

# An Economic Miracle in East Asia? The Case of Japan in the Post-War Period: Korean War Dichotomies and the Effect of Industrial Policies and Strong Fiscal Institutions as Causes for Long-Term Economic Development, Approaches to Sustained Prosperity from 1950 to the Present

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**Abstract-** This article addresses the Japanese Economic Miracle as a dichotomy between the Korean War and the Strong Fiscal Institutions biased on structural reforms during the nineteenth-century period. The research framed social development studies driving for the several Japanese historical processes, and it is economy in analytical terms. For this purpose, quantitative data explains the most crucial Economic Policy factors for Sustainable Growth underlie the Comprehensive National Development Plan and the Post War events and legal actions influencing territorial development. Moreover, a crucial benchmark was CNDPs and their implications establishing balanced development on the industry, property rights, monetary and fiscal policy.

**Keywords-** *Japanese Miracle, Fiscal Institutions, Business Cycles, Post-War, Land Reform, Korean War, Dodge Plan, Property Rights, Economic Development*

## I. INTRODUCTION

At the end of World War II, the historical record about the conflict that lasted more than five years caused 85 million deaths and countless damages worldwide. Some countries succumbed to defeat and even disappeared<sup>1</sup>. In contrast, others tried to overcome the abrupt burden of foreign debt and reaffirm their commitment to strengthening diplomatic relations between the various nations. A comparison of cross-countries led by the Gini Coefficient of Regional Disparities targeting OECD Members and Japanese Economic Growth Rate Changes over the last 60 years suggests that after its debacle during World War II, Japan has turned out into one of

the most developed and economically promising countries and it stand out in contemporary economic history<sup>2</sup>. During 1945, before Allied victory<sup>3</sup>, Japanese public spending was directed toward producing military weapons to obtain a preponderant role in geopolitics during the war, which led to destruction (Azuma, 2009).

At the same time, the American Army Forces destroyed many commercial and industrial buildings. In this context, the manufacture of military ammunition for the Japanese Army Forces became significant in proportion to limit the domestic production of processed food concerning the total output of many industrial plants and domestic appliances in Japan. As a result, the Japanese hegemony increased during the war. Nevertheless, the economic collapse carried by a shock of domestic supply, chaos, hunger, unemployment rates, and international demand seriously affected the surviving Japanese civil society. The war destroyed almost a quarter of all homes in the country. In these circumstances, the Allied Occupation Forces were responsible for recovering the shattered country.

However, traditional Japanese society was able to rebuild and restructure its economic system due to externalities as the leading supplier of essential goods during the Korean War. To understand Japan's economic growth throughout the post-war period, one must consider its economic and cultural development during the nineteenth century, virtually the administration's structural reform experiences. Likewise, Japanese historiography of the nineteenth century was called Meiji Restoration 1868-1912.

<sup>1</sup> According to the database of worldwide deaths in World War II, there have been an estimated 2,120,000 military deaths and around 2,600,000-3,100,000 total civilian and military deaths (National WWII Museum, 2003).

<sup>2</sup> Appendix 1 shows the evolution of Gini Coefficients between urban areas and rural areas during 1923-1937. "the Gini Coefficient is higher for rural areas than urban areas, the scale of the increase during this period is 0.0060 in urban areas and 0.008 in rural areas. The industrialization rates -defined as the proportion of persons employed in the non-primary industry among all employed persons) of

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urban and rural areas shown in the same table also differ substantially" (Minami, 2008, pp.8-10).

<sup>3</sup> Truly, the Allied Victory was a block led by Great Britain, the Soviet Union, United States of America. The Allies scored key victories across the military conflict and won the war.

On the other hand, in the beginning, Japan's inequality gap was very high compared to its Western counterpart<sup>4</sup>. The wider world's historical isolation turned out to be a disruptive counterfactual that could eventually overcome by promoting technology development under the Edo or Tokugawa Period 1603-1868. Likewise, the State administration of the early Meiji Period set the foundation for the transition from a country of semi-feudal structures with certain pre-capitalist features to a modern, highly industrialized society (Morishima, 1982). As a legacy of the Edo period, it focuses on establishing the bases for economic growth in the early Meiji period, making the boost of the Japanese economy possible by leading it towards the rise of the modern era from 1880. Thus, at the beginning of the 20s, it foreshadowed a plan for expansion on a larger scale as an Empire.

