RESEARCH ARTICLE

THE EFFECTS OF FISCAL DECENTRALIZATION, ECONOMIC GROWTH AND INCOME INEQUALITY ON POVERTY RATE OF INDONESIA'S 33 PROVINCES.

Khubbi Abdillah[1], Djoko Mursinto[2].
1. Doctoral Study Program, Faculty of Economics and Business, Airlangga University, Surabaya, Indonesia
2. Economics Department, Faculty of Economics and Business, Airlangga University, Surabaya, Indonesia

Manuscript Info	Abstract
	This study aims to analyze the effect of fiscal decentralization, income inequality, and economic growth on poverty rate of 33 provinces in Indonesia. The population of this study consists of 33 provinces in Indonesia. This study utilizes secondary data released by Statistics Indonesia (Badan Pusat Statistik/BPS) from 2009 to 2012. The data were analyzed using panel data regression on Eviews 7 software. The analysis comes to several findings. First, in short term fiscal decentralization and economic growth do not have significant effect on poverty rate while income inequality has significantly negative effect on regional poverty rate. Second, fiscal decentralization and economic growth possess significant and negative effect on regional poverty rate. In long term, regional poverty rate is decreasing in several provinces with high economic growth and high regional income. Third, income inequality does not give significantly negative effect on regional poverty rate. Decreasing income inequality may improve regional poverty rate even though the effect is in minuscule scale. Nevertheless, equitable development will happen in most Indonesia provinces in long term. *Copy Right, IJAR, 2016,. All rights reserved.*

Introduction:-

Regional autonomy as a form of decentralization process in Indonesia brings out regencies, municipalities, and districts as autonomous regions. Decentralization becomes the most logical consequence to improve underdeveloped regions in Indonesia, the biggest archipelago consisting of wide range of islands separated by sea. Demand for decentralization had occurred in the early of 20th century during Dutch Indies era (The, 1999; Wignjosoebroto, 2004). Decentralization did not fully take place. On contrary, some narrow regions were unified to facilitate tax collection. Indonesia also implemented federalized government in 1950s before the issuance of Presidential Decree in 1959 (Dekrit Presiden 1959) (Anderson, 1999). Massive decentralization implemented in Indonesia on January 1 2001, one year after legalization of Law regarding regional autonomy.

Regional autonomy has been implemented in Indonesia for 12 years since the enactment of Law Number 22 Year 1999 regarding Regional Government updated by Law Number 32 Year 2004 and Law Number 25 Year 2004 on Financial Balance between Central Government and Local Government (as amended by Law Number 33 Year 2004). The substance of the amendment is that Local Government has greater authority to manage its own governance and financial matters. The objective of the amendment is that through decentralization each region becomes more independent in implementing governance and development.

According to Anwar Syah (2002), decentralization policy consists of three different perspectives, namely political decentralization, administrative decentralization, and financial decentralization. From political perspective, decentralization distributes the authorities owned by central government and local governments evenly. From administrative perspective, the central government "shares" some of its authorities to be managed by local governments to simplify and speed up public services while from financial perspective decentralization attempts to

reduce fiscal disparity among local government (horizontal imbalance) and fiscal disparity between local government and central government (vertical imbalance).

During regional autonomy era, it turns out that funding components given by the central government is much larger than Regional Own-Source Revenue (Pendapatan Asli Daerah/PAD) collected by each local government (Nordholt and Klinken, 2008). This phenomenon indicates that central government is much stronger than local government. Unfortunately, decentralization followed by proliferation of administrative regions has encouraged the local government to utilize all local resources (including prioritizing on local residents). In this sense, local governments are more oriented on its internal affairs and inhibit inter-regional cooperation. This situation improve sentiment on local identities such as ethnicity, religious views, race, and group so that these factors are practically implemented on political and economic aspects of the region. As a response to this problem, Indonesian government attempts to fulfill the demand on decentralization without causing disintegration. In this case, Indonesian Government issued Law Number 18 Year 2001 on Special Autonomy for Aceh Province (Nanggroe Aceh Darussalam). Through the law, Indonesian Government agrees to share 70% of its oil and natural gas revenue with Aceh Provincial Government (after amendment, the proportion is changed to 50% for Aceh Provincial Government and 50% for central government). Indonesian government reconciles with two most volatile regions, Papua and West Papua Province by issuing Law Number 21 Year 2001. These laws have excluded Papua, West Papua and Aceh from the implementation of Law Number 22 Year 1999 (as amended by Law Number 32 Year 2004) on Regional Government. Increased funding allocated by central government to Aceh and Papua has successfully reduced turmoil happening in the two provinces. Through decentralization, Indonesian government successfully declined turmoil and protests in other provinces, such as Riau and East Kalimantan. In order to cope with turmoil in Riau, Indonesian government segregated Riau Province into two new provinces: Riau and Kepulauan Riau. By implementing decentralization, the government has created more conducive situation for economic growth. Viewed from the mission of decentralization policy, regional segregation is a way to accelerate public service and thus improve regional welfare.

