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Narrowing the wealth and income gap in Poland, China, and the United States

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Abstract

With the widespread of globalization, the wealth gap continues to widen globally. Due to the enormous differences in national conditions and political systems of various countries, this article selects China, the United States, and Poland as the research objects, and uses a specific time unit as the benchmark, and mainly focuses on the four directions of medical care, education, job opportunities, and pensions. A reader could understand the correlation between the wealth gap and multiple factors deeply in this article. This article analyzes the impact of income disparity on these three countries and proposes solutions to help narrow the gap between the rich and poor in these three countries.

Keywords: Wealth inequality, Gini index, the Lorenz curve, Secondary distribution, urban and rural dual system,

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Chapter 1: Introduction

1.a General Introduction of the Research Project

Wealth and income inequality explain the widening gap between the rich and the poor in society. These two terms are used jointly because there is sufficient evidence to suggest that income inequality eventually leads to wealth inequality in society. Income inequality is the unequal distribution of income among individuals while wealth inequality is the unequal accumulation of income, estates and bonds, and the net worth of an individual. An individual's wealth is the total of financial assets and real assets minus their debts. Globally, the bottom half of the population possess just 2% of the world's wealth, while 10% own 83% and 1% own 43% (inequality facts, n. d)

To take a closer look at the impact of wealth and income inequality it is helpful to examine how it has developed in three countries: the United States, Poland, and China. In America individuals in the top 5 percent earners brought in more than 50% of all u.s earners (Schaeffer, 2020). While China has had a fast growth after moving to a market economy. It is currently the world's second largest economy. This rapid growth has brought about inequality. A market economy brings about income variation because wealth holdings, effort, risk, and uncertainty play a large role in the income of individuals (Li,2013).

Meanwhile, Poland's transformation to a market economy brought about some levels of inequality in the country. Although inequality is not of a very high level in Poland compared to China and the U.S., Poland's inequality is focused on wage inequality and wealth inequality, and levels of opportunity inequality

The rationale for research problem

More than anything the Coronavirus pandemic has made evident the gap in wealth and income equality that exists in many countries. Before that, there was a lot of debate as to whether this was an actual problem that needed to be addressed. Some levels of income inequality can be considered healthy and are part of the characteristics of a growing economy, a capitalist economy, or showing healthy competition or hard work in a country. But in recent months with the impact of the coronavirus, the middle income and low-income earners have been laid off permanently from their jobs. The poor have very little resources to survive on most importantly seek medical help in times of need. Data from the latest federal reserve shows that the top 1% percent hold 30.4 % of the wealth in America while the bottom 50% hold 1.9%. (Beer, 2020).

Another problem evident during the height of the pandemic was the lower-income workers who were deemed essential and had to go to work during the pandemic, while millions of people lost their jobs and some lost their lives. The top 10% saw their wealth increase while the bottom 50% saw a decrease in their wealth. So, the question is, are the top rich, really working twice as hard as the poor, or does influence and tax evasion contribute to their increased wealth? It is necessary to understand the causes and impact of the continuously widening gap. The income inequality gap is at an all-time high and rising inequality that is only benefiting a small percentage of the population could have grave consequences, including developmental problems for those at the losing end.

According to a report by Harvard Chan school of public health (2020) about half of the middle-income earners and a majority of lower-income earners say they have had a problem paying for medical bills or prescriptions. The report also showed that middle income and low-income earners would have a problem paying for an expected bill amounting to a thousand dollars.

The three countries highlighted in this thesis are all peculiar and different in the type of government system, policies, and history. China, a communist country, has experienced rapid development and has transformed its economy into a market economy. This rapid growth has brought about expansion of employment, education, trade, and increased opportunities but this growth has not reached some in the country and has led to vast inequality among individuals.

Poland is a socialist country. America is a capitalist country with a market economy. Although these countries are different this thesis shows the widening wealth gap is global and affects countries with different systems of governance.

Definition and explanation of key terminologies

Anti-Union actions: These are activities either by the government or employers that oppose some kinds of recognized employee unions (Gall, 2004).

Pandemic: According to the World Health Organization (2010) a pandemic is the extensive spread of a new disease.

Socialist: In a socialist economy government is heavily involved in key aspects of the economy such as production, property ownership, and output. There is currently no country that has a pure socialist economy (Robin hood, 2020)

Market economy: An economic system in which production and prices are determined by individuals and businesses. This is achieved through the forces of demand and supply (Robin hood, 2020).

Value-added tax (VAT): Value-added tax (VAT) is a consumption tax placed on a product whenever a value is added at each stage of the supply chain, from production to the point of sale.

Consumption tax: Consumption tax is a tax on the purchase of a good or service. Consumption taxes can take the form of sales taxes, tariffs, excise, and other taxes on consumed goods and services.

Primary distribution: Primary distribution refers to the distribution within the material production sector that creates national income, forming the original income of the state, enterprises, and individuals.

Secondary distribution: Secondary distribution means that after national income is distributed within the material production sector, it must be redistributed within the whole society to ensure to meet the needs of non-material production sectors, collective welfare undertakings, balanced economic development of various regions, and social reserve funds.

Chapter 2: Hypothesis (Theory) – Assumption

2.a Brief Overview of Theoretical Foundations Utilized in the Research Study

Drennan (2015) in his book *Inequality: Why It Matters and Why Most Economists Didn't Notice* there is a misperception that most rich individuals get their earnings from capital they own while the low- and middle-income earners get theirs from wages and salaries. Although that used to be the case it is no longer true for top executives like CEOs, professionals, and those in managerial positions. It is also true that the top 1% get gains from the capital but data shows that recently their share of income from salaries has increased to about 66%.