True, following World War II's defeat, much has speculated about the Japanese economy's rapid growth. In contrast, analyzing several papers and databases from the Japan Statistics Bureau Yearbook and finding several different positions concerning the *Japanese economic miracle*. This monograph attempts to clarify this dichotomous spectrum by focusing on finding answers to long-term sustainable post-war economic development and the effect of fiscal and industrial policies and *National Comprehensive Development Plans*' (NCDPs)<sup>5</sup> overall implications for the long-term Japanese economy.

## II. GEOGRAPHY ASSETS AND POST-WAR BACKGROUND

Japan is a landlocked nation with a millennial origin and an island chain formation, being the most important group of islands: Honshu, Shikoku, Kyushu, Hokkaido, and about other 40 smallest islands. The Japanese territory is located in North-East Asia<sup>6</sup>, bordered by the Pacific Ocean, the Sea of Japan, the Okhotsk Sea, and the China Sea. The westernmost point is the island of Yonagunijima -122°55'57" east longitude-, the easternmost point of Japan is the island of Minami-Tori Shima -153°59'12" East latitude-, the southernmost point is the island of Oki-no-Tori Shima -20°25'31" North latitude- and the northernmost point is the island of Etorofu -45°33'26" North latitude- (Papinot, 1986).

In this region, most of the time, the climate is subtropical, with quite a lot of humidity. It is very well known because it has four climates with well-marked trends in seasonal changes and is known worldwide for its unique rain cycles (Takayasu, 1981; Sakamoto, 2019).

Moreover, Japan benefits from diversity in flora and fauna and is known for being a mountainous country, and forests cover

<sup>4</sup> See (Aizawa, Dekle and Helble, 2017).

<sup>5</sup> During the period of Japan's rapid economic growth and the stable growth that followed, *Comprehensive National Development Plans (CNDPs)* were formulated almost every ten years to define long-term future directions and policies for the balanced development of national lands. The outcomes of such undertakings were the construction of infrastructure nationwide and a

approximately two-thirds of its territory (378,000 km). According to the Japanese Paleolithic division proposed by archaeologist Keiji Imamura, the first humans in the Japanese insular region date back Paleolithic period 35,000 years C.E. Later, the 'Yayoi' culture made its appearance, well-known for its early use of metallic rice-growing tools. One of the main ethnic-cultural settlements was the 'Yamato,' which over the centuries became a warrior-like kingdom and allowed it to expand across the archipelago under the guidance of a deeply centralized policy, employing soldiers to control tribes near their districts (Imamura, 1996).

On the other hand, the Yamato tribe had begun to adapt neighboring folks from other tribes to what would now be China and Korea. Thus, during the Kofun period 300-710 C.E., foreign traders spread their diversity of customs when they arrived in the Japanese archipelago. As a result, foreign traders compromised the ruling classes' political and cultural sovereignty, from where the Japanese 'aristocracy' requires the support from an elite of soldiers to respect their territorial integrity and sovereignty, leading to the rising of the 'samurais' (Aikens and Takayasu, 1981).

Subsequently, monarchies were established in Japan that trends over the Medieval Age (Chusei), Early Pre-Modern Age (Kinsei) with various civil wars such as the Onin War of 1467 ended in unification a century and a half afterward. Similarly, the 'status quo' of the monarchy prevailed even during the Edo period, characterized by its peacefulness and determined to shut down the borders and keep Japan away from the wider world (Pearson et al., 1986, Henshall, 1999). During these periods, the throne eventually morphed into a feudal-hereditary military dictatorship government named 'Tokugawa Shogunate'<sup>7</sup>, the last prince abdicated in 1868.

Thereby starting the Meiji Era marked Japan's modernization by leaving the feudal system and samurai traditions. It is appropriate to mention the achievements that characterized that period:

- "Extensive agrarian reforms were carried out, including the abolition of Japanese-style zamindaris and the transfer of land to the peasants.
- A unified State was achieved with the purpose of feudal decentralization.
- Abolishing social hierarchies (especially the semi-feudal power of the samurai) and stratification.
- A massive investment was made in education with a powerful double emphasis on Western ethics, Eastern science.
- The Government encouraged and promoted primary industry -steel plants, for example-" (Amulya, 1972).

significant reduction of regional income disparities (Vibhu and Yuko, 2017, p.4)

<sup>6</sup> See (Japanese Ministry of Foreign Affairs, 2009).

