Comparative Study of *Millennium Development Goals (MDGs)* Achievement in Various Regional Economic Typologies in Indonesia

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Economic development in Indonesia has created much kind of regional typologies. Klassen has divided this typology into four namely advanced and rapidly growing region, fast growing region, developed but depressed region and relatively backward region. There are some regional characteristic differences among those typologies. These differences have occurred in many sectors including human resources development sector which can be reflected by differences in the achievement of Millennium Development Goals (MDGs). This research is aimed to determine the achievement of Millennium Development Goals (MDGs) in those regional typologies.

In this research, analysis of secondary data uses quantitative methods. Level of MDGs achievement is calculated by the analysis of percentage. Level of MDGs achievement in regional typologies which are used in this research is assessed by doing cross-tabulation between result of regional typology analysis and classification of MDGs achievement. The comparison of MDGs achievement among typologies was analyzed using One Way ANOVA.

The results show that most of the provinces in Indonesia have an average percentage achievement of the MDGs under 100%. There are six provinces categorized as region which have a high level of MDGs achievement, 18 provinces have moderate levels of achievement and nine provinces with low levels of MDGs achievement. In the Klassen typology of Indonesia, level of achievement of the MDGs pattern sequence is not corresponding to the sequence pattern of regional economic development level. The order typology with the MDGs levels ranging from the highest to the lowest is developed but depressed region, relatively backward region, advanced and rapidly growing region, and fast growing region. Based on One Way ANOVA test result, there is no significant difference between MDGs achievement in the various typologies.

Therefore the difference of regional economic development level in Indonesia did not create a significant difference in the achievement of the MDGs.

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Introduction

In the third world countries such as Indonesia, the development paradigm which implemented in the past is past too laud high economic growth as the primary goal so that less attention to equity aspects of development outcomes between regions. This can lead to the emergence of socioeconomic disparities between regions that will ultimately lead to the failure of efforts to eradicate poverty in the country. Socio-economic disparities between regions that is the most important development problems faced by Indonesia.

Development effortsthathave been enactedby theIndonesian governmentin the past, onthe one handhas resulted insignificantprogress, butonthe other handhas also producedmanyurgentproblemstobe solved. It is inevitablethat thedevelopmentof the pastare moreemphasison achievinghigh economicgrowth rates, has createdan increase inincomepercapita. Nevertheless, thedevelopmentfocused on the improvementof nationalproduction, is notaccompaniedbythe developmentandstrengthening ofinstitutions, both public and finance, which should serveallocateresources efficientlyandeffectively. In fact, Todaro(1983) revealedthatthe factorsor componentsof economicgrowth which areessential inany societythere arecapitalaccumulation, populationgrowth, andtechnologicaladvancement. Componentof capitalaccumulationandpopulationgrowthis partof thehumanresourcesectorso thatit can be saidthathumancapitalis closely related tothe process ofeconomicgrowth. Withthese considerations,the resultsofeconomic development, especially in the context ofthe regionaleconomyshould be aimedto improve the quality ofhuman capitalso hopefullythere will bepositive feedbacktoimprovement ofeconomicgrowth.

One of the effortsthathave been madebythe countriesinthe worldtoacceleratethe development ofhuman resourcesisjointlydeclared theMillenniumDevelopmentGoals (MDGs). The MDGsareaglobaldevelopment paradigmwhich signed by 189member statesof the United Nations(UN), including Indonesia intheUN MillenniumSummitin September2000.UN General AssemblyResolutionthenlegalize ittothe UNGeneral Assembly Resolution No.55/2dated September 18, 2000Aboutthe Millennium Declarationof the United Nations(A/RES/55/2. UnitedNationsMillenniumDeclaration). TheMDGsis basically amutual commitmentof the international communitytoacceleratehuman development. One of themain objectivesof thedeclaration ofthe Millennium Development Goalsis to requiredonorcountriessuch as

theUnited States andother developedcountriestoincreaseofficialdevelopmentaid(official development assistance) amounted to0.7percentof their gross domestic product(GDP).

