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Analysis of Japan's high economic growth period - Lessons for India in the post-COVID-19 era

Naveed Trumboo
E-Mail: naveedtrumboo@gmail.com
National Graduate Institute for Policy Studies (GRIPS), Tokyo, Japan

Dr. Shailla Draboo, PhD
E-Mail: drabushella@gmail.com
Jamia Millia Islamia University, New Delhi, India

Abstract
World War II (1939-1945) left Japan devastated with a heavy loss to its economy. Despite this setback, the country not only improved its economic base, but also grew tremendously to become a global giant in the next few decades. This paper focuses on the period of high economic growth in Japan, which broadly ranges from 1950s to early 1970s and analyses the reasons which led to its so-called "economic miracle". Using the existing literature and body of work available on the subject, the paper presents the key features of this period and deep dives into the industrial policy and the transformation of Japanese economy during these years. It also discusses the impact of this growth on the society of Japan. Finally, the paper highlights some important lessons which India can learn to tide over the challenges posed by the Covid-19 pandemic. The paper finds out that Japan was able to achieve the high economic growth due to the synergy between the government and the corporate, unique industrial structure and a high reliance on increasing the potential of small and medium enterprises. Further, India can replicate many of these policies owing to its huge human resource capital.

Key words: Japan's High Growth Era, Indian economy, Covid-19 pandemic, Small and Medium Enterprises, Kaizen.

Introduction

World War II (1939-1945) left an indelible mark on world history. It resulted in huge destruction of economic base of countries, loss of human life and widespread sufferings among other things. As per one estimate, the war resulted in death of more than 50 million people worldwide and costed United States alone more than 4 trillion USD (adjusted to 2011 prices) (Daggett, 2010). Perhaps the greatest impact of this war was on smaller countries like Japan, which were already struggling due to scarce resources. As per an estimate by the Economic Stabilization Board, Japan lost 1.85 million people and a quarter of its national wealth due to the war (Economic Stabilization Board, 1949). After its defeat, Japan was experiencing a low industrial growth, high inflation coupled with high debt and huge expenditure on recovery and war compensation. Hence, it was extremely crucial for Japan to take some steps in order to bring the economy back on track. And it was successful in doing so, as despite these challenges, Japan rose to become one of the leading economies of the world in the next few decades (Johnson, 1982). Japan's story offers many lessons for other countries as they try to understand and replicate the "economic miracle" witnessed in

Japan. This paper will first analyse the major economic developments during the period of 1945-1973 and then highlight some lessons from Japan's experience, which may be useful for a country like India to revive its economy hit by the current Covid-19 pandemic. The paper attempts to answer two research questions as mentioned under:

i. What were the reasons due to which Japan was able to achieve high economic growth despite suffering huge losses in WWII?

ii. What are the key learnings for a country like India from Japan's success story in post-Covid-19 times?

Literature review of Japan's economic development post World War II

As mentioned above, Japan faced unprecedented crisis after its defeat in World War II. The war led to a steep decline in almost all the growth indicators and therefore, required an immediate intervention by the government. Post-1945, Japan's recovery period can be divided into three phases – Era of reform (1945-1948), Era of recovery (1948-1954) and Era of high growth (1954-1972) (Takada, 1999). The Era of reform corresponds to the period when certain policies were brought by the Supreme Commander for the Allied Powers (SCAP), the name given to the leader of Occupation Forces (Allied powers) in Japan. The era of recovery (1948-54) corresponds to the period when economic stabilization policies were implemented like enforcement of a balanced budget (or surplus budget), reduction of price subsidies and inflation. The era of high growth (1954-1973) corresponds to the period when Japan saw a high Gross Domestic Product (GDP) growth rate averaging 9.3 percent, high industrial growth rate of at least 13 percent, low inflation and a positive balance of payment (Yoshioka & Kawasaki, 2016, p. 11).