<sup>7</sup> "It must be noted that from the point of view of the Tokugawa Shogunate, there were very compelling reasons to select the path of closure vis-à-vis the West and impose the *sakoku* policy" (Azimi, 2019, p.36).

Furthermore, Tokyo became Japan's capital, where it remains today, and an aggressive westernization rapid process was launched<sup>8</sup>. As a result, Japan industrialized and turned into the first nation to be promoting technical development across the Southeast Asia region. Therefore, the reforms wiped out the old stratification of the social fabric (rulers and samurai, peasants, and citizens) and introduced in military system changes linked to the structure of power in favor of the Government guided by the Japanese Philosophy and its modern currents. These reforms were predominant in defining Japanese society's cultural and contemporary features and included specific social behavior patterns as a way of thinking, mainly spread in schools; this thinking model enhanced the Japanese citizen.

Under the same mechanism, the 'fixed land tax' was introduced in 1873 (Tanaka, 1982). Similarly, the process of expansionism in the Japanese archipelago as well as towards neighboring nations was established as state policy, causing conflicts with the Chinese Empire<sup>9</sup> and at the same time engaging in a military confrontation with the Russian Empire<sup>10</sup> (Meyer, 2015). Undoubtedly, Japan has been considered a well-established nation, with a centralized state and unrestricted rights to property, which leads us to believe that Japan was on a path of up-and-coming development that would build the foundations for power, prosperity, and wealth (Acemoglu and Robinson, 2012).

### III. WORLD WAR II LEGACY

During 1929 the Japanese Government had fulfilled the financial vertically integrated business conglomerates cartels known as 'zaibatsu'. Four companies that controlled Japanese producers' monopoly, Mitsubishi, Sumimoto, Mitsui, and Yasuda, were the predominant ones. As a result, these firms controlled in 1937 one-third of Japan's foreign trade revenues, one-third of bank and stock market deposits and placements, most of Japan's heavy industry, and Japan's shipbuilding manufacturing (Tanehashi, 2005; Dassbach, 1994).

Furthermore, one should emphasize the rise of the military to power, which plotted China's Japanese invasion, such as the Manchurian Incident of 1931. Likewise, due to their military hegemony, the Japanese diplomatic corps signed the Tripartite Pact between Italy and Germany in 1940 as an omen to the Second World War. It is worth mentioning that the U.S. government-imposed sanctions such as the oil embargo against Japan, which in the short term affected 90% of its industry and on the same scale, imports from the U.S. were significantly

<sup>8</sup> "Thus, as early as the 1870s, in the midst of the Westernization fever that had gripped Japan, Tenshin became a leading figure among intellectuals and artists increasingly alarmed by the loss of the country's traditional arts. The group, while welcoming new ideas and techniques from the West, advocated, in the words of Tenshin, a strong re-nationalizing of Japanese art in opposition to that pseudo-Europeanizing tendency now so fashionable throughout the East" (Azimi, 2019, p.49)

<sup>9</sup> Moreover, Japan's aggression in the second Sino-Japanese War (1937–45) and the crimes committed by its military forces continue to weigh heavily on bilateral relations. Japan expanded into Manchuria in 1931 and invaded northern China in July 1937. After a bloody battle for Nanjing, Imperial Army troops massacred thousands of Chinese soldiers and civilians in the worst atrocity of the invasion.

affected, accounting for 3/4 of Japanese imports (Chesneaux et al., 1966, p.112).

#### A. Significant Post-War Challenges faced by Japan

Finally, after the war, by disbanding its military forces, Japan was plunged into unemployment close to 8 million soldiers. Artillery gunners deepened the country into a recession that, compared to the Japan Statistical Bureau's statistical data, turned out to be four long years of high unemployment in around 13.1 million people (Japan Statistical Yearbook, 2018).

Fortunately, the agrarian sector swallowed up large-scale unemployment, which operated with a workforce concerning around 18 million by both men and women. However, underemployment prevailed with a return of low earnings. On the same order of priority was the shortage of food and energy, since the primary source of energy and input for factories and the operation of a country's industry was coal. Consider that the strict Japanese regimen forced the Chinese and Korean population to labor in human conditions while working in the coal mines; even they were striking and refusing to work in factories (Fujii, 1994).