Over the world, the salaries of CEOs grow at a faster rate than that of a median worker. According to CNBC news CEO's compensation has grown by about 1000% as compared to 11.9% for an average worker. The data below put together by Dr. Andrew Chamberlain (2015) shows a

CEO's pay in comparison to a median worker in 2014. The data show's a wide gap between the two. From the table, it shows that a CEO's pay is more than 1000 times a median worker, with Discovery Communication having the highest CEO pay ratio to worker gap.

CEO Pay vs. Median Worker Pay

glassdoor

Employer Search

Employer	Rank	2014 CEO	CEO Total Pay	Median Worker Total Pay	Ratio of CEO Pay to Worker Pay	Overall Company Rating
Discovery Comm.	1	David M. Zaslav	$156,077,912	$80,000	1,951	3.8
Chipotle	2	Steve Ells	$28,924,270	$19,000	1,522	3.4
CVS Health	3	Larry J. Merlo	$32,350,733	$27,139	1,192	2.7
Walmart	4	C. Douglas McMillon	$25,592,938	$22,591	1,133	3.0
Target	5	Brian C. Cornell	$28,164,024	$30,000	939	3.2
CBS Corp	6	Leslie Moonves	$57,175,645	$66,365	862	3.5
Bed Bath & Beyond	7	Steven H. Temares	$19,116,040	$26,047	734	2.9
Macy's	8	Terry J. Lundgren	$16,497,220	$22,800	724	3.0
Gap	9	Glenn Murphy	$16,064,312	$22,800	705	3.6
Starbucks	10	Howard D. Schultz	$21,466,454	$32,080	669	3.8
Kroger	11	W. Rodney McMullen	$12,987,582	$20,420	636	3.0
Ross Stores	12	Barbara Rentler	$12,083,834	$19,120	632	2.8
Time Warner Cable	13	Robert D. Marcus	$34,615,597	$55,006	629	3.3
Microsoft	14	Satya Nadella	$84,308,755	$137,000	615	3.8
Walt Disney Co.	15	Robert A. Iger	$46,497,018	$79,211	587	3.8
Oracle	16	Lawrence J. Ellison	$67,261,251	$117,415	573	3.3
Best Buy	17	Hubert Joly	$13,881,219	$25,160	552	3.4
Comcast	18	Brian L. Roberts	$32,961,056	$59,745	552	3.2
Viacom	19	Philippe P. Dauman	$44,334,858	$82,094	540	3.6
Walgreens	20	Gregory D. Wasson	$16,732,555	$30,980	540	2.9
UPS	21	D. Scott Davis	$16,994,449 *	$31,880	533	3.5
Regeneron Pharma.	22	Leonard S. Schleifer	$41,965,424	$79,332	529	3.8
Polo Ralph Lauren	23	Ralph Lauren	$24,537,936	$47,452	517	3.3

Literature Review

Currently, there is a lot of literature about the reasons for the wide inequality gap globally. Some reasons are important and contribute more immensely to the problem of inequality while some of the reasons are suspect and on their own merits cannot be directly attributed to the rapidly increasing gap.

Suspect factors

Globalization is recognized as a factor of income inequality (Drennan, 2015). Factors of Globalization include foreign competition, technological changes, and outsourcing and offshoring labor and manufacturing. When countries offshore such aspects of businesses it affects the level of employment that could have been present in the country. Therefore, wages decrease and this increases income inequality. Technological changes have affected the level of wages and jobs such as manufacturing and accounting jobs are being replaced with new technologies and machines. Further causing the gap between the rich and poor to widen. But these are factors that are worldwide and therefore its effects are not peculiar to one country.

The increase in divorce rates is also a factor in income inequality. Unlike the early 90s individuals are marrying later in life and divorce rates are far higher. Economists believe that married couples are more likely to be successful than single parents. Single parents who are not well to do cannot afford education and other necessities for their kids who may grow up to be not as well off as their counterparts with higher education and good family background. Although this is possible and may have happened to some families, it cannot be attributed to the very high gap between the rich and the poor in these three countries.

Personal factors such as intelligence quotient (IQ) and determination is also believed to be a factor of income inequality in society. Intelligence and hard work play a role in the success of an individual. A book written by Lynn and Vanhanen(2002) called IQ and the wealth of nations explored the relations of nations with high IQ's and better health conditions, high life expectancy, and low infant mortality rates. Lynn concluded that nations with high IQ's have better health conditions and life expectancy than nations with low IQ's. But these factors cannot be attributed to increasing income inequality in the country. Lynn and Vanhanen categorized countries like America and England as having a high average IQ but the methods used to analyze IQ have been disputed by some economics. These countries with high levels of IQ have wealth and income inequality as compared to countries with low IQs.