Actually, there is interrelationship betweenhumancapitalandeconomicgrowth. However,existingstudiesare generallyobservedthe effectof humancapitalon economic growthandlessconcerned with theimpactofeconomic growth onhumancapital(Ramirez, 1998). A number ofstudies onhuman resourcesdisclosed inMeierandRauch(2000), for example, are alsomore focusedaspectof theimpactof humancapitalon economic growth. Thoughthe influence ofeconomic developmenton the qualityof humanresourceisobvious, for examplethe economiccrisisinIndonesiahad reversedregionallevelsof human developmentthat has beenachievedduringthe period ofgrowth(Saadah, 2001)and the bringfinally bring negative impacton regionaleconomic(Akita andAlisjahbana, 2002). Therefore, this studytried toraise the topic ofthe influence ofeconomic growth onhuman development, especially in thevarioustypologies ofregionsgeneratedbyeconomic developmentinIndonesia.

Problems

Differences inthe level ofhuman resources quality between regionswillcreateagapthatleads to adisparitiesbetween theregion thathavea lowquality of human resourceswitha region with highquality of human resources. Because ofthequality of human resourceshas a close connectionwiththe performance ofthe economy, thedisparitiesalsooccursin terms ofeconomic performancebetweenthe tworegions. Suchcasesare verycommon inthe developmentof Indonesia. Indonesiaasanarchipelagic stateis aterritorial unitconsisting of 33provincesarevery diverse. Thisdiversitycan be foundin a various development sectors economicdevelopmentwhich can be seen from difference in level of regionaleconomic developmentbetween regions. Thiswilllead toa differencein termsof humanresourcedevelopment. Theinfluencecan occur throughtwomechanisms:throughthe role ofcivil society such asthrough community organizationsandnon-governmental organizationsandthroughhousehold and governmentactivities. Allocationbetweenandwithinthese institutions, and the differencesmaybe thecause ofdifferences inbehaviorof human developmentperformancein spite ofsimilarlevels ofeconomicperformance.Therefore, this studyaimedtoassess comparison of MDGs achievement as indicator of human resources quality inthe variousregional economic typologies sinIndonesia

Methodology

In this research, analysis of secondary data uses quantitative methods. Level of MDGs achievement is calculated by the analysis of percentage. This analysis required quantitative data, so data selection was done to select indicator MDGs that have quantitative data and goals. So from67indicatorsselected17 indicatorsthat representthe eightMDGs. Those indicators can be seen from table 1.

Table 1. Indicators of MDGs uses in the research

No.	Goals	Indicators
1.	Eradicating extreme poverty and hunger,	• Percentage of opulationbelow thenational poverty line(%) • The percentage ofmalnourishedchildren under five • Adequacy ofcaloricintake(kcal) <1400 • Adequacy of caloricintake(kcal) <2000
2.	Achieving universal primary education,	The literacy rate of age 15-24
3.	Promoting gender equality and empowering women,	• Net enrollmentratio ofgirls/boys inprimary school • Net enrollmentratio ofgirls/boys injunior high school • Net enrollmentratio ofgirls/boys inhigh schools • Net enrollmentratio ofgirls/boys incolleges or universities • Literacy ratio of women/ menaged 15-24
4.	Reducing child mortality rates	• Child mortality/CMR • The infant mortality rate/IMR
5.	Improving maternal health	Maternal Mortality
6.	Combating HIV/AIDS, malaria, TB and other diseases,	Case detection rate of TB
7.	Ensuring environmental sustainability	• Access toimproved drinkingwatersources • Access to adequate sanitation
8.	Developing a global partnership for development.	Percentageof households withinternetaccess

Level of MDGs achievement in Klassen regional economictypologieswhich are used in this research can be assessedby doing cross-tabulation between result of regional typology analysis

and classification of MDGs achievement. The comparison of MDGs achievement among typologies was analyzed using One Way ANOVA.

