The Impact of Radical Redistribution on the Economic Growth

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Abstract

The previous studies explained that radical redistribution, such as land reform, brings about rapid economic growth. However, they did not provide a statistical model to support the argument. We extend the previous studies by providing a statistical model to show the relationship between radical redistribution and economic growth. We use a multivariate regression model to identify the relationship. The result shows that successful radical redistribution in a capitalist country leads to a 4,080% additional increase in GDP per capita between 1960 to 2020 with a 95% confidence level. The radical redistribution's impact initially grew and lasted for around 50 years. We suggest a repeated radical redistribution policy every 50 years as a solution to reduce a country's economic inequality.

Keywords: Radical Redistribution, Growth, Land Reform, Regression Model

Introduction

All countries try to achieve long-term economic growth. Under capitalism, achieving sustainable long-term economic growth and distributing the results of growth have been challenging issues. While a country achieves economic growth, economic inequality increases under capitalism, in general. If economic inequality increases, it will increase inequality of opportunity too to both the current members and the new generation of the society. Researchers have examined the impact of economic inequality on growth. However, the relationship is not clear yet. Many studies report the negative effects of inequality on growth and its duration (Persson & Tabellini, 1994; Ostry and Berg, 2011; Ostry et al., 2014; Cingano, 2014). Benabou (1996) argues that income distribution has a positive impact on economic growth by reducing wealth inequality. Some studies report that income inequality is positively related to economic growth (Forbes, 2000; Panizza, 2002). Others report that it depends on the situation. Barro (2000) argues that high-income inequality disturbs growth in poor countries but encourages growth in rich countries. Kuznets (1955) states that as a country develops, economic inequality initially increases, but later decreases. Banerjee and Duflo (2003) reveal that growth increases when inequality is low, but decreases when it is high, suggesting an inverted U-shaped function. Halter et al. (2014) conclude that while inequality increases growth in the short run, it decreases growth in the long run. Considering the different results from studies, it is difficult to determine the effect of inequality on growth (Kraay, 2015).

Some scholars studied the relationship between the inequality of opportunity and income growth. Marrero and Rodriguez (2013) report a negative relationship between inequality of opportunity and growth. Hsieh et al. (2013) argue that reducing barriers to occupational choice for women and minorities enhances aggregate wage growth by 15% to 20%. Bradbury and Triest (2016) suggest that intergenerational mobility enhances economic growth, which in turn increases economic opportunity. Marrero et al. (2016) find that inequality of opportunity negatively impacts the income growth of the poor.

While most papers focus on income inequality, some research focused on the government's radical redistribution to lower asset inequality, increase opportunity, and achieve economic growth. Berry (1984) states that land reform in Japan, South Korea, and Taiwan led to agricultural growth. Wang (1988) argues that after the land reform in South Korea, the

landowners became more productive due to their ownership. Rodrik (1995) insists that high levels of income and wealth equality in South Korea and Taiwan through their governmental intervention have promoted growth. Benabou (1996) says that the very equal distribution of income and land in South Korea played a significant role in her economic growth, but the high level of wealth concentration in the Philippines impeded the growth. Jeon & Kim (2000) report that land reform in South Korea brings about income redistribution, political power redistribution, low transaction costs, and 40% increased agricultural productivity. Grabowski (2002) explains how land reforms in Japan, South Korea, and Taiwan spurred rapid growth by abolishing economic classes and increasing economic equality. Iscan (2018) argues that redistributive land reforms after World War II played a pivotal role in economic growth.

Although many papers explain the positive relationship between land reform and economic growth, they do not offer a statistical model due to a lack of data. We extend the studies by proposing a statistical model using data from 1960 to 2020. Our analysis shows a positive relationship between radical redistribution and economic growth. In addition, by repeating the regression model with different periods, we report that the impact of radical redistribution increases and lasts for 50 years. The impact almost disappears after that period. Consequently, countries experience high unemployment rates, low growth rates, and high economic wealth inequality after 50 years. Thus, the results suggest that countries to consider another radical redistribution to continue to grow.

