<u>The Japanese Economic Miracle: From Ruin to Superpower</u>

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Author Bio:

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Abstract:

After World War II, Japan and its economy were in ruins. Industrial production fell about sixty-five percent compared to pre-war levels. However, in the post-war era the Japanese were able to turn around their economy. Few if any governments have achieved economic growth at the levels of the Japanese post World War II. The Japanese Economic Miracle was a period in which Japan's per capita GDP increased at an average annual rate of 7.1 percent and its overall economy grew on average 9.7 percent per year. Japan's economy became the second largest in the world behind only that of the United States. This paper provides an explanation of this unprecedented economic growth, addressing many of its core causes. It then discusses what is today known as the burst of the "bubble", in which real estate prices plunged about seventy percent and the Japanese stock market collapsed by about eighty percent. Ultimately this burst demonstrated that the rapid growth of the Japanese economy was unsustainable.

Key Words: World War II, U.S. Occupation, Dodge Plan, Korean War, Technological Improvements, State-Sector-Firm Coordination, Competition, Bubble

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From the end of World War II through the 1980s, the Japanese economy grew at an unprecedented rate. World War II destroyed Japan and its economy. Industrial production fell about sixty-five percent compared to pre-war levels, Japanese investments in Asia became worthless, and urban housing as well as industrial plants were destroyed.[1] To put it lightly, the economy following the war was in ruins. World War II, as a result, forced the Japanese to embark on rebuilding their economy. This reconstruction process led to what is now known as the Japanese "Economic Miracle," a period of robust economic growth in Japan. Between 1945 and 1956, Japan's per-capita G.D.P.[2] increased at an average annual rate of 7.1 percent[3]. Between 1956 and 1970, Japan's overall economy grew on average 9.7 percent per year.[4] While the Japanese economy grew at a considerably slower rate after 1970, it nevertheless would surpass Britain's economy to become the second largest economy in the world after that of the U.S.

Democratic governments commonly seek to achieve economic growth in their respective countries because it typically correlates with an improvement in domestic living standards. If there is more money circulating in an economy, businesses can make more money and in turn pay their workers more in wages. If workers earn more, they can spend more. And if they spend

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[1] G.C. Allen, *The Japanese Economy* (New York: St. Martin's Press, 1982), 19.

[2] Gross domestic product, or G.D.P., is the universal measurement used to describe the total value of the goods and services produced in a country. When one refers to an increase in G.D.P., one is referring to economic growth since it involves an increase in the production of goods and services in an economy over a period of time.

[3] Okazaki Tetsuji, "Lessons from the Japanese Miracle: Building the Foundations for a New Growth Paradigm," Nippon, accessed April 16, 2021, https://www.nippon.com/en/in-depth/a04003/#.

[4] Masaaki Shirakawa, "The Transition from High Growth to Stable Growth: Japan's Experience and Implications for Emerging Economies," Bank of Japan (5 May 2011), Slide 2.

more, businesses can earn more and, in turn, reinvest in their enterprises by, for example, creating more jobs and investing in innovation. This virtuous cycle can then repeat itself. In recognition of this circular effect, the Japanese government -- aided by the U.S., the Korean War, and technological improvements -- achieved strong domestic economic growth by strengthening industry and turning the country into a manufacturing powerhouse.

Having defeated the Japanese in World War II, the United States military, led by General Douglas MacArthur, occupied Japan between 1945 and 1952.[5] While in Japan, MacArthur, acting on behalf of U.S. interests and those of its allies, imposed reforms on Japan that helped drive the country's economic transformation.

Under U.S. occupation, Japan reduced its military expenditures through demilitarization. Japan dissolved its standing military and ended the production of military materials and weapons.[6] To mitigate the risk of re-militarizing, the government removed from positions of power individuals who were militant nationalists.[7] The Japanese government codified its stance on militarization when it enacted the Japanese Constitution of 1947. As part of its signing, Japan permanently renounced the right to use military force and instead agreed to rely on the U.S. for its protection.[8] Japan's demilitarization was important for the Japanese economy because it

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[5] Richard J. Smethurst, "The Allied Occupation of Japan: 1945-52," University of Pittsburgh, accessed May 10, 2021, https://www.japanpitt.pitt.edu/essays-and-articles/history/allied-occupation-japan-1945-52.

[6] Masahiro Takada, "Japan's Economic Miracle: Underlying Factors and Strategies for the Growth," Lehigh University (23 March 1999), 6-7.

[7] James I. Matray, *Japan's Emergence As A Global Power* (Westport: Greenwood Press, 2001), 156.