By the end of 1946, the leading Japanese concern was the possibility of a food and fuel shortage for the coming winter of 1946. In this context, it is essential to emphasize that the Japanese economy cannot be considered a "business as usual" model. After the defeat, Japanese finances were overshadowed by war inflation, mainly due to the excessive circulation of funds for provisional military spending—namely, troop salaries, payment for military goods, advance payments for services, and administrative fees (Gluck, 1994). In this context, after the defeat, Japanese finances were overshadowed by war inflation, mainly due to the excessive circulation of funds for provisional military spending—namely, troop salaries, payment for military goods, advance payments for services, and administrative fees (Gluck, 1994). To sum up, the 1949 Dodge Plan and the Japanese Comprehensive National Development Plans (CNDPs) solved the watery currency crisis, as discussed below.

#### B. Settlement of the Allied Forces in Japan

As diplomatic assistance and back-up mechanism, the United States-led Allied Powers provisionally occupied Japan, led by General MacArthur—Supreme Commander of the Allied Powers, SCAP. That eventually led to implementation of a new Constitution in 1947, which stipulated total spending on military and defense forces. Likewise, it implemented three disruptive reforms, the abolishment of zaibatsu or business conglomerates,

By 1939, Japanese forces occupied northeastern China and a large portion of its coastal areas (Meyer, 2015, p.26)

<sup>10</sup> (Kublin, 1950; Matsui, 1972; Esthus, 1981) mentions that the territorial and political control as the main rivalry between Russia's and Japan's War influenced by the military and commercial expansionism, which began with the Port Arthur battle. Furthermore, "the attack on Port Arthur had given Japan superiority at sea. In response, the Russian Baltic Fleet, commanded by Admiral *Zinovy Petrovich Rozhdestvsky*, less well-equipped and of older make than its Far East as the Second Pacific Squadron in October 1904" (Van Dijk, 2015, p.432).

the agrarian reform, and the labor democratization (Garon, 2012; Moen, 1999; Smith, 2008, Azuma, 2009).

Simultaneously, under the Allied Forces protectorate promulgated the Antitrust Law and the Decentralization Law, the SCAPs redistributed the cultivate plots to their new tenants due to the agrarian reform implementation. In perspective, this has democratized agricultural land in Japan over the long term. Moreover, Appendix 02 shows that revenue generated by the sale of land has more than doubled in five years, which means that it is more profitable to take cover in the short-term since it represents an upward trend in land assets (Tanaka, 1974). Essentially, when the SCAPs imposed the agrarian reform, the plots were nationalized and then redistributed to their new tenants.

#### IV. FROM REFORM TO SUSTAINABLE RECOVERY

##### A. *The Spearheading of the Dodge Plan during 1948*

Under the reforms mentioned above, the Japanese economy was on a path to gradual recovery due to SCAP. Nevertheless, during 1948, tensions between World Powers such as Russia and the United States were building up, which meant no longer finance the coast of Japan's recovery.

Thus, Joseph Dodge, President of the Bank of Detroit, launched the Dodge Plan. As a result, the transitional Government introduced as an axis of the Government's policy: a balanced budget, suspension of new loans for Rebuilding, the abolition of state subsidies (Suzuki, 1994; Hayashi, 2014; Cohen, 1958).

True, the draft measures were almost impossible to execute due to the looming outcome, which is the recession. Nevertheless, the dreaded Korean War began in the early 1950s. Japan became a major supplier of basic foodstuffs and a concession holder for the American armada, thereby putting Japan back on the international market through capital accumulation progressive recovery due to ongoing deflation.

##### B. *Korean War Boom*

The result could not have been better as former Finance Minister Ishibashi<sup>11</sup> mentioned, in one year alone, the total amount of trade increased by 34%, leading to an unexpected boom. The aforementioned caused Japan's production to increase by about 70% (Takada, 1999). Likewise, the influential Japanese post-war historian Kozo Yamamura mentions:

"Foreign currency derived from U.S. Army and military staff reached huge amounts by that time: \$590 million in 1951 and over \$800 million in both 1952 and 1953. Thus, Japan earned a temporary dollar income that represented 60 to 70 percent of its exports. That is, Japan was being allowed to import at a rate of approximately \$2 billion per year.

