Regional Income Disparities in Indonesia

By : J.S. Uppal and Budiono Sri Handoko

Ringkasan

Kesenjangan pendapatan antar daerah dalam suatu perekonomian merupakan fenomena yang terjadi di seluruh dunia. Pada umumnya kesenjangan lebih tajam pada negara sedang berkembang karena "socio-economic rigidities" dan "factor immobilities." Mempelajari kasus Indonesia merupakan hal yang menarik karena Indonesia adalah negara kepulauan yang terbesar di dunia dan dengan kebhinekaannya.

Dalam paper ini penulis mencoba memperkirakan derajat kesenjangan pendapatan daerah di luar sektor pertambangan dengan menggunakan propinsi sebagai daerah. Juga dianalisa beberapa kebijaksanaan pemerintah untuk memperkecil kesenjangan, di samping diidentifikasikan faktor-faktor yang menyebabkan kesenjangan tersebut. Penulis menemukan kecenderungan menurunnya koefisien kesenjangan daerah. Dan ditemukan pula bahwa urbanisasi tidak lagi meningkatkan per kapita PDRB. Sedangkan faktor yang cenderung menurunkan kesenjangan pendapatan daerah adalah anggaran belanja Pemerintah Pusat dan bantuan kepada propinsi.

I. Introduction

Regional inequalities within national economies is a world wide phenomenon. It exists in all societies, developed as well as underdeveloped and in countries under different political persuasions. It is a universal experience that in all societies, some regions lag behind the others, during the process of national economic development. The degree of regional disparities and the contributory factors, are, however, different in various societies depending on their socio-economic structures and the spatial distribution of factor endowment. In general, the degrees of disparities are more marked in under-developed economies due to socio-economic rigidities and factor immobilities, which tend to losen up with the process of economic development. There is much concern for balanced development in all countries through adoption of specific policies for development of backward regions in recognition of problems from unbalanced regional development. Besides various economic benefits accruing from development of regions lagging behind, there are political implications involved.

The residents of backward regions deem their being left behind, an act of discrimination and in several countries, the same is cited as justification for political cessions. The complaints of regional inequality have fueled political unrests and rebellions in many countries. In this paper we will analyse disparities in regional incomes in Indonesia and attempt to identify main contributing factors. We will also review public policies to reduce the regional inbalances.

Indonesia makes in interesting study to discuss regional disparities because of sharp contrasts she present in various socio-economic variables. It is the largest archipelago in the world, situated between the large and masses of Asia and Australia and containing 13667 islands: some as large as several countries in Europe combined and many just dots in the ocean. With an estimated population of 162 millions in 1982, with about 60 percent concentrated on the eight percent land space of the islands of Java and Madura, Indonesia is the fifth most populous country in the world. She presents extremes in demographic patterns. While the island of Java has one of the highest population density: 690 per square kilometres, some of the large islands are thinly populates e.g., the density of population is only 12 per square Km in Kalimantan.

Indonesia is the largest country in Southeast Asia with total land area of about 2 million kilometres. It is a country of great distances: 5000 Km from North Sumatra in the West to Irian Jaya in the East. The spread of thousands of islands over a vast area and separated from each

other by great distances, makes the task of public administration for socio-economic integration, rather difficult. The Republic of Indonesia is a mixture of races and people belonging to over 300 different ethnic groups, speaking over 250 languages and dialects and belonging to all the major world religious. While the enormous cultural diversity of Indonesia could be a source of strength, in creating a nation drawing wisdom from diverse human experiences, it could also be a cause of internal social and political disruption. No wonder therefore, that on achieving independentce in 1945, the Republic of Indonesia chose her national moto the phrase "Bhineka Tunggal Ika" (Unity throug diversity), which serves as a rallying point in the multi-racial, multi-lingual society.

Historically, the Indonesian political system has been characterised more by diverse political groupings than by a strong central government, except during the Dutch colonial rule. After attainment of independence and more particularly since the New Order Government, the emphasis has been places on achieving national integration and unification, which has special importance for national development planning.

Thus, while the Indonesian development plans—Repelitas, emphase national economic policies, the need for achieving a balance in development of various regions to satisfy the regional interests and strengthen distinctiveness of different provinces, is well recognised. In this way, Indonesia has a two prong development strategy: overal national development along with balances regional development, which, in her view, complement each other.

