

# AN ANALYSIS INFLUENCE POPULATION DYNAMICS TO HUMAN DEVELOPMENT INDEX IN YOGYAKARTA.

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**Abstract.** Human Resources Management trending topics as regional Indicator to measure Human Development Index when Government and also Society developing this parametric best standard. Best standard in Statistics, had been displayed and score in Secondary Data Statistics Central Bureau as an intention have indication, which Yogyakarta is good predicate for indicator Human Development Index variables, 2016-2019.

The development of population in Yogyakarta, including Men Population Special Region in Yogyakarta Province and Women Population Special Region in Yogyakarta Province every year with assumption equality counted every month. Data human development index every year have got illustration so that all the distance preliminary people to next people more clearly. Data in table have got indicates which the Province problem solving with overall Information Technology Skills from score 2016 = 49.23 until overall Information Technology Skills score 2019 = 75.04.

Conclusions Regression equation with independent variables population some significantly in Yogyakarta Special Region Province with overall Information Technology Skills variable, and Women Population in Yogyakarta Special Region Province variable. F test for First Model 19994.523., then t test overall Information Technology Skills for First Model 141.402. Community in Yogyakarta before Pandemic *Corona viridae* 19 diseases.

**Keywords:** Human Development Index, Men, Women, Overall Information Technology Skills.

## 1. INTRODUCTION.

Research about Influencing Population Dynamics to Human Development Index in Indonesia focus on Yogyakarta as a Special Region with the highest Gini Ratio relatively and second score relatively for Human Development Index in Indonesia.

Through its family planning programs, Indonesia has successfully reduced the annual population growth from 2.31 percent in 1980 to 2.0 percent in 1990, The figure decreased further to 1.7 percent during 1990-1995 and is predicted to reach only 1.2 percent during 2000-2005. Yet the absolute number of the population also doubled from 119 million in 1971 to 203 million in 2000. Also, the family planning programs have been criticized in the past mainly they were more aimed toward quantitative target, by compromising quality, health care especially women and the people's rights to choose. The high population coupled with the uneven distribution and the quality of human resources, adds to pressure on natural resources. In the past uneven distribution was partially solved through the transmigration program (moving people from Java to the less populated islands outside Java) but in some cases, this has caused social conflicts with the local inhabitants and environmental degradation. To date population distribution has been dealt with separately from environment management. But efforts are being taken to standardize some indicators for quality and quantity of population and indicators for the balance of population and the environment in 1999/2000. (Anonim, 2002). [1]

Generation to implementation about population dynamics in Indonesia through the mindset of Human Resources Management living on International Business Tourism area.

Some activities including all job analysis about tourism area, need measurement about Human Development Index, all matters about implications received after *Pandemic Corona viridae 19*. Overall Information Technology Skills as a new culture in International People as same as possible for Indonesia people, who some people need meeting with safe for healthy.

The HDI was created to emphasize that people and their capabilities should be the ultimate criteria assessing the development of a country, not economic growth alone. The HDI can also be used to question national policy choices, asking how two countries with the same level of Gross National Income per capita end up with different human development outcomes. These contrasts can stimulate debate about government policy priorities. The Human Development Index (HDI) uses is a summary measure of average achievement in key dimensions of human development: healthy life being knowledgeable and have a decent standard of living. The health of dimensions is assessed by life expectancy at birth, the education dimension is measured by mean of year of schooling for adults aged. (Ranis, G., Steward, F, 2001). [24]

## **2. LITERATURE REVIEW.**

### **2.1. Preliminary Research.**

The Human Development Index emerged as alternative to pure income measures like GDP. Yet, little effort has been made to explicitly connect and merge these two lines of thought in order to study the effect of income inequality on alternative development measures in general or human development as defined by the Human Development Index in particular. This has been the case even though the foundation of the two issues can both be traced back to as far as Kuznets who in his famous Kuznets curve established a hypothesis about the reverse effect, the one of economic growth on inequality (Kuznets, 1955) and in connection to his work on national accounting added that the welfare of a nation could not be inferred from a measure of national income. (Kuznets, 1932). [23]

