Analysis of Inequality of Income Distribution in North Sumatra in 2011-2022

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Abstract

In a country, both developing and developed countries, the problem that often occurs is economic problems or income distribution that is not evenly distributed in all corners of the country. Indonesia is no exception, especially in the province of North Sumatra. The research method that the author uses is descriptive research method, namely the research results are obtained from accurate and clear secondary data sourced from Gini coefficient data and the Central Bureau of Statistics (BPS). From the results of observations or data results obtained that the result of unequal income distribution in Indonesia has resulted in social inequality, poverty and income inequality. The effect of income inequality is that money causes the rich to get richer and the poor to get poorer. As a result, many new problems arise from the income inequality effect. The purpose of this study was to determine the inequality of income distribution in North Sumatra from 2011 to 2022. The conclusion obtained from income distribution data in the North Sumatra region is that income inequality in this region has increased from 2011 to 2022.
Keywords: Inequality, Income Inequality, North Sumatra

Introduction

The term development has long been an everyday concept in Indonesia. The problem of development equity and its results have only been seen since Pelita III, where the development strategy was changed with the aim of prioritizing equality in an evolutionary trilogy known as the Eight Paths of Equality, namely: 1) Performance of basic human needs in the form of food, clothing and housing; (2) Opportunity to purchase education and health services; (3) profit sharing; (4) Employment Opportunities; (5) business opportunities; (6) opportunity to participate especially in development for young people and women; (7) development distribution; and (8) opportunity to get justice

The economic development of the Indonesian people includes all aspects of the people's economy, both the lives of people living in rural areas and the lives of people living in urban areas. The main objective is to increase and increase the standard of living of all Indonesian people. Economic development is carried out by focusing on efforts to grow in the economic sector by utilizing all the potential it has and the potential of its means of natural resources and human resources.

Indonesia is a very large archipelagic country characterized by many provinces and various problems to be solved. One of the biggest problems that is difficult for Indonesia to face is the problem of unequal distribution of income in various regions in Indonesia.

The biggest problem faced by Indonesians is the unequal distribution of income between high and low income groups, leading to increasing economic inequality and poverty. Income distribution is one aspect of poverty that needs attention because it is essentially a measure of relative poverty.

Economic inequality has both positive and negative impacts. Positive effects Inequality can encourage competition among underdeveloped regions Promote regional growth and prosperity. Despite the effect, the negative side of inequality is economic inefficiency, which undermines the stability of high social inequality which is often seen as unfair (Todaro, 2011). The negative effect of this inequality creates new problems for society.

The economy is said to experience economic growth when economic activity is higher than in the previous period. The higher the income of a society, theoretically the higher the welfare. Economic growth itself is said to be a phenomenon in which income grows from year to year, where uneven economic development causes differences in income in each region. The magnitude of individual income distribution is the most frequently used measure of economic inequality in a region. It turns out that from the general public Poverty increases every year

In terms of inequality, the Gini index is needed to assess the size of the income gap. The Gini index consists of values from 0-1. If the Gini index = 0, the income differences are exactly the same. So everyone gets the same income. Gini index 1 means total income inequality.

Literature Review

A. Definition of Inequality

Inequality between regions is increasingly widespread in regional economic activities. This is due to differences in the content of natural resources and differences in the demographic conditions of different regions. This difference also distinguishes the ability of each region to support the development process. Inequality refers to the relative standard of living in a society. Economic inequality itself means the difference in economic development between regions both vertically and horizontally which causes unequal development.

B. Definition of Income Inequality

Income inequality can also be interpreted as an aspect of poverty that really needs to be considered by the government because in essence this income distribution inequality is included in relative poverty, which means that poverty calculation is based on the portion of regional income distribution. This inequality of income distribution reflects the even distribution of development results of a region or country or of each individual. For example, in developing countries, income inequality is greater, while in developed countries income levels tend to be more evenly distributed so that the level of inequality in income distribution is low.