The implementation of fiscal decentralization is expected to lower poverty rate and disparity among provinces because fiscal decentralization will distribute centers of economic growth that once centered in Java (especially Jakarta). In fiscal decentralization, each province has authority to manage its own financial matters and improve financial independence of the region through tax collection. The function of tax collection is to fund development of the region through its budgetary function. Tax collection also functions on economic activities carried out on the region, resource allocation, and redistributing regional income and regional consumption in the region through its regulation function (Musgrave and Musgrave, 1989). Due to these functions, the allocation of regional tax revenue focuses on strategic consumptions conducted by local government to reduce poverty rate and to improve economic growth in the region and reduce disparity between rich and poor regions. Based on this phenomenon, the writers propose a hypothesis that the higher financial independence of a local government the more capable the government to reduce its poverty rate and improving its economic growth and reducing income disparity within the region. In order to prove the hypothesis, the writers design this study to examine and testify the effects of financial decentralization, income disparity, and economic growth on poverty rate of Indonesia's 33 provinces in short term period and long-term period.

Theoretical frameworks:-
Autonomy comes from Greek words auto (means self) and nomos (means regulation/laws) (Sarundjajang, 2000: 33). Autonomy refers to a government that is able to self-govern its region implemented on regulations designed by the government itself by considering aspiration of its people. Paragraph 5 and 6 of Law Number 32 Year 2004 on Regional Government Article 1 states: autonomy refers to rights, authorities, and obligations owned by an autonomous region to set and take care of its government affairs and local community interests in accordance with legislative regulations as an autonomous region refers to a unit of legal community with its own administrative area borders regulating and managing its own governmental affairs and interests of its people based on its own initiative under the Unitary State System Republic of Indonesia (Negara Kesatuan Republik Indonesia/NKRI).

Widjaja (2002) explains that through regional autonomy the regions are expected to be more independent in conducting all of its activities while on other hand central government is expected to be able to loosen its influence on local governments. Local governments are expected to be able to play its functions to facilitate and develop its region without external intervention based on its public accountability (its responsibility towards local community

and towards central government) as consequence of Indonesia as a unitary state. In unitary states, regional autonomy is given by central government to the local government. In this sense, local government merely "receives" the authority from the central government. This concept differ Unitarian countries from federal country where regional autonomy is innate to every state and every state in a federal country gives its authorities to the federal government therefore every matter dealt by the federal government is basically given by the states.

Decentralization has become global phenomenon. Roy Bahl and Jorge Martinez-Vasquez (2002) argued that a well-designed decentralization may bring the efficiency of public services and make public service closer to the target (i.e. local community) thus decentralization may help developing the region and reducing its poverty rate. However, the implementation of decentralization may be hard at first because it closely relates to political, fiscal, administrative, and institutional policies.

Prud'homme Remy (1995) sees another side of decentralization. He concludes despite of global trend tend to implement decentralization, the actual condition of decentralization may contradict standard theories on fiscal decentralization. He finds that decentralization has its own negative sides. By considering these negative sides or disadvantages, a government has a better option to implement decentralization. Instead of totally decentralizing all of its authorities, a government may choose what functions or sectors to be decentralized and by what regions. In some cases, the main problem lies on how to coordinate public service administration at different levels altogether rather than to determine who administering public services (central government or local governments). In their study, Ahmad, Junaidi et al.(2005) found that dissatisfaction on the implementation of centralistic approach on public service administration pushes the government to decentralize its responsibilities in administering public service to the local government.

Provinces with High Economic Growth Rate, Low Poverty Rate	Provinces with High Economic Growth Rate, High Poverty Rate
Aceh	North Sumatera
Riau	West Sumatera
Riau Islands	Jambi
Bangka and Belitung	South Sumatera
Bengkulu	Lampung
Eastern Nusa Tenggara	kDKI KJakarta
Central Kalimantan	West Java
North Sulawesi	Banten
Gorontalo	Central Java
Central Sulawesi	DI Yogyakarta
West Sulawesi	East Java
South-Eastern Sulawesi	Bali
Maluku	West Nusa Tenggara
Northern Maluku	West Kalimantan
Papua	South Kalimantan
West Papua	East Kalimantan
	South Sulawesi