The remainder of the paper is organized as follows. The next section introduces a statistical model and explains the dependent variable, independent variables, and control variables. In the following section, we present the data, how to get them, and what they look like. And then, we analyze the results based on the model. We discuss how radical redistribution contributes to our society. The final section summarizes the results and their implications.

Model

We construct a model to elucidate the impact of radical redistribution on the GDP growth rate:

$$Cumulative\ GDP\ per\ capita = \alpha_0 + \alpha_1 Redistribution + \alpha_2 Inflation + \alpha_3 Life\ Expectancy + \alpha_4 Population + \alpha_5 GINI + \alpha_6 FDI + \alpha_7 Uneployment + \alpha_8 EduLowSecondary + \alpha_9 EduPrimary + [\alpha_{10} Exsocialist + \alpha_{11} WestEurope + \alpha_{12} CentralEurope + \alpha_{13} Asian + \alpha_{14} AngloSaxon] + \varepsilon \quad (1)$$

Dependent Variable: The dependent variable is the cumulative growth rate of GDP per capita from 1960 to 2020.

Independent Variable: The Radical Redistribution variable is the independent variable, subject to certain conditions. It is a dummy variable, indicating whether there was successful radical redistribution in a capitalist country. A value of 1 signifies the presence of such redistribution, while 0 indicates its absence.

Control Variables: The inflation variable represents the mean inflation rates from 1960 to 2020. Life Expectancy variable denotes the average life expectancy of each country during the period from 1960 to 2020. Population variable refers to the mean population size from 1960 to 2020. The GINI variable measures the mean GINI coefficient from 1960 to 2020. The FDI variable calculates the mean FDI by the current US dollar from 1960 to 2020. The unemployment variable estimates average unemployment rates (% of total labor force) from 1960 to 2020. The EduLowSecondary variable measures average educational attainment at least completed lower secondary, population 25+, total (%) (cumulative) from 1960 to 2020. The EduPrimary variable calculates the mean of primary completion rate, total (% of relevant age group) from 1960 to 2020. Lastly, according to Antonelli et al. (2017), we set 5 regional dummy variables. There is no Scandinavian country in the sample, and thus we omit it.

Data

For the study, we collected the data from the World Bank. Table 1 presents the data description. The Cumulative Growth variable represents the cumulative GDP per capita growth rate from 1960 to 2020, with a mean value of 4,002% and a standard deviation of 38.811. The minimum and maximum values are 9.864 and 199.42, respectively. The redistribution variable takes a value of 1 if there was successful radical redistribution under capitalism and 0 otherwise.

Table 1. Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
CumulativeGrowth	30	40.02	38.811	9.864	199.42
Redistribution	30	.133	.346	0	1
Inflation	30	3.932	1.46	2.198	8.067
LifeExpectancy	30	67.549	9.269	45.856	77.932
Population	30	1.169e+08	2.448e+08	2749518.8	1.094e+09
GINI	29	38.102	8.044	27.883	61.883
FDI	30	7.730e+08	1.954e+10	-5.863e+10	7.853e+10
Unemployment	30	7.1	5.094	.782	21.09
EduLowSecondary	30	60.238	24.425	20.905	99.162
EduPrimary	29	86.276	15.816	49.716	102.076
ExSocialist	30	.067	.254	0	1
WestEurope	30	.167	.379	0	1
CentralEurope	30	.1	.305	0	1
Asian	30	.367	.49	0	1
AngloSaxon	30	.167	.379	0	1