[8] "Occupation and Reconstruction of Japan, 1945–52," U.S. Department of State, accessed May 11, 2021, https://history.state.gov/milestones/1945-1952/japan-reconstruction.

allowed monies the government had previously spent on the military to be channeled into the country's broader economy.

American forces that occupied Japan also contributed to the breakup of the Zaibatsu, powerful business conglomerates that dominated many Japanese industries. One reason for their dissolution was to fully destroy Japan's military power both institutionally and psychologically, as the Zaibatsu were responsible for the mass production of military-grade materials and weapons.[9] The main basis for disbanding these business conglomerates, though, was to spark greater competition among Japanese companies. Through breaking up the Zaibatsu into independent companies, the number of businesses in Japan's economy increased and so did competition among them.[10] Two laws were also put in place to create greater competition. The first was an anti-monopoly law, which prevented a single company or a small handful of companies from taking over a given industry.[11] In other words, the law prohibited all cartel activities. The second was a decentralization law, which forced holding companies to shrink if any of the businesses under them amassed too much market power.[12] Competition encourages companies to innovate and improve their products. By increasing competition in various industries, these two laws along with the collapse of the Zaibatsu helped foster Japan's economic growth.

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[9] Takada, 7-8.

[10] Matray, 6.

[11] Ibid.

[12] Takada, 7.

Given the limited number of employers in Japan prior to the U.S. Occupation, the Zaibatsu were able to exploit Japanese workers for a long time. However, workers eventually grew angry and formed labor unions with the help of the U.S. The formation of labor unions benefited the Japanese economy because it led to greater employee satisfaction and, in turn, greater workforce productivity. The percentage of workers organized into labor unions climbed from zero in 1945 to about 60 percent in 1948.[13] Clearly labor reforms played a significant role in the creation of labor unions, as there were no labor unions prior to the U.S. Occupation. Lobbying efforts by these unions led to the enactment of the Trade Union Law, which outlined basic workers' rights -- such as the right to strike and the right to bargain collectively -- and prohibited unfair and exploitative employer practices. Tangible outcomes of the Trade Union Law included higher wages and improved working conditions.[14] With workers earning higher incomes, consumer spending increased which, in turn, contributed to domestic economic growth. In addition, a lifetime employment system was established, and this arrangement fostered loyalty between employees and their employers.[15] Such loyalty increased workforce productivity. In summary, the formation of labor unions improved the relationship between workers and employers. In the end, it boosted Japanese corporate profits and economic growth.

After the U.S. Occupation laid the foundation for the resurgence of the Japanese economy through Japanese demilitarization, the dissolution of the Zaibatsu, and labor reforms, the Dodge Plan was executed. This plan was designed to facilitate Japan's economic recovery without

[13] Ibid., 9.

[14] Koichi Hamada and Munehisa Kasuya, "The Reconstruction and Stabilization of the Postwar Japanese Economy: Possible Lessons for Eastern Europe?," *Yale University, Economic Growth Center, Center Discussion Paper, No. 672* (September 1992), 10; Takada, 9.

[15] Takada, 9.

American aid. It accomplished this objective through the introduction of five major policies. The first was to create a more balanced government budget in order to lower inflation, as too much government spending can cause inflation to accelerate.[16] This plan was implemented successfully, as a 90 billion yen budget deficit in 1946 turned into a 155 billion yen surplus in 1949.[17] Second, the Reconstruction Finance Bank refined its lending practices so as to reduce the number of bad loans it granted.[18] Similarly, the Japanese government began to more strictly regulate the issuance of government subsidies, making sure that these subsidies were actually put to use to promote industry.[19] Additionally, a more efficient and strong tax collection system was formed to further discourage tax evasion and to provide the government quicker access to monies received through taxes.[20] Finally, as part of the Dodge Plan, a fixed exchange rate of 360 yen to 1 U.S. dollar was established to keep Japanese export prices relatively low and, in turn, encourage U.S. citizens to buy Japanese goods.[21] While the U.S. Occupation set the groundwork for a Japanese economic rebound, the Dodge Plan was crucial for Japan because it allowed the country to become economically independent.

Shortly after the Dodge Plan was carried out, the Korean War began in 1950. The start of the Korean War resulted in a major stimulus to Japanese production. Before entering the Korean

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[16] James D. Savage, "The Origins of Budgetary Preferences: The Dodge Line and The Balanced Budget Norm in Japan," *Administration and Society* (July 2002), 270.

[17] Ibid., 268.

[18] Takada, 10.

[19] Ibid.

[20] Savage, 270.

[21] Ibid, 278.

