# Growth inequality and convergence in indonesia



### Contents

Expected Consequences

# **Background**

Government has three chief economic maps: stabilising concern rhythm, supplying goods and servicies, and redistributing resources. Cardinal authorities has of import function on stabilising concern rhythm, supplying national goods and servicies, and redistributing resources. Because of the openess of local economic system, local authorities of import function merely in supplying local goods and services. One of the statement is that local authorities has better information about local people demands.

Fiscal decentalisation is defined as the assignment of financial duties to the lower degrees of authorities, that is, the grade of regional (local) liberty and the authorization of authoritiess to make up one's mind upon its ain outgos and its ability to bring forth local grosss.

Institutional models are used in assign financial policy duty to each degree of authorities. In unitary state, this duty is taken by cardinal authorities. On the other manus, in federal states, the financial duty is alocated to cardinal and local authorities. In this federal states, cardinal authorities usage financial transportation or moral suasion in carrying local authorities to obey the national financial policy. Another scheme to curtail the impact of local authorities policy is delegating beginning of gross to subnational governement that has features more stable and cyclically less sensitive. This scheme do the stabilisation policy as the cardinal authorities duty and makes subnational authorities grosss more stable Shah ( 2007 ) .

Decentralization addition competition among territory to react the demand of local citizens. Scholars have different sentiments about this competition. Some of them said that the competition non merely healthy, but besides lead the development procedure reach the Pareto optimality. Others argued that there would be many instances of substructure duplicate, which was sub optimum at the national degree.

Tiebout (1956) showed that decentalisation create "voting-by-feet" mechanism which positively influence the degree of the public goods proviso. Peoples will travel to the country that local authorities gross and outgo match their penchants.

In instance of some territories have a batch of resources than others, cardinal authorities in many decentralised states find troubles to redistribute the income from that beginnings. Rich resource parts inquiring for more gross portion for themselves disregarding the equality aim of states ( Tanzi, 2002 ) .

# **Growth and Equality**

Government outgo sebagai supply or demand (barro, 1990)?

Government outgo on wellness and instruction menjadi Capital in broadterms, and as a consequence capital become changeless return to scale, no longer decreasing return to graduated table (barro, 1990).

Outwardnesss facet of authorities outgo.

Definisi growing, growing per kapita.

Apakah growing tidak bisa bersamaan dengan equality? Apa teorinya?

Sebelum desentralisasi fiskal pertumbuhan lebih tinggi dibandingkan dengan sesudahnya. Apakah ini disebabkan oleh desentralisasi fiskal? Apa teorinya?

Desentralisasi financial didefinisikan sebagai Local expenditure/consolidated authorities outgo.

Apakah equality menjadi lebih baik sesudak desentralisasi fiskal? Apa teorinya?

Tunjukkan dengan informations pertumbuhan sebelum desentralisasi fiskal dengan sesudah desentralisasi fiskal. Tunjukkan pula inequality sesudah desentralisasi fiskal dengan sebelum desentralisasi fiskal. Jawab apakah kemungkinan perubahan tersebut disebabkan oleh desentralisasi fiskal.

Pengeluaran pemerintah daerah sebagian besar ke belanja pegawai. Apakah mempengaruhi growing.

# **Review of Related Literature**

Assorted surveies have been conducted related to the consequence of financial decentalisation on inequality. Some of the surveies states that financial decentalisation reduces the inequality, while others find the opposite consequences.

Using transverse state informations, Shankar et. Al. (2001) states that regional development policies have failed to minimise regional income inequalities. Merely Thailand, out of nine other states, has experienced convergence in regional incomes.

Kim et. Al. (2003) show that the distribution of regional incomes was positively correlated with the spacial distribution of educational services, employment chances, transit and H2O supply installations, and information web variables, whereas the regional disparity was negatively correlated with per capita GDP and the urbanisation procedure.

Using state-level cross-sectional informations for the United States, Akai et.

Al. (2005) nowadays that financial decentalisation as a commitment device may cut down regional inequality.

Bonet (2006) concludes that success of financial decentalisation policy in Columbia play of import function in cut downing regional income disparities. He uses two commanding variables, the degree of openness of the economic system and the economic agglomeration tendency.

Resosudarmo (2006) claims that despite the being of regional income disparity in Indonesia, conditional growing of regional income per capita in Indonesia is convergence.