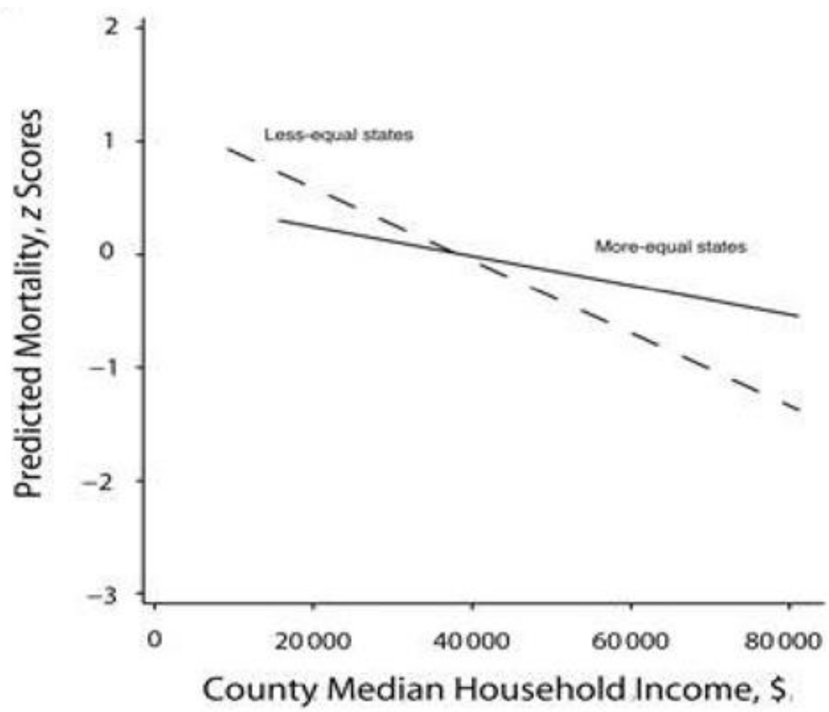
Important factors

Another contributing cause of increasing income inequality in America is the decrease in labor unions in the country (Drennan, 2015). Research shows that the income for low and middle-income increase slowly as compared to those of higher-income particularly the top 1%. Labor unions help give workers bargaining power for good pay and improved working conditions. The anti-union action by employers puts employees at a disadvantage in bargaining or speaking up in union against wrongdoings by their employer. This contributes majorly to the increasing income gap in the country.

The power and influence of the high-income earners have accounted for the increasing gap globally (Drennan, 2015). In some cases, income goes to the top earners because they raise funds to influence political outcomes by lobbying and making huge political contributions therefore pushing their agenda and maintaining laws and policies that largely benefit them. According to a report by Duffin (2020), the number of active lobbyists in the United States amounted to 11,862.

A study by Wilkinson and Pickett (2008) shows that there is a strong relationship between income inequality and high mortality rates. The study was conducted amongst 3139 counties in the united states. The results of the study showed that mortality caused by homicide, respiratory diseases, alcohol, and liver diseases were higher among states and counties where income inequality was high as compared to states with low-income inequality.

The graph above is an example of the mortality rate by homicide in states with more income inequality and a state with less income inequality. The graph from less equal states is steeper in comparison to equal states. It is therefore beneficial to the health and security of the state and a country when income inequality is at a minimum.



Chapter 3: Methods

3.a Research sources

Due to different national conditions and political systems, the three target countries of this research have different sources for the collection of research data.

After World War II, the Socialist People's Republic of Poland was established in 1952, and then turned to democratization in 1980, becoming the Third Republic and joining the North Atlantic Treaty Organization capitalist camp. Due to the democratization process, Poland's news media has a certain right to report freely. Research institutions from other countries also have a certain willingness to dig out the truth because of Poland's unique political and historical characteristics.

Information from outside Poland includes The London School of Economics and Political Science, World Inequality Database, The Borgen Project, Accace Outsourcing and advisory services in Europe, Health Management, etc. Among them are colleges, media, and databases from Europe, as well as non-profit organizations and academic journals from the United States. Information from Poland includes Poland's largest media, Poland Today, and Internet economic analysis platform, the non-profit organization; Observator Finansowy.

In China, information about the wealth gap is collected from official data. Including the National Bureau of Statistics of China and China's largest official media People's Daily Online. It is worth noting that the Chinese government's website and database are not accessible outside of China, so the integrated data provided by the Huajing Industrial Research Institute was used as a third-party data source in the research process. The data provided by Huajing Industry Research Institute are all valid data from the National Bureau of Statistics of China. Information sources from Chinese non-governmental sources are generally lacking in traceability and most of the private data is denied by the National Bureau of Statistics of China, so they are controversial and are not used as sources of information in this study.

The data on the wealth gap in the United States comes from four aspects, government, reports, news, and books. Government reports mainly come from the Congressional Budget Office, the New York City Independent Budget Office, and the Congressional Research Service, which are the main sources in this research. News media include the New York Times, Public Broadcasting Service, and Education Week. Also, the book Income Inequality: Why It Matters and Why Most Economists Didn't Notice is also used to support the views of this research.

3.b Data analysis methods

In the process of data analysis, there are two main data analysis methods used.

Descriptive statistics: A method of sorting out and analyzing data from Poland, China, and the United States through graphs, estimating and describing the relationship between the distribution status of the data, digital features, and random variables. In the process of data analysis, a certain time unit is used as a benchmark to analyze the different Gini coefficients and the characteristics of the wealth gap in three countries at the same time point or similar historical stages. This analyzes the trend of the wealth gap under a specific time background and filters out the variables that may cause the wealth gap. In the process of analysis under this method, the analysis of historical reasons, cultural background, policy factors, institutional factors, and other variables is added, and the reasons that cause or improve the wealth gap under different backgrounds are comprehensively obtained.

Correlation analysis. This thesis points out whether there is any connection between the social phenomena caused by the wealth gap in Poland, China, and the United States. It also discusses the relevant direction and degree of connection to specifically related phenomena such as education, health care (Social Security System), job opportunities, and retirement mechanisms. In general, there is a pattern of multiple correlations between the three countries in terms of the gap between rich and poor and social factors. That is, there is a correlation between two or more variables involved in the research. The analysis results obtained by considering any one of these factors are one-sided. There is a certain connection between all factors. For example, when considering educational factors, regional and geographic factors should be considered comprehensively. Because the uneven distribution of educational resources is directly related to the economic foundation, geographic environment, and development level of different regions.