There were mainly four stakeholders involved in the growth story of Japan during this period – the common households, government, corporations, and international players. Common households were responsible for the supplying inputs like labour to corporations which produce goods and services. These were in turn consumed by the households, which led to a cycle of demand and supply, thus boosting the economy. Government played its role in implementing the policies aimed at improving industrialization, modernization of institutions, skill building and capacity enhancement. The foreign institutions were a part of the demand-supply cycle as they were consuming Japanese goods and services and were making investments in Japanese corporations. The reasons for this growth are discussed in detail in the next sub-sections.

Era of Reforms (1945-1948)

Post WWII, Japan came under the control of SCAP led by General Douglas MacArthur, who brought three major reforms in Japan to democratize Japan and its economy - the breaking up of the zaibatsu, land reforms, and labour democratization (Takada, 1999). The first reform was the dissolution of the big business conglomerates, called zaibatsu (like companies and banks), which were treated preferably by the Government (Ohno, 2006). SCAP considered them to fund Japan's military during the war and hence they were broken down into smaller separate entities. This resulted in decentralization of power, improvement in labour-wage conditions and rise of entrepreneurship. Some laws to this effect were also passed like Fair Trade Law and Law for the Elimination of Excessive Concentration of Economic Power (1947).

Another reform was introduced in the land sector which in its essence was about giving land-to-the tiller. In effect, all farmlands of absentee landlords above certain limits were sold to the actual tillers (Ohno, 2006). This increased the number of independent farmers and helped them grow economically. "The percentage of farmland cultivated by tenant farmers declined from 46 percent in November 1946 to 10 percent in August 1950." (Ito and Hoshi, 2019, p. 46). On the other hand, this reform is often criticized for creating many small land holdings in the long run, which made farming inefficient and decreased agricultural productivity.

The third reform brought under SCAP was regarding labour democratization. Japanese laborers were now allowed to create unions under the Labour Union Law (1945) and demand better working conditions and wages. Even though this resulted in many labour strikes, however, the overall result was improvement in the lives of laborers. This improvement increased domestic consumption and benefitted the economy consequently (Takada, 1999). Reforms were also brought in other sectors like education, agriculture, and banking sector. The efficacy of these three reforms is a matter of debate as some experts have suggested that even though these reforms may have resulted in creating a competitive economy in the long run, however, "they did not contribute directly to the recovery." (Ito and Hoshi, 2019, p. 45).

Era of Recovery (1948-1954)

This era started with the Dodge Plan (1948) drafted by Joseph Dodge, a Detroit banker. Due to the beginning of the Cold War between USA and Russia from 1947, USA's stance towards Japan changed. Rather than treating it as country which was supposed to be kept de-industrialized, USA decided to make Japan a permanent ally in the region for which it was necessary to make it economically independent and industrialized. Further, the reforms brought in by SCAP did not help solve two most important macro-economic problems of Japan – low productive capacity and high inflation. Under these circumstances, Joseph Dodge was sent with a stabilizing policy framework in 1948. The policy included following a balanced budget (which would result in surplus of balance of payment), suspension of loans from external banks, tightening of subsidies and grants by the Government and introducing a unitary exchange rate of 360 yen to the dollar. Due to this policy, the private companies were forced to improve their working style to cut losses and increase efficiency. The fixed exchange rate gave an extra incentive by making the exports competitive in international markets.

It proved be one of the biggest reasons for transforming Japanese industries as they slowly gained expertise to maximize profits and improve quality. Enhancing productivity by using technology (also known as Gorkiha) and focusing on heavy industries like steel, coal, mining, and railways became a mission mode project. The fiscal deficit, which rose from 92.3 to 141.9 billion yen in 1946-48, suddenly turned to a surplus of 156.9 billion yen in 1949 (Ohno, 2006). These developments in the business culture converged with the Korean War in 1950, which proved to be a boon for Japan. Because of the war, US military's demand for Japanese goods increased manifold. With the rising levels in consumption and money inflow, local companies were able to increase their production. Their profits flowed back into the economy which resulted in increase of per capita income. Thus, the fear that Dodge Line measures would plunge the Japanese economy to another depression was prevented.