Hill (2008) argues that there have been no major alterations in regional inequality in Indonesia and the Philippines, although the decision depends on the choice of economic indexs.

Aritenang (2009) suggests that inequality degree in Indoneisa is still terrible and convergence rate has decrease after decentalisation epoch.

# **Fiscal Decentralization in Indonesia**

Decentralization in Indonesia has been started since 2001. To hike the decentalisation procedure, passage president enacted Law 22 of 1999 on https://assignbuster.com/growth-inequality-and-convergence-in-indonesia/

Local Government Administration. This jurisprudence is used as a legal footing of district-level authorities ( regencies and municipalities ) . District authorities have all authorization and duties that held by cardinal authorities before, except for national defence and security, spiritual personal businesss, the judicial system, financial and pecuniary policy, and foreign personal businesss. On the other manus, states remain as a representative of cardinal authorities and act as coordinator between cardinal and district-level authorities.

The passage president besides enacted Law 25 of 1999 on Central and Local Fiscal Balance to supply local authorities plenty fund to dispatch all of new duties. One of the chief funding beginnings for local authorities is general allotment grant (DAU) which is non-specific purpose grant from the cardinal authorities. Other funding beginnings are particular allotment grant (DAK) and sharing of grosss from natural resources. Besides those beginnings of funding, local authorities besides has its ain gross chiefly from local revenue enhancements and user charges.

Decentralization ends require financial liberty to do it success harmonizing economic position. Fiscal liberty is needed by local authorities to better public services quality and better the willingness local citizens to pay revenue enhancements. Current position of fiscal status of territory authorities shows that mean territory merely acquire 10 % of their gross from local revenue enhancements and user charges. It means, another 90 % of fund needed is depends on transportation from cardinal authorities. This status shows that financial decentalisation in Indonesia more focal point on the expenditure side.

Contrary to the status of territory authorities, one research showed that states relied 45 % of their gross from local revenue enhancements and user charges. This shows that states more in fiscal matters independent than territory that is an sarcasm since the jurisprudence expect that the liberty is in territory degree. Based on this existent status, some research workers point out the liberty should be at provincial degree. It will convey more capacity to regional authorities since more financess available for development. Another statement why liberty should be at provincial degree is that the similarity cultural features, development phase, and geographical environment. Furthermore, one research showed that if liberty were at provincial degree, the largest portion of grants would be the poorest states in Indonesia (Brodjonegoro et. al., 2000).

Many experts were skeptic with the likely succesfullness of decentalisation in Indonesia after passage of decentalisation jurisprudence. One job that made the decentalisation vulnerable was big-bang attack. Tanzi ( 2002 ) claims for certain that the big-bang decentalisation attack in Indonesia will make bad consequences. Brodjonegoro, et. Al ( 2000 ) besides claim that decentalisation procedure should be implemented bit by bit, alternatively of big-bang attack. Harmonizing to them, the gradual scheme purpose is prefferable to guarantee stableness in macroeconomic.

After several old ages of decentalisation, expert may alter his sentiment.

Brodjonegoro ( 2004 ) province that after three old ages, the decentalisation procedure achieve " mild " success which can be shown from the drastic alterations from one of the most centralised authorities to one of the most decentralised authorities merely in one twelvemonth readying.

# **Financing Fiscal Decentralization in Indonesia**

Fiscal transportation is really of import for local authorities in Indonesia. The sum of transportation significantly increasing from 1. 5 % of GDP in 2001 to 6. 8 % of GDP in 2006. One of the ground of this tendency is increasing figure of states and districs after decentalisation. Before 2001, there are 27 states and less so 300 territories. Presently, there are 33 states and 510 territories. Another ground of this tendency is "hold-harmless" policy. Harmonizing this policy, the parts will ne'er have transportations lower than old twelvemonth.

The chief transportations from cardinal authorities to local authorities is general intent grant ( DAU ) which is a unconditioned transportation. This grant history for 60 % of cardinal authorities transportation. From that sum, territory authoritiess receive 90 % of fund and states receive 10 % of the fund. The DAU is allocated utilizing certain method by Ministry of Finance. This expression, harmonizing to Silver et. Al. ( 2001 ) , more transparant than expression that used to cipher transportation in pre-decentralized epoch.