II. Government Policies For Regional Development

The government policies aiming at removal of regional income disparities were unitiated along with the First Five Year Plan (1969–1973). Though the First Five Year Plan gave priority to the overall growth & stabilisation of the national economy and rehabilitation of the badly neglected infrastructure, it laid ground work for some crucial policies which, later became dominant factor for regional development. First was the introduction of the Inpres program which channels development funds from the Central government to local governments. Since the introduction of this program, the Central government has provided massive funds directly to local governments bypassing many of the established bureaucratic channels. Secondly, Bappenas was charged with the responsibility of formulating plans for regional development. A Regional Income Research Group was constituted in 1970 to gather necessary data to initiate research on regional income level.

The Second Five Year Plan (1974—1979) carried the objective of regional development further with the following specific goals: to achieve balance between regional and sectoral developments; to reduce inequalities in the rates of development between provinces; to assist provincial governments to solve their socio—economic problems, and to improve development planning process and also the taxing capacities of provinces. To meet these goals, Inpres regional development subsidy program was expanded to reach half of the national budget amounting to 20 percent of the provincial development budgets. Another major step towards achieving balanced regional development was the establishment of the Bappenas in all provinces and charged with responsibility of coordinating at the provincial levels the sectoral programs of the central and provinsial governments.

Later the Bappenas were strenghtened through a Presidential Instruction no 27, March 1980, which emphasized their role in coordinating all planning at the local government levels. In addition, during the Second Plan, other crucial supporting activities were adopted: Introduction of the concept of regionalization; establishment of regular regional and national consultations and initiating large number of regional development planning studies. To give effect to the above activities, the country was conceptually divided for development purposes, into several regional development centers. Also, through the annual regional and national consultations, the processes of budget formulation at the provincial as well as central government were integrated to achieve effective development at regional levels. Sixteen regional development studies were completed during 1971—1979, convering the whole country. These studies are valuable and comprehensive sources of statistical data on local as well as regional levels.

During the Third Five Year Plan (1979—1983), Bappenas, originally set up at the provincial level, were extended down to district (Kabupaten) levels with each province having a district level (level II) Bappeda assisting the district head (Bupati) in development activities in his area. Also, the scope and financial assistance of Inpress subsidies to local governments at provincial, district and village levels were greatly enhanced. Greater attention was paid to village level organisation such as Village Development Committees (Lembaga Sosial Desa) by strengthening them through New Village Administrative Law in 1979 according to which government assumed much greater control of development activities at the village level. Having initiated the necessary administrative infrastructure for balanced regional development, the Fourth Five Year Plan (1984—1988) aims at strengthening the process with special attention paid to syncronise the

pace of development in relatively less developed regions identified as isolated, less fertile, density or sparcely populated and problem areas. It lays emphasis on improiving the working of regional and local planning agencies through enhancing efficiency and effectiveness of internal consultations within regions and that of national consultation. The thrust of all these policies will be to spread the benefits of national economic development throughout various regions of the country.

A review of various governmental policies aiming at balanced regional development would show that in Indonesia, the major policy instruments are (A) Allocation of central grants and subventions to regional government or regional agencies. These include (i) Grants paid to regional governments and extended through their budgets and accounts: (including the subsidi Daerah Otonom and the Inpres Dati I); (ii) Grants for Development projects which are allocated and spent by regional governments but which do not pass through their budget or bank accounts (e.q. Inpres Sekolah Dasar, the Inpres Kesehatan and the Inpres Kabupaten); (iii) Allocations from Central ministerial budgets which are spent by the technical dinas of regional governments but do not pass through provincial budgets or accounts — also known as 'sectoral' expenditures. (B) Location of public enterprises and incentives for private investments in particular regions. Though we will analyse the role of central grants regional development later, we may point out here that central transfer constitutes 75 percent and 79 percent of the current regional receipts of the provincial (First— Stage) and Kotamadya/Kabupaten (2nd stage) governments respectively for the country as a whole during 1981—1982, while these ratios differ markedly in different regions. Such a high magnitude of inter—governmental finance is likely to influence the relative development of the grant receipient jurisdictions.