One way to map financial capacity of the provinces in Indonesia is by using quadrant method. The provinces are mapped on four different quadrants depending on the amount of average fiscal decentralization (i.e. ratio between Regional Own-Source Revenue/Pendapatan Asli Daerah (PAD) and Total Regional Revenue) and average poverty rate on the region during 2009-2012. Figure 1.1 below describes conditions of each quadrant. First quadrant describes the ideal condition where the regions have high fiscal decentralization rate and lower poverty rate (compared to national poverty rate). This quadrant consists of 13 provinces. The second quadrant consists of provinces with high fiscal decentralization rate and high poverty rate. The members of this quadrant are 4 provinces. Quadrant III and IV indicates less ideal conditions where the regions have low fiscal decentralization rate and high poverty rate (Quadrant III) and low fiscal decentralization rate and low poverty rate (Quadrant IV). The members of these quadrants are 8 province for each quadrant.

QUADRANT III (LOW FISCAL DECENTRALIZATION RATE, HIGH POVERTY RATE)		QUADRANT II (HIGH FISCAL DECENTRALIZATION RATE, HIGH POVERTY RATE)	
Papua			
West Papua		Western Nusa Tenggara	
Maluku		Lampung	
Eastern Nusa Tenggara		DI Yogyakarta	
Gorontalo		Central Java	
Nanggroe Aceh Darussalam			
Central Sulawesi			
Bengkulu			
Bangka and Belitung		DKI Jakarta	West Sumatera
Central Kalimantan		Bali	West Java
Riau Islands		South Kalimantan	South Sulawesi
North Sulawesi		Banten	North Sumatera
Riau		Jambi	South Sumatera
North Maluku		East Kalimantan	East Java
West Sulawesi		West Kalimantan	
South-Eastern Sulawesi			
QUADRANT IV (LOW FISCAL DECENTRALIZATION RATE, LOW POVERTY RATE		QUADRANT I (HIGH FISCAL DECENTRALIZATION RATE, LOW POVERTY RATE)	

Figure 1.1: Position Matrix of Fiscal Decentralization Rate and Poverty Rate of 33 Provinces in Indonesia 2009-2012

Dollar and Kraay (2000) estimated elasticity of GDP growth of income per capita of the poor communities is 1%. It indicates that every 1% of output growth contributes 1% of poor community income. However, Timmer (1997) applies similar econometric techniques finding out that the elasticity is as much as 8%. This finding is supported by other studies, including the one conducted by World Bank (2005). In their study, World Bank (2005) shows negative correlation between poverty rate and economic growth.

Recent academic debates often talk about correlation between economic growth and decreasing poverty rate. The main question on these debates is whether economic growth advantages the poor. During the late 1990s, the term "pro poor growth" became popular as the economists started to analyze the policies to decrease the poverty rate faster through economic growth and income distribution. Pro poor growth is defined as economic growth that absolutely decreases poverty rate (OECD, 2001; UN, 2000). To provide analytic and operational relevance to the concept, economic literature comes with two approach. The first approach focuses on belief that the poor definitely feels the advantages of economic growth even though the advantages of economic growth even though the distribution of economic growth results is very disproportional. The second approach focuses on increasing income per capita of the poor by accelerating economic growth and improving participation of the poor on economic growth and the result may accelerate poverty rate decreasing. By focusing on accelerating poverty rate decrease, this approach consistently committed to the first mission of Millennium Development Goals (MDGs), namely reducing the number of people with daily income less than 1 dollar a day (extreme poverty) from 1990 to 2015 (World Bank, 2006).