Discussion

Economic growthis anincrease inthe levelofnational income(Boediono, 1999). Thus, economicgrowthistheincrease inoutputpercapitain the long term. Economic developmentinIndonesiahas createdvarioustypologies ofregions. Inthis research, Klassentypologyis usedas a regional economic analytical toolto determine thestructure and patternof economicgrowth ina region. The approach usedis theregionalapproachas expressedbySjafrizal(1997). This approachproducesfourtypes ofregions, namely advanced and rapidly growing region, fast growing region, developed but depressed region and relatively backward region.

Inthis research, thescaleused to measurethe quality ofhuman resourcesis the level ofachievement of theMillenniumDevelopmentGoals (MDGs). The level ofachievement of the MDGsconsistofeightgoalsas measured by67indicators, buttheindicatorsused in the analysisare indicatorswhich have quantitave. So from67indicatorsselected17 indicatorsthat representthe eightMDGs.

Based onthe calculation ofthe level ofachievement of the MDGs foreach provinceinIndonesiawhich shown inTable1, it can be seenthatmost of theprovincesinIndonesiahavean averagepercentageachievement of the MDGsunder100 %. Notedthere are 32provincesout ofthe total33provinceswiththe level ofachievement of theMDGs lessthan100%. Based onthesetablesalsocan be seen thatthere is only oneprovincethathas achievement level morethan100%, which is DKI Jakarta Province withan averagepercentagerateof125.89 %.

Based on theclassification whichis doneusingstandard deviationmethod, there are six provincescategorized as region which have a highlevel ofMDGs achievement, 18provinceshavemoderatelevels ofachievement andnineprovinceswithlowlevels ofMDGs achievement. Therefore, it can be saidthatmost of theprovincesinIndonesiahave moderate level of MDGs achievement.

Provinces withthe highestlevel ofMDGs achievement is DKI Jakarta. Percentagerate ofMDGs achievementinthe province is125.89%. Based on thecalculation of the achievement

percentageofeachMDG indicator,can be seen thathigh percentage ofMDGsachievement in the DKI Jakarta province is influencedbythe achievement percentageofthe firstMDG goal(poverty reduction) which reached192.67%. Meanwhile, province withthelowestlevel ofachievement oftheMDGs is Nusa Tenggara Barat withachievement percentageof61.82%.

Nationally, the Millennium Development Goalswhich already achievedis thefirstgoal(poverty reduction) withan averagepercentageof135.3%.Whileothergoalshave not beenachieved. Goalwiththe lowestachievementlevelsisthe eighthgoal(develop a globalpartnershipforthe Development) witha percentageof21.05%.