III. Review of Earlier Studies

Due to lack of historical data, studies on regional economic development in Indonesia have been undertaken only quite recently. As mentioned earlier, it was only in 1970, that a Regional Income Research Group was formulated to collect 'coherent and consistant regional data.' The regional studies undertaken since 1970 can be divided into two categories: Regional studies for individual regions/provinces and interregional studies. Former studies have been commissioned both by the government as well as undertaken by individual researchers. As mentioned earlier, 16 studies were commissioned by the Government during 1971—1979, covering the whole country. In addition, there have been several individual

studies undertaken for different regions, the results of which have appeared in journals and unpublished monographs.

Some of these studies are quite comprehensive and they contain valuable data on socio-economic and spatial aspects of individual regions. These studies have also identified various factors retarding socio-economic regional development and made useful recommendations for their improvement. Unfortunately, however, on account of differences in data base and the methodologies used, these studies are not very useful to analyse inter-regional disparities. It is only recently: that the Biro Statistik have published inter-regional data on provincial basis in the series: Pendapatan Regional Propinsi Di Indonesia, which has now made it easier to analyse inter—regional income disparities and trends over time.

From amongst the few studies on regional income disparities, a pioneer study was conducted by Hendra Esmara[1] on the basis of data developed by the Regional Income Research Group, as mentioned earlier, pertaining the year 1972. The Group adopted province as a region. Hendra Esmara systematically estimated gross domestic product for different provinces on the basis of data on value added or gross value of product for different sectors. Excluding the income from oil from the regional *GDP (GRDP)* in oil producing provinces, Esmara computed the GRDP from non-oil sources to make the regional data comparable. The measure of regional disparity is estimated by Williamson's formulation of the coefficient of variation of per capita income for which the mean and variance are calculated from estimates of regional per capita income weighted by the corresponding population as defined in the equation :

$$Vm = \frac{\sqrt{\Sigma (Y_i - \bar{Y})^2 \frac{f_i}{n}}}{\bar{Y}}$$

where f_i = Population of the $\bar{Y}$ ith region

n = Total population

Y_i = Income per capita of the ith region &

$\bar{Y}$ = average income for the country

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1) Hendra Esmara, "Regional Income Disparities, *Bulletin of Indonesian Economic Studies,* Vol XI, No. 1, 1975, pp. 41 – 57.

He computed the value of *Vm*: coefficient of variation of per capita income for Indonesia for the year 1972 at 0.522. Hendra Esmara also showed how this estimate would change if we include income from oil and also exclude income from timber industry from some provinces. He compared the above coefficient of income disparity for Indonesia with those from selected developing countries and found it to be of the same order of magnitude as for Philippines, Columbia and Puerto Rico. Looking into factors responsible for regional income disparities, Hendra Esmara identified the factors, "which determine the productivity of labour, differences between regions in natural resource endowment, in the stock of man-made capital per head or in the quality of labour or efficiency of resource use and organisation".[2] Specifically he listed 'oil and timber' resources, man-land ratio (indicated by density of population per square Km), and location of large and medium manufacturing establishments, as conspicuous for regional inequalities.

As stated earlier, Biro Pusat Statistik has been publishing more recent data on the GDP on provincial basis on continuing basis, which enables us to analyse regional disparities and identify the contributing factors in this connection. In our estimation of regional income disparities, we have made use of the data for the years 1975 and 1980. We have also excluded provincial incomes from oil since, as stated earlier, inclusion of income from oil sources for few oil producing provinces over states the degree of inequalities. Also income from oil accrues to the central rather than to the provincial government, for spending in the country as a whole.

In Table I we give below data on non-mining *GRDP* per capita for various provinces for the years 1975 and 1980, the growth rate during the same period, arranged according to descending order for the 1980 per capita *GRDP* :

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2) *Ibid.,* p. 50.

