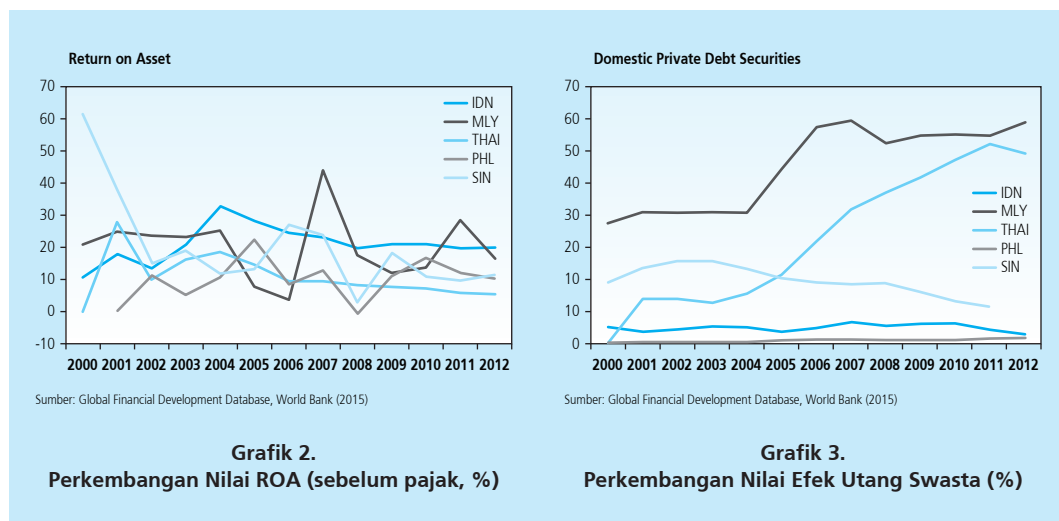
Diantara indikator pembangunan keuangan global, ada beberapa indikator yang lazim digunakan untuk melihat seberapa dalam finansialisasi di negara ASEAN-5. Indikator-indikator tersebut antara lain nilai kapitalisasi pasar (*stock market capitalization*), rasio profitabilitas (*Return on Asset/ROA*), efek utang swasta domestik (*domestic private debt securities*), dan pendapatan nonbunga sektor perbankan (*bank non-interest income*)

Terkait hal itu, sejak 2009, nilai kapitalisasi saham di pasar keuangan atau lebih sering dinamakan sebagai pola dan kecenderungan nilai kapitalisasi pasar diantara negara ASEAN-5 terus naik dari waktu ke waktu terkecuali Singapura (lihat Grafik 1). Grafik 1 juga menunjukkan bagaimana nilai kapitalisasi pasar Singapura selalu berada di peringkat teratas hingga 2010. Sayangnya, sejak 2011, Malaysia berhasil menyalip Singapura dalam hal nilai kapitalisasi pasar. Adapun posisi negara ASEAN-5 lainnya seperti Thailand, Indonesia, dan Filipina tidak mengalami perubahan dalam periode 2000-2012. Menariknya lagi, nilai kapitalisasi pasar Singapura dan Malaysia selalu berada di atas nilai pendapatan nasionalnya (PDB) dalam kurun waktu 2000-2012. Sebaliknya, dalam periode tersebut, nilai kapitalisasi pasar Thailand, Indonesia, dan Filipina masih di bawah nilai pendapatan nasionalnya.



Adapun pola dan kecenderungan nilai imbal hasil atas aset (*Return on Asset/ROA*) terlihat berbeda dengan indikator nilai kapitalisasi pasar. Secara umum, nilai ROA tertinggi masih dipegang oleh Indonesia kendati pernah disalip oleh Malaysia pada 2011. Sebaliknya, Thailand justru berada pada posisi terbawah untuk nilai ROA. Menariknya, Singapura yang dikenal sebagai

pusat keuangan di kawasan ASEAN justru memiliki nilai ROA yang lebih rendah dibandingkan Indonesia dan Malaysia. Menariknya lagi, Malaysia dan Singapura memiliki nilai ROA dengan tingkat volatilitas relatif yang lebih tinggi diantara negara ASEAN-5 lainnya.