C. Causes of Income Inequality

There are several causes of inequality in income distribution, including the following:

a. High population growth in each region will result in a decrease in per capita income
b. There is unstable inflation
c. Inequality of development between each region
d. Low social mobility
e. Worsening exchange rates or exchange rates, especially for developing countries
f. There is an inelasticity of demand for developed countries for export goods from developing countries
g. The destruction of the people's handicraft industry

D. Overcoming Income Inequality

The government continues to work to reduce the economic disparity between the rich and the poor, including development disparities between regions. Even though the level of inequality as measured by the Gini Ratio has decreased, efforts to increase the distribution of development outcomes are continuing. BPS recorded a Gini Ratio of 0.393 in March 2017 compared to 0.408 in 2015. To promote economic equity, the government implemented five policies to reduce inequality. The five policies include reducing unemployment, reducing poverty, providing employment, reducing wealth inequality, and strengthening people-based industries. Various efforts have been made by the government to eliminate social inequality, including equal distribution of public income and social security programs. In addition, the government is trying to reduce poverty by creating jobs such as labor-intensive industries

Research Method

This study uses a descriptive approach that aims to describe and analyze the variable income distribution inequality in North Sumatra. The type of data in this study is secondary data, namely data on income distribution inequality as seen from the Gini coefficient from 2011 to 2022. This data comes from the Central Bureau of Statistics (BPS) of North Sumatra

Results and Discussion
    A. Overview of Regional Conditions in North Sumatra Province
        1. Geographical Location of North Sumatra

            Geographical location in the province of North Sumatra is located in the western part of Indonesia which is located on the lines 1^0 - 4^0 North Latitude and 98^0 - 100^0 East Longitude. The region of North Sumatra is bordered to the north by the province of Aceh, to the west, to the east by the Malacca Strait and to the south by the provinces of Riau and West Sumatra. North Sumatra Province has a land area of about 71,680.68 km^2, most of which are located on the mainland of the island of Sumatra and a small part are located on the island of Nias and several small islands in the western and eastern parts of the island of Sumatra.

            The largest area in North Sumatra province is Mandailing Natal district with an area of 6,620.70 km^2, followed by Langkat district with an area of around 6,263.29 km2 and Simalungun district with an area of 4,386.60 km^2. A small area is Sibolga with an area of 10.77 km^2 of the entire North Sumatra region. Based on its location and natural conditions, North Sumatra is divided into three regions, namely the west coast of North Sumatra which has many types of steep and rocky areas and swampy highlands and the east coast. The highland region includes North Tapanuli, Toba, Samosir, Simalungun, and Karo

            Kabupaten Humbang Hasundutan, Kabupaten Pakpak Bharat, Kabupaten Samosir dan Pematang Siantar Kota. Kawasan Pesisir Timur meliputi Kabupaten Labuhan Batu, Kabupaten Labuhan Batu Utara, Kabupaten Labuhan Batu Selatan, Kabupaten Asahan, Kabupaten Batu Bara, Kabupaten Deli Serdang, Kabupaten Langkat, Kabupaten Serdang Bedagai, Kota Tanjung Balai, Kota Tebing Tinggi, Kota Medan dan Kota Binjai.

        2. Weather Conditions

            Because it is located near the equator. North Sumatra Province is included in the tropical climate zone. North Sumatra province's land surface is very diverse , some areas are flat, only a few meters above sea level, hot climates ranging from 33.40 ^{0}C, some mountainous areas with gentle slopes, temperate climates. Some are in the high zone, where the lowest B.

B. Overview of Economic Development in North Sumatra Province

Economic growth can be interpreted as a measure of the development results achieved, especially in the economic field. Economic growth is also a picture of the level of economic development.

