

## **ANALYSIS OF FACTORS AFFECTING THE HUMAN DEVELOPMENT INDEX IN INCREASING INDONESIAN ECONOMIC GROWTH IN NORTH SUMATRA PROVINCE**

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**Latar Belakang:** perbaikan dapat diartikan sebagai upaya atau prosedur yang dapat memicu perubahan. Prosedur perbaikan ini meliputi segala aspek kehidupan masyarakat, termasuk aspek keuangan, politik, sosial dan budaya.

**Tujuan:** dengan tujuan untuk mencapai pertumbuhan keuangan

**Metode:** metode yang bisa digunakan adalah Model Pooled Least Square (Common Effect), Model Pendekatan Efek Tetap (Fixed Effect) dan Model Pendekatan Efek Acak (Random Effect).

**Hasil:** hasil pengolahan data menunjukkan t hitung variabel tingkat kemiskinan adalah t hitung < t tabel. Signifikan uji t memiliki signifikan sebesar 0,0021 dengan standar signifikan 0,05, Maka nilai signifikan tingkat kemiskinan lebih kecil dari 0,05 maka  $H_0$  ditolak dan  $H_a$  diterima.

**Kesimpulan:** Pada pertumbuhan ekonomi sangat memiliki pengaruh yang positif kepada IPM di prov. Sumatera Utara, yang dapat disimpulkan bahwa jika meningkatkan pertumbuhan ekonomi juga akan meningkatkan Indeks pembangunan manusia di Prov. Sumatera Utara di karenakan keduanya saling berhubungan.

**Kata kunci:** *Indeks Pembangunan Manusia; Pertumbuhan Ekonomi; Kemiskinan; Belanja Langsung per Kapita; Provinsi Sumatera Utara*

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**Abstract (English)**

**Background:** Improvement can be interpreted as an effort or procedure that can trigger change. This repair procedure covers all aspects of people's lives, including financial, political, social and cultural aspects.

**Objective:** with the aim of achieving financial growth

**Methods:** The methods that can be used are the Pooled Least Square Model (Common Effect), the Fixed Effect Approach Model and the Random Effect Approach Model.

**Results:** The results of data processing show that the  $t$  count of the poverty level variable is  $t \text{ count} < t \text{ table}$ . The significance of the  $t$  test is 0.0021 with a significant standard of 0.05, so the significant value of the poverty level is less than 0.05, so  $H_0$  is rejected and  $H_a$  is accepted.

**Conclusion:** Economic growth has a very positive influence on the HDI in North Sumatra Province, which can be concluded that if increasing economic growth will also increase the human development index in North Sumatra Province because the two are interconnected.

**Keywords:** Human Development Index; Economic growth; Poverty; Direct Spending per Capita; North Sumatra Province

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## BACKGROUND

In simple terms, improvement can be interpreted as an effort or procedure that can trigger change. This repair procedure covers all aspects of people's lives, including financial, political, social and cultural aspects (Sulaiman, 2021). Economic improvement is the procedure of changing the situation for the better for prosperity and improvement and prosperity for the better. In the discourse of

economic improvement, financial improvement is similar to creating, maintaining and growing state revenues in general. The financial boom is one indicator of overall financial performance both at the national and regional (regional) levels. According to Todaro (Yunitasari, 2007), the financial boom is a procedure in which the level of the financial system will increase from time to time to obtain a better level of income. Indonesia's financial boom fell with the help of using 3% from 6% to 3% between 2010 and 2020. The economic boom is considered as one of the maximum vital signs in conducting an overall performance assessment in the monetary system, the main issue being to examine the effects of monetary improvement efforts that have been carried out through the countryside or regions. . If product production and supply will increase from the previous year to the modern year, it continues to increase. The economic boom will show how monetary entertainment will generate network profits in a positive period. An economic system is considered to be experiencing a boom if all actual wages for the use of manufactured goods in a given year are more than the previous year. The indicator used to measure the monetary boom is the Gross Regional Domestic Product (GDP) price boom which is based entirely on regular prices (Dewi & Sutrisna, 2015).