3.c Assumptions made in analyzing the data

The research assumes that the government data collected and the government report is accurate in the process of analysis. The data on the wealth gap in the United States are similar in data orientation to those reported by non-governmental organizations and those published by the United States government. However, the Chinese government's data is somewhat controversial. The National Bureau of Statistics of China began to suspend the release of the Gini coefficient and other data related to the wealth gap in China in the early 2000s. Subsequently, the China Southwestern University of Finance and Economics (2015) released its statistics to the public in 2011. According to their report, China's Gini coefficient at that time was 0.61. This means that in China, less than 5% of people get 50% of the national income. However, the data from the China Statistics Bureau is based on information from the China Census Bureau, covering almost the entire population of China of 1.393 billion. Data from Southwestern University of Finance and Economics only count a sample of 8,000 people in parts of China. Compared with 1.393 billion and 8,000, the data from the Chinese government is more thorough and representative. Therefore, in this study, the data provided by the Chinese government will be used as a reference standard for relevant analysis.

Chapter 4: Findings –research/cases

4.a Brief overview of the research project

With the acceleration of the process of globalization and industrialization, the income gap between various countries is also rapidly expanding. Coupled with the combined effect of many factors, global income inequality has become a widespread social problem. Uneven social distribution is an important issue for countries at all stages of development. This research will take Poland, China, and the United States as the research objects, and investigate and analyze the inequality of wealth in Poland, China, and the United States.

In the United States, with the deepening of globalization, the inequality and gap between the rich and the poor have also significantly increased. The United States currently has one of the highest income inequality rates among developed countries. Unlike the United States, China is a developing country and became the 143rd full member of the World Trade Organization (WTO) on December 11, 2001. China opened its market after joining the WTO. Although this policy has stimulated China's rapid economic growth, inequality has greatly increased compared to times before China entered the WTO. The unbalanced distribution of resources and capital and the monopoly of trade and resources are the factors that contribute to the gap between the rich and the poor. Poland and China are both developing countries. At the same time, Poland is an important industrial transfer base for the European Union. Although between 1994 and 2010, Poland's economic growth rate exceeded 4% in most years and even reached 7% in 2007. The gap between rich and poor has been widening in the past 30 years. By comparing the current economic development status and historical data of many countries around the world. We find that it is impossible or unrealistic to eliminate the gap between rich and poor in a country. This article looks at high-income levels, the negative impact of wealth inequality on a country, and the best possible policies that can be adopted.

4.b Results of the Method of Study and Any Unplanned or Unexpected Situations that Occurred

The research mainly uses descriptive statistics, and therefore the Gini coefficient is the tool mainly used to measure the country's wealth and poverty. However, we found that Gini coefficients are not unique. Two different Lorenz curves can give rise to the same Gini coefficient. The Lorenz curve is the curve corresponding to the cumulative distribution function established on the past wealth distribution data and is mainly used to reflect the inequality of income distribution. Furthermore, the Gini coefficient of a developing country can rise (due to increasing inequality of income) while the number of people in absolute poverty decreases. This is because the Gini coefficient measures relative, not absolute, wealth. Another limitation of the Gini coefficient is that it is not additive across groups. The total Gini coefficient of a society is not equal to the sum of the Gini's for its sub-groups. Thus, country-level Gini coefficients cannot be aggregated into regional or global Gini's, although a Gini coefficient can be computed for the aggregate. Because the underlying household surveys differ in methods and types of welfare measures collected, data is not strictly comparable across countries or even across years within a country. Two sources of non-comparability should be noted for distributions of income in particular. First, the surveys can differ in many respects, including whether they use income or consumption expenditure as the living standard indicator. The distribution of income is typically more unequal than the distribution of consumption. Besides, the definitions of income used differ often among surveys. Consumption is usually a much better welfare indicator, particularly in developing countries. Second, households differ in size (number of members) and the extent of income sharing among members. And individuals differ in age and consumption needs. Differences among countries in these respects may bias comparisons of distribution.

Gini index measures the extent to which the distribution of income (or, in some cases, consumption expenditure) among individuals or households within an economy deviates from a perfectly equal distribution. A Lorenz curve plots the cumulative percentages of total income received against the cumulative number of recipients, starting with the poorest individual or household. The Gini index measures the area between the Lorenz curve and a hypothetical line of absolute equality, expressed as a percentage of the maximum area under the line. Thus, a Gini index of 0 represents perfect equality, while an index of 100 implies perfect inequality. Therefore, Combining the Lorentz curve with the Gini coefficient to comprehensively consider the expected research closer to the facts.

4.c Brief Descriptive Analysis

Economy of Poland

The Polish economy is at a medium level of development in the world. Poland was in economic trouble in the 1980s. In the process of drastic changes, the government at that time accepted the suggestion of the American economist Sachs and adopted the famous Shock Therapy for the economy and achieved relative success. Under the guidance of this reform method, privatization has been promoted rapidly on a large scale. The economic transition has brought a significant recovery and improvement in the Polish economy. However, privatization is a double-edged sword. While stimulating the economic development of Poland, it also has the effect of increasing the gap between the rich and the poor. However, behind the economic improvement, there are considerable social conflicts and crises hidden. Among them, the widening and divergence of the gap between the rich and the poor is an outstanding problem, and it has become a concentrated expression of many social problems in Poland. Data for the distribution of income in Poland from 1983 to 2015 shows that the income ratio of the top 10% of income in Poland gradually increased from 22% to 36% from 1983 to 2015 and finally stabilized at 35%. From 1983 to 2015, the income ratio of the bottom 50% of the Polish population dropped from more than 30% to less than 25%. Due to the lack of sufficient income redistribution, social issues in related fields such as education, healthcare, and job opportunities have become more complicated. Also, income inequality related to differences in Poland, urban and rural, and geographical differences is a serious problem.