TABEL I. GROSS NON-MINING REGIONAL DOMESTIC PRODUCT PER CAPITA BY PROVINCES IN INDONESIA AT CONSTANT MARKET PRICES, 1975–1980

Provinces (According to descending order of GRDP/PC)	Per Capita GRDP at Constant Prices (1975 – 1980) (in Rupiah)		Annual Growth Rate in GRDP per capita 1975–1980 (%)	Incidence of Poverty (% Population below poverty line)
	1975	1980		
East Kalimantan	202,958	301,470	8.23	13.4
D.K.I. Jakarta	195,892	264,620	6.20	16.9
South Sumatra*	99,820	145,320	7.80	13.6
Central Kalimantan	80,911	140,080	11.60	12.3
North Sumatra	94,582	130,470	6.64	20.4
North Sulawesi	80,075	119,330	8.31	32.7
Maluku	86,821	118,920	6.49	39.0
Irian Jaya*	80,194	112,880	7.08	7.8
Bali	68,011	112,170	10.52	38.3
Riau*	90,569	109,300	3.83	13.3
West Kalimantan	76,132	105,770	6.80	9.4
Aceh*	97,029	99,720	0.55	8.8
East Java	65,632	95,530	7,80	54.9
West Java	71,072	95,200	6.02	32.7
Jambi	70,284	93,730	5.93	7.9
South Sulawesi	66,509	92,210	6.75	42.3
South Kalimantan	70,450	85,360	3.91	12.5
West Sumatra	59,455	82,160	6.68	14.0
Lampung	71,898	82,110	2.69	45.5
Bengkulu	51,802	80,670	9.26	21.0
South–East Sulawesi	63,834	79,140	4.39	28.8
Central Sulawesi	56,235	75,470	6.06	49.1
Central Java	56,012	69,090	4.29	57.9
D.I. Yogyakarta	56,330	67,860	3.79	59.9
East Nusa Tenggara	38,713	53,630	6.74	56.6
West Nusa Tenggara	41,405	53,330	5.19	50.0
Indonesia	78,038	110,115	6.6	39.3

Notes: 1. Incidence of poverty measure the proportion of population living below poverty line, which in 1980 was defined by the World Bank as minimum food expenditure requirement of.17.6 kg of rice per month per capita which is required to provide 2,150 calories and 30 grammes of protein per day. In addition, an allowance is made for non-food basic items such as shelter and clothing, related to the consumption expenditures of households subsisting at the minimum food expenditure level.

2. *These provinces have substantial increases from oil and mining which have been excluded. Hence their actual per capita GRDP and also growth rates are higher than given in this table.

Sources: Biro Pusat Statistik, *Provincial Income in Indonesia 1975—1982 Part I,*
1985, and World Bank, *Indonesia, Policies and Prospects for Economic
Growth and Transformation,* April 1984.
Biro Statistics, *Statistik Indonesia* 1984.

The data in Table I shows that in general, there is a positive relationship between the level of per capita non mining GRDP, growth rates and negative relationship with incidence of poverty. Also, conversely, the provinces with lower GRDP per capita had lower growth rates and higher incidence of poverty. We have classified provinces in Indonesia according to their levels of per capita GRDP and rates of growth in Table II.

TABEL II. CLASSIFICATION OF PROVINCES BY PER CAPITA NON—MINING GRDP AND ANNUAL GROWTH RATES 1975 — 1980.

	High Per Capita GRDP (9 Provinces)	Low Per Capita GRDP (6 Provinces)
High Growth Rate	*South Sumatra *East Kalimantan North Sumatra North Sulawesi Maluku *Irian Jaya Bali Jakarta Central Kalimantan	East Java South Sulawesi West Sumatra Bengkulu East Nusa Tenggara West Kalimantan
Low Growth Rate		(11 Provinces) *Riau *Aceh Lampung West Java Jambi Central Sulawesi South East Sulawesi Central Java D/I. Yogyakarta West Nusa Tenggara South Kalimantan.

Note: * It should be noted that these provinces have substantial incomes from oil and mining (e.g. Riau it was 82.9 percent of the GRDP) during 1980 which have been excluded from their per capita GR—. DP. Hence their actual per capita GRDP, growth rates and ranking are higher than indicated in this table.

The data in Table II, also shows that, in most cases, there is direct positive relationship between growth rate and per capita *GRDP*. In general, provinces with higher per capita *GRDP* also has higher growth rates.

We have also computed the Williamson coefficient of regional inequalities in non-mining incomes from the data published by the Biro Statistics as in Table III.

TABLE III. COEFFICIENTS OF REGIONAL INEQUALITY IN PER CAPITA NON—MINING GRDP, 1976—80.