Tabel 1

PDRB Per Kapita berdasarkan harga berlaku menurut kabupaten / kota (dalam Rupiah)

Periode 2011 – 2013

Kabupaten Kota	Produk Domestik Regional Bruto Per Kapita Atas Dasar Harga Berlaku menurut Kabupaten/Kota (rupiah)											
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Sumatera Utara	23778381.00	31109349.24	34544178.04	37913895.62	41019539.08	44557762.32	48003601.89	51427494.00	54620404.00	54979044.00	57569793.00	63194182.91
Nias	9794032.00	14738113.06	16407993.86	18049993.42	19664739.91	21667962.89	22753908.77	24636473.00	26611574.00	27619440.00	28565862.00	30393638.19
Mandailing Natal	10418838.00	16685226.57	18677507.64	20539721.81	22247548.13	24491077.08	26649319.54	28451718.00	30169003.00	29379369.00	31126553.00	33830497.56
Tapanuli Selatan	13399807.00	25689538.76	32233537.18	34087279.37	36562815.04	39599860.01	42959511.72	45961324.00	49397036.00	48806866.00	50945707.00	55487218.95
Tapanuli Tengah	8020490.00	16311087.01	17622674.14	19003861.62	20399797.43	21992877.34	23495348.92	24934361.00	26119495.00	27867949.00	28753713.00	31049490.02
Tapanuli Utara	14692361.00	16115964.89	17279972.58	18666207.66	19957843.95	21312628.59	22718451.43	24332249.00	26071315.00	26524531.00	27917074.00	30291797.92
Toba Samosir	22052114.00	24512909.97	26689055.18	28971533.51	31288931.51	33954467.90	36499646.11	39204402.00	41812686.00	38204189.00	39597467.00	42161712.84
Labuhan Batu	20041430.00	41325449.22	45235379.22	48885659.98	52106397.84	56332871.79	60662338.13	64345055.00	67295287.00	70449184.00	75216464.00	82297309.45
Asahan	20127633.00	28953392.05	31852132.21	34769010.98	37470992.89	40981266.68	44551813.64	47854663.00	51146769.00	50416672.00	54003135.00	59129668.11
Simalungun	14071628.00	25151339.14	27714005.64	30020732.78	31960562.32	35326467.10	38211192.09	41038393.00	43832797.00	40010292.00	42418784.00	46285430.28
Dairi	15502978.00	18719099.82	20693673.52	22581579.26	24447889.51	26490917.80	28312002.77	30248407.00	32272150.00	30271338.00	31157809.00	33972435.30
Karo	21183934.00	30565576.03	33725793.56	36111592.74	38887870.83	42179797.30	44801602.99	46917382.00	49028529.00	51961249.00	53349721.00	57852049.99
Deli Serdang	24458632.00	27816359.69	31472213.97	35107391.70	37813200.40	41086202.19	44071079.20	46882094.00	49166871.00	57121603.00	59394175.00	65275058.35
Langkat	19974161.00	23168391.98	25499087.05	27709963.46	30335610.25	33244425.69	36012766.45	38504178.00	40770602.00	41997095.00	44756262.00	49438868.74
Nias Selatan	8296801.00	11678799.35	12925145.11	14091597.12	15341310.54	16686383.01	18116498.60	19964732.00	21362077.00	19975206.00	20265918.00	21447849.70
Humbang Hasunduta	15988874.00	18651726.47	20459726.13	22373027.26	24117028.86	25828988.59	27483734.02	29325411.00	31169378.00	31066971.00	31828353.00	34204247.53