According to the World Bank data, 13.3% of the countries experienced radical redistribution. The average inflation rate from 1960 to 2020 is 3.93%, with a standard deviation of 1.46. The mean value of the Life Expectancy variable is 67.549 years, with a standard deviation of 9.269 years. The average population during the 70 years is 116,900,000, with a standard deviation of 224,800,000. The average GINI variable is 38.102%, with a standard deviation of 8.044. However, the GINI variable has many missing data points, so we use the average from 1960 to 2020. The FDI variable is Foreign Direct Investment, whose average is $773 million, and the standard deviation is $19.54 billion. The unemployment variable's mean value is 7.1%, and the standard deviation is 5.1%. The mean completion rate of low secondary education is 60.24%, and its standard deviation is 24.23%. The mean of the completion rate of primary education is 86.28%, and its standard deviation is 15.82%. The ex-social variable is a dummy variable, meaning if the country is ex-socialist, then the datum is 1, and otherwise 0. Others like West Europe, Central Europe, Asia, Anglo-Saxon, Africa, and America are also dummy variables that indicate the region of each country.

Table 2. GDP per capita Cumulative Growth Rate Ranking & Radical Redistribution During 1930s~1950s

Country	Cumulative Growth Rate (1960-1990)	Radical Redistribution Success during 1930s~1950s
Japan	53.28	1

South Korea	40.76	1
Spain	33.83	1
Italy	24.89	1
Austria	22.18	0
Portugal	20.87	0
Netherlands	18.92	0
France	15.39	0
Belgium	15.17	0
Thailand	13.89	0
United Kingdom	12.66	0
Iran	10.39	0
Turkiye	9.08	0
Australia	9.08	0
Canada	8.53	0
Congo, Rep.	8.40	0
Mexico	7.89	0
United States	6.94	0
Nigeria	5.08	0
South Africa	4.97	0
New Zealand	4.90	0
Colombia	4.71	0
India	3.44	0
Uganda	3.41	0
Pakistan	3.25	0
China	2.88	0
Kenya	2.63	0
Bangladesh	2.48	0
Philippines	2.11	0
Myanmar	1.10	0

We selected the radical redistribution variable with certain conditions. Firstly, the radical redistribution should have occurred during or after World War II, the period from the 1930s to the 1950s. Secondly, the countries in question should be capitalist countries. Thirdly, the redistribution should be deemed successful, meaning that it has garnered agreement from many scholars regarding its effectiveness. Thus, if a country underwent radical redistribution, the

datum is coded as 1; otherwise, it is coded as 0. Table 2 displays the ranking of GDP per capita cumulative growth rates from 1960 to 1990, along with the radical redistribution variable. Japan holds the top rank in cumulative growth rate, followed by South Korea.

Flores (1970) reports that after Japan's land reform, the percentage of land operated by landowners increased from 54% to 92%. Iscan (2018) suggests that the ratio of farm owners in Japan increased from 52% in 1941 to 91% in 1955, while tenants decreased from 48% to 9% during the same period. Therefore, we assign a dummy datum of 1 to Japan.

Asset inequality dramatically improved in South Korea after World War II. President Syngman Rhee initiated the Land Reform Act on June 21, 1949. Shin (1976) explains that in 1950, a total of 577,000 *chungbo* of land was distributed to more than 1.6 million farmers, contributing to the modernization of agriculture. Iscan (2018) notes that the ratio of farm owners in South Korea increased from 44% in 1938 to 93% in 1965, while the tenant ratio decreased from 56% to 7% during the same period. Thus, we assign a dummy datum of 1 to South Korea.

According to Basco (2023), Spain distributed 120,000 hectares of land to 40,000 families by using the 1932 decree and almost 500,000 hectares of land to 110,000 families by using the 1936 decree. Finally, the government distributed 600,000 hectares of land to 120,000 landless families after the land reform law of 1932, resulting in less than 1% of landless families. Since Spain experienced radical redistribution in the 1930s, the datum is 1.

Bonanno (1988) mentions land reform in Italy from 1944 to 1961, with three different acts passed in 1950. At the end of the reform, 133,066 families received land, totaling about 500,000 people. The land reform in Italy significantly weakened peasant movement power (Mottura and Pugliese 1980; Fabiani 1979, p. 129; Bonnano 1984, p. 50). Consequently, Italy's dummy datum for the radical redistribution variable is 1.