Year	Coefficient of Regional Inequality
1976	0.4631
1977	0.4609
1978	0.4344
1979	0.5240
1980	0.4435

Sources: Calculated from data in Biro Pusat Statistik, *Pendapatan Regional Propinsi-Propinsi Di Indonesia*, 1976 — 1980 dan 1976 — 1980, Jakarta.

The figures on the Williamson coefficients of regional inequality show a declining trend in Indonesia during the period 1976 — 1980, which might be attributed to various government policies outlined above. We can—not compare the coefficient of regional inequality (0.522) for 1979 computed by Hendra Esmara, as explained earlier with our estimates because of differences in the data base, though both these estimates are quite consistent: they show declining trend in the regional inequalities in income.

IV. Factor Explaining Regional Income Disparities

There are several factors — social and economic, that cause disparities in regional incomes. We have attempted to analyse the impact of some

of such factors on the level of regional incomes for the year 1980. Since our object is to attempt to explain why some provinces tend to lag behind others, we have used the statistical technique of rank correlation to identify factors that explain ranking of provinces according to their per capita non-mining gross domestic product. Among the factors analysed are : Decomposition of regional economies into different sectors: primary, secondary and tertiary, level of investment; transfer of resources from the Central government; expenditure of Central government in provinces; population growth and density; level of urbanisation; incidence of poverty; value added per worker in medium and small scale industries, proportion of children in relevant age groups in primary and secondary schools. The data on the variables are given in Appendices I – IV.

Table IV gives values of the coefficient of rank correlations between the non—mining per capita GRDP for 1980 and various factors listed above.

As noted in an earlier section there is significant and positive relationship between the per capita GRDP and the rate of growth of regions. In other words, the provinces with higher per capita GDP also grew at faster rates. What are the main contributary factors ? Our statistical analysis indicate clearly two such major factors first, the magnitude of total investment under the Repelita I to V (Appendix III). The highly significant coefficient of rank correlation suggests that, in general, the magnitude of total investment was greater in provinces with higher per capita GRDP. The Second main factor is the value added per worker in medium and large scale industries (Appendix II), which also has significant and positive rank correlation with the non-mining per capita *GRDP*. The other factors which have positive, though some what weak correlation, with the relative rank of provinces in terms of per capita *GRDP*, are Diversification of Employment: a more balanced spread of employment among various sectors.

The role of employment diversification in determining the ranking of various provinces on the basis of per capita GRDP is also corroborated by the relative contribution of various sectors to the regional economies. The primary sector has a depressing effect in that the provinces with higher proportion of income generated by primary sector, tend to have lower ranking, as indicated by the negative coefficient of rank correlation. The increasing contribution by the secondary and primary sectors, in general, tend to increase the relative position of the province on the income scale. Thus, the shifting of work force from the primary to secondary and tertiary sectors, particularly to the medium and large scale industries, would produce more balanced regional development.

TABEL IV. RANK CORRELATION BETWEEN PER CAPITA
NON–OIL GRDP, 1980 AND VARIOUS FACTORS

Factors	Coefficient of Correlation	Value of the T test
Growth of Income	0.47863	2.67058
Total Investment under Repelita I – III	0.533	3.09
Central Government Transfers to Provinces	−0.5068	−2.880
Central Government Expenditures in Provinces	−0.3882	−2.0636
Value Added Per worker in Medium and Large Scale Industries	0.5512	3.23704
Employment Diversification	0.26017	1.32003
Proportion of Urban Population	0.078119	0.38381
Contribution of the Primary Sector to GRDP	−0.372991	−1.9694
Contribution of the Secondary Sector to GRDP	0.173163	0.861332
Contribution of the Tertiary Sector to GRDP	0.211624	1.06077
Proportion of Population Below Poverty Line	−0.385812	−2.0487
Enrollment of Pupils in Primary Schools	0.14171	0.70131
Enrollment of Pupils in Secondary Schools	0.27401	1.3985
Density of Population per square Km	−0.258461	−1.31073
Population Growth	0.189402	0.94498

The population density has somewhat negative rank correlation with the per capita *GRDP*. This would suggest intensified transmigration policies to reduce population pressures from some already highly densely populated regions, particularly on the islands of Java and Bali. The growth of population, on the other hand, has a positive, though non-significant, rank correlation with the non-mining GRDP. It seems that in the sparsely populated islands such as Kalimantan, Sulawesi, the increasing population tends to increase the level of GRDP. This would again indicated a positive role that the transmigration can play in increasing the level of *GRDP* in sparsely populated regions. As expected, the incidence of poverty decreases with increase in the provincial per capita *GRDP*. This relationship strongly suggests that the growth strategy would be an effective policy

to alleviate poverty in Indonesia.