Pakpak Bharat	8926340.00	14561549.77	15753860.63	16934415.62	18151328.89	19798591.51	21191349.83	22589017.00	23767278.00	23282247.00	23834097.00	25519226.85
Samosir	15191920.00	18796432.24	20798666.16	23061589.42	25396796.78	27655311.47	29989293.81	32469661.00	35152678.00	33395960.00	34534288.00	37077364.13
Serdang Bedagai	18217870.00	24935361.06	27729342.34	30439133.11	33107731.36	36198406.35	39310886.99	42294269.00	45450612.00	43601239.00	45944656.00	50176775.18
Batu Bara	19684117.00	50644209.66	54183712.35	59174017.93	63361098.94	68086625.70	72738987.65	77415555.00	81396934.00	85362153.00	90029827.00	98150709.02
Padang Lawas Utara	8487325.00	25462589.86	27932222.29	30117012.39	32550565.37	35210924.50	37651925.55	40154176.00	42096054.00	46921625.00	49849624.00	53784663.76
Padang Lawas	7930884.00	24664319.83	26990277.63	28929260.87	30435795.20	33388751.50	35971180.22	38458403.00	39891069.00	46121233.00	49822507.00	54575865.34
Labuhanbatu Selatan	24789866.00	48980140.82	53250686.01	57299410.69	60698061.58	65559964.02	70974722.85	75465242.00	79036333.00	90032146.00	97078029.00	106625839.28
Labuanbatu Utara	24082333.00	39097173.35	43045191.20	46802312.27	50186072.59	54654596.64	59161909.93	63032129.00	66758160.00	66167204.00	71009862.00	77457956.83
Nias Utara	10034573.00	14133743.65	15892816.80	17468290.21	18858290.57	20573074.57	22179781.63	23724681.00	25449555.00	25276857.00	26043861.00	27675665.99
Nias Barat	8148368.00	11574734.54	12924542.00	14025235.05	15173971.89	16600241.44	18995907.19	20490439.00	22185630.00	21408363.00	22298150.00	23780110.46
Sibolga	19951909.00	31608001.34	35627844.40	39788841.91	44331525.70	49117363.95	53331855.64	57994856.00	63246552.00	62649110.00	64449897.00	70163186.08
Tanjungbalai	21338683.00	27045423.79	29890544.95	33029207.49	36236421.44	39758871.09	43373414.04	47175954.00	50801057.00	52311057.00	54225983.00	58226755.44
Pematangsiantar	18981676.00	31290836.91	34954032.74	38984091.15	42707592.86	46409051.57	49476390.64	51979135.00	54451429.00	52051340.00	52473799.00	55493432.52
Tebing Tinggi	17603851.00	20435197.44	23029965.94	25271796.68	27343456.48	29750906.29	31882154.37	33906282.00	35846016.00	35142175.00	36291830.00	38986791.51
Medan	43932544.00	54667741.10	60628386.62	67657621.89	74513723.45	83452215.39	90341498.15	98263688.00	105623957.00	99800415.00	103509150.0	112310157.69
Binjai	22723829.00	24162561.52	26619963.64	29251828.54	31669122.90	33883689.67	36559095.63	39304878.00	42058090.00	40488046.00	41702013.00	44385179.85
Padangsidimpuan	11749507.00	16265737.14	17803426.69	19375950.44	21089588.56	23076048.36	24870188.61	26765890.00	28478028.00	28889457.00	29798729.00	31960924.24
Gunungsitoli	17930540.00	19526811.41	21691975.67	23937791.95	26432609.34	29298499.80	32330683.63	35486672.00	38509038.00	42535236.00	44017837.00	47075793.25