Di samping itu, finansialisasi dinilai tidak melulu soal nilai kapitalisasi pasar dan imbal hasil atas aset. Nilai efek utang swasta sebagai bagian dari proses sekuritisasi dan kebijakan keuangan perusahaan juga penting untuk diperhatikan. Grafik 3 di atas menunjukkan nilai efek utang swasta di Malaysia menempati ranking tertinggi diantara negara ASEAN-5. Sebaliknya, Filipina dan Indonesia menempati posisi paling buncit dalam hal nilai efek utang swasta. Menariknya, jurang nilai efek utang swasta antara Malaysia dan Singapura kian melebar pasca krisis keuangan global 2008. Menariknya lagi, nilai efek utang swasta Malaysia dan Thailand terus meningkat sejak 2004. Sementara itu, nilai efek utang swasta Singapura justru bergerak ke turun sejak 2004 dan mengalami penurunan yang cukup signifikan pasca 2008.

Analisa deskriptif ini dipersandingkan dengan hasil estimasi model ekonometrik berikut. Perbandingan ini penting untuk memberikan penjelasan logis dan argumen yang saling menguatkan, atau justru argumen yang saling bertentangan. Keduanya penting sebagai bagian dari *robustness test* dalam penelitian ini.

#### 4.2. Pemilihan Model dan Hasil Estimasi

Pemilihan model menggunakan uji Breusch-Pagan Lagrange Multiplier sebagaimana ditampilkan pada Tabel 3. Hasilnya, menunjukkan REM tidak dapat dijalankan. Dengan demikian, kesemua model yang digunakan dalam analisis data panel disarankan menggunakan model efek tetap (FEM).

**Tabel 3.**  
**Hasil Uji Breusch-Pagan Lagrange Multiplier**

Jenis Model	Prob>chibar2	Keputusan	Kesimpulan
Model 1	1.0000	H <sub>0</sub> diterima	Menggunakan model efek tetap
Model 2	1.0000	H <sub>0</sub> diterima	Menggunakan model efek tetap
Model 3	1.0000	H <sub>0</sub> diterima	Menggunakan model efek tetap
Model 4	1.0000	H <sub>0</sub> diterima	Menggunakan model efek tetap

Untuk melihat apakah terdapat otokorelasi pada model data panel dinamis, digunakan uji autokorelasi Arellano-Bond. Hasilnya, dari Tabel 6 di bawah terlihat bahwa secara statistik hipotesis awal (null hypothesis) yang menyatakan tidak terdapat autokorelasi diterima atau tidak dapat ditolak. Dengan demikian, dari semua model yang dilibatkan, tidak ada satupun yang memiliki autokorelasi.

**Tabel 4.**  
**Hasil Uji Autokorelasi**

Jenis Model	Prob > z		Keputusan	Kesimpulan
Model 1	Order 1	0,1901	H <sub>0</sub> diterima	Tidak terdapat otokorelasi
	Order 2	0,2847		
Model 2	Order 1	0,2098	H <sub>0</sub> diterima	Tidak terdapat otokorelasi
	Order 2	0,3267		
Model 3	Order 1	0,1848	H <sub>0</sub> diterima	Tidak terdapat otokorelasi
	Order 2	0,9850		
Model 4	Order 1	0,1367	H <sub>0</sub> diterima	Tidak terdapat otokorelasi
	Order 2	0,5917		

Hasil estimasi pengaruh finansialisasi terhadap distribusi pendapatan dengan menggunakan analisis data panel ditampilkan pada Tabel 4. Jenis analisis data panel yang digunakan pada Tabel 1 adalah model efek tetap. Hasilnya, keempat variabel yang digunakan untuk melihat pengaruh finansialisasi terhadap ketimpangan dengan menggunakan model efek tetap secara statistik terbukti signifikan. Nilai koefisien variabel Lag GINI, ROA dan LSMC bertanda positif yang sementara variabel LDPDS bertanda negatif. Hal ini mengindikasikan bahwa kenaikan nilai Lag Gini, ROA dan LSMC akan memperburuk kesenjangan pendapatan. Sebaliknya, kenaikan nilai LDPDS justru memperbaiki tingkat distribusi pendapatan di kawasan ini.