According to statistics from the GUS (Central Statistical Office in Polish: ***Główny Urząd Statystyczny***) regional civil organization in Poland in 2012, the poorest cities/towns in Poland are mainly concentrated in Silesia, Lower Silesia, and Dzkie. It's per capita income is one-seventh of Krynica Morska, the wealthiest city/town in Poland. The differences in people's incomes usually result from the differences in their work productivity, education, seniority, and working time, as well as the occupied position. According to Poland's central bank and polish national bank report entitled "Household Wealth in Poland", in 2016 the top 10% of the most affluent households held as much as 41% of the total net assets, while the net assets of the bottom 20% of the poorest households accounted for barely 1% of all household assets.

Economy of China

Although China still maintained strong growth during the global economic downturn, as a large country with one-fifth of the world's population and nearly 1.4 billion people, there are huge differences between North and South, as well as differences between East and West. Income inequality is equally serious and far-reaching for China. China became the 143rd full member of the WTO on December 11, 2001. Then China opened its market after joining the WTO. At the beginning of reform and opening-up, China's Gini coefficient was 0.317 in 1978 and has exceeded the 0.4 warning line since 1994 (except in 1999), the overall trend is increasing year by year, exceeding 0.465. It reached 0.491 in 2004 and 0.491 in 2008. By 2018, compared with 2008, China's Gini coefficient has shown a downward trend, but it is still at a relatively high level, which is also higher than the 0.24-0.36 levels of developed countries.

In the early stage of reform and opening up, to stimulate market vitality and improve production efficiency, China implemented the transition from a planned economy to a market economy and the strategy of gradient development. The Chinese government invests more fiscal revenue into the economic development of the eastern region. However, the rapid growth of the east part of the central and western areas of the lack of support, leading role is not apparent, but exacerbated by human resources and natural resources to the eastern region agglomeration, lead to the wealthy region is more affluent and more prosperous, low areas getting poorer and poorer. Trade has enabled the rapid economic development of coastal areas, while inland provinces have played more roles in providing raw materials and processing primary products. Although the economy has also improved, the economic growth rate is far behind the growth rate of the eastern coastal areas. In addition to the difference in economic development between the east and the west, there is also a difference between the economic development of the south and the north parts of China.

To properly govern 1.3 billion people, China has established a strict urban and rural dual system. Urban residents and rural residents hold different identification certificates, thereby restricting the inflow and outflow of rural and urban populations. This household registration system reduces the government's management costs and management difficulties and provides a relatively stable internal environment for China's economic development. But the strict dual system of urban and rural areas has also brought about income inequality between urban and rural areas. The per capita disposable income of urban residents increased from 61.62 dollars in 1979 to 3,973 dollars in 2018, the per capita net income of rural households increased from 160.2 dollars to 1,844.71 dollars, and the increase in the absolute value of the urban-rural income gap increased from 37.25 dollars to 2,128.33 dollars. The relative gap between people has been narrowing in recent years, but the urban-rural income ratio has dropped from a peak of 3.33 in 2009 to 2.95 in 2015, although the relative gap is still at a high level. In 1979, the urban-rural income ratio also exceeded 2.52.

Higher incomes have stimulated the rural population to flood into the cities continuously, and the urban population has increased dramatically. Some super cities such as Beijing, Shanghai, Tianjin, Wuhan arise in China. Each city accommodates more than 10 million people. Urban-rural income inequality has gradually aggravated income inequality in megacities as the rural population floods into cities, in addition to China's regional development differences and the increase in the gap between the rich and the poor caused by the dual urban-rural system. According to the "2015 China Minsheng Development Report" issued by Peking University, the top 1% of households own about one-third of the country's property, while the lowest 25% of households own only about 1% of the property. According to the 2015 Hurun Richest List of China, the richest 726 people have 151,369,759 US dollars, accounting for 14.5% of China's GDP in 2015. At the same time, real estate accounts for a large proportion of residents' wealth. In recent years, real estate prices have increased dramatically, especially in the first tier and second-tier cities. In this circumstance, the wealth gap widens. Excessive housing prices also cause buyers to overdraft their future income in advance and lead to low buyers. Financial assets also have contributed to the widening gap between rich and poor, and there is a trend that financial assets are gradually concentrated in high-income households. The China Minsheng Development Report by Xing (2015) also shows that China's property inequality increases year by year. China's property Gini coefficient was 0.45 in 1995, 0.55 in 2002, and 0.73 in 2012. The degree of property inequality is significantly higher than the degree of income inequality.

The economy of the United States

Since President Reagan took office in 1979, the Gini coefficient of the United States has continued to rise, and wealth has increasingly been concentrated in the hands of a few people. In 1976, if 100 US dollars are used to represent the total income of the United States, and the distribution is made from the richest 20% to the poorest 20%, the distribution result is 43.60 US dollars, 24.20 US dollars, 17.3 US dollars, and 10.8 US dollars and the poorest get 4 dollars (Horowitz, Igielnik and Kochhar, 2020). From President Reagan’s inauguration in 1981 to

President Reagan's resignation in 1989, the distribution of the 100 US dollars has changed. The allocation is based on the richest 20% to the poorest 20%, which are 46.8 US dollars and 24 US dollars respectively, 15.8 USD, 9.5 USD, and the poorest person gets 3.8 USD. By comparison, we can see that, except for the wealth of the richest 20%, the wealth of everyone else is shrinking. What followed was class consolidation and damage to the democratic system. Beginning in 1930, American labor unions gradually became stronger, and the government also established a federal minimum wage, established social insurance and unemployment insurance systems, and increased taxes on companies and the wealthy. The economist Paul Krugman calls this phenomenon "The Great Compression." He believes that these policies created more equality for the American people and also curbed the expansion of income inequality in the following forty years. This situation changed around 1980, a period called "The Great Divergence" by economists. The rich use investment and other business income as their main source of income, while the poor still use wages as their main source of income. However, since 1980, the taxation of investment income by the US government has decreased significantly. Before 1980, the US government's taxation on investment income reached 40%. Until 2013, the investment income tax was as low as 15%. This year, the investment income tax has become 25%. Continuous tax cuts have allowed the government to obtain less money to redistribute citizens' income.