For the Japanese economy, which had been doing its best just to import just under \$1 billion in goods in 1949 and 1950, the \$2 billion imports meant that key industries that depended on raw

material imports could roughly double their output." (Yamamura, 1967; Takada, 1999).

Therefore, the Korean War increased the effect on investments in infrastructure, plants, and technological innovation. In the same direction, Japan re-established its long-awaited independence by signing the Japanese American Security Pact in 1952.

#### V. ECONOMIC MIRACLE

##### A. *Growth Drivers*

Undoubtedly, in its early days, the Japanese miracle became mostly proposed by foreign governments and the drive for externality, such as the Korean War. However, this does not address the continuous growth of the rising sun's land over the next ten years (Hoshi Et al, 2008; Grimes, 1999). This event is known in development economics as sustained growth, a continuous growth by purely internal or external factors that can be guided by pro- or counter-cyclical policies from the standpoint of monetary aggregates, as well as by a multidimensional framework for the development of social programs or a short- or medium-term stimulus package and fiscal rules (Carbonnier, Campodónico, and Tezanos, 2017).

##### B. *Economic Policy Factors for Growth*

Nevertheless, Japan's rapid economic growth was a multi-causal process due to extraordinary events and the provisional Government's policies, including human capital, the Japanese people's willingness to work together, and the efforts to achieve economic recovery. In the same vein, Japan's economic performance in 1960 was guided by a quality labor force, which combined high investment rates to constitute the core force for vigorous growth. Second, tax reforms were associated with an accelerating depreciation, extraordinary deductions for export earnings (Patrick and Rosovsky, 1976; Boltho, 1996).

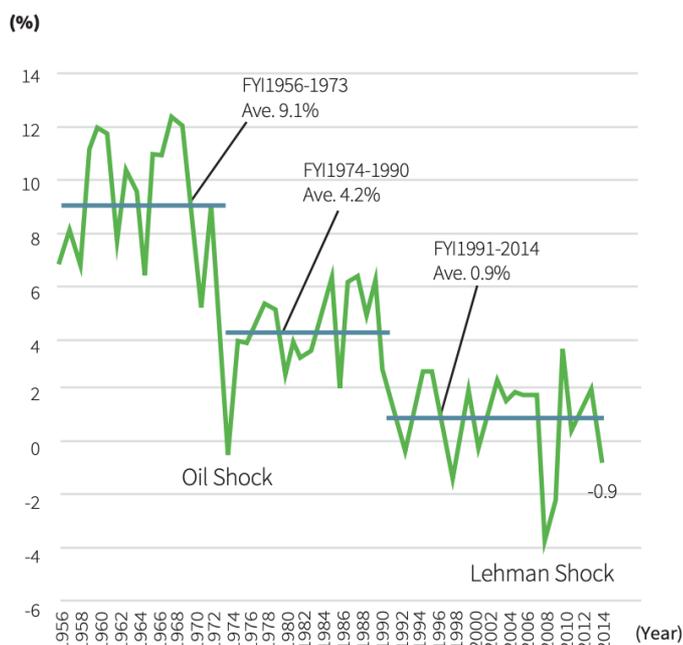
Moreover, from the banking and finance standpoint, Henry C. Wallich of the Federal Reserve Board mentions the financial system as an operational entity of institutional control, applauding credit rationing, although the absence of bond markets at the time was quite volatile for foreign investors (Reischauer, 1977; Rosenbluth and Thies, 2010; Barta, 2018; Restrepo, 2017).

In other words, Japanese financial markets are strongly influenced by government policies that push the financial system in the same direction as market forces would. The macro-fiscal and monetary policy, with occasional breakdowns in the balance of payments or the threat of accelerated inflation, has turned Japan into an economic slowdown, as the graph below shows:

<sup>11</sup> During 1946, Tanzan Ishibashi, former Japanese Ministry of Finance declared to the press "Wage War until We Win and All for Victory. However, in the coming savings campaign, economic recovery and revival of the realm will be

our watchwords as we remind everyone, too, of the importance of saving to the savers themselves" (Garon, 2012)

Figure 01. Japanese Economic Growth Rate Changes over the last 60 years



Source: Tokyo Learning Center (Policy Paper Series 2)/ 2017. Adapted from World Bank database (Vibhu and Yuko, 2017).