Many previous studies found that economic growth might improve income per capita, which in turn reduces poverty rate (Dollar and Kraay, 2001; Field, 1989). Calderon and Serven analyzed the effect of infrastructure development on economic growth and income distribution. The samples of this study were 121 countries in 1960-2000. This study came out with two significant findings: 1) proper infrastructure development positively affects long-term economic growth; and 2) indecent quality and quantity of infrastructure may bring negative effect on income equality. These findings are significant in terms of statisticsf and economics.
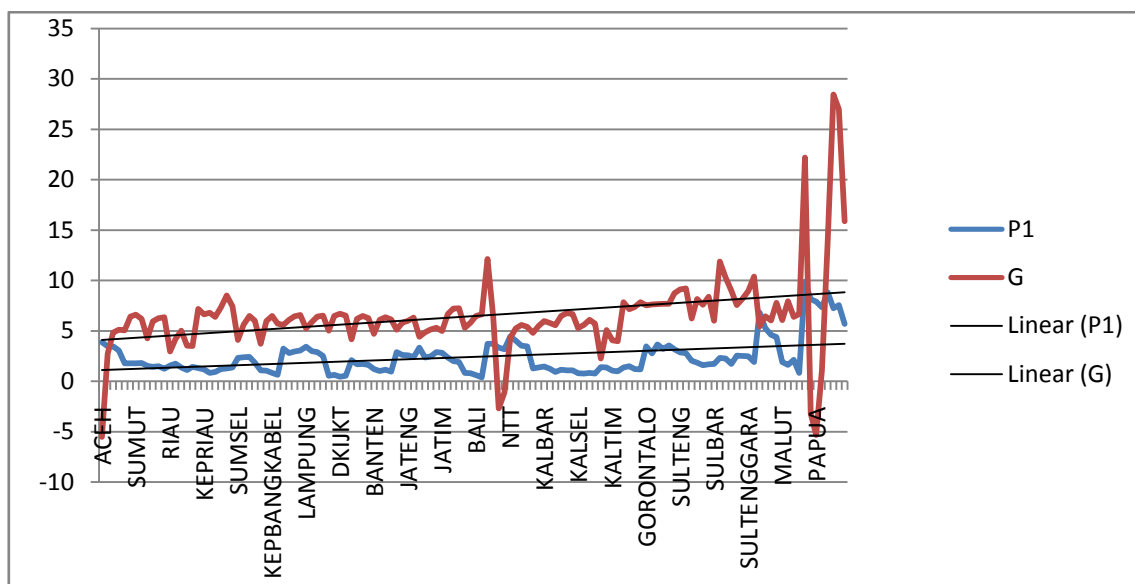
Figure 1.2: Economic Growth Rate and Poverty Rate of Indonesian 33 Provinces in 2009-2012

Figure 1.2 above shows that economic growth of Indonesian provinces during 2009-2012 closely associates with poverty rate. During 2009-2012, we can see that the development of poverty rate always follows economic growth but in different direction. In this case, the improvement on economic growth will decrease the poverty rate. The inverse correlation between these two phenomena can also be seen on its linear line. During 2009-2012 economic growth rate of Indonesian provinces tends to be increasing while its poverty rate tends to be decreasing. However, several provinces may have both increasing economic growth rate and increasing poverty rate.

There are three strategies to help poor communities access the results of economic growth (World Bank, 2006), namely by maintaining macro economy stability (i.e. by maintaining inflation rate low and maintaining currency rate at stabile and competitive level); improving accessibility for poor communities towards the advantages of economic growth; and investment to improve poor community capability.
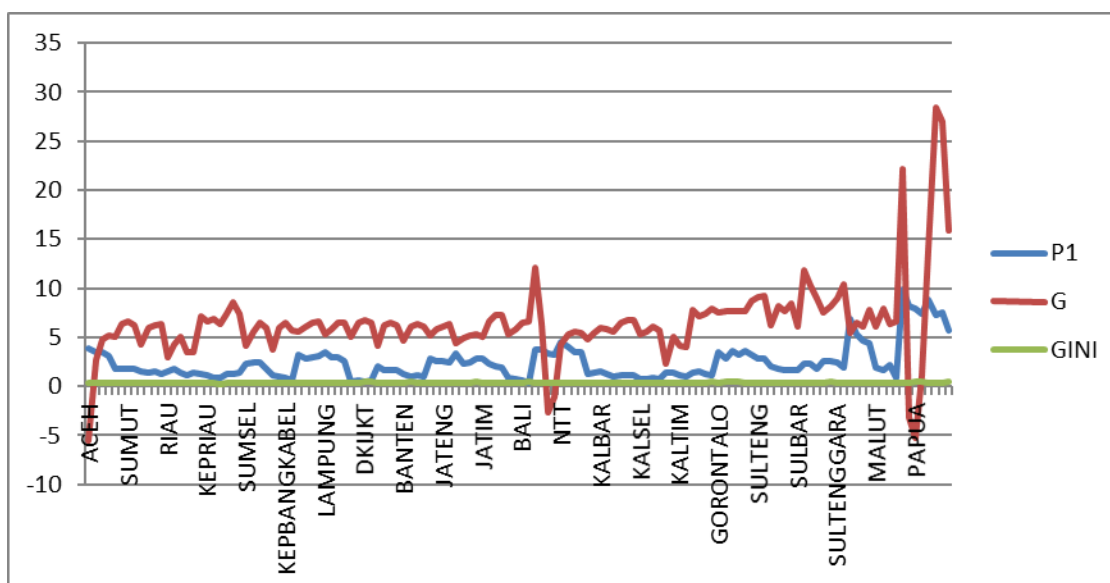
Figure 1.3: Economic Growth Rate, Income Inequality, and Poverty Rate of Indonesian Provinces