At the same time, the impact of income inequality is gradually reflected in areas such as health care, education, job opportunities, and pensions. The problem of excessively expensive medical services in the United States has always existed. In 2013, the average medical expenditure in the United States was 9,255,2.7 US dollars times the average of the countries in the Organisation for Economic Co-operation and Development. From 2000 to 2010, the growth rate of per capita medical expenses was 5.6%, while the GDP growth rate during the same period was only 4.3%. Among the government's current project expenditures, the proportion of medical and health expenditure has increased from 19.9% in 2007 to 22.6% in 2014, and fiscal medical and health expenditure has also increased from 905.8 billion dollars to 13,105 billion dollars. But the average life expectancy of Americans is less than 80 years. Among the more than 5,000 medical institutions in the United States, 70%-80% is privately owned. The patient's surgery fee is paid by the insurance company to the hospital and the doctor respectively. The ratio of the two is about 7:3. The money that American citizens spend on medical treatment is gradually concentrated in the hands of the rich through the medical system.

People who have no money to seek medical help can apply for free federal medical assistance. When the poor suffer from a severe illness, some choose the emergency room in public hospitals. According to EMTALA (Medical Insurance and Medicaid Services Center. "Emergency Medical and Labor Law" 42. (1986). United States Code Section 1395dd), even if the patient cannot afford the cost, the hospital cannot refuse the patient. Patients can pay in installments without interest, or they can apply for relief to pay for medical expenses, but the high medical expenses still make them "poor due to illness." If patients do not have money to pay for medical costs, the government will help patients pay off their debts. Therefore, medical expenditure has brought heavy financial pressure on the US government. The rich obtain wealth from the entire society by controlling medical resources. Social wealth has gradually shifted from all social classes to the rich. Income inequality is increasing, and the government's adjustment effect on income is getting smaller and smaller.

With the development of science and technology, fundamental work streamlined, the gradual transfer of manufacturing jobs to East Asia and South Asia due to cost reasons. Education levels also have a more decisive impact on future income. In other words, the lower the level of education, the lower the wage income. Rich people spend far more money than poor people on their offspring's education plan to keep them educated and this contributes to securing higher-paying jobs than a poorly educated individual. In some situations, the rich donate money to private Ivy League schools to help children gain more advantages in education. These private schools have more money to develop their education plan than public schools that may not have enough government funding or private individuals to help improve the level of education. This situation means that it is more difficult for the poor to obtain better academic qualifications, better platforms. Thus some poor may fall into a cycle where it is difficult to change their lives.

Chapter 5: Discussion –recommendations

5.a Brief Overview of Material

The global imbalance in the distribution of wealth and income is divided into two categories. The first category is caused by market competition and economic growth. The other category is caused by the inequality of the distribution system.

（1） For inequality distribution problems, the role of the government must be reflected. If this type of balance is moderate, it can be regarded as a "benign" imbalance without being unreasonable. Measures such as tax regulation, reduction of government intervention and administrative monopoly, and the introduction of competition can alleviate the gap between the rich and the poor. The most fundamental solution is via more in-depth reforms so that the low-income and middle-income groups can get more attention and thus obtain corresponding economic benefits (Tao, 2019). However, it means that the high-income earners and the rich will suffer losses, and reform will also enter tough times.

For income imbalances caused by misallocation of resources, market forces can be used to allow labor and other input elements to flow freely, thereby correcting the incentive mechanism of each element. In other words, to help underdeveloped regions increase their per capita income level, the main work should focus on increasing the income level of low-income people.

Regardless of the country, to solve the problem of unequal distribution of wealth, it needs systematic supporting measures, and more importantly, the country's reform determination and fundamental policies. (Tao, 2019)

5.b Recommendation

Poland

The problem between rich and poor is an epitome of social problems. The widening gap between the rich and the poor in Poland's social system lies in the reclassification of social classes caused by the drastic changes. The nature and condition of the problem are closely related to the social system, so the social system plays a decisive role in the wealth gap problem. How well it is resolved is a concrete reflection of the superiority of Poland's social system.

Since the early 1990s, Poland has come a long way. At the beginning of the transition, Poland was doing well compared to many other socialist countries. The rapid abolition of price controls and trade barriers, as well as a comprehensive privatization plan, led to a rapid transition to the market economy. Subsequently, more inclusive political institutions allowed people to reach a broad consensus, building a market economy based on solidarity. (World Bank, 2016). At that time, Polish economic growth increased jobs and wages, reduced poverty, and kept inequality low. Poland's Gini coefficient has fallen slightly, and the poverty indicator has also fallen significantly.

However, Poland's transformation has brought new economic and demographic challenges. With the development of the automation trend, many working-class families face high anxiety and uncertainty about their future. Even those favored by the growth process are frustrated because they have not realized their desire for faster integration with advanced economies in management and income. In addition to these pressures, Poland is also facing a rapidly aging population, which will require more targeted social expenditures to ensure fiscal sustainability.

Achieving the established income levels of high-income countries and accelerating integration with high-income European countries will require new policies (World Bank, 2016). Although there is space for catching up by absorbing advanced technologies, productivity improvement will increasingly require innovation. A series of policy reforms will help accelerate innovation. For example, simplify entrepreneurial activities, increasing investment in research and development; from preschool to university, investing more resources in education; encouraging more permanent employment contracts to increase incentives to train workers; supporting the growth of the capital market by increasing investment in infrastructure to increase the availability of financing.