Peninsula, United Nations forces stationed themselves in Japan. While in Japan, they made large-scale purchases of Japanese goods such as clothing and beds. These orders provided a strong boost to the manufacturers of these goods.[22]

While the Korean War gave the Japanese manufacturing industry a much-needed jolt, the sustained growth of the industry can be attributed in part to technological improvements. Japanese companies imported various technologies from foreign countries, acquired technological know-how from them, and used that know-how to develop their own technologies. Technological advances helped Japanese companies grow more profitable and, in turn, contributed to the growth of the domestic economy overall. Due to technology, Japan transitioned from primarily being a low-productivity, low-growth agricultural-driven economy to a high-growth manufacturing-driven economy.[23] It began producing high-tech, relatively expensive goods such as cameras, televisions, automobiles, and ships.[24] Higher-priced goods meant Japanese companies generated greater revenues. In addition, greater use of technology provided Japanese manufacturers with economies of scale.[25] Japanese manufacturers were able to increase the unit volumes they produced while decreasing their cost per unit of output. In short, technology contributed to G.D.P. growth in Japan because it enabled Japanese companies

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[22] W.G. Beasley, *The Rise of Modern Japan: Political, Economic, and Social Change Since 1850* (New York: St. Martin's Press, 1995), 244.

[23] Tetsuji.

[24] Katsuro Sakoh, "Japanese Economic Success: Industrial Policy Or Free Market?," *Cato Journal* 4, 2 (Fall 1984), 538.

[25] Stephen G. Bunker and Paul S. Ciccantell, *East Asia And The Global Economy* (Baltimore: The John Hopkins University Press, 2007), 2.

to increase their profit margins by decreasing production costs, increasing revenues, or some combination of the two.

Considering recent developments in technology, the Japanese government set aggressive goals for Japan's economy. One of these goals involved the Income Doubling Plan of 1960, designed by Prime Minister Ikeda Hayato. The plan's objective was to double per capita income within a ten-year period and to raise the living standards of the Japanese population. In order to achieve this goal, the government sought to achieve annual economic growth of nine percent during the plan's first three years.[26] The government wanted to expand Japanese exports by ten percent annually as well.[27] Furthermore, the government's Economic Stabilization Board aimed to restore levels of production to peak levels prior to World War II.[28] The goals set by Hayato and the Economic Stabilization Board provided Japan with tangible outcomes to work towards and would help guide Japanese economic policy.

The Japanese government adopted an economic development model that involved heavy state-sector-firm coordination.[29] In other words, the government aided the development of certain industries and specific companies within those industries. It did so through many economic policies. First, it kept interest rates relatively low to encourage Japanese businesses to borrow money.[30] There were three main economic institutions or programs through which

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26 Matray, 170-171.

27 Beasley, 248.

28 Ibid., 245.

29 Bunker, 1.

30 Sakoh, 541.

businesses received low-interest loans: the Japanese Development Bank[31], the Export-Import Bank of Japan[32], and the government's Fiscal Investment and Loan Program[33]. In addition to distributing low-interest loans, the government provided subsidies to Japanese companies.[34] The government also issued domestic companies licenses for foreign technology[35] and maintained low tax rates[36]. Interestingly, Japan maintained the lowest ratio of taxes to national income among all countries belonging to the Organization for Economic Cooperation and Development.[37] Such a low rate of taxation allowed Japanese consumers to spend money that would otherwise have gone to the government in the form of taxes. Low corporate tax rates also enabled companies to re-invest in their businesses. Finally, the Japanese government kept a favorable exchange rate that discouraged imports and promoted exports.[38] All of these policies were intended to support Japanese industry. Without such assistance, many domestic private enterprises likely would not have achieved the level of growth that the government desired.

In addition to these economic policies, the government to some degree regulated domestic and international competition. While competition among Japanese companies

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[31] Takatoshi Ito, "Japan and the Asian Economies: A 'Miracle' in Transition," *Brookings Papers on Economic Activity* (1996), 225.

[32] Jeffrey M. Herbener, "The Rise and Fall of the Japanese Miracle," Mises Institute, accessed April 8, 2021, https://mises.org/library/rise-and-fall-japanese-miracle.

[33] Sakoh, 526.

[34] Ito, 225.

[35] Bunker, 11.

[36] Sakoh, 524.

[37] Ibid., 530.