In general, poverty is characterized by income gained by a person is below certain thresholds or poverty standard. A person is categorized as "poor" if his/her average monthly income per capita is below poverty threshold. Meanwhile,
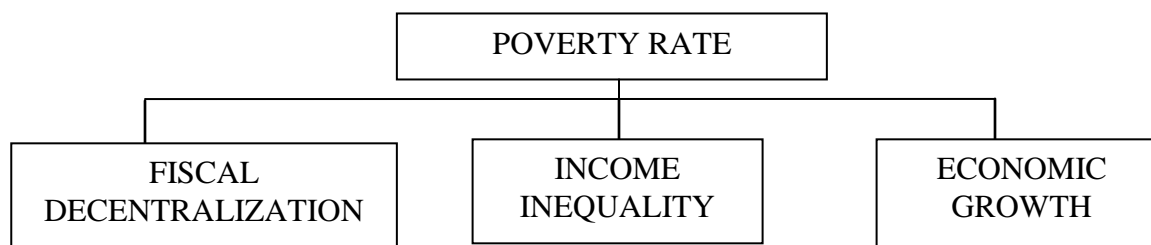
inequality is defined as disparity between the rich and the poor. In some cases, when economic growth is increasing and poverty rate is improving the poor community gets richer however the rich becomes richer. This may worsen the inequality (i.e. the disparity becomes greater). On the other hand, in some cases for example when stock exchange plummeted and the rich gain many losses the inequality may be improved when the disparity between the rich and the poor becomes nearer (Kuncoro, 2013).

Figure 1.3 above indicates correlations among economic growth, poverty rate, and income imbalance of Indonesian provinces during 2009-2012. The figure shows that economic growth is in line with decreasing poverty rate but economic growth opposes income distribution. In this sense, trend of economic growth does reduce the poverty rate but on the other side it also imbalances income distribution.

Research methodology:-
This study utilized secondary data obtained from Statistics Indonesia (Biro Pusat Statistik/BPS) consisting of data panel of 33 provinces in Indonesia during 2009-2012. The data contained Regional Own-Source Income (Pendapatan Asli Daerah/PAD) of the provinces in Indonesia, total regional income of the provinces in Indonesia, and economic growth depends on constant price (2000), economic growth based on Provincial Governments, and Human Development Index (Indeks Pembangunan Manusia/IPM) released by Provincial Governments. This study aims to analyze the effects of fiscal decentralization, income inequality, and economic growth on decreasing regional poverty rate of the provinces in Indonesia during 2009-2012.

In this study, the writers applied data panel regression model to analyze the data. Data panel combines time series data and cross section data. Panel method data analysis technique consists of three-step tests namely Pooled Least Square test (PLS), Fixed Effect Model (FEM) approach, and Random Effect Model (REM). The best model was used to examine the correlation among variables (i.e. dependent variable and independent variables). The examination was conducted both partially and simultaneously.

```
                    ┌─────────────────────┐
                    │    POVERTY RATE     │
                    └─────────────────────┘
            ┌───────────────┼───────────────┐
  ┌──────────────┐  ┌──────────────┐  ┌──────────────┐
  │    FISCAL    │  │    INCOME    │  │   ECONOMIC   │
  │DECENTRALIZATION│ │  INEQUALITY  │  │    GROWTH    │
  └──────────────┘  └──────────────┘  └──────────────┘
```

Analysis models:-
This study adopted two models applied on previous study conducted by Martinez and Spuldeva (2010) to analyze the effect of fiscal decentralization on economic growth rate and income inequality. The initial step of data analysis was doing data panel regression based on Expression 3.1 below:

MODEL 1
$$POV_{it} = \beta o + \beta_1 FD_{1it} + \beta_2 INQ_{2it} + \beta_3 GRW_{3it} + \mu_{it}$$

Note:
POV = Poverty Rate
FD = Fiscal Decentralization
INQ = Income Inequality
GRW = Economic Growth Index
β = Elasticity Rate of Independent Variables Contribution on the Dependent Variable
μ = Error term
i = Cross-Section Data Indicator
t = Time Series Data Indicator

The next step on Model 1 was choosing the best model by using Restricted F-test examination and Hausman test. F Mode-test was used to choose better model between Pooled Least Square (PLS) and Fixed Effects Model while

Hausman test was used to determine the better model between Fixed Effects Models (FEM) and Random Effect Model (REM). The next step on this model is measuring R^2 value and assessing its effects in partial and simultaneously.