The Objective of this research are to (1) analyze the factors affecting human development index and household expenditures for health and infrastructure on human development index in Central Java. The model was built using econometric approach in the form of a system of simultaneous equations, including five blocks i.e government's revenue, government expenditures, input, output, and performance. The system of simultaneous equations consisted of 26 equations (19 structural equations and 7 identity equations). The estimation method used two stage least squares with SYSLIN procedure. Prediction Simulation used the stepwise autoregressive method. The model simulation used Newton's method and SIMNLIN procedure. The result of policy simulation concludes that the combination of the increase in government expenditure for education and infrastructure lead to better performance in increasing income per capita disposable income and HDI compared to the combination of the policy of the increase in government expenditure for education and in both municipalities and district, but municipalities receive greatest impact compared to district. (Novindra, N., Sinaga, B. M., dan Sulistyowati, N., 2017). [23]

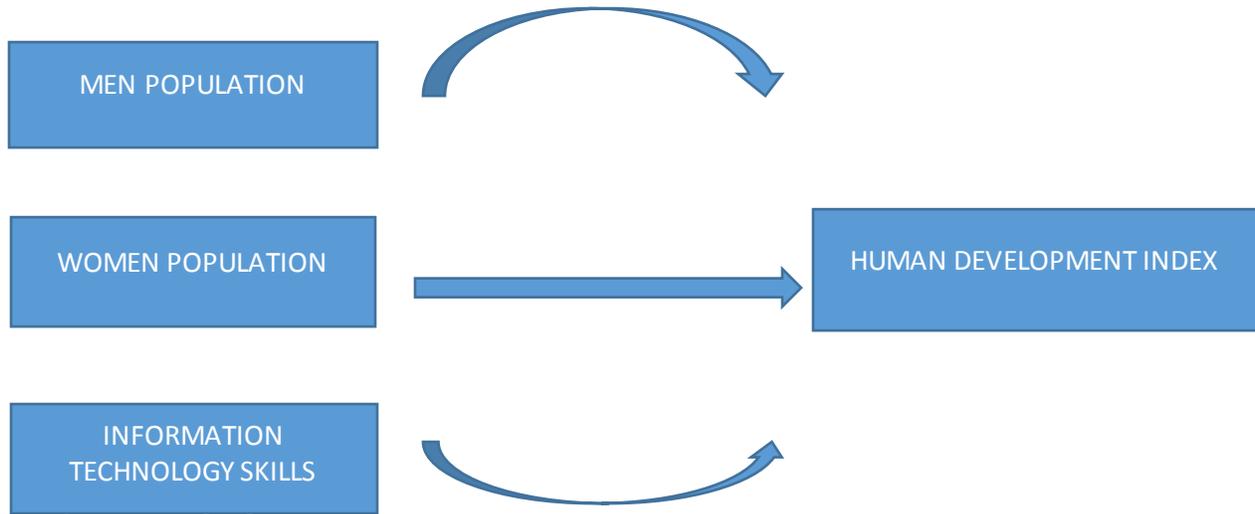
This research aims to examine the causal relationship between the provincial financial performance and the human development index. The results of this research are important since it can be used as a guidance to make sound policy of local governments revenue and budget allocation which can improve the welfare of quality of the society. (Damayanty, S. A., Setiawan, H and Riphah, S., 2016). [21]

This Study aims to determine the effect of the Human Development Index, Capital Expenditure, Fiscal Decentralization against Economic Growth and income inequality in East Java in Indonesia. This study applied a quantitative approach using a combination between time series and data between place and space (cross section), to determine whether there is a relationship between two variables or better direct or indirect influence. The findings indicated that the index of Human Development and Capital Expenditure have a positive and significant effect on income inequality (Novid, A and Sumarsono, H., 2018). [22]

### **2.2 International Textbooks.**

Human Resources Management is the organizational function responsible for attracting, hiring, developing, rewarding, and retaining talent. HRM is responsible for people related issues as well as employment-related legal compliance. (Gully, 2014). [

### 2.3 Research Operational Model.



#### 3.1. Variables.

Understand about all aspects from title until every step research activities, and also determine all variables adjustment problem solving. Variables which to determine indicators HDI as dependent variables (Y), Men Population Yogyakarta Special Region (X1), Women Yogyakarta Special Region (X2), and Information Technology Skills (X3).