Another of import transportation is Particular Allocation Grant (DAK) which is a sort of conditional grant. The aim of DAK is for particular demands of parts, including exigencies and financing cardinal precedences at the part degree. The chief sectors of DAK are instruction, wellness, rural roads and irrigation, public disposal substructure, and forestry. Although DAK is lesser than DAU, the sum of DAK besides has an increasing tendency from 1.5% of entire grant in 2001 to 10.5% in 2009.

Besides DAU and DAK, cardinal authorities besides allocates fund utilizing deconcentration and co-administration. Deconcentration financess are given to provincial authorities as representatives of cardinal authorities. On the other manus, co-administration fund is portion of ministry budget that implemented by territory authorities. Since deconcentration and co-administration have the same characteristecs with DAK, in the hereafter they will be combined to DAK.

Presently, states and territories authorities which receive DAK, deconcentration, and co-administration are required to pay some portion of the cost. With this demand, these transportations become closed-ended conditional transportation.

Some natural resources rich territories receive immense sum of money from Shared Revenue Fund ( DBH ) . This DBH is divided into two classs: ( I ) Tax DBH and ( two ) the Natural Resources DBH.

# **Inequalities Across Indonesia**

Uneven distribution of resource and economic activity across Indonesia (McCulloch, 2008):

Java island represent merely 6 % of the state 's land country but accommodates about 60 % of the population.

Java bring forthing 52 % of GDP, Sumatera island produces 28 % of GDP, and Kalimantan island 11 % . Eastern Indonesia ( Sulawesi, Nusa Tenggara, Maluku, and Papua ) jointly history for merely 10 % of GDP.

Eastern Indonesia is langging behind in ternms of its substructure as step by entree to electricity and telephones. In Papua, Maluku, and Nusatenggara, less than 10 % of family have entree to a telephone and less that 40 % of house clasp have entree to electricity.

Java dominates all sector except for oil, gas and excavation. Sumatera and Kalimantan contribute 18 % and 22 % to this sector severally.

Fabrication is the dominant sector in western Indonesia whilst agribusiness is the dominant sector in eastern Indonesia.

The economic activity is concentrated merely in several large metropoliss, Jakarta, Bandung, Medan, and Surabaya. These large metropoliss and country near them have high portion on national GDP. Other countries that have rich natural resource, such as East Kalimantan, Riau, and Papua, besides get high portion ( see figure 1 ).

# Figure 1. District portion of national GDRP in Indonesia, 2003

# Beginning: McCulloch (2008)

The high per capita GDRP is non ever in the high GDRP country because population more concentrated on high economic activities part. Rich natural resource remote countries have low population because houses use capital intensive factor to pull out the natural resource ( see figure 2 ).

# Figure 2. District per capita GDRP in Indonesia, 2003 Beginning: McCulloch ( 2008 )

Human Development Index ( HDI ) is better on high economic activity country. Per capita GDRP does non ever related to HDI. For illustration, although high per capita GDRP, Papua state merely has low HDI ( see figure 3 ) .

# Figure 3. HDI among part 2006, 2007, 2008

# **Beginning: Indonesian Statistics Bureau and computation Theoritical And Analytic Model**

Following Barro ( 1990 ) and Xie et. Al. ( 1999 ) , the endogenous growing theoretical account consists of two-input production map: private capital and public disbursement. Amalgamate authorities disbursement ( ) consist of cardinal authorities disbursement ( ) , provincial authorities disbursement ( ) , and territory authorities disbursement ( ) :

Assuming CES production map with changeless returns to scale in both inputs:

Where and are in (0, 1) and. If, the map follows the Cobb-Douglas specification. Although human capital and labour is non considered in the theoretical account, they are included in empirical work.

A level end product revenue enhancement at rate is imposed to finance the amalgamate authorities disbursement:

The single public-service corporation map is:

Where is single ingestion of a individual merchandise produced in economic system, is the opposite of the temporal snap of substituion, and is the rate of clip penchant.

The dynamic budget restraint of single:

```
, given.
```

The Hamiltonian equation for optimum single ingestion way and capital stock way:

The first order conditions are given by:

(7)

(8)

The transversallity status is as attacks eternity.

Immediate consequence from the equations is that the growing rate of ingestion:

(9)

Where ; vector ten denotes the vector ; is interpretated as existent involvement rate and defined by

(10)

Spending portions of cardinal, provincial, and territory authorities is defined as:

(11)

Therefore, by definition.