Kuznets defines monetary increase as growing the long-term potential in rural areas for various types of goods and offerings to the community (Yunitasari, 2007). According to Todaro (2003) the elements that can boost monetary increase can be implemented in three fundamental components. First, capital accumulation, including new types of investments that are invested in land, body gadgets and human capital or human resources. Second, population growth will increase the tempo of labor. Third, technological advances may be able to improve old-fashioned approaches to dealing with work (Pambudi, 2013). The increase in rural monetary over the long term can be supported by using growth in the physical capital stock and more workers, but also to increase the first level of human capital which has a strong influence on increasing first-level employment and using more and more developing technological advances. Human development can be done by using the improvement of various components that are important for human lifestyles to develop human resources, especially lifestyle ranges, training and also a respectable lifestyle. To publish it, BPS has established a popular measure to measure the increase in useful human resources as mentioned in the Human Development Index (HDI) or Human Development Index (HDI).

In carrying out a measurement, the human improvement index is a useful measuring tool for determining financial improvement, measuring the extent to which the community's high level of physical and spiritual satisfaction, especially indicators of health, education and financial levels (Suliswanto, 2010). Therefore, humans appear as real wealth and nation-building. The ever-evolving level of

human progress largely determines society's ability to understand and process the supply of financial growth, each related to the era and company with the aim of achieving financial growth.

From the results of the 2020 Population Census, Indonesia's population in September 2020 reached 270.2 million people. In 1961 Indonesia conducted its first population census and the population continues to increase every year. From the results of the 2020 Population Census, it is known that there may be a further population of around 32.56 million, from these results also obtained within 10 years or an average of 3.26 million humans every year throughout the year. 2010 to 2020. The price of population growth in Indonesia for 10 years from 2010 to 2020 reached an average of 1.25% according to the year. This percentage decreased compared to the increase in population prices in the previous 10 years from 2000 to 2010 of 1.49% (Sugiyanto & Kurniawati, 2021).

An increase in the economy will increase the cost of delivering the desired asset for human improvement. By growing assets with proper asset allocation and a much wider distribution of opportunities, especially on activity opportunities, it will inspire the increase of people to push up once again and better. On the other hand, the increase in people leads to a multiplied increase in finances. The level of excessive human improvement significantly determines the ability of society to understand and manipulate financial enhancement assets, respectively in the era and in the company as an important method for increasing financial improvement (Lumbantoruan & Hidayat, 2015).

In achieving the Human Development Index in Indonesia, the best was given to DKI Jakarta Province of 80.76, while the lowest growth was occupied by the utilization of Papua Province's assistance of 60.84. Despite being miles but below, the fulfillment of the Papua Province Human Development Index has changed its reputation from low to light because of that last year (Calundu, 2018). Human development in North Sumatra continues to increase every year, this makes North Sumatra ranked twelfth with the Human Development Index reaching 71.74. This figure is multiplied by 0.56% usage assistance or an increase with 0.79% usage assistance compared to 2018.

The increase in humans in North Sumatra is excessive, compared to many provinces in Indonesia. However, it is clear that each district/city in North Sumatra has superior quality human resources. The complexity faced today is not only the Human Development Index, but also disparities because the Regency/City Human Development Index in North Sumatra is not light, some are excessive, excessive and moderate. Why is human improvement in North Sumatra Regency/City now no longer easy? and whether monetary growth, poverty and direct expenditure in accordance with the capita affect the uneven human development in each Regency/City Region. From this description, the author is

involved and wants to see how much monetary growth, poverty and direct spending per capita affect the human development index. Therefore, this study takes the title "Analysis of Factors Affecting the Human Development Index in Increasing Indonesia's Economic Growth in North Sumatra Province".

## RESEARCH METHODS

With that, the researcher will analyze the factors that influence the human development index in increasing Indonesia's economic growth in the province of North Sumatra. This study uses secondary data with panel data analysis. There are two advantages in using panel data (WITA, 2022): By combining time series and cross section data in panel data, the number of observations becomes larger. Reduce identification problems. Panel data is better at identifying and measuring effects that simply cannot be addressed in time series data alone or in cross sections. Panel data can control for individual heterogeneity.