It can be shown in the previous graph that during a balance of trade or payment crisis, as occurred with the oil shock, which inevitably refers to the fact that in the contemporary world.

Bond and stock market have repercussions related to Japan's growth, as well that various companies in the industrial and technological sectors put their investments in the stock market, from which this type of cyclical events in the economy are highly volatile and with negative returns for their holdings.

### VI. THE PATH TO SUSTAINBLE GROWTH

As previously argued, during the period of economic growth through a discussion table, the executive and the Ministry of Finance and Economy take the initiative to establish the CNDPs Comprehensive National Development Plan, intending to set the balanced development of public policy, monetary and fiscal in 10 years, the long term (World Bank, 2017). To that end, in the following table we have summarized all the processes from 1950-2005:

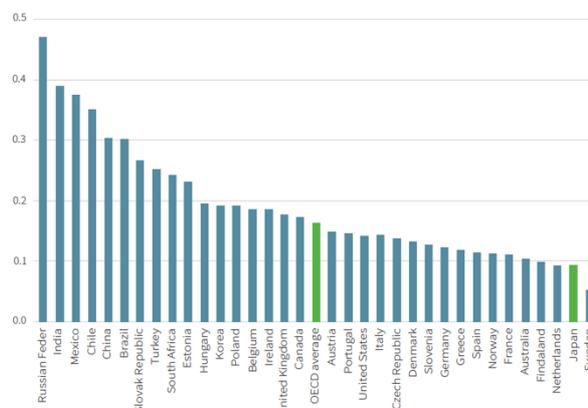
Figure 02. Post-war events and legal actions clustering spatial and territorial development



Source: Tokyo Development Learning Center (Policy Paper Series 2)/ 2017. Adapted from World Bank database (Vibhu and Yuko, 2017).

The socio-economic, demographic, institutional, and Japanese administrative reforms in the past century supported the essential aspect of the CNDP's and the odds to achieve their purposes outlined. Under this framework, the commission employs three elements as axes: concentration, connectivity, and convergence (Vibhu and Yuko, 2017). Thus, as an institutional plan of medium-term projection, the private and public sector join forces in the adoption of industrial location policies, institutional frameworks at the national and regional levels focused on comprehensive development (e.g., the 2005 Planning Law), and finally equitable growth for the population, and citizens' participation as the primary beneficiaries. For more detail on the path to sustained long-term growth, (see the compare regional disparities in the following chart)

Figure 03. Gini Coefficient of Regional Disparities targeting OECD Members



Source: World Bank (2017) / Paper Series 2 // OCDE "A glance at the regions 2011". Adapted from World Bank database (Vibhu and Yuko, 2017).

Similarly, using the Gini Coefficient to track inequality rate gaps between countries and consider their population's vulnerability, economic development, salary gaps and public health accessibility gaps. Indeed, analyzing the regional disparities across the countries, Japan reveals a low disparity coefficient, which in the short term leads us to think of an optimistic view of development in the medium and long term.

## VII. FINDINGS

Finally, one of the drivers that made Japan's remarkable post-war economic growth possible was the strong institutions founded not only since the occupation of Allied Forces in Japan but also from the roles played by the Meiji Restoration and the viability of fiscal sustainability in the Japanese economy during the Korean War, due to their fast-growing export volumes. Another critical factor to consider was the rapid displacement of the unemployed, who numbered around 13 million and were absorbed by the agricultural sector, which demanded labor, although many were underemployed (Aoki, 2011).

Nonetheless, after economic growth took off, the Japanese authorities lead the way to implement multisectoral round tables that exist to date as the Comprehensive National Development Plans (CNDPs). Evidence shows that economic miracle fluctuates between close dichotomies that without a precise, detailed, comprehensive analysis of quantitative and historiographical data could result in a cause-and-effect relationship between Japan's participation and the Korean War. However, the state-level economic, social, and tax reforms which started during the nineteenth century over the dawn of the 1950s had considerable implications on the successive events of economic expansion and growth going forward.

## ACKNOWLEDGMENT

This case study was based on analysis and projection approach contained in the Korean War Dichotomies and the Effect of Industrial Policies and Strong Fiscal Institutions as Causes for Long-Term Economic Development, is integral to understand the periodicity and impact of Japanese Reforms related to the socio-economic and industrial reforms during the nineteenth century and twenty-first Centuries.