We could not find evidence of radical redistribution policies in other countries during the 1930s or 1950s. Even if a country underwent radical redistribution, it was typically a communist country like China. Therefore, only four countries—Japan, South Korea, Spain, and Italy—underwent radical redistribution during the 1930s or 1950s.

Table 3. Matrix of correlations

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
(1) CumGrowth	1.000									
(2) Redistribution	0.582**	1.000								
(3) Inflation	0.528**	0.004	1.000							
(4) LifeExpectancy	0.296*	0.389*	-0.453**	1.000						

(5) Population	0.203	-0.100	0.501**	-0.127	1.000					
(6) GINI	-0.307*	-0.236*	0.075	-0.396*	-0.064	1.000				
(7) FDI	0.012	0.454**	-0.432**	0.322*	-0.497**	-0.235	1.000			
(8) Unemployment	-0.249*	0.110	-0.417**	0.082	-0.131	0.440**	-0.002	1.000		
(9) EduLowSecondary	0.203*	0.312*	-0.539**	0.768***	-0.143	-0.356*	0.440**	0.070	1.000	
(10) EduPrimary	0.315*	0.393*	-0.249*	0.695***	0.111	-0.023	0.154	0.178	0.706***	1.000

Note: *Weak **Medium ***Strong ****Very Strong

Table 3 shows that the correlation between cumulative growth and redistribution is medium (0.582). The inflation rate also has a medium correlation (0.528) with Cumulative Growth. Life Expectancy, GINI, Unemployment rate, and Education of Low Secondary and Primary have a weak correlation with Cumulative Growth. Radical redistribution has a medium correlation with the cumulative growth rate.

Data Analysis

Table 4. Regressions of GDP per capita

VARIABLES	(1) No Region	(2) No Inflation	(3) No Life Expectancy	(4) No Population	(5) No Education	(6) Only Redistribution	(7) All
Redistribution	40.45**	76.55***	41.37**	42.40**	36.36*	65.83***	40.80**
	(16.04)	(20.40)	(18.23)	(18.55)	(18.16)	(17.18)	(18.23)
LifeExpectancy	1.053	1.349		0.969	1.683*		0.917
	(0.792)	(1.214)		(0.927)	(0.809)		(0.910)
Population	-3.22e-08	-2.18e-08	-2.89e-08		-1.39e-08		-2.79e-08
	(2.15e-08)	(2.99e-08)	(2.22e-08)		(2.28e-08)		(2.22e-08)
GINI	-0.684	-0.766	-0.376	-0.0744	-0.292		-0.485
	(0.748)	(1.452)	(1.076)	(1.050)	(1.037)		(1.081)
FDI	-2.57e-10	-1.39e-09**	-2.93e-10	-1.97e-10	2.37e-10		-3.64e-10
	(2.94e-10)	(4.84e-10)	(4.57e-10)	(4.51e-10)	(4.01e-10)		(4.62e-10)
Unemployment	0.714	-1.575	0.167	-0.0780	0.335		0.183
	(1.069)	(1.368)	(1.132)	(1.135)	(1.235)		(1.132)
EduLowSecondary	0.648*	1.321**	1.040**	0.965**			1.000**
	(0.334)	(0.581)	(0.439)	(0.449)			(0.441)
EduPrimary	-0.0490	-0.784	-0.0244	-0.372			-0.231
	(0.494)	(0.723)	(0.521)	(0.559)			(0.559)
ExSocialist		23.48	1.395	0.182	9.728		3.818
		(25.41)	(19.54)	(19.85)	(21.65)		(19.68)
WestEurope		-21.08	23.04	16.84	18.54		11.50
		(29.02)	(20.47)	(23.52)	(23.90)		(23.45)
CentralEurope		-76.89*	4.094	-2.890	18.87		-9.973
		(36.76)	(30.20)	(33.44)	(32.48)		(33.26)
Asian		3.074	-4.408	-8.656	-11.86		-8.198
		(19.74)	(14.53)	(15.30)	(15.82)		(15.00)
AngloSaxon		-69.26**	-21.75	-26.46	0.774		-29.66
		(29.17)	(23.12)	(24.76)	(23.65)		(24.40)
Inflation	25.35***		26.59***	24.90***	27.45***		25.60***
	(4.718)		(7.208)	(7.395)	(7.728)		(7.271)
Constant	-144.8**	-8.028	-113.2*	-146.6**	-177.9**	31.24***	-140.7**
	(57.28)	(69.50)	(57.80)	(64.99)	(69.40)	(6.274)	(63.89)
Observations	28	28	28	28	29	30	28
R-squared	0.831	0.761	0.868	0.863	0.813	0.344	0.878