Sumber: BPS Sumatera Utara

Based on the data above, it can be seen that economic growth has increased every year which can be seen from the value of the Gross Regional Domestic Product (GDP) per/capita of North Sumatra or the Kabupaten/Kota in North Sumatra province, the GRDP value for North Sumatra province is based on constant prices in 2011 amounted to 23,778,381.00, in 2012 it increased to 31,109,349.24, in 2013 it increased by 34,544,178.04, in 2014 it also increased by 37,913,895.62, in 2015 it was 41,019,539.08, year 2016 increased by 44,557,762.32, so did 2017 it increased by 48,003,601.89, in 2018 it increased by 51,427,494.00, in 2019 it increased by 54,620,404.00, in 2020 it increased by 54,979,044 .00, in 2021 it will increase by 57,569,793.00, and in 2022 it will again increase to 63,194,182.91

If you look at the table of Per Capita GRDP at Current Prices by Regency/City (Rupiah) the highest value is located in the city of Medan with a value of 112310157.69 in 2022 and Labuhan Batu Selatan district with a value of 106625839.28 in 2022.
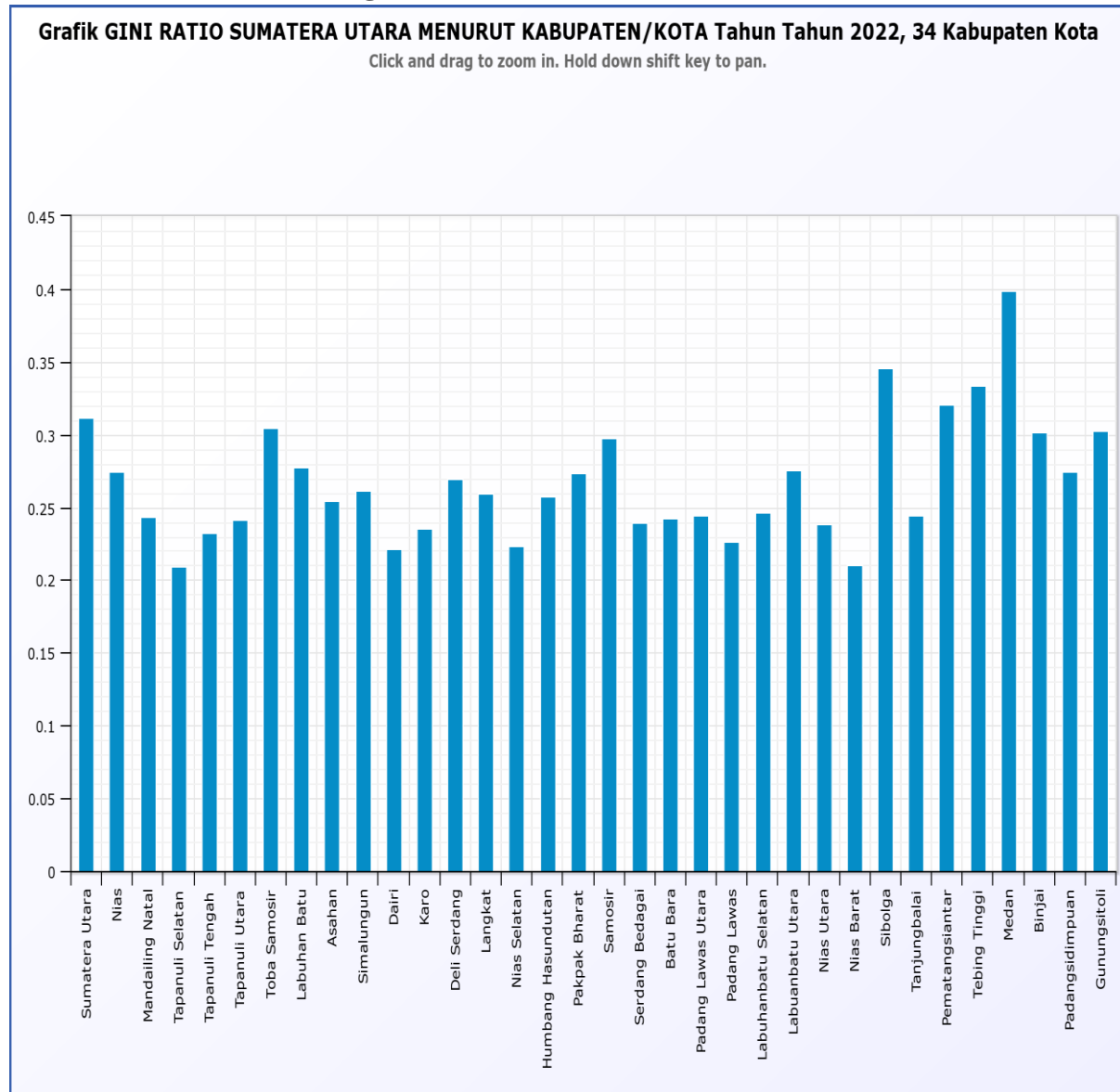
C. Overview of Economic Inequality in North Sumatra Province

Analysis of Inequality of Income Distribution in North Sumatra in 2011-2022

Economic inequality in a province occurs because economic development in a district or city experiences inequality. This distributional inequality is represented by the development of the Gini Ratio as seen from 2022 as follows