What would be the effective policy measures to reduce the regional income disparities in Indonesia ? Our statistical analysis strongly suggest that the Central government transfers, through various types of grants, and also Central government expenditure in provinces, have been channelled more to provinces with relatively lower per capita GRDP combined with highly significant statistical relationship between the level of investment and provincial GRDP, the central government transfers and expenditure have evidently played important role in reducing regional income disparities. These results would also suggest that the central government should continue to allocate greater proportion of its expenditures and transfers to further bridge gap in the incomes of various provinces.

Another effective policy measure would be to locate medium and large scale industries in lower income provinces, as indicated by statistical relationship between value added per worker in such industries and the employment diversification with the level of regional GDP. Our results also suggest that urbanisation certainly does not promote economic growth in the present economic step up. While some provinces: North Sumatra, Sout Sumatra and D.K.I. Jakarta have high GRDP per capita along with higher proportion of urban population, there are some provinces with very low GRDP per capita and high proportion of urban population. In terms of public policy, more urbanisation is not likely to increase per capita income in low income regions. This would suggest location of industrial enterprises away from already highly urbanised areas particularly in Java.

Spread of secondary education also has positive rank correlation with the regional per capita GDP. Though the relationship is somewhat weak, yet it does suggest more intensive efforts to promote secondary education in provinces with incomes. Secondary education promotes development of human capital, which in turn, has direct bearing on the growth of regional incomes.

V. Conclusion

In this paper, we have attempted to estimate the degree of regional disparities in non-mining GRDP (taking province as a region) and to identify main contributing factors. Also, we have reviewed some public policies aimed at reducing these disparities. The data published by the Biro Pusat Statistik on Pendapatan Regional Propinsi-Propinsi di Indonesia, for various years, was used in these statistical excercises. For identifying main factors contributing to regional income disparities, we used the statistical

technique of rank correlation, since our main objective is to identify factors would alter the relative ranking of provinces in terms of the non-mining per capita GRDP.

The coefficient of regional inequalities for the year 1975–1980 shows a declining trend in regional income disparities. Excluding the income from oil and mining, the degree of regional inequality in Indonesia is estimated at about the same magnitude as in other most developing countries. In general, the provinces with larger per capita GRDP have experienced higher rates of growth. In order to identify factors which promote regional economic growth, we have used the statistical technique of rank correlation. The relative values of the coefficients of correlation would indicate the relative role of the various factors in determining the ranking of various provinces on the income scale. Among the factors which are found to have positive and significant rank correlation with the per capita *GRDP* include: total investment under Repelita I – III; central government expenditures and transfers in various provinces; value added per worker in medium and large scale industries and the degree of employment diversification. Also, spread of secondary education assists in growth of regional incomes through development of human capital. Our results also show that the incidence of poverty decreases with growth in GRDP. As regards the relationship between *GRDP* per capita and population, we find that increase in population density reduces the relative income levels, though in the sparsely populated provinces, the growth of population has contributed to increase in per capita incomes.

However, contrary to the conventional wisdom, we find that in general, urbanisation is no longer associated with rise in per capita *GRDP*. The factors which tend to reduce the gap between the regional incomes are: Central government expenditures and transfers and grants to provinces. Our statistical analysis suggest that the Central government investment policies under Repelita and expenditure and transfer in provinces, play dominant role in reducing the regional inequalities through increasing the levels of incomes in provinces with comparatively lower per capita *GRDP*.

APPENDIX 1. PROVINCE AND ALL INDONESIA ESTIMATES ON SECTORAL
PROPORTIONS OF NON-MINING INCOME GENERATED.