MODEL 2

$$POV_{it} = \beta o + \beta_1 FD_{1it} + \beta_1 FD_{1it}{}^2 + \beta_2 INQ_{2it} + \beta_3 GRW_{3it} + \beta_3 GRW_{3it}{}^2 + \mu_{it}$$

Model 2 above applied panel regression (balanced panel) step. The step is used to examine theories on fiscal decentralization and economic growth have trade off correlation on poverty rate by squaring the independent variables. The following step on this model is measuring R2 value and assessing its effects in partial and simultaneously.

Findings and discussion:-

In general, Model 1 contains comprehensive independent variables (including dummy variables representing characteristics of each region). Estimations on Model 1 applied Fixed Effect Model (FEM) while Model 2 applied Pooled Least Square Method.

Model 1 attempts to explain how diverse characteristics owned by each province in Indonesia affect its poverty rate. In order to achieve this goal, the writers applied Cross-Section Fixed Effects rather than using the dummies variables on the first model because the distribution of these dummy variables was fixed. The decision in choosing Fixed Effect Model (FEM) is based on several considerations, including the characteristics of data series itself and results of statistical examination. Based on the characteristics of data used in this study, this study used data of all provinces in Indonesia. On the other words, this study used data population rather than data sample. The number of cross-sections on each period is fixed. Based on statistical examination, the value of $F_{statistic}$ was higher than F_{table}. This result rejects H0 and accepts H1 with significance value (α = 5%), p-value F-statistic and chi square are significant. Based on these results, Fixed Effect Model was chosen as estimation technique on this model because the addition of dummy variables might improve residual sum of squares (by assuming that intercept difference between individual and regression (slope) coefficient was constant. The result of Hausman test with significance rate 5% indicated chi square statistic value 11.8 (higher than Chi square table value 0.35. This result rejected H0 and indicated that Fixed Effect Method (FEM) was more suitable than Random Effects Model (REM).

Estimation results presented on Table 1.1 below indicates that fiscal decentralization does not significantly affect poverty rate in Indonesian provinces (as indicated by negative coefficient of fiscal decentralization variable, -1.208 and significance probability 0.2446 higher than expected significance rate (α), 0.05). Table 1.1 below also indicates that economic growth does not significantly affect poverty rate (as indicated by negative coefficient of economic growth variable, 0.004 and significance probability (α) 0.804 higher than expected significance rate 0.05. The estimation table also shows that income imbalance significantly affects poverty rate on 33 provinces in Indonesia (as indicated by positive t-statistic value of income imbalance coefficient, 8.37 and significance probability 0.0000 lower than expected significance rate (α) 0.05.

Besides these statistical data, Table 1.2 also indicates that efforts carried out by the local governments to lower its regional poverty rate may reduce disparity of income imbalance in the regions. In general, positive cross-section fixed effect coefficients mark that increasing regional poverty rate will increase income disparity. DKI Jakarta is the Province with biggest positive correlation while the provinces with negative correlation are: Papua, Western Nusa Tenggara, and Eastern Nusa Tenggara.

Data panel regression analysis on this study reveals determination coefficient value (R^2) indicating capability of each independent variable to explain variations and alterations of the dependent variable. The measurement result reveals the value of determination coefficient is 0.9789. This means that 97.89% of regional poverty rate as dependent variable in this study can be explained by independent variables (i.e. fiscal decentralization, economic growth, and income imbalance).

Table 1.1.
Estimation on the Effects of Fiscal Decentralization, Economic Growth, and Income Imbalance on Poverty Rate of Indonesia's 33 Provinces 2009-2012 (Model 1) .

Independent Variables	PLS	FEM	REM
Model 1			
Fiscal Decentralization	5,280763	-1,208462	-0,188331
	0,000*	0,2446	-0,8428
Economic Growth	0.005323	-0,004077	-0,005979
	0,9318	0,8047	0,7151
Income Imbalance	-8,974102	14,77977	14,10639
	0,1436	0,000*	0,000*
R-squared	0,140389	0,97899	0,32478
Adjusted R-squared	0,120242	0,971331	0,308954
S.E. of regression	2,781677	0,502151	0,519162
F-statistic	6,9682	127,8093	20,52261
Probability (F-statistic)	0,000222*	0,000*	0,000*
F - Test			
Effect Test	Stat	Df	Prob
Cross-section F	119,745049	32,96	0,000*
Cross-section Chi-square	489,917622	32	0,000*
Hausman - Test			
Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	11,818699	3	0,008*

Table 1.2:
Income Imbalance Cross-Section Fixed Effect Coefficients of Indonesian Provinces (2009-2012) .