Grafik
Perkembangan Gini Ratio Sumatera Utara Priode 2022

Sumber: BPS Sumatera Utara

Inequality of income distribution for the province of North Sumatra has increased in 2022 by 0.3, as well as at the district/city level the Gini coefficient for North Sumatra is higher among other districts/cities with a figure of 0.4

Tabel 2
Gini Ratio Kabupaten/Kota Provinsi Sumatera

Kabupaten/ Kota	GINI RATIO SUMATERA UTARA MENURUT KABUPATEN/KOTA											
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Sumatera Utara	0.3183	0.3418	0.3342	0.3106	0.3360	0.3190	0.3150	0.3176	0.3165	0.3161	0.3145	0.3120
Nias	0.2352	0.2276	0.2776	0.2624	0.2491	0.2735	0.2491	0.2645	0.2740	0.2512	0.2452	0.2750
Mandailing Natal	0.2910	0.3186	0.2763	0.2791	0.2874	0.2700	0.2523	0.2574	0.2623	0.2478	0.2403	0.2440
Tapanuli Selatan	0.2599	0.2777	0.2523	0.2264	0.2349	0.2729	0.2528	0.2727	0.2467	0.2022	0.2564	0.2090
Tapanuli Tengah	0.3650	0.3291	0.3079	0.3027	0.3588	0.3062	0.3058	0.3174	0.3090	0.3350	0.2917	0.2330
Tapanuli Utara	0.3470	0.3542	0.3003	0.3045	0.3558	0.3087	0.3289	0.2819	0.3065	0.2867	0.2766	0.2420
Toba Samosir	0.3152	0.3395	0.3437	0.3017	0.3280	0.3077	0.2922	0.3279	0.2753	0.2903	0.2719	0.3050
Labuhan Batu	0.2998	0.3035	0.3275	0.2962	0.3062	0.3082	0.2792	0.2936	0.2767	0.2715	0.2564	0.2780
Asahan	0.3100	0.3333	0.2634	0.2768	0.2742	0.2826	0.2668	0.2912	0.2793	0.2605	0.2441	0.2550
Simalungun	0.2993	0.3212	0.3286	0.3557	0.3186	0.2960	0.2554	0.2897	0.2738	0.2950	0.2641	0.2620
Dairi	0.2752	0.2889	0.2769	0.2745	0.2787	0.3006	0.2403	0.2649	0.2873	0.2706	0.2268	0.2210
Karo	0.3035	0.2872	0.2865	0.2710	0.3368	0.3283	0.2678	0.2682	0.2642	0.2706	0.2327	0.2360
Deli Serdang	0.2722	0.3014	0.2748	0.2724	0.3159	0.2823	0.2814	0.2935	0.2732	0.3120	0.2628	0.2700
Langkat	0.3062	0.3115	0.3080	0.2787	0.2674	0.2834	0.2489	0.2534	0.2660	0.2378	0.2381	0.2600
Nias Selatan	0.2406	0.2259	0.2069	0.2354	0.2411	0.2136	0.2694	0.3295	0.3186	0.2865	0.2411	0.2230
Humbang Hasundutan	0.2755	0.2762	0.2565	0.2226	0.2666	0.2750	0.2982	0.2909	0.2893	0.2464	0.3043	0.2580
Pakpak Bharat	0.2675	0.3016	0.3121	0.2769	0.3031	0.2644	0.2555	0.2393	0.2791	0.2475	0.2421	0.2740
Samosir	0.2744	0.3038	0.3306	0.3183	0.2875	0.2764	0.2870	0.2846	0.3010	0.3175	0.2735	0.2980
Serdang Bedagai	0.2650	0.2843	0.2537	0.2599	0.2906	0.2545	0.2754	0.2828	0.2571	0.2620	0.2287	0.2400
Batu Bara	0.2904	0.2461	0.2501	0.2109	0.2830	0.2676	0.2335	0.2494	0.2773	0.2592	0.2396	0.2430
Padang Lawas Utara	0.2410	0.2797	0.2152	0.2336	0.2689	0.2525	0.2498	0.2989	0.2702	0.2283	0.2547	0.2450
Padang Lawas	0.2746	0.3074	0.2571	0.2534	0.2969	0.3256	0.2482	0.2985	0.2313	0.2653	0.2525	0.2270
Labuhanbatu Selatan	0.2213	0.2296	0.2228	0.2274	0.2611	0.2435	0.2197	0.2427	0.2497	0.1935	0.2317	0.2470
Labuanbatu Utara	0.2505	0.2531	0.2388	0.2379	0.3001	0.2549	0.2665	0.2819	0.2668	0.2624	0.2431	0.2760
Nias Utara	0.2543	0.2996	0.2642	0.2523	0.2608	0.2660	0.2685	0.2374	0.2844	0.2506	0.2359	0.2390
Nias Barat	0.3592	0.2471	0.2109	0.2199	0.2524	0.2899	0.2469	0.2833	0.2578	0.2339	0.2238	0.2100
Sibolga	0.3223	0.3366	0.3219	0.3106	0.3541	0.3442	0.3234	0.3032	0.2718	0.2912	0.2764	0.3460
Tanjungbalai	0.3317	0.3514	0.3348	0.2900	0.3647	0.3726	0.2784	0.3320	0.2678	0.2716	0.2477	0.2450
Pematangsiantar	0.3209	0.3189	0.3124	0.2938	0.3579	0.3213	0.3494	0.3340	0.3298	0.3362	0.3076	0.3210
Tebing Tinggi	0.3240	0.2931	0.2864	0.3139	0.3982	0.3577	0.3035	0.3396	0.3237	0.3337	0.3440	0.3340
Medan	0.3269	0.3940	0.3959	0.3220	0.3739	0.3328	0.3520	0.3144	0.3519	0.3199	0.4020	0.3990
Binjai	0.3705	0.2693	0.2603	0.3084	0.2517	0.3155	0.3163	0.3085	0.3511	0.3244	0.2903	0.3020
Padangsidimpuan	0.3339	0.3393	0.3179	0.3190	0.3166	0.3335	0.3236	0.3593	0.3098	0.3538	0.3101	0.2750
Gunungsitoli	0.3532	0.3445	0.3247	0.3477	0.3674	0.3569	0.3463	0.3608	0.3183	0.3223	0.3166	0.3030