The survey of statistics was considering across several time-series in the research made with official data of the World Bank (WK), Japan Statistical Bureau, Japanese Ministry of Finance, Tokyo Development Learning Center, National Japanese Censuses, Japanese Ministry of Agriculture and Sericulture, and Japan Statistical Yearbook.

The analysis in this paper was carried out by a database study, coordination with government authorities in the Osaka region, and the Embassy of Japan in Lima. The approaches, in addition to quantitative, descriptive analysis within the framework of Acemoglu and Robinson's studies of institutional economics, using the interdisciplinarity of Japanese historiography to order the events in a timeline from Tokugawa Shogunate or Edo Period, Meiji Period, and the World War II repercussions in Japan across the Postwar Era and the Korean War.

Moreover, the complementary bibliography is based on Edmond Papinot, Eiichiro Azuma, Hiroshi Yasuoka, Daron Acemoglu, James. A. Robinson, Virgil Van Dijk, Hyman Kublin, Japanese Ministry of Foreign Affairs, Jerome B. Cohen, Kozo Yamamura, Masahiro Takada, A.J. Tanahashi. Richard Pearson, Gina Lee Barnes, Karl L. Hutterer, C. Aikens, H. Takayasu, C. Gluck, T. Aizawa, R. Dekle, Mñ. Helble, R. Esthus.

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APPENDIX

Appendix 1

Table 1. Income distribution and related indices by category of municipality in Japan, 1923-1937

Region	Year	Gini Coefficient	Change in Coefficient (1923-1937)	Industrialization Rate (%)	Number of taxpaying households	Number of municipalities	
<b>I.Cities and towns</b>	<i>1</i>	1923	0.569	0.037	67.8	102,083	38
		1930	0.582		72.9	178,827	45
		1937	0.606		74.6	262,066	44
	<i>2</i>	1923	0.578	0.060	70.7	42,707	20
		1930	0.603		72.3	49,959	20
		1937	0.638		75.2	61,016	20
<b>II.Villages</b>	<i>1</i>	1923	0.534	0.001	29.7	53,633	86
		1930	0.544		30.1	67,342	106
		1937	0.535		29.6	66,758	97
	<i>2</i>	1923	0.584	0.008	31.9	38,882	62
		1930	0.602		30.6	40,565	62
		1937	0.592		31.4	41,768	62
<b>III.Municipalities</b>	<i>1</i>	1923	0.544	0.013	41.4	155,716	124
		1930	0.555		42.9	246,169	151
		1937	0.557		43.7	328,824	141
	<i>2</i>	1923	0.585	0.039	49.9	81,589	82
		1930	0.607		51.9	90,524	82
		1937	0.624		54.4	102,784	82

Sources: Average incomes, Gini Coefficients and numbers of taxpaying households are according to the household data for each year, and industrialization rates are based on the 1920, 1930 and 1940 National Japanese Censuses. Adapted from (Minami, 2008)

Notes:

1. *Section 1* gives the simple arithmetic averages of the results for all municipalities obtained from the data in each year, and *Section 2* gives the results obtained by pooling the taxpayers in municipalities for which data are available for all three benchmark years.
2. The industrialization rate is the percentage of people who are employed in non-primary industry among all employed people. Figures for 1923 and 1937 are the results for 1930 and 1940.

## Appendix 2

Table 2. Income from land sales in comparison with other revenues (100 million yen)

Family income of farmworkers					
Year	Agriculture	Other Independent Companies	Salary	Mortgage Interest Rates	Income from the sale of land parcels
<b>1950</b>	<b>12087</b>	<b>2306</b>	<b>9431</b>	<b>2214</b>	<b>689</b>
<b>1965</b>	18502	2860	20102	4841	2956
<b>1966</b>	21289	2988	22777	6023	3725
<b>1967</b>	24936	3287	26085	6828	4236
<b>1968</b>	26123	3416	30663	7618	5424
<b>1969</b>	27312	4006	36590	8528	9382
<b>1970</b>	26861	4567	44591	9482	12102

Source: (Japan Statistical Yearbook, 2018) with data from the Ministry of Agriculture and Sericulture from 1960-1970. Adapted from (Tanaka, 1974).