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Based on Table 4, the impact of radical redistribution on growth is 40.80 times with a confidence level of 95%. The effects of average inflation and education in low secondary are significant and strong, but the impacts of life expectancy, population, GINI, and unemployment are negligible. According to model (7), if a country undergoes radical redistribution under capitalism, GDP per capita additionally increases by 4,080% over the next 60 years with a confidence level of 95%. A 1% increase in the average inflation rate leads to a 2,560% increase in GDP per capita with a confidence level of 99%. A 1% increase in the average low secondary education rate results in a 100.0% increase with a confidence level of 95%. Other variables have no impact on GDP per capita. This model explains 87.8% of the GDP per capita growth rate.

Table 5. Regressions of GDP per capita by Periods

	(1)	(2)	(3)	(4)	(5)	(6)
VARIABLES	1960~1970	1960~1980	1960~1990	1960~2000	1960~2010	1960~2020
Redistribution	0.626	5.685**	21.27***	30.81***	42.50***	43.96***
	(0.371)	(2.201)	(5.237)	(6.316)	(8.968)	(12.06)
Inflation	0.130*	0.617	1.619	4.857***	11.99***	21.42***
	(0.0645)	(0.457)	(1.041)	(1.554)	(2.446)	(3.523)
LifeExpectancy	0.0230*	0.116	0.587***	0.616***	1.308***	2.035***
	(0.0116)	(0.0755)	(0.167)	(0.217)	(0.355)	(0.512)
Population	-1.66e-10	-3.48e-09	-8.14e-09	-1.41e-08	-2.52e-08*	-1.39e-08
	(7.11e-10)	(3.73e-09)	(7.27e-09)	(9.81e-09)	(1.37e-08)	(1.82e-08)
Constant	-1.249	-4.293	-33.00**	-46.47**	-104.9***	-185.9***
	(0.861)	(5.799)	(12.21)	(16.85)	(29.36)	(42.37)
Observations	27	28	26	30	30	30
R-squared	0.515	0.518	0.748	0.757	0.782	0.767

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

For the robustness of our results, we checked the radical redistribution impact on the cumulative GDP per capita by changing the measuring periods. Table 5 shows the results. While there was no significant radical redistribution impact from 1960 to 1970, the impact became significant from 1960 to 1980, and it gets more significant with longer periods. However, the growth of the impact diminished after the 2000s and almost disappeared in the 2010s (see Figure 1). Thus, we conclude that radical redistribution's impact is growing as time passes and then disappears in 50 years.