(in Discending order of provincial GRDP/PC 1980)

| Province | Proportions of Income Generated | | | | | |
| | Primary | | Secondary | | Tertiary | |
	1975	1980	1975	1980	1975	1980
East Kalimantan	37.49	22.44	6.14	4.70	56.37	72.86
D.K.I. Jakarta	2.09	1.62	17.35	21.97	80.56	76.41
South Sumatra	38.08	34.34	16.98	28.20	45.66	37.48
Central Kalimantan	55.26	42.89	8.02	19.58	36.72	37.53
North Sumatra	51.54	49.29	9.58	12.45	38.88	38.26
North Sulawesi	45.47	47.68	8.17	6.08	46.36	46.24
Maluku	65.56	55.18	3.03	7.94	31.41	36.88
Irian Jaya	52.5	51.67	2.33	7.94	45.17	40.39
Bali	48.33	42.58	11.18	13.39	40.49	44.03
Riau	34.32	35.81	7.12	7.69	58.56	56.50
West Kalimantan	52.26	41.06	12.20	17.95	35.54	40.99
Aceh	75.84	85.92	5.26	3.73	18.90	10.35
East Java	41.50	36.84	17.63	17.08	40.37	46.08
West Java	45.18	39.09	11.81	17.76	43.01	44.15
Jambi	53.49	51.95	9.06	26.47	37.45	21.58
South Sulawesi	53.94	49.18	12.29	5.96	33.77	44.86
South Kalimantan	42.47	31.86	4.73	5.54	52.74	62.60
West Sumatra	43.28	35.76	14.03	15.95	42.69	48.29
Lampung	56.55	45.79	8.73	10.24	34.52	43.97
Bengkulu	59.39	47.10	6.81	13.50	33.80	39.40
South-East Sulawesi	63.38	55.53	3.92	3.41	32.70	41.06
Central Sulawesi	60.63	52.30	3.75	9.87	35.62	37.83
Central Java	40.57	40.70	18.38	14.08	48.95	45.22
D.I. Yogyakarta	37.84	39.64	14.95	16.43	47.21	43.93
East Nusa Tenggara	62.18	60.94	5.63	5.13	32.69	33.93
West Nusa Tenggara	54.45	68.85	4.93	10.76	40.62	20.39

Sources: Computed from Biro Pusat Statistik, *Pendapatan Regional Propinsi-Propinsi di Indonesia 1976 — 1980 and 1975 — 82,* Jakarta, and Statistik Indonesia, 1984, Jakarta.

APPENDIX II. GROSS REGIONAL DOMESTIC PRODUCT, GROWTH RATE, VALUE-ADDED IN LARGE SCALE INDUSTRIES AND EMPLOYMENT DIVERSIFICATION IN PROVINCES, 1980.

Province (According to descending order of GRDP/PC)	Non-Mining GRDP Per Capita 1980 (Constant 1975 prices)	Growth of per capita non-mining GRDP 1975–80	Percent of Value-Added per worker in Medium and Large Scale Industries	Employment Diversification
East Kalimantan	301,470	8.3	68	0.68
D.K.I. Jakarta	264,620	6.2	82	0.76
South Sumatra	145,320	7.8	50	0.52
Central Kalimantan	140,080	11.6	45	0.39
North Sumatra	130,470	6.64	57	0.49
North Sulawesi	119,330	8.31	4	0.60
Maluku	118,920	6.49	27	0.42
Irian Jaya	112,880	7.08	61	0.45
Bali	112,170	10.5	23	0.65
Riau	109,300	3.8	43	0.53
West Kalimantan	105,770	6.8	61	0.32
Aceh	99,720	0.5	38	0.42
East Java	95,530	7.8	57	0.59
West Java	95,200	6.0	56	0.67
Jambi	93,730	5.9	48	0.40
South Sulawesi	92,210	6.7	23	0.55
South Kalimantan	85,360	3.9	44	0.52
West Sumatra	82,160	6.7	19	0.53
Lampung	82,110	2.7	7	0.38
Bengkulu	80,670	9.3	29	0.29
South-East Sulawesi	79,140	4.4	6	0.43
Central Sulawesi	75,470	6.1	3	0.39
Central Java	69,090	4.3	52	0.62
D.I. Yogyakarta	67,860	3.8	41	0.65
East Nusa Tenggara	53,630	6.7	17	0.33
West Nusa Tenggara	53,330	5.2	8	0.52

Sources: Biro Pusat Statistik, *Statistik Indonesia,* 1984.