Era of High Growth (1954-1972)

The political conditions were turning in favour of Japan as it gained independence in 1951 (San Francisco Peace Treaty) and then joined International Monetary Fund (1952), The World Bank (1953) and United Nations (1956). Japan was thus able to secure a place in the international markets without trade restrictions thereby boosting its exports. This period also saw changes in the fiscal and monetary policies of Government and banks. Credit was available to companies easily for business expansion, interest rates were kept low and government protected companies from potential bankruptcy. Another important feature of this period was the availability of educated and relatively well-skilled workforce in Japan. The corporations adopted assemble-line system of production, which enabled the workforce to specialize. This workforce was the engine behind the "Made-in-Japan" trend –symbolizing international consumer's love for Japanese products due to their high quality and durability. During this period, Japan's industrial growth was 14 percent on an average, which exceeded the planned rate of about 9.2 percent on average. Similarly, it achieved an average GDP growth rate of 10.6 percent, exceeding the planned average of 7 percent. (Yoshioka and Kawasaki, 2016).

Other noticeable triggers for inducing high-economic growth in Japan included the Doubling National Income Plan and trade liberalization policy in 1960 and Economic and Social Development Plan (1967-1971). A specialized Economic Planning Agency (EPA) was formed in 1955 to be in-charge of the comprehensive national development plans. Japan was able to convince the global players about its robust growth model making it a favourable destination for investment. It also provided a renewed spark at domestic level motivating the locals to join the growth story more vigorously (Hamada & Kasuya, 1992). Ministry of International Trade and Industry (MITI), which was conceived in 1949, was the pioneer in drafting such policies to bring reforms in industrial sector particularly steel, coal, and infrastructure.

Although the country saw a recession in 1965, the period of 1950-1970s was mostly characterized by large investment, large consumption, and large exports (Huan, 2010). By the end of 1969, Japan had become world's second largest economy after USA in GNP terms (Johnson, 1982).

Analysis of Japan's Industrial Structure

Japan's industrial structure merits a discussion as it was seen to be instrumental in the high growth of country's economy. *Keiretsu* or enterprise groups emerged after the breaking up of *zaibatsu* by the SCAP's policies. In pre-war Japan, four big conglomerates (Mitsubishi, Mitsui, Sumitomo, and Yasuda) controlled about 25 percent of the paid-in corporate capital (Ito & Hoshi, 2019). Such monopolies (from the perspective of SCAP) were targeted by the *zaibatsu* dissolution plan and the result was the creation of the post-war *Keiretsu*. It was essentially a collection of firms in various industries which supported each other in form of financial borrowings, share-holding and business strategy. After the reorganization, there were six large *Keiretsu* till the end of 1990s - Mitsubishi, Mitsui, Sumitomo, Fuyo, Sanwa and Ichikan. Another feature of this structure was that banks were allowed to be both a lender and a shareholder in these enterprises. The membership in these groups was primary defined by the participation in the President's Club, which was a gathering of the top executives. For instance, Hitachi had membership of three groups – Fuyo, Sanwa and Ichikan. The difference between the pre-war *zaibatsu* and the post-war *Keiretsu* was that the latter did not have any main holding company. The similarity was that it also comprised of a mix of firms doing business in banking, insurance, steel, trading, heavy industry, etc.

Ito and Hoshi (2019) provide the analysis of two types of vertical *Keiretsu* – production *Keiretsu* and distribution *Keiretsu.* The first one was prominent in the auto industry with major players including Toyota and Nissan. There were arranged into a group where they had direct and exclusive ties with about 100 suppliers. This arrangement had many benefits such as reduction in development costs due to close communication between suppliers and manufacturers, insurance against production cost fluctuations and a dependable network of manufacturing and supply. The disadvantages included that new innovations did not spill over to the whole economy as the technology mostly remained within the enterprise. The second type - distribution *Keiretsu* - were a prominent feature of the electronics industry (major players included Sony, Panasonic, and Toshiba), where the manufacturer organized a series of distributors. These distributors would carry wide range of electronic products from only one particular brand. The manufacturers benefitted from the control they exerted on retail prices and discounts, and the distributor benefitted from the generous buy-back policy on unsold goods and other rebates.