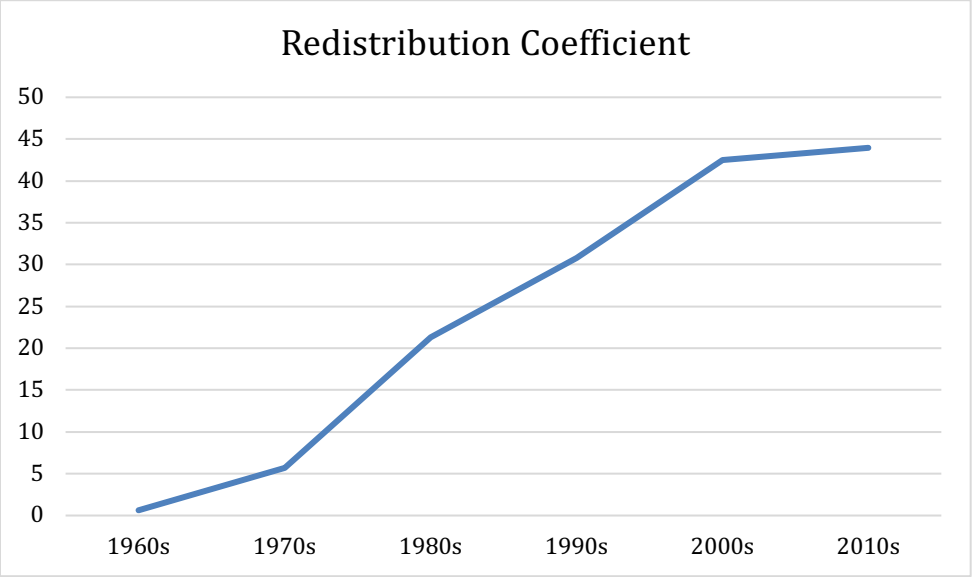

Figure 1 Redistribution Coefficient Change by Periods

Discussion: Radical Redistribution and Economic Inequality

The United States became a superpower after World War II based on a free market and democracy. The free market and democracy brought economic growth through competition, innovation, and opportunities. However, the free market has brought problems of economic inequality, such as income inequality and wealth inequality, leading to frustration among many people in the middle and lower classes. These groups grew larger over time under the system, worsening the problems. Therefore, many people have lost trust in the free market that once brought prosperity to the U.S. Some advocate for a welfare state, and some others even support communism due to their desire for economic equality. Since the majority of people belong to the middle and lower classes, both Democratic and Republican parties compete to increase welfare policies to win elections. However, welfare states and communism are not solutions for economic inequality, as history has shown. Welfare states and communism weaken the economy because they reduce economic efficiency.

We suggest radical redistribution as an answer to handle the economic inequality. Of course, Radical redistribution has some difficult issues to apply. Rich people will oppose it because they will lose part of their wealth. Some of them may even emigrate to keep their wealth. Thus, we suggest strong political support through the voting system for the policy

application. If only a simple majority supports this policy, it could lead to significant political instability. However, if two-thirds of the population approves the policy, it would have strong legitimacy. Moreover, the two-thirds voting rule prevents populist politicians from abusing the policy for their benefit. Therefore, while radical redistribution faces opposition from the wealthy, the two-thirds voting rule can mitigate this resistance. The two-thirds voting rule may cover another issue of radical redistribution, economic moral hazard. Communist economies collapsed due to economic moral hazard. Some people may wait for redistribution and do not want to work hard for their living. However, the two-thirds voting rule makes it hard to expect when radical redistribution will be implemented since two-thirds of people do not agree with radical redistribution, it never happens. Thus, the two-thirds voting rule makes moral hazard difficult.

Although radical redistribution has issues, as discussed above, it could solve several problems derived from a country's economic inequality and any efforts to resolve the inequality. First, it is a practical policy for resolving economic inequality while promoting economic growth as proven by numerous studies (Kaneda, 1980; Berry, 1984; Wang, 1988; Rodrik, 1995; Benabou, 1996; Jeon & Kim, 2000; Grabowski, 2002; Iscan, 2018). Japan and South Korea experienced radical redistribution through land reform after World War II. These reforms made both countries more egalitarian and spurred rapid economic growth. Rich people resisted these reforms, but democratic systems made them possible because the majority of people were in the middle and lower classes. Since countries like Japan, South Korea, Italy, and Spain have already implemented land reforms, it is possible to do so again.