The panel data used in this study is a combination of time series data from 2017-2020 and cross sections taken from 33 regencies/cities in North Sumatra obtained from the Central Statistics Agency (BPS) of North Sumatra. The panel data used in this study is a combination of time series data. from 2017-2020 and a cross section taken from 33 regencies/cities in North Sumatra obtained from the Central Statistics Agency (BPS) of North Sumatra (Kartikasari, 2020). Analysis Method The analytical model used is a mixed analysis of panel data regression analysis.

According to Agus Widarjono (2013)<sup>8</sup>, panel data is a combination of cross section data and time series data. Regression with panel data is called panel data regression model. From previous research, data analysis is limited to four variables, namely the Human Development Index (IPM), Economic Growth (PE), Poverty (Kms), and Education Sector Government Expenditures (PP). This study was analyzed using the following equation:  $IPMit = o + 1 PEit + 2 Kmsit + 3 PPit + uit$  Where: HDI = human development index PE = economic growth (percent) Kms = poverty rate (percent) PP = government spending on education  $o =$  Intercept  $1, \alpha_2, \alpha_3 =$  regression coefficient (independent variable)  $uit =$  error component  $i = 1, 2, 3, \dots, 15$  (cross-section data of Provinces in Indonesia)  $t = 1, 2, 3, 4$  (data time-series, 2017-2020) In conducting panel data regression, first determine the method to be used by comparing one method to another. There are several methods that can be used, namely the Pooled Least Square Model (Common Effect), the Fixed Effect Approach Model and the Random Effect Approach Model.

## RESULTS AND DISCUSSION

GRDP is a measure of the success of the government in using existing resources and can be used for planning and decision making. The higher the regional GDP, the greater the potential source of income for the region. Based on GRDP at a fixed price, Indonesia's GRDP fluctuated from 2010 to 2019, and in 2020, the COVID-19 pandemic drastically reduced Indonesia's GRDP to 2.07%. Central Sulawesi and South Sulawesi made the largest contribution to Indonesia's GRDP from 2016 to 2020. These states, together with Gorontalo, have made the largest contribution to Indonesia's GRDP for four consecutive years.

Therefore, if we look at the GRDP of the Indonesian state as a whole at a fixed price in 2000, it can be concluded that the GRDP can increase or the GRDP of each state of Indonesia can decrease. GRDP (Gross Domestic Product) is caused by several factors, including wealth in the form of economic resources (natural wealth), population, population ability (HR) to use production technology and process regional wealth. The tendency to disperse GRDP control and uneven growth rates lead to uneven development between regions. In 2020, the GRDP of Indonesia and several other states experienced a decline, but Central Sulawesi showed positive results.

Regency City [Series 2010] GRDP at 2010 Constant Prices by Regency/City (Billion Rupiah)

Kabupaten Kota	[Seri 2010] PDRB atas Dasar Harga Konstan 2010 Menurut Kabupaten/kota (Milyar Rupiah)		
	2018	2019	2020
Sumatera Utara	512 762,63	539 513,85	533 746,36
Nias	2 440,16	2 563,03	2 609,14
Mandailing Natal	8 904,14	9 376,46	9 288,65
Tapanuli Selatan	9 201,96	9 683,66	9 721,77
Tapanuli Tengah	6 678,25	7 024,15	6 970,58
Tapanuli Utara	5 510,19	5 764,94	5 851,40
Toba Samosir	5 249,25	5 503,76	5 488,92
Labuhan Batu	22 112,34	23 232,71	23 252,75
Asahan	24 844,87	26 245,24	26 299,57
Simalungun	25 996,21	27 348,70	27 625,70
Dairi	6 267,82	6 569,81	6 508,05
Karo	13 744,17	14 376,2	14 261,4