Sumber : BPS Sumatera Utara

Based on the data in table 2 above, it can be seen that the inequality of income distribution in the province of North Sumatra is increasing, although not as high as the inequality of income distribution in Indonesia. According to the Gini Coefficient, where the Gini coefficient in North Sumatra reaches 0.3120 in 2022, where the coefficient is already lower than last year which means that the distribution of income in North Sumatra in 2022 will have a smaller income distribution inequality compared to previous years previously. While the Gini coefficient is still close to zero, the Gini coefficient is close to 0 meaning that the income distribution is better or more even and the Gini coefficient is close to one, meaning the income distribution is more unequal. In 2022, the highest distribution inequality is 0.39 in Medan, 0.34 in the Sibolga area while the lowest income distribution inequality is 0.20 in Mandailing Natal district and 0.21 in Nias Baru.

Conclusion

Inequality is a situation in which society is not evenly distributed or unbalanced due to various differences both in terms of social, economic and cultural which results in several incidents such as poverty, inequality and so on.

Income inequality is a situation where there are differences in income between communities which lead to differences in social status, differences in wealth and standard of living among these communities. There are many consequences of this income inequality,

including low mobility and the destruction of people's crafts. This inequality causes the rich to get richer and the poor to get poorer. From the discussion obtained from BPS data for the North Sumatra region, that the development of economic growth in North Sumatra from 2011 was 23778381.00 to 2022 which was 63194182. It can be concluded from the amount of economic growth from 2011-2022 that it has increased. And the income inequality obtained from BPS in the North Sumatra Provision from 2011 is 0.3183 to 0.3120 in 2022. It can be concluded that income inequality has decreased regularly from year to year

Suggestion

Based on the amount of income inequality in North Sumatra Province which has decreased from year to year, it is hoped that the North Sumatra Provincial government will be more observant and more alert in reducing income inequality and also that the community will work together and help each other.

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