After replacing (10) and (11) into (9), the long-term growing rate, , is obtained as a map authorities disbursement portions, income revenue enhancement, and other exogenic factors:

(12)

Harmonizing to (12), authorities disbursement on different degrees affect economic growing.

To analyse the respond of long-term growing rate to assorted disbursement portions, it is assumed that

the authorities 's aim is to maximise growing rate in (12) by taking and. In this manner, the authorities aim is the same with maximising person 's growing in (9) topic to authorities restraint of (3). Hence the job become maximizing (12) topic to:

(13)

The growth-maximizing revenue enhancement rate is given by the undermentioned vitamin E quations:

(14)

where.

The growth-maximizing portions of cardinal, provincial, and territory authorities passing given by:

(15)

(16)

• (17)

and can be interpreted as single productiveness of public disbursement by the cardinal, provincial, and local authoritiess, severally. represent aggregative productiveness of all degrees authorities disbursement.

Equation (15) – (17) shows that growth-maximizing disbursement portions are equal to the ratios of persons productiveness over the aggregative productiveness. Some reallocation of resources among all degrees of authorities will be growth-enhancing if the existent disbursement portions do non match to these growing maximising portions.

In the instance of Cobb-Douglas engineering which, the growth-maximizing revenue enhancement rate in (14) can be simplified as:

(18)

This expression is the same with Barro (1990) after doing the notation consistent, and each authorities disbursement as follows:

(19)

(20)

(21)

# **Research Aims**

The first aim of this research is to happen out whether financial decentalisation affects national economic growing.

The 2nd aim of this research is to happen out whether financial decentalisation affects regional inequality.

The 3rd aim is to happen out whether financial decentalisation makes hapless part become poorer.

# Methodology

Econometric analysis is utilized to explicate the consequence of financial decentalisation on regional inequality and regional convergence.

# **Econometric Model:**

The econometric theoretical account to analyse whether financial decentalisation affects regional inequality is taken from Bonet ( 2006 ) :

Where is regional income inequality measured as follows:

is regional per capita GDP and is the national per capita GDP. Subscript corresponds to part and inferior corresponds to twelvementh of informations.

is a step of financial decentalisation with the emphasized on expenditure side decentalisation. Three campaigners of decentalisation indexs will be used: outgo per capita, outgo as per centum of GDP, and portion of local outgo in the sum.

comprises other explanatory variables of regional income inquality.

The econometric theoretical account for convergence is as follows (Aritenang, 2009):

The first equation is absolute convergence, while the 2nd equation is conditional convergence. The absolute convergence implies that the economic growing, denoted by GDP per capita is determined by convergence and convergence ( Barro et. al. , 2003 ) . The difference is that conditional convergence has explanatory variables.

a vector of financial decentalisation, The dependant variable is natural logarithm of income per capita growing. The determiner of disparity index is noted the initial GDP per capita, as LAG, The negative mark of this variable indicates convergence of economic growing. is the distance from capial metropolis of Indonesia, Jakarta, that shows appraisal consequence in different clip period.

# **Datas**

GDRP, HDI, and other sosial and economic informations taken from Central Bureau of Statistics (BPS). Local authorities budget informations, General Allocation Fund (DAU), and Particular Allocation Fund (DAK) are drawn from the regional Finance Information System (SIKD) Ministry of Finance.

Investment related informations are generated from the Regional Investment Coordinating Boards ( BKPMD ) .

# **Econometricss Tools**

Ordinary Least Square (OLS) is used to analyse the econometric theoretical account. As portion of the analysis, several trial is conducted. Besides standard trial for OLS, it is of import to make test related to the possible being of spacial dependance or heterogeneousness in the observation. The presence of spacial job causes prejudice and incompatibility job. For illustration, alocation outgo on instruction might be influenced by the neighbor part. Furthermore, the parts that lie on the same island tend to hold similar patern in economic construction comparison to other parts on different island. Moran 's I and Lagrange multiplier trial will be conducted to prove the spacial autocorrelation in the mistake footings,

# **Expected Consequences**

It is expected that financial decentalisation has negative impact on economic inequality among parts. Similarly, financial decentalisation is expected to back up economic convergence among parts.