		8	7
Deli Serdang	68 341,00	71 878,6 9	70 596,8 3
Langkat	28 170,08	29 597,7 7	29 343,2 6
Sumber : Data BPS4 Sumatera	018,74	4 221,04	4 246,83
Humbang Hasundutan	3 946,12	4 141,10	4 135,60
Pakpak Bharat	805,01	852,30	850,79
Samosir	2 931,70	3 098,74	3 080,43
Serdang Bedagai	18 421,38	19 393,3 9	19 308,4 6
Batu Bara	22 998,60	23 998,5 9	23 923,6 4
Padang Lawas Utara	7 791,05	8 228,45	8 322,51
Padang Lawas	7 534,30	7 959,31	8 053,50
Labuhanbatu Selatan	17 797,95	18 750,1 6	18 899,3 1
Labuanbatu Utara	16 413,33	17 259,1 9	17 306,5 9
Nias Utara	2 228,75	2 332,44	2 369,36
Nias Barat	1 179,91	1 236,73	1 257,28
Sibolga	3 393,91	3 570,33	3 521,72
Tanjungbalai	5 473,63	5 790,37	5 763,21
Pematangsiantar	9 170,19	9 611,74	9 430,04
Tebing Tinggi	3 760,50	3 954,03	3 926,39
Medan	148 007,14	156 780, 58	153 669, 83
Binjai	7 708,59	8 133,54	7 984,46
Padangsidempuan	4 038,93	4 261,32	4 230,41
Gunungsitoli	3 232,97	3 428,45	3 441,65

Based on the table above, the results show that the economy in North Sumatra in 2020 as measured by Gross Regional Domestic Product (GRDP) at current prices reached IDR 811,282.84 billion and GRDP per capita reached IDR 55.18 million. The North Sumatran economy in 2020 experienced a contraction of 1.07 percent compared to the 2019 achievement of 5.22 percent. In terms of

production, the highest contraction was experienced by the Transportation and Warehousing Business Field of 12.77 percent. In terms of expenditure, the highest contraction was experienced by the Export Component of Goods and Services at 10.36 percent. North Sumatra's economy in the fourth quarter of 2020 compared to the fourth quarter of 2019 experienced a contraction of 2.94 percent (y-on-y). In terms of production, the highest contraction was experienced by the Transportation and Warehousing Business Field of 16.93 percent. In terms of expenditure, the highest contraction was experienced by the Export Component of Goods and Services at 15.12 percent.

The economy of North Sumatra in the fourth quarter of 2020 compared to the third quarter of 2020 experienced a slowdown by 0.05 percent (q-to-q). In terms of production, this was caused by a decline in the Agriculture, Forestry and Fisheries Business Fields, which decreased by 2.10 percent. From the expenditure side, it was caused by the Export Component of Goods and Services which experienced a slowdown by 2.59 percent. The spatial structure of the economy on Sumatra Island in 2020 is dominated by North Sumatra and Riau provinces. North Sumatra Province gave the largest contribution to the Gross Domestic Product on Sumatra Island, amounting to 24.06 percent, followed by Riau Province at 21.62 percent and South Sumatra Province at 13.60 percent.

In looking at a development development in a country there will be many causes. One that can be used is the Human Development Index (IPM). Indonesia itself uses this indicator to be used in evaluating the government's performance and as a target for the next national development target. There are three aspects that are components of the HDI, namely the age of the community, the length and average of attending school and the aspect of per capita expenditure. If the three aspects have increased, it can be said that progress has been made, and it must be seen whether the targets have been met or not and how significant the progress has been. When viewed from the three aspects that make up the index, the increase in HDI in 2020 in Indonesia is caused by an increase in the UHH aspect and the education aspect. The UHH of the Indonesian people this year has increased by 0.13 years to 71.47 years from the previous figure of 71.34 years. The trend in the last ten years continues to increase. In 2010 Indonesia's UHH figure was below 70 years.

## **CONCLUSIONa**

Economic growth has a very positive influence on the HDI in North Sumatra province, which can be concluded that if increasing economic growth will also increase the human development index in North Sumatra Province because both are interconnected with economic growth, poverty and also government spending. in the education sector will have a very positive effect on the human development index in North Sumatra Province. From the tests carried out on direct



per-capital expenditures, it has a fairly good effect on the human development index in North Sumatra Province starting in 2015-2020. From the results we found that poverty has a negative effect on the human development index in North Sumatra Province.

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