The *Keiretsu* played three important roles during the period of high growth. First, with their extensive network connecting manufacturers, suppliers and distributors, these enterprises were able to create a dependable chain of business. Fluctuations in the market could be better absorbed with the support of the large group holding. Second, although the *Keiretsu* did not necessarily mean higher profits, however, Nakatani (1984) as cited in Ito and Hoshi (2019) found that the strength of *Keiretsu* was in stability of profits, essentially because of their risk aversion. This means that the business expanded slowly but with more stability. Third, the *Keiretsu* was often criticized for creating a barrier to foreign firms, although some studies show that this was a result of fierce competition between different group-affiliated firms and not collusion among them.

The second aspect of the industrial sector during the high growth period was the industrial policy followed by Japan. The infant industry policy was followed by MITI (reorganized as the Ministry of Economy, Trade and Industry (METI) in 2001), where they protected domestic industries from foreign competition. The government provided assistance in creation of infrastructure for all industries like developing roads, ports, power plants, etc. It also gave subsidies and import protection to targeted industries till domestic industries became competitive. Further the government, promoted "rationalization" in industries whereby automation and increasing productivity was encouraged. Finally, the small and medium-sized firms were provided many benefits to help them grow, such as creation of the Small and Medium Enterprise (SME) Agency in 1948 under MITI, which provided help related to finance, labour, increasing productivity, etc. The industrial policy of Japan during high growth era has been criticized by many for cartelizing economic activities and suppressing free markets. However, the fact remains that this policy was able to promote many infant industries and make them competitive globally.

Japan had arrived at the global level as a world economic leader and it experienced a stable growth in the next two decades. Figure 1 below shows a comparison between the growth of real GDP per capita (in 2011 US$) of Japan versus other countries (Bolt *et al.*, 2018).