Governance in reducing poverty and income inequality is essential to establishing a framework conducive to growth and social stability. High-quality institutions can promote competition and build public trust in the government. Improving the tax system's progressiveness, increasing spending on public medical services, and providing targeted social security systems for disadvantaged groups will enable Poland to ensure equal opportunities and rapid and sustainable growth in the coming years. An increase in the retirement age and measures to encourage permanent and temporary immigration can solve the potential aging crisis.

Poland's current tax system reduces inequality only to a small extent. Direct taxation of personal income is characterized by low progressiveness and a negligible effect in reducing inequality (Goraus and Inchauste 2016). Value-added tax and consumption tax are regressive (compared to many rich countries, the poor account for a higher proportion of income) and exacerbate income inequality to a greater extent than many developing countries. The tax system's redistributive capacity should be strengthened by reducing the tax (direct and indirect) burden of very low-income earners or increasing taxes on high-income earners.

China

China's Gini coefficient has remained high for more than 20 years and has become one of the countries with the most unequal income distribution globally. The reform of the income distribution system is the primary measure of China's economic restructuring and an essential link in maintaining social stability. In the four main links of production, distribution, circulation, and consumption, distribution problems have been prominent for a long time.

Reform of the primary distribution system

According to the data provided by the "Annual Report on Income Distribution of Chinese Residents (2019)", the income distribution gap in China tends to deteriorate further. Among low-income groups, migrant workers deserve special attention. The 290 million migrant workers accounted for nearly 66% of the total employment population of 440 million in 2019, but the relative growth rate of their wage income began to decline after 2015 (Song, 2020). The income of migrant workers is relatively low, and the expectation of getting social security is relatively low as well. Speeding up the urbanization process of migrant workers and raising the income level of nearly 300 million workers can improve the living standards of 600-700 million related households.

It should also be noted that the urban-rural division of land elements has also severely restricted the overall income of migrant workers and farmers. According to statistics, because rural workers migrate to cities and work there the whole year, the vacancy rate of farmhouses in rural areas is generally above 20%, and in many coastal areas, it is generally around 40%. The poor circulation of rural homesteads has led to the inability to increase farmers' property income. Therefore, to increase migrant workers' and farmers' income, it is necessary further to break the urban-rural administrative division of land elements and convert the vast potential wealth attached to homesteads and rural collective operating construction land into property rights migrant workers, and farmers can trade equally.

Besides, the vast majority of urban self-employed and most self-employed businesses are also low-income groups, and their income is not stable. In 2020, affected by the epidemic, this part of the employed people has been hit hard. Adhering to the principle of employment priority, the Chinese government should try its best to tap their potential and create conditions for their employment, instead of squeezing them out of first-tier cities as "low-end populations."

Reform of the secondary distribution system

The basic social security system and taxation system implemented by national legislation to adjust the primary distribution gap is common in all developed market economy countries. China should further increase the mutual aid of basic social security and give full play to the stabilizing effect of taxation on the primary distribution (Song, 2020). It is of great significance to improving the consumption level of the major low-income and middle-income people in China.

In terms of narrowing the gap between the rich and the poor, value-added tax, consumption tax, business tax, and other indirect taxes are regressive taxes, and personal income tax is a progressive tax. Corporate income tax and property taxes currently have little effect on narrowing the wealth gap. As a result, the regressivity of the overall tax system structure has widened the income gap among residents, increasing the Gini coefficient by up to 3.1 percentage points. In recent years, the tax system's role in smoothing the primary distribution gap has not improved significantly.

Fiscal policy is a powerful tool to narrow the gap between rich and poor. More people should be allowed to have property income to expand the middle-income group. Tax regulation should be brought into full play, and tax leverage should be used to achieve the effect of "limiting high and compensating low," such as improving personal income tax collection methods and taxing on high-end residential property.

The primary distribution should be moderately inclined to low-income earners, with particular attention to migrant workers, while regulating the distribution order, narrowing the gap between urban and rural areas, regions, and industries, and promptly adjusting the minimum wage standard. The secondary distribution should equalize essential public services as the direction, deepen the reform of the basic social security system, and significantly increase direct taxes (Song, 2020).

Besides, to narrow the gap between the rich and the poor, it is necessary to promote the balanced development of urban and rural education so that more people can enjoy equal educational opportunities. The key is to increase financial investment, such as always maintaining education financial investment accounting for 4% or more of GDP, accelerating the standardization of rural primary and secondary school buildings, educating and taking care of left-behind children in rural areas, and improving the funding system for students from disadvantaged families.

United States

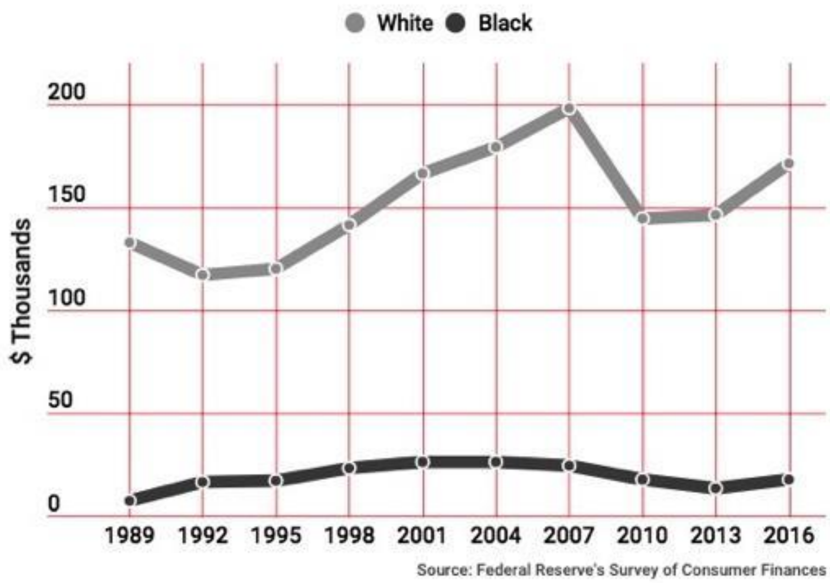
In recent years, finance and high-tech have become the leading industries in the United States to promote economic development. The labor market is polarized. White-collar and gold-collar salaries are getting higher and higher. Blue-collar salaries are far behind the pace.