No	Provinces	Coefficients	No	Provinces	Coefficients
1	ACEH	0.205325	18	NTB	-6.43241
2	SUMUT	2.479828	19	NTT	-4.87166
3	SUMBAR	2.419649	20	KALBAR	-2.69331
4	RIAU	4.215452	21	KALTENG	3.384616
5	KEPRIAU	3.880952	22	KALSEL	-1.80707
6	JAMBI	1.71893	23	KALTIM	3.661068
7	SUMSEL	1.376188	24	SULUT	3.953899
8	KEPBANGKABEL	1.948399	25	GORONTALO	-2.65286
9	BENGKULU	1.263858	26	SULTENG	-0.96617
10	LAMPUNG	-0.233055	27	SULSEL	-0.64012
11	DKIJKT	5.440825	28	SULBAR	-1.98822
12	JABAR	0.347042	29	SULTENGGARA	-2.69889
13	BANTEN	-1.444191	30	MALUKU	-0.6529
14	JATENG	1.042817	31	MALUT	-2.799
15	DIJOGJA	3.382818	32	PAPUA	-8.10737
16	JATIM	0.371407	33	PAPUABAR	-3.5068
17	BALI	0.400941			

The verification of the effects of independent variables on the dependent variable is carried out through F-test measurement. Based on the measurement, the writers found that F-statistic value as much as 127.80 while F-table value as much as 1.46 (with numerator value 32, denominator value 131, and significance value 5%). This result shows F-statistic value is higher than F-table. This value rejects H0 and accepts H1 (with probability rate (F-statistic value) 0.0000. this result indicated that the independent variables (i.e. fiscal decentralization, economic growth, and income imbalance) altogether significantly affected the dependent variable (regional poverty rate of 33 provinces in Indonesia 2009-2012).

Model 2 attempts to explain how the independent variables affect the dependent variable. This model applied Pooled Least Square (PLS) method with panel regression (balanced panel) approach on its estimation. The result of estimation (as presented on Table 1.3 above) indicates that fiscal decentralization significantly affects regional poverty rate. This finding is proven by negative coefficient of fiscal decentralization variable (-22.72) and negative t-statistic value (-4.07) with significance probability rate (p) 0.0001 at significance threshold (α) 0.05.

Table 1.3 above shows that economic growth variable significantly affects regional poverty rate of Indonesia's 33 provinces. This finding is proven by negative coefficient of economic growth (-0.007) with negative t-statistic value (-1.66) with significance probability rate (p) 0.0091 at significance threshold (α) 0.05. The estimation proves that income imbalance does not significantly correlate with regional poverty rate of the provinces in Indonesia as indicated by negative income imbalance coefficient (-4.24) and significance probability (p) 0.45, higher than significance threshold (α) 0.05.

Table 1.3:
Estimation of Fiscal Decentralization, Economic Growth, and Income Imbalance Effects on Indonesia's Provinces Poverty Rate 2009-2012 (Model 2)

Independent Variables	Coefficients	t-statistic value	Probability
Model 2			
Fiscal Decentralization	22.73335	4.68351	0*
Fiscal Decentralization (squared)	-22.72131	5.57264	0.0001*
Income Imbalance	-4.249381	5.69521	0.457
Economic Growth	0.222445	0.11207	0.0493**
Economic Growth (squared)	-0.007918	0.004765	0.0991***
R-squared	0.282693	Log likelihood	-308.3677
Adjusted R-squared	0.254229	F-statistic	9.931414
S.E. of regression	2.561108	Prob(F-statistic)	0*
Sum squared residue	826.4689	Durbin-Watson stat	0.114409

Note: Data analyzed using Eviews 7
* = Significance rate threshold 1%
** = Significance rate threshold 5%
*** = Significance rate threshold 10%

Data panel regression analysis (balanced panel) conducted in this study resulted determination coefficient (R^2) indicating capability of all independent variables altogether explain variations and alterations of the dependent variable. Based on the analysis, the value of R^2 coefficient is 0.2826. This finding indicates that 28.26% of poverty rate in Indonesia provinces can be explained by the independent variables (i.e. fiscal decentralization, economic growth, and income imbalance) whereas 71.13% of poverty rate correlates with other variables which were not analyzed in this study.

The effects of the independent variables on the dependent variables was carried out through F-test examination. The result of F-test examination indicates F-statistic value as much as 127.80 with F-table value as much as 1.46 (numerator = 32 and denominator = 131) and significance rate threshold (α) 0.05. From the estimation, it is found that F-statistic value is higher than F-table. This finding rejects H_0 and accepts H_1 with probability value (F-statistic) 0.0000. It proves that all independent variables (fiscal decentralization, economic growth, and income imbalance) significantly affect the regional poverty rate of 33 provinces in Indonesia from 2009 to 2012.