Province	Goal 1	Goal 2	Goal 3	Goal 4	Goal 5	Goal 6	Goal 7	Goal 8	Average	Class
Aceh	100.60	99.90	108.36	81.56	34.29	73.86	52.73	15.36	70.83	Moderate
Sumatera Utara	127.04	99.86	101.92	48.88	73.78	106.71	74.75	16.56	81.19	Moderate
Sumatera Barat	110.37	99.81	111.80	50.27	54.61	75.86	62.31	27.74	74.10	Moderate
Riau	134.18	99.95	105.12	65.12	52.35	49.29	68.03	24.62	74.83	Moderate
Jambi	140.94	99.98	102.69	63.53	30.32	97.57	66.88	14.16	77.01	Moderate
Sumatera Selatan	121.50	99.92	107.83	58.15	58.39	69.57	65.35	18.36	74.88	Moderate
Bengkulu	107.00	99.87	107.37	49.62	35.83	94.14	49.14	20.90	70.48	Low
Lampung	121.60	99.93	110.51	55.84	48.28	60.43	57.15	10.94	70.58	Low
Bangka Belitung	159.86	99.68	105.50	64.27	23.78	87.43	70.79	20.34	78.96	Moderate
Kepulauan Riau	127.84	99.91	106.68	54.33	39.87	51.86	60.64	25.12	70.78	Moderate
DKI Jakarta	192.67	99.99	91.02	85.52	271.54	114.14	83.62	68.64	125.89	High
Jawa Barat	128.12	99.90	94.53	62.14	37.32	103.57	67.29	24.58	77.18	Moderate
Jawa Tengah	131.88	99.82	105.55	94.23	32.40	77.43	81.57	19.28	80.27	Moderate
DI Yogyakarta	162.45	100.00	97.51	133.25	44.94	75.29	98.54	55.84	95.98	High
Jawa Timur	132.26	99.44	96.11	68.41	117.29	83.14	77.52	22.70	87.11	High
Banten	128.43	99.94	97.17	52.59	40.13	107.43	62.65	25.06	76.67	Moderate
Bali	126.81	99.14	94.65	75.93	63.20	90.29	98.69	24.76	84.18	High
Nusa Tenggara Barat	108.39	99.01	99.73	33.36	31.32	47.57	61.56	13.64	61.82	Low
Nusa Tenggara Timur	126.99	97.79	106.33	40.18	18.86	54.29	43.87	9.28	62.20	Low
Kalimantan Barat	138.10	99.15	98.55	52.12	25.98	71.86	68.35	13.86	70.99	Moderate
Kalimantan Tengah	122.62	99.86	101.62	85.39	35.36	42.57	47.68	12.10	68.40	Low
Kalimantan Selatan	135.15	99.85	112.41	41.16	24.29	62.43	67.61	20.52	70.43	Low
Kalimantan Timur	195.01	99.86	106.34	86.34	32.58	46.43	82.90	37.14	85.82	High
Sulawesi Utara	140.70	99.86	108.19	70.07	21.22	137.43	78.47	23.24	84.90	High
Sulawesi Tengah	124.06	99.90	104.40	42.36	16.81	62.29	62.71	11.64	65.52	Low
Sulawesi Selatan	120.73	98.31	107.83	58.24	47.71	66.43	78.20	19.60	74.63	Moderate
Sulawesi Tenggara	123.56	99.39	105.99	53.86	28.79	100.29	76.25	13.10	75.15	Moderate

Gorontalo	131.78	99.03	106.66	45.30	19.16	110.43	64.39	19.82	74.57	Moderate
Sulawesi Barat	118.21	97.65	113.37	32.21	21.97	73.57	64.08	8.26	66.16	Low
Maluku	119.31	99.85	104.54	36.70	17.33	109.00	68.38	15.64	71.34	Moderate
Maluku Utara	189.47	99.78	100.97	44.17	20.67	54.43	63.11	12.58	73.15	Moderate
Papua Barat	182.21	97.01	92.82	57.75	13.83	57.00	58.60	16.48	71.96	Moderate
Papua	134.95	79.69	90.66	53.05	28.18	73.00	41.45	12.80	64.22	Low
National average	**135.30**	**98.88**	**103.17**	**60.48**	**44.31**	**78.39**	**67.43**	**21.05**	**76.13**	

Economic developmentinIndonesiahas given birth tovarioustypologies ofregions. Klassen has divided this typology into four namely advanced and rapidly growing region, fast growing region, developed but depressed region and relatively backward region.