#### 3.2. Hypotheses.

Data Gained from Statistics Central Bureau to adjustment with Purpose of Research, need Hypotheses.

H1. Men Population Variables (MPV) influencing Human Development Index (HDI).

H2. Women Population Variables (WPV) influencing Human Development Index (HDI)

H3. Overall Information Technology Skills (OITS) influencing Human Development Index (HDI).

All Data will be see at **Table 3.1.**

Year – Month	(Y) Human Development Index 2016 – 2019	(X1) Man Population Yogyakarta Special Region. Constant/Year	(X2) Woman Population Yogyakarta Special Region. Constant/Year	(X3) Information Technology Skills.
20161	78.38	1839951	1880961	49.23
20162	78.38	1839951	1880961	49.23
20163	78.38	1839951	1880961	49.23
20164	78.38	1839951	1880961	49.23
20165	78.38	1839951	1880961	49.23
20166	78.38	1839951	1880961	49.23
20167	78.38	1839951	1880961	49.23

20168	78.38	1839951	1880961	49.23
20169	78.38	1839951	1880961	49.23
201610	78.38	1839951	1880961	49.23
201611	78.38	1839951	1880961	49.23
201612	78.38	1839951	1880961	49.23
20171	78.89	1860869	1901298	57.37
20172	78.89	1860869	1901298	57.37
20173	78.89	1860869	1901298	57.37
20174	78.89	1860869	1901298	57.37
20175	78.89	1860869	1901298	57.37
20176	78.89	1860869	1901298	57.37
20177	78.89	1860869	1901298	57.37
20178	78.89	1860869	1901298	57.37
20179	78.89	1860869	1901298	57.37
201710	78.89	1860869	1901298	57.37
201711	78.89	1860869	1901298	57.37
201712	78.89	1860869	1901298	57.37
20181	79.53	1881478	1921394	68.82
20182	79.53	1881478	1921394	68.82
20183	79.53	1881478	1921394	68.82
20184	79.53	1881478	1921394	68.82
20185	79.53	1881478	1921394	68.82
20186	79.53	1881478	1921394	68.82
20187	79.53	1881478	1921394	68.82
20188	79.53	1881478	1921394	68.82
20189	79.53	1881478	1921394	68.82
201810	79.53	1881478	1921394	68.82
201811	79.53	1881478	1921394	68.82
201812	79.53	1881478	1921394	68.82
20191	79.99	1901735	1941197	75.04
20192	79.99	1901735	1941197	75.04
20193	79.99	1901735	1941197	75.04
20194	79.99	1901735	1941197	75.04
20195	79.99	1901735	1941197	75.04
20196	79.99	1901735	1941197	75.04
20197	79.99	1901735	1941197	75.04
20198	79.99	1901735	1941197	75.04
20199	79.99	1901735	1941197	75.04
201910	79.99	1901735	1941197	75.04
201911	79.99	1901735	1941197	75.04
201912	79.99	1901735	1941197	75.04

### 3.3. Regression Equation

Stepwise Regression Method.It means. In Statistics stepwise regression is a method of fitting regression models in which the choice of predictive variables is carried out by an automatic

procedure. In each step, a variable is considered for addition to or subtraction from the set of explanatory variables based on some pre-specified criterion. Usually this takes the form of a sequence of F tests and or t-tests, but other techniques are possible, such as adjusted R<sup>2</sup>.

### 3.3.1. Model

Stepwise (criteria: Probability of F to enter  $\leq 0.050$  include independent variable entered SKILLS and W. Skills explains about overall Information Technology Skills, and W as a Woman Population in Yogyakarta Special Region Province, with dependent Variable : HDI. The meaning of HDI is Human Development Index.