Conclusion:-
1. The estimation conducted in this study using Model 1 and Model 2 proves that fiscal decentralization, economic growth rate, and income imbalance altogether significantly affect regional poverty rate of 33 provinces in Indonesia.
2. Model 1 estimation indicates that fiscal decentralization and economic growth variables do not significantly affect regional poverty rate while income imbalance negatively and significantly affect regional poverty rate on 33 provinces in Indonesia. This finding shows that economic growth and fiscal decentralization applied on the regions are not able to reduce poverty rates on the regions in short term period. On the other hands, there is positive correlation between income imbalance and poverty rate. In this sense, the higher

income disparity the higher regional poverty rate. Therefore, it may be assumed that increasing regional poverty rate is caused by uneven distribution of regional revenue where most of regional revenue is distributed to and utilized by rich communities.

3. Model 2 estimation indicates that fiscal decentralization and economic growth significantly affect regional poverty rate. Income imbalance does not significantly affect regional poverty rate. Negative correlation between fiscal decentralization and regional poverty rate indicates that improvements on fiscal decentralization (for example, the increasing of Regional Own-Source Revenue (Pendapatan Asli Daerah/PAD) may reduce regional poverty rate on that region in long term period. Therefore, regional financial independence will help reduce regional poverty rate by allocating its Regional Own-Source Revenue into programs implemented to eradicate poverty rate in the region. Negative correlation between economic growth and poverty rate indicates that economic growth may reduce regional poverty rate in long term period. In this sense, economic growth will reduce regional poverty rate through its trickle down effects in forms of increasing employment and wages. Decreasing income imbalance may also improve regional poverty rate even though the effect is minuscule. Yet, development will be distributed evenly in most provinces in Indonesia in long term period.

Bibliography:-

1. Anderson, BR'OG. 1999. Indonesian Nationalism Today and in the Future. In: Indonesian. No. 67, April.
2. Bahl, Roy & Jorge Martinez-Vazquez. 2005. Sequencing Decentralization. T. k : t.p.
3. BPS. 2013. Statistik Keuangan Pemerintah Provinsi Tahun 2009-2012.
4. Calderon, C. & Serven, L. (2004). The Effect of Infrastructure Development on Growth and Income Distribution. Retrieved from http://bcentral.cl.eng/stdpub/studies/workingpaper/htm/270.htm.
5. Dollar, David & Aart Kraay. (2002). Growth is Good for the Poor, Journal of Economic Growth.
6. Kuncoro, Mudrajad. 2013. Mudah Memahami & Menganalisis INDIKATOR EKONOMI. UPP STIM YKPN: Yogyakarta.
7. Martinez, Jorge-Vazquez & Sepulveda, Christian F. 2010. The Consequences of Fiscal Decentralization on Poverty and Income Inequality. International Studies Program Working Paper 10-02 February 2010. Georgia State University, Andrew Young School of Policies Studies.
8. OECD. 2001. Rising to the Global Challenge: Partnership for Reducing World Poverty. The DAC High Level Meeting 25-26 April: Organization for Economic Cooperation and Development.
9. Prud'homme, Rémy. 1995. The Dangers of Decentralization: The World Bank Research Observer, Vol. 10, No. 2 pp. 201-220; stable URL: http://www.jstor.org/stable/3986582.
10. Sarundajang. 2000. Arus Balik Kekuasaan Pusat ke Daerah. Jakarta: Pustaka Sinar Harapan.
11. Taylor, Timothy. (2012). The Instant Economist: Everything You Need to Know About How The Economy Works. London: Plume Book.
12. UN. 1970. Towards Accelerated Deveopment-Proposals for The Second United Nations Development Decade, United Nations Publication No. E. 70. II. A. 2, New York: United Nations.
13. Undang-undang Nomor 32 tahun 2004 tentang Pemerintah Daerah.
14. Undang-Undang Nomor 33 Tahun 2004 tentang Perimbangan Keuangan antara Pemerintah Pusat dan Daerah.
15. Widjaja. HAW. 2000. Otonomi Daerah dan Daerah Otonom. Jakarta: Raja Grafindo Persada.
16. Wignjosoebroto, S. 2004. Desentralisasi Dalam Tata Pemerintahan Kolonial Belanda: Kebijakan dan Upaya Sepanjang Babak Akhir Kekuasaan Kolonial di Indonesia (1900-1940). Bayumedia: Malang.
17. World Bank. 2005. Pro-Poor Growth in the 1990s. Lessons and Insights form Countries, June, Washington, D. C.
18. 2006. World Development Report 2006. Equity and Development, Washington, D. C.