———————————, Manufacturing Statistik Vol. I & II, 1980, 1982.

———————————, Results of the 1980 Population Census.

APPENDIX III. GROSS DOMESTIC PRODUCT, CENTRAL GOVERNMENT EXPENDITURE AND INCIDENCE OF POVERTY IN PROVINCES, 1980.

Province (According to discending order of PC/GRDP)	Per Capita GDP Non-Mining (constant 1975 prices)	Central Government Expenditure (% of non-mining GDP)	Central Government transfers as % GRDP/PC	Incidence of Poverty (% Population below Poverty Lines)	Percent of Total Investment Under Repelita I – III
East Kalimantan	301,470	16	2	13.4	3.9
D.K.I. Jakarta	264,620	23	18	16.9	17.8
South Sumatra	145,320	13	7	13.6	3.0
Central Kalimantan	140,080	17	15	12.3	0.7
North Sumatra	130,470	12	8	20.4	3.3
North Sulawesi	119,330	19	15	32.7	0.8
Maluku	118,920	15	12	39.0	0.9
Irian Jaya	112,880	34	11	7.8	7.1
Bali	112,170	18	14	38.3	4.0
Riau	109,300	16	2	13.3	1.5
West Kalimantan	105,770	17	14	9.4	3.6
Aceh	99,720	22	5	8.8	9.6
East Java	95,530	9	7	54.9	29.6
West Java	95,200	13	8	32.7	0.4
Jambi	93,730	30	21	7.9	1.0
South Sulawesi	92.210	14	11	42.3	1.3
South Kalimantan	85,360	23	19	12.5	1.6
West Sumatra	82,160	20	17	14.0	0.8
Lampung	82,110	13	11	45.5	0.4
Bengkulu	80,670	38	28	21.0	0.1
South-East Sulawesi	79,140	72	35	28.8	0.6
Central Sulawesi	75,470	27	24	49.1	6.6
Central Java	69,090	11	9	57.9	0.3
D.I. Yogyakarta	67,860	22	17	56.9	0.3
East Yogyakarta	53,630	27	24	56.6	0.3
West Nusa Tenggara	53,330	23	21	50.0	0.1

Sources: Biro Pusat Statistik, *Statistik Indonesia*, 1984,
Pendapatan Regional Propinsi-Propinsi Di Indonesia, 1986 - 80 and
State of Local Finances, (First Stage Government) 1982.

APPENDIX IV. GROSS REGIONAL DOMESTIC PRODUCT AND DEMOGRAPHIC PATTERNS IN PROVINCES, 1980.

Provinces (According to discending under GRDP/PC)	Per Capita GRDP Non-Mining (constant 1975 prices)	% Urban Population	Population Density per sq Km	Annual Population Growth 1970–1980
East Kalimantan	301,470	51	6	5.7
D.K.I. Jakarta	264,620	96	11023	3.9
South Sumatra	145,320	31	45	3.3
Central Kalimantan	140,080	23	18	3.9
North Sumatra	130,470	35	118	2.6
North Sulawesi	119,330	33	111	2.3
Maluku	118,920	24	19	2.9
Irian Jaya	112,880	78	3	2.7
Bali	112,170	57	444	1.7
Riau	109,300	49	23	3.1
West Kalimantan	105,770	33	17	2.3
Aceh	99,720	24	47	2.9
East Java	95,530	62	609	1.8
West Java	95,200	51	593	2.4
Jambi	93,730	15	32	4.1
South Sulawesi	92,210	49	83	1.7
South Kalimantan	85,360	45	83	2.2
West Sumatra	82,160	21	68	2.2.
Lampung	82,110	24	139	5.8
Bengkulu	80,670	17	36	4.4
South-East Sulawesi	79,140	20	18	3.9
Central Java	69,090	56	742	1.6
D.I. Yogyakarta	67,860	66	868	3.9
East Nusa Tenggara	53,630	56	57	1.9
West Nusa Tenggara	53,330	57	135	2.4

Sources: Biro Pusat Statistik, *Statistik Indonesia,* 1984.