**Table 3.2.**

Model	R	R SQUARE	ADJUSTED R SQUARE	STANDARD ERROR OF THE ESTIMATE
1	0.999	0.998	0.998	2,998
2	0.999	1.000	1.000	,603

- a. Predictors : SKILLS
- b. Predictors : SKILLS, W

**Table 3.3.**

### One- Sample Test

Test Value = 0

	T	df	Sig. ( 2 tailed)	Mean Difference	Lower	Upper
<b>MEN</b>	<b>557.023</b>	<b>47</b>	<b>0.000</b>	<b>1871008.250</b>	<b>1864250.93</b>	<b>1877765.57</b>
<b>WOMEN</b>	<b>583.610</b>	<b>47</b>	<b>0.000</b>	<b>1911212.500</b>	<b>1904624.43</b>	<b>1917800.57</b>

**Table 3.4.**

### ANOVA<sup>a</sup>

MODEL		SUM OF SQUARES	df	Mean Square	F	Significance
<b>1</b>	<b>Regression</b>	<b>179763.431</b>	<b>1</b>	<b>179763.431</b>	<b>19994.523</b>	<b>0.000<sup>b</sup></b>
	<b>Residual</b>	<b>413.569</b>	<b>46</b>	<b>8.991</b>		
	<b>Total</b>	<b>180177.000</b>	<b>47</b>			
<b>2</b>	<b>Regression</b>	<b>180160.621</b>	<b>2</b>	<b>90080.310</b>	<b>247486.425</b>	<b>0.000<sup>c</sup></b>
	<b>Residual</b>	<b>16.379</b>	<b>45</b>	<b>.364</b>		
	<b>Total</b>	<b>180177.000</b>	<b>47</b>			

- a. Dependent Variable: HDI
- b. Predictors Constant.SKILLS
- c. Predictors: SKILLS, W

Table 3.5.

**Coefficients**

		Unstandardized	Coefficient	STD		
Model		<b>B</b>	Standard	<b>Beta</b>	<b>T</b>	<b>Significance</b>
			Error			
<b>1</b>	<b>Constant</b>	<b>7536.350</b>	<b>2.746</b>		<b>2744.740</b>	<b>.000</b>
	<b>SKILLS</b>	<b>.061</b>	<b>0.000</b>	<b>.999</b>	<b>141.402</b>	<b>.000</b>
<b>2</b>	<b>Constant</b>	<b>5357.620</b>	<b>65.957</b>		<b>81.229</b>	<b>.000</b>
	<b>SKILLS</b>	<b>.034</b>	<b>0.001</b>	<b>.551</b>	<b>40.352</b>	<b>.000</b>
	<b>W</b>	<b>.001</b>	<b>0.000</b>	<b>.451</b>	<b>33.034</b>	<b>.000</b>

a. Dependent Variables : HDI

Table 3.6.

**Excluded Variables**

Model		Beta in	t	Sig.	Partial	Collinearity
					Correlation	Statistics
						Tolerance
<b>1</b>	<b>M</b>	<b>.452</b>	<b>31.260</b>	<b>0.000</b>	<b>.978</b>	<b>0.11</b>
	<b>W</b>	<b>.451</b>	<b>33.034</b>	<b>0.000</b>	<b>.980</b>	<b>0.11</b>
<b>2</b>	<b>M</b>	<b>-8.326c</b>			<b>-1.000</b>	<b>1.311E1</b>

- a. Dependent Variable : HDI
- b. Predictors in the Model: (Constant), SKILLS
- c. Predictors in the Model: (Constant),SKILLS, W

#### 4. RESULTS AND DISCUSSION.

Electronic Data Processing to gain results with SPSS (*Statistical Package and Service Solutions/Statistical Package*) and provide some knowledge and information about flow process of research, include =

Population dynamics including birth rate and Immigration rate, transmigration and urban population. Statistics data had been provided between 2016 until 2019 have indicate Women Population greater than Men Population. *Pandemic Corona viridae 2019* generally start from August 2019 in USA, popular December 2019 in RRC display the new life style, Information Technology minded with teleconference for meeting, communications and documentation. Measurement with secondary data at Statistics Central Bureau appropriate in Indonesia with predictable data for 2032, Women population more than Men population, but until 2019 Women Population Special region in Yogyakarta more than Men population yet.

The quality of modern thinking about Human Resources Management provide increasing indicators appropriate with data overall information technology skills, sequencing from low to high. Appropriate with interesting study program which focus on Management and Informatics Engineering more customers. Technical problem, problem solving and minimize shooting for information system more efficiently rather than physical audience.