Table 2. Klassen typology of Indonesia

No.	Province	Typology
1.	Aceh	Relatively backward region
2.	Sumatera Utara	Developed but depressed region
3.	Sumatera Barat	Relatively backward region
4.	Riau	Advanced and rapidly growing region
5.	Jambi	Fast growing region,
6.	Sumatera Selatan	Relatively backward region
7.	Bengkulu	Relatively backward region
8.	Lampung	Fast growing region,
9.	Bangka Belitung	Developed but depressed region
10.	Kepulauan Riau	Developed but depressed region
11.	DKI Jakarta	Developed but depressed region
12.	Jawa Barat	Relatively backward region
13.	Jawa Tengah	Relatively backward region
14.	DI Yogyakarta	Relatively backward region
15.	Jawa Timur	Developed but depressed region
16.	Banten	Relatively backward region
17.	Bali	Relatively backward region
18.	Nusa Tenggara Barat	Fast growing region,
19.	Nusa Tenggara Timur	Relatively backward region
20.	Kalimantan Barat	Relatively backward region
21.	Kalimantan Tengah	Developed but depressed region
22.	Kalimantan Selatan	Fast growing region,
23.	Kalimantan Timur	Advanced and rapidly growing region
24.	Sulawesi Utara	Fast growing region,
25.	Sulawesi Tengah	Fast growing region,
26.	Sulawesi Selatan	Fast growing region,
27.	Sulawesi Tenggara	Fast growing region,
28.	Gorontalo	Fast growing region,
29.	Sulawesi Barat	Fast growing region,
30.	Maluku	Fast growing region,
31.	Maluku Utara	Fast growing region,
32.	Papua Barat	Fast growing region,
33.	Papua	Advanced and rapidly growing region

Todetermine the level ofachievement of the MDGsinvarioustypes ofKlassen typology,cross tabulationanalysisisbetweenthe classification of MDGsachievement andtypology was done. This analysisproducedthe followingtable.

Table 3. Matrix of cross tabulationanalysisisbetweenthe classification of MDGsachievement andtypology

Typology / Class	Advanced and rapidly growing region	Fast growing region,	Daerah maju tapi tertekan	Relatively backward region
High	Kalimantan Timur	Sulawesi Utara	DKI Jakarta, Jawa Timur	DI Yogyakarta, Bali
Moderate	Riau	Jambi, Sulawesi Selatan, Sulawesi Tenggara, Gorontalo, Maluku, Maluku Utara, Papua Barat	Bangka Belitung, Kepulauan Riau,Sumatera Utara	Jawa Tengah, Aceh, Sumatera Barat, Sumatera Selatan, Jawa Barat, Banten, Kalimantan Barat
Low	Papua	Kalimantan Selatan, Lampung, Sulawesi Barat, Nusa Tenggara Barat, Sulawesi Tengah, Gorontalo	Kalimantan Tengah	Bengkulu, Nusa Tenggara Timur

Fromthematrix, it can be seenthat theachievement level of MDGsinvarioustypes oftypologies is vary widely. Provinces withhigheconomicgrowthratehas not beendefinitelyhavea highMDGsas welland vice versa. This showsthat the level ofachievement of the MDGsineach provincedo not always relyon the kind oftypology ofregional economicdevelopmentofthe province concerned. The results showedthat level ofachievement of theMDGspatternsequence is notcorresponding to thesequencepattern of regionaleconomic developmentlevel. The ordertypologywiththe

MDGslevelsrangingfromthe highestto the lowestisdeveloped but depressed region, relatively backward region,advanced and rapidly growing region, andfast growing region. The percentage of MDGs achievement in each typology can be seen in table 4.

Table 4. Percentage of MDGs achievement in each typology

	Tipologi	Persentase pencapaian MDGs
1	Advanced and rapidly growing region	74,96
2.	Fast growing region,	72,09
3.	Developed but depressed region	85,39
4.	Relatively backward region	79,42