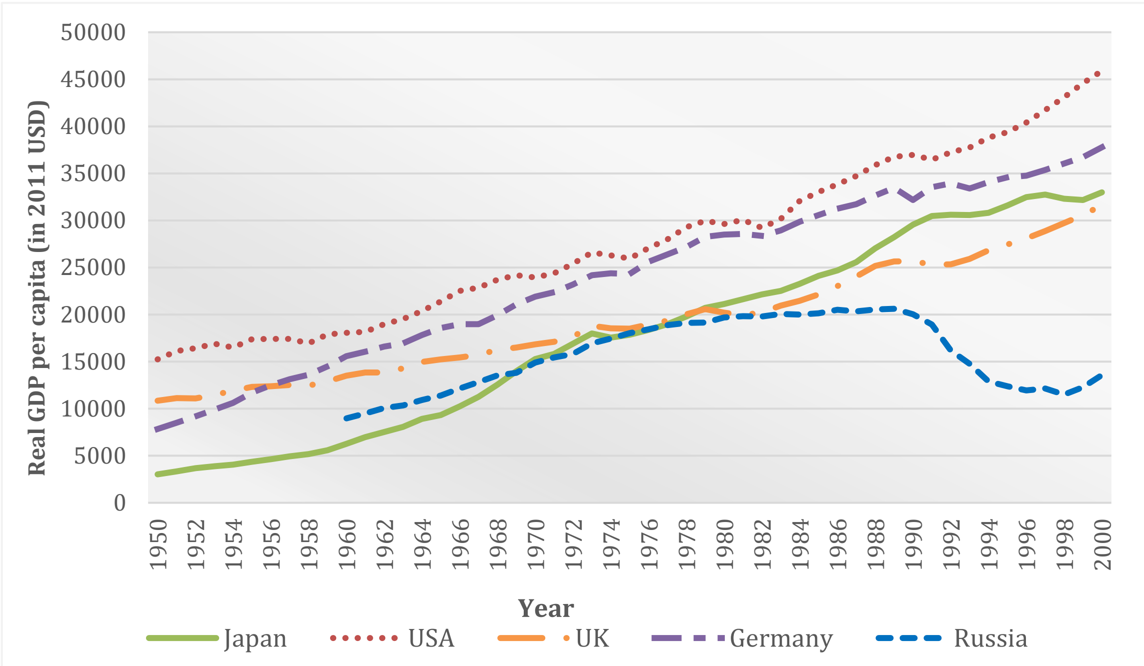

Figure 1: *Growth of Real GDP per capita (in 2011 US$) of Japan versus Others*
Source: Maddison Project Database, version 2018.

From the above graph, it is clear that Japan's real GDP per capita gradually caught up with other developed economies of the world and by the late 1970s, it had surpassed UK and Russia. This growth changed the social and cultural life of the people also as discussed in the next section.

Impact of the 'Economic Miracle' on Japanese Society

Japan was traditionally a closed society due to its limited interaction with the outside world. From 1945 to 1955, the major changes in the society were brought by the policies of SCAP particularly in education (Nagai, 1969). It involved changes in the educational institutions, content of education and also introducing new ideas in the courses (Sasaki, Saito & Hosoya, 1957). From 1955 onwards, Japanese people had accepted the economic growth model and had adjusted themselves to the demands of the new system. According to Zhang (1998) 'Irrespective of Japan's great losses, the war had not destroyed the fundamentals of the society necessary for its industrialization – the national consensus for modernization (ambition of catching up with the West), social respect for learning, appreciation of hard work and frugality, modern institutional structures for education and management. The population were highly disciplined.' These features are often considered to be the most critical elements of Japan's success story.

The rising level of per capita income and consumption boom during the 1950-1970s period changed the lifestyle of Japanese. An ever-growing middle class had emerged, which was actively shaping the decisions of the government. Latest gadgets like television, washing machines, cars and coolers were a rage among the people. Three C's (car, cooler and colour TV) were a common aspiration of people, so much so that they became a subject of portrayal for popular TV shows like "*Ohayo*" (Good Morning). The growth in production reduced the prices of these goods which increased their demand further thus creating a continuous cycle. Before the war, Japanese wore traditional dresses and lived in traditional houses. By

1960s, American food like bread and coffee had become very common and people had started living in concrete buildings (Ohno, 2006). Western ideas of modernity in terms of attire, thoughts, family values, gender roles and popular literature had become very common. However, this did not mean that Japanese had completely shun their own traditions. Rather a symbiotic blend of both the Orient and the Occident was perceivable in Japanese society.

Discussion on Lessons for India from Japan's success

There are many lessons from Japan's high growth period which can be adopted by a developing country like India. These become even more important now when the country finds itself in deep economic challenges owing to Covid-19 pandemic. India has seen a gradual increase in its GDP since attaining Independence in 1947. Further, its GDP has shifted from being an agrarian economy to a service-sector economy as the share of services sector has increased from 29 percent in 1960-61 to 54 percent in 2018-19, while the share of manufacturing sector has not increased significantly (Ministry of Statistics & Programme Implementation, 2014; Reserve Bank of India, 2019). The 1990-economic reforms were majorly responsible for this shift as they practically bypassed the manufacturing sector in India. As a result, the manufacturing sector did not grow as efficiently as it grew in India's neighbouring countries. This has created many problems in the long-run. Firstly, a weak manufacturing sector means the scale of most of the firms in India remains small, which cannot reap the benefits of economy of scale. This gets manifested by the fact that about 87 percent of the manufacturing employment in India was in the micro-enterprises (less than 10 employees) (Dougherty, Herd & Chalaux, 2009). This feature has not vastly changed, and the latest Economic Census report shows that not enough jobs are being created in the manufacturing sector (Kantha, 2017). Studies have also shown that the manufacturing sector in India faces many issues at multiple levels like poor infrastructure, labour issues, low firm turnover due to small scale and poor market integration. While each of these issues need a separate analysis, some lessons from Japan's growth can be pointed out.