SPSS Analysis including F test (1,46,5%) with 1 usage degree freedom 19,994.523 greater than 4.692, it means the way of together all variables independent include, Men Population, Women Population and Overall Information Technology Skills had been received.

t test with 1 usage degree freedom regression, also 46 residual 141.402 greater than 2,324.15, with first model, Overall Information Technology Skills influencing significantly against Human Development Index.

#### CONCLUSION

The Summary is a brief statement of the essential findings. Sectional summaries may be used if there are many specific findings. These may be combined into an overall summary. In simple descriptive research, a summary may complete the report, because conclusions and recommendations may not be required. (Cooper, D.R., Schindler, P.S., 1998).

Yogyakarta as a location with the second score about Human Development Index influenced by variable women population and overall information technology skills after Jakarta.

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## **BIBLIOGRAPHICS**

- [1] Anonim, 2002 From Crisis to Sustainability.Paving the Way for Sustainable Development In Indonesia. National Assessment of Agenda 21 Republic of Indonesia.
- [2] Anonim, 2016. LONGMAN. Dictionary of Contemporary English 6<sup>th</sup> Edition. For Advanced Learners, Essex England.Pearson Education Limited.
- [3] Basuki 2010. Metode Penelitian.Second Edition.Penaku. Jakarta.
- [4] Bakry,U.S. 2016. International Relation Research Methods,First Edition.Pustaka Pelajar.Yogyakarta.
- [5] Chandra,A, 2013. 99,99% Lolos Seleksi Tes Masuk TNJI/POLRI. Penerbit Forum Edukasi. Yogyakarta. .
- [6] Cooper,D.R. and Schindler,P.S., 1998. Business Research Methods.Sixth Edition.
- [7] Deal and Glasman,H 2010. Science Research Writing.First Published.Imperial College Press.Singapore.
- [8] Gully,S.M.,and Phillips,J.M, 2016. Human Resources Management.South Western.
- [9] Hamdi,M. 2014. Public Policy. Ghalia Indonesia. Bogor.
- [10] Handoko,T.H.,et al 2008. Paradigma Baru Sumberdaya Manusia.Second Edition.Amara Books.Yogyakarta.
- [11] Ije,J, and Tesorioro,F. 2008. Community Development.Third Edition.Pustaka Pelajar.Yogyakarta.
- [12] Jolley,J.M. and Mitchell, M.L. 2007. Research Design Explained.Sixth Edition.Thomson Wadsworth.
- [13] Padangaran,A.M. 2011 Project Management,Community Development.Unhalu Press.Kendari.
- [14] Parjiono,Samosir,A.P.,Sujai, M. 2017. Fiscal Policy,Climate Change,and Sustainability Development.Gramedia. Jakarta.
- [15] Santoso,S. 2015. SPSS 22 From Basic to Expert Skills.PT Elex Media Komputindo.Jakarta.
- [16] Silalahi,U. 2017. Social Research Methods.Fifth Edition.PT Refika Aditama.Bandung.
- [17] Soetomo, 2011. Community Empowerment, First Edition.Pustaka Pelajar.Yogyakarta.
- [18] Sunyoto,D. 2015. The Research of Human Resources Management.First Edition. Center of Academic Publishing Services. Yogyakarta.

[19] Susilo, D.R.K 2009. Environmental Sociology.First Edition.PT RajaGrafindo Persada,Jakarta.

[20] Widarjono,A. 2015. Multivariate Analysis(Applied). UPP STIM YKPN.Yogyakarta.

## **REFERENCES**

[21] Damayanty,S.A., Setiawan,H, Riphah,S. Causality Analysis between Financial Performance and Human Development Index.Volume 2 (3) 2016.

[22] Novid, A.and Sumarsono,H. The Quantitative Economics Research.and International Scientific Journal. Volume 1(2). 2018

[23] Novindra,N.,Sinaga,B.M.,and Sulistyowati,N. Impacts of Government and Household Expenditure on HDI. Journal Ekonomi & Kebijakan.Department of Economic Development ,Faculty of Economic,Semarang State. Volume 10 Nomor 02. 2017.

[24] Ranis,G.,Stewart,F et al 2001 Human Development :Beyond The Human Development Index. Journal of Human Development. 7(3) November 2001.