Tabel 5. Finansialisasi dan Koefisien Gini: Analisis Data Panel (1989-2014) (Variabel Dependen=Gini <sub>i,t</sub> )				
Variabel	Model 1	Model 2	Model 3	Model 4
<b>Variabel Lag</b>				
Log GINI <sub>i,t-1</sub>	0.5523*** (0.1309)	0.5471*** (0.1297)	0.3837*** (0.0845)	0.2243** (0.0873)
<b>Variabel Kunci</b>				
ROA	0.0046** (0.0021)	0.0041** (0.0021)	0.0031** (0.0013)	0.0036* (0.0020)
LSMC	0.0612** (0.0280)	0.0784** (0.0307)	0.0943*** (0.0147)	0.0516*** (0.0198)
LDPDS	-0.0184*** (0.0066)	-0.0148** (0.0071)	-0.0326*** (0.0030)	-0.0166** (0.0068)
<b>Variabel Kontrol</b>				
LUNEM		0.0398 (0.0307)	0.0511* (0.0282)	.0098605 .0532646
LEMPA			-0.1978 (0.1449)	-0.5009** (0.2428)
LVEM				-0.0185 0.0576)
CONS		1.3184*** (0.4405)	2.4436*** (0.9262)	4.1802*** (1.2566)
Catatan: Standard Error (dalam kurung), *p<0.10, **p<0.05, ***<0.01				

Tabel 5 menunjukkan nilai koefisien lag gini sebesar 0.55 yang artinya kenaikan 10 persen nilai koefisien gini tahun sebelumnya akan meningkatkan tingkat kesenjangan pendapatan sesudah periode tersebut sebesar 5,5 persen. Selanjutnya, nilai koefisien ROA dan LSMC masing-masing sebesar 0,005 dan 0,06 yang mengindikasikan bahwa kenaikan nilai ROA dan LSMC masing-masing sebesar 10 persen menyebabkan kenaikan nilai koefisien gini berturut-turut sebesar 0,05 persen dan 0,6 persen. Adapun nilai koefisien LDPDS adalah -0,02 yang mengindikasikan kenaikan nilai LDPDS sebesar 10 persen akan menurunkan nilai koefisien gini sebesar 0,2 persen. Dari ketiga variabel finansialisasi yang digunakan menunjukkan bahwa meski signifikan, namun pengaruhnya terhadap distribusi pendapatan di kawasan ASEAN belum memiliki pengaruh yang dominan.

Sebagaimana telah diuraikan sebelumnya, salah satu permasalahan yang mengemuka dalam analisis data panel adalah jika terdapat lag dari variabel terikat sebagai variabel bebas, maka kemungkinan akan terdapat korelasi antara variabel terikat dengan residu. Atas dasar itu, maka analisis panel data dengan menggunakan model efek tetap perlu dilanjutkan dengan menggunakan analisis Generalized Method of Moments (GMM) guna mendapatkan analisis yang lebih baik. Menurut Roodman (2006), analisis GMM dibutuhkan karena seperti dalam kasus OLS, analisis panel data dengan lag variabel dependen dan error yang saling berautokorelasi berpotensi menghasilkan parameter yang inkonsisten. Karena itu, analisis data

panel akan menjadi lebih baik jika dilanjutkan dengan analisis *dynamic panel data model* yang dikembangkan oleh Arellano-Bond (1991) atau lebih populer dikenal sebagai *Arellano-Bond estimator*.