Second, radical redistribution prevents a country from bloody revolutions. Historically, there have been numerous bloody revolutions due to economic inequality, such as the French Revolution, the transition from the Goryeo to the Joseon Dynasty in Korea, and various communist revolutions including the Chinese Cultural Revolution and the Russian Revolution. More than 500,000 people died during the French Revolution. Many people were executed, and they also suffered from economic and political instability. Economic inequality brought about the transition from the Goryeo to the Joseon Dynasty. Goryeo's aristocratic families lost their economic foundation and disappeared from history. Furthermore, more than 20,000,000 Chinese were killed during the Cultural Revolution to preserve Chinese communism against capitalists. More than 7 million people were also murdered during the Russian Revolution. The main reason

for these revolutions was economic inequality. If radical redistribution is implemented, then we don't have to experience these revolutions.

Third, radical redistribution prevents a country from national default due to excessive welfare programs. Economic inequality leads to excessive demands on welfare systems. Consequently, some countries, such as Greece, Venezuela, Portugal, and Argentina, have experienced national financial defaults. Greece's economic crisis was due to a mix of factors, including high public spending on pensions and social benefits, inefficient tax collection, and structural economic weaknesses. Generous welfare programs contributed to large budget deficits and high public debt, which were unsustainable. Venezuela's economic collapse was due to a combination of mismanagement, reliance on oil revenues, and extensive social welfare programs that were unsustainable, especially after falling oil prices. Portugal required a bailout in 2011 due to high public debt and deficits. While not solely due to welfare spending, generous social programs were part of the broader issue of high public spending. Argentina has experienced several economic crises, one of the contributing factors being high public spending, including spending on social programs. Therefore, radical redistribution can prevent national default due to excessive welfare systems because radical redistribution makes the welfare system unnecessary.

Fourth, radical redistribution makes innovation and higher education possible. In an unequal society, poor people want to innovate and educate themselves, but they must spend most of their time covering daily expenses. For them, innovation and education are hard to achieve due to a lack of time and resources, perpetuating the cycle of poverty across generations. In contrast, rich people have ample resources to innovate and educate themselves and their children continuously. Once a country becomes egalitarian, individuals can become economically independent from landowners or capitalists. They can innovate and educate their children using their resources. When more individuals innovate, it significantly impacts growth, leading to rapid economic progress. Therefore, radical redistribution helps facilitate innovation and education.

Lastly, radical redistribution unites the country. It brings about not only economic equality but also national unity. Most democratic countries are politically divided into right and left wings. Economic inequality exacerbates this division, as the rich move further right to protect their wealth, and the middle and poor move further left to seek more welfare. However, radical redistribution creates an egalitarian society, eliminating the incentive for such divisions. Many democratic countries suffer from political division, where people do not change their

support even when their party is wrong, leading to corruption. Therefore, radical redistribution contributes to national unity.

In sum, while economic inequality is a serious problem in our society, radical redistribution can be a solution. Although it will face strong opposition from the wealthy and risks of populist abuse, the two-thirds voting rule can overcome these challenges. Radical redistribution reduces economic inequality by stimulating growth, restoring trust in the free market, enabling innovation and education, and uniting the country.

Conclusion

Based on our statistical model, we demonstrate that radical redistribution significantly impacts growth. Our data reveals significant correlations between radical redistribution and growth. In instances where successful radical redistribution took place in capitalist countries, GDP per capita additionally multiplied by 40.80 over the subsequent 60 years.

The impact of redistribution initially increased, lasted for around 50 years, and disappeared. South Korea and Japan experienced low growth rates, high unemployment rates, and elevated economic inequality post-2000. To propel the economy forward once more, we propose repeated radical redistribution for every effective duration of 50 years. We believe that the implementation of a radical redistribution policy requires support from more than two-thirds of democratic votes to gain majority approval, as the wealthy typically oppose such policies. In addition, two-thirds of democratic votes will prevent abuse of the policy by populist politicians.

Our study contributes literature on radical redistribution's impact on economic growth, offering a statistical model using data from 1960 to 2020. While we suggest a repeated radical redistribution policy every 50 years to experience economic growth and minimize the economic inequality problems, future study is needed regarding details of the policy application, such as what kind of radical redistribution a country needs to apply and how.

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