Besides, American society has structural racism and inequality in education, finance, and health care systems. Children from white Americans or wealthy families are born with more resources and opportunities in education, medical care, and schooling than African and Hispanic children.

During the epidemic, industry income divergence became more evident. People working from home are less unaffected than people in the service industry most of whom are unemployed because they cannot work from home. Most of the victims of the COVID-19 are engaged in the service industry or have a blue-collar job, most of whom are African Americans and Hispanics.

(1) Racial wealth gap: a long-standing gap

Although black Americans have made progress in education, the racial gap between rich and poor has been widening since 1995. The chart below shows the median household net worth adjusted for inflation.



According to the Kauffman Foundation, black entrepreneurs' profits are three times more likely than white entrepreneurs to be harmed by a lack of capital (Kauflin & Novack, 2020). It requires improving the channels for black-owned companies to obtain capital and breaking down historical and current barriers. These barriers make it difficult for African Americans to accumulate wealth. It is recommended that large international banks invest more profits in minority banks every year to support blacks and minorities in starting businesses and increase revenue.

Everyone needs emergency savings to prevent sudden loss of income or unexpected expenditures. COVID-19 has highlighted the uneven distribution of demand. According to the

Federal Reserve's data, 71% of white Americans can borrow $3,000 from family or friends at a critical juncture, but only 43% of African Americans can borrow the same amount (Kauflin & Novack, 2020). The COVID-19 pandemic highlights the fact that most African Americans lack income, cannot purchase necessary healthcare, food, and medicine, and suffer more than white Americans. It could be meaningful to offer some refundable tax credit for emergency savings—for example, by making the current, little-used retirement savers' credit more generous and available to more taxpayers, for more types of savings.

(2) Education: the most critical tool to improve the most impoverished population

A well-educated country is a capable, skilled, and prosperous country. It can be said that education is the most critical tool to save the poorest people. It can help the lower class rise to the middle class. The increasing cost of American universities over the past decades is a severe obstacle to eliminating income inequality and economic opportunity inequality. Therefore, confronting this problem is necessary and challenging. It is recommended that public universities in various states set up special funds to encourage and help students from low-income families to enter universities (Sutter, 2013). Simultaneously, integrating public universities, creating shared assets in schools, and attracting businesses and wealthier families to invest in public schools will benefit children in the community.

(3) Income: raising the minimum wage is the most effective means

According to a research report by the Federal Reserve, in 2019, the 1% richest Americans own one-third of the nation's wealth, a slight decrease from nearly four-fifths in 2016. However, 9% of wealth is owned by the next-richest American. Therefore, the wealthiest one-tenth of households own 71% of the wealth, the same as in 2016 (Rugaber, 2020).

On the other hand, the United States' minimum wage is now less valuable than it was in the 1960s. The core of the American dream is to succeed by working hard. However, today, for people at the bottom of society who work full-time, this dream can hardly become a reality. It is recommended to raise the minimum wage level on time, increase the taxation of high-income groups, and use it to fund public education and other programs to narrow the overall income gap gradually.

5.c Post Analysis and Implications of Hypothesis and Findings

Via the investigation of the wealth gap between the rich and the poor in Poland, China, and the United States, we found that although the three countries have different social systems and different historical and cultural backgrounds, they have certain similarities. Poland and the United States do not have a very big urban-rural gap, but the vast gap between China's urban and rural areas is the leading cause of income imbalance. Both Poland and China are experiencing problems with unfair distribution in the process of rapid development. Poland and the United States' different characteristics on the issue of the wealth gap are caused by the different socio-economic systems in Europe and America. The United States advocates a free market economy and advocates reducing government intervention in the market so that the market can play its leading role. European countries advocate a social market economy, advocate for the government's intervention in the market, protect labor rights, and establish a mixed market economy system. Generally speaking, these three countries have commonalities in the measures to solve the gap between the rich and the poor, such as realizing the equalization of education, improving the living standards of low-income groups, and realizing the economic inclusiveness development.

Chapter 6 Conclusion

6.a Summary of Academic Study

The increasing wealth and income gap are primarily caused by structural and systematic problems deep-rooted in the method of governance and policies that govern a country. The research on the three different countries prove that factors like the type of market economy or system of government does not particularly aid or prevent income and wealth inequality in a country but the non-effectiveness of policies regarding issues such as progressive taxes, fixing employment discrimination, racial and gender discrimination, and raising minimum wages can harm the country.

The Effects of income inequality and wealth inequality are harmful as crime rates and high mortality rates but governing trade, increasing labor unions and reducing the influence of the rich that sway policies help the

6.b Limitations of the Theory or Method of Research

This thesis has some limitations such as limited access to data in China. This thesis did not include data from the national bureau of statistics from china because of limited access to that information. Therefore, the data collected did not include figures that showed the level and trends of income inequality over a specific time. There is limited information on income and wealth inequality in Poland therefore conclusions drawn are as a result of analyzing different causes of income inequality in the county.

The limitations of this thesis do not affect the validity of information gathered about the causes of income and wealth inequality and the recommendation suggested for each country. The data used and discussed are from confirmed valid sources.

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