Atas dasar itu, maka penggunaan metode GMM melibatkan beberapa variabel instrumen untuk menyelesaikan permasalahan adanya korelasi antara lag dependen variabel dengan residual dan adanya hubungan antara regressor lag variabel terikat dengan residual. Adapun yang dimaksud dengan variabel instrumen adalah variabel yang tidak memiliki hubungan atau korelasi dengan residual. Atau, variabel yang memiliki korelasi dengan variabel bebas namun tidak memiliki pengaruh langsung terhadap variabel terikat. Karena itu, variabel instrumen yang dilibatkan adalah *bank credit to bank deposit (BCBD)* dan *bank non-intererst income to total income (BNII)*.

Tabel 6. Finansialisasi dan Koefisien Gini: Analisis GMM (1989-2014) (Variabel Dependen=Gini <sub>i,t</sub> )				
Variabel	Model 1	Model 2	Model 3	Model 4
<b>Variabel Lag</b>				
Log GINI <sub>i,t-1</sub>	0.5676*** (0.0501)	0.5330*** (0.0059)	0.3837*** (0.0845)	0.2243*** (0.0873)
<b>Variabel Kunci</b>				
ROA	0.0050*** (0.0008)	0.0038*** (0.0011)	0.0031** (0.0013)	0.0036* (0.0020)
LSMC	0.0620** (0.0244)	0.0822*** (0.0165)	0.0943 *** (0.0147)	0.0516*** (0.0198)
LDPDS	-0.0057 (0.0151)	-0.0243** (0.0106)	-0.0326*** (0.0030)	-0.0166** (0.0068)
<b>Variabel Kontrol</b>				
LUNEM		0.0501 (0.0153)	0.0511* (0.0282)	0.0099 (0.0533)
LEMPA			-0.1978 (0.1449)	-0.5009 (0.2428)**
LVEM				-0.0185 (0.0576)
CONS	1.3463*** (0.1330)	1.360*** (0.0427)	2.4436*** (0.9262)	4.1802*** (1.2566)

Catatan: Standard Error Robust (dalam kurung), \*p<0.10, \*\*p<0.05, \*\*\*<0.01

Hasil estimasi dengan menggunakan teknik estimasi GMM ditampilkan pada Tabel 6. Secara umum, tabel tersebut menunjukkan bahwa finansialisasi secara statistik terbukti memiliki pengaruh yang signifikan terhadap distribusi pendapatan. Ketiga indikator finansialisasi yang digunakan untuk mengukur pengaruh proses finansialisasi terhadap nilai koefisien gini menghasilkan tanda koefisien yang konsisten dengan hasil estimasi model efek tetap. Hasilnya, koefisien estimasi untuk variabel ROA dan LSMC terbukti memiliki pengaruh yang

searah terhadap koefisien gini. Artinya, kenaikan ROA dan LSMC akan memberikan efek yang buruk terhadap perbaikan kesenjangan pendapatan. Sebaliknya, koefisien estimasi variabel LDPDS konsisten negatif yang mengindikasikan bahwa kenaikan nilai variabel tersebut akan menurunkan nilai koefisien gini atau akan memperbaiki tingkat ketimpangan pendapatan.

## **V. KESIMPULAN**

Tujuan dari studi ini adalah untuk mengukur pengaruh proses finansialisasi dalam perekonomian terhadap distribusi pendapatan di negara ASEAN-5. Untuk mengukurnya, data yang digunakan berupa data panel periode 1989-2014. Dengan menggunakan model efek tetap dan model data panel dinamis Arellano-Bond, hasil estimasi kedua jenis analisis data panel tersebut membuktikan bahwa ketiga variabel finansialisasi yang dipilih memiliki pengaruh yang signifikan terhadap distribusi pendapatan. Variabel nilai kapitalisasi pasar dan imbal hasil atas aset sebelum pajak berkorelasi positif dengan distribusi pendapatan. Artinya, jika nilai kedua variabel tersebut meningkat maka tingkat distribusi pendapatan cenderung akan memburuk. Sebaliknya, variabel nilai efek utang swasta domestik memiliki hubungan yang negatif dengan kesenjangan pendapatan. Hal ini mengindikasikan bahwa kenaikan variabel nilai efek utang swasta domestik dapat berperan sebagai instrumen perbaikan tingkat distribusi pendapatan.

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