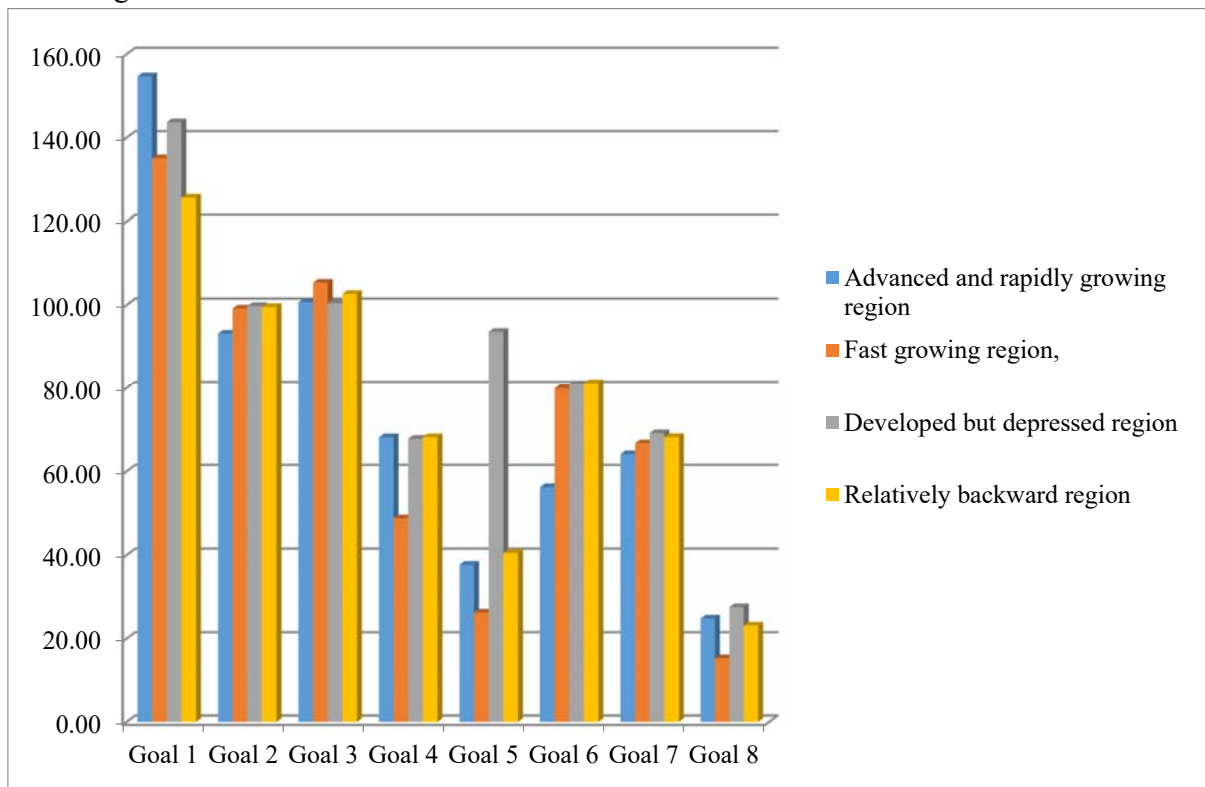The level of MDGs achievementforeach goalateach typetypologyis alsovary widely. This canbe seen infigure1.

Figure 1. MDGs achievementforeach goalateach typetypology

To examinewhether there issignificant differencein the MDGsachievement betweeneachtypology thenOne WayANOVAtest was done. Thistestresulted significant valueof0,162. This meansthat there is nosignificant differencebetween MDGsachievement in thevarioustypologies. In other words, itmeansthat the difference ofregionaleconomic developmentlevelinIndonesiadid notcreateasignificantdifference inthe achievement ofthe MDGs.

Conclussion

Most of theprovincesinIndonesiahavean averagepercentageachievement of the MDGsunder100 %. There is only one province with achivement more than 100 %, that is DKI Jakarta. Most of province in Indonesia have moderate level of MDGs achievement. There are six provincescategorized as region which have a highlevel ofMDGs achievement, 18provinceshavemoderatelevels ofachievement andnineprovinceswithlowlevels ofMDGs achievement. In the Klassen typology of Indonesia, provinces withhigheconomicgrowthratehas not beendefinitelyhavea highMDGsas welland vice versa. Level ofachievement of theMDGspatternsequence is notcorresponding to thesequence pattern of regionaleconomic developmentlevel. The ordertypologywiththe MDGslevelsrangingfromthe highestto the lowestis developed but depressed region, relatively backward region, advanced and rapidly growing region, and fast growing region.Based on One WayANOVAtest result, there is no significant differencebetween MDGsachievement in thevarioustypologies. It means that the difference ofregionaleconomic developmentlevelinIndonesiadid notcreateasignificantdifference inthe achievement ofthe MDGs.

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