Japan was able to demonstrate the usefulness of drafting a clear policy framework for improving productivity and growth. Led by METI, the companies were forced to rationalize i.e. adopt newer technologies and cut production costs. The government preferentially allocated raw material to key industries and also helped create infrastructure like roads and power plants. Further, the government gave special tax provisions, subsidies, and loans to smaller firms to make them competitive. While these measures many seem socialist in approach, when balanced with efficient working style in companies, they have proved to be beneficial for Japan. To achieve this goal, Japan emphasized on the concept on kaizen, which means changing the mindset of the entire organization by constant and endless effort, team discussion and visualization of procedure and results. This practice reduced the wastage in Japanese companies and they began to be known for their superior quality in the entire world. Two important pillars which were part of this growth eco-system in Japan were the local companies (kaisha) and the skilled workforce. The economic miracle of Japan did not happen just because of favourable conditions at the macro-economic level. It happened because the people constantly learnt from the best international practices, moulded themselves to the requirements and worked hard to make the policies work. Unique systems such as the keiretsu i.e. business networks which remain operationally independent but link important stakeholders like industrialists, banks, and trading companies to create exclusive relationships, helped create a stable and successful economy at domestic level (Crawford, 1998).

Presently, India can adopt many of the above practices to improve its manufacturing sector, which is critical if it wants to become an international competitor and also support its growing population domestically. Existing problems of unemployment and the fact that hardly any Indian manufacturing firm is a global leader shows that the country has not given enough attention to this sector. Further, the rising threat from China in the Asia-Pacific region can be countered only if India can prove to be an attractive manufacturing hub for investors all around the world. Although, it is not like India has never adopted good practices such as kaizen. Large firms like Maruti Suzuki (a private venture between India and Japan), work on these principles and have shown their effectiveness over a period of time. However, all these initiatives exist as 'islands of prosperity' rather than being a national characteristic.

Another area where India can adopt the best practices from Japan's high growth era is the Small and Medium Enterprises sector. Often termed as the "growth engines" of India's economic growth, MSMEs have helped increase the country's Gross Domestic Product (GDP) and generate employment for millions of people. As per a report, there are more than 51 million units of MSMEs in the country, which provide employment to more than 117 million persons (RBI, 2017). Despite their importance, small businesses still struggle due to credit crunch, compliance burden and uncertainty in regulatory laws. The SMEs in Japan also struggled due to low productivity, low wages, and job insecurity in the 1950s-80s. However, many measures were taken to support this sector to help them excel and became globally competitive and eventually things changed post-1990s. Among these measures was the reliance put on introduction of technology, skill upgradation of employees and provision of easy credit facilities.

Given the importance of manufacturing sector, particularly in the post-Covid pandemic times when the economy is badly affected, it is all the more necessary that India carries out systemic studies to analyse Japan's high growth period and understand how it was able to achieve the economic miracle even after being devasted by the World War II. Of course, it is not possible to completely replicate the economic policies owing to the vast differences between the two countries, however, best practices suitable to the Indian economy can be found and adopted.

Conclusions

There is no doubt that the post-war period of 1950-1970s had the most profound effect on Japan throughout its whole history. Not only it changed the economic condition of the country, but it also changed the lifestyle of the people. At the global level, Japan was able to make its entry as an economic leader recognized for its quality products and brand value. Culturally, a country which was known to follow an isolationist policy, gradually started accepting international cultures. Japanese middle class had been born, which was typically identified with the image of a 'salaried man'. For developing countries like India, this high growth period remains a subject of study. Undoubtedly, India will greatly benefit if its policy makers are also able to replicate the 'Japanese way of working', which helped Japan achieve the economic miracle in a relatively short span of time.

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