[38] Robert J. Crawford, "Reinterpreting the Japanese Economic Miracle," *Harvard Business Review* (January-February 1998).

benefited the domestic economy, the Japanese government feared that too much competition would be detrimental to the development of the economy. The government supported certain companies in the country's most promising industries and, with too much competition, the government feared that the growth of those specific companies potentially would be hindered. Thus, the government restricted entry of new competitors to sectors that were already overly crowded.[39] In order to protect Japan's domestic industries from foreign competition, the government adopted a policy of protectionism. One measure it took was to impose import quotas, which limited the number of goods that Japan would import from other countries. By 1962, Japan had 492 different products under import quotas.[40] The government also imposed high tariffs on products made internationally to discourage Japanese citizens from buying foreign-made goods rather than domestic manufactured goods.[41] By regulating competition to an extent, the Japanese government turned what previously was a trade deficit -- where Japan was importing more than it was exporting -- into a trade surplus whereby Japan began to export more than it imported.

While government regulation of competition was certainly a factor that contributed to Japan's trade surplus, this surplus can also be attributed to the many Japanese industries that experienced exponential growth after World War II. For example, the steel industry in Japan underwent rapid growth as annual steel output increased from 22 million tons to 93 million tons

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[39] Ito, 225.

[40] Sakoh, 531.

[41] Ito, 226.

between 1960 and 1970.[42] Japanese steel exports increased from 8.8 percent of total world exports in 1960 to a peak of 40.8 percent in 1976.[43] Another industry that grew rapidly post World War II was the shipbuilding industry. During the war, ships were mainly built for military use. After the war, Japanese shipbuilding companies started producing commercial ships for export. By 1957 Japanese shipbuilding production exceeded its 1944 wartime peak.[44] From the 1960s through the 1980s, Japan manufactured about half of the world's new shipping capacity.[45] A third industry that expanded greatly during this same period was the automobile industry. At Toyota, a major Japanese car manufacturer, the number of vehicles manufactured per worker per year tripled between 1955 and 1957 and then increased another 60 percent by 1964. By 1965, Toyota workers' productivity levels actually surpassed those of the Big Three American automakers -- i.e., General Motors, Ford, and Chrysler.[46] An increase in productivity levels was widespread among Japanese car manufacturers, as Japanese annual manufacturing output increased from 70,000 cars in 1955 to 3,146,000 cars in 1967.[47] The steel, shipbuilding, and automotive industries developed into three of Japan's largest industries. In reality, though, the Japanese economy as a whole flourished during this period at an unprecedented rate.

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42 Beasley, 247.

43 Bunker, 71.

44 "Japan's Shipbuilding Industry," Cross Currents, accessed April 28, 2021, http://www.crosscurrents.hawaii.edu/content.aspx?lang=eng&site=japan&theme=work&subtheme=INDUS&unit=JWORK049#:~:text=Japan's%20modern%20shipbuilding%20industry%20began,shipbuilding%20nation%20in%20the%20world.

45 Ibid.

46 Michael A. Casumano, "Manufacturing Innovation: Lessons from the Japanese Auto Industry," *M.I.T. Sloan Management Review* (15 October 1988).

47 Allen, 113.

The rapid growth of the Japanese economy, however, could not be sustained through the 1980s. The Bank of Japan's decision to maintain low interest rates backfired, as the easy and relatively cheap access to capital that was made possible by low interest rates caused a lot of business and household borrowing, which in turn led to heavy investment in residential, commercial, and office real estate; stocks; and factories and capital equipment. Robust investment in real estate caused domestic real estate prices to soar and, because of the large land holdings of many Japanese public companies, stocks to soar as well. In addition, Japanese companies used their high stock prices to raise additional capital which subsequently would be used to drive further investment in real estate, industrial plants, and capital equipment. All of this demand and speculation drove domestic asset prices through the roof. For example, the value of residential real estate in Japan's major cities rose 167 percent between 1985 and 1990. Economic growth in the late 1980s averaged nearly five percent annually, which off a relatively high base of G.D.P. was especially strong.[48]

As is the case so often with speculative booms, people believed that asset prices would only increase and therefore that it would be impossible for one to lose money. However, the surge in asset prices ended when the Bank of Japan realized that it needed to hit the brakes to avoid the risk of inflation spiraling out of control. The Bank of Japan's new Governor, Yasuchi Mieno, commenced a round of steep interest rate increases towards the end of 1989. With access to credit curtailed and the cost of borrowing increasing, Japan's speculative frenzy abruptly

[48] Robert J. Samuelson, "Japan's Bubble Bursts," *The Washington Post* (18 March 1992), https://www.washingtonpost.com/archive/opinions/1992/03/18/japans-bubble-bursts/20e6df85-cffc-4430-bc00-802775a1cf62/; Justin McCurry, "How Japan Has Fared in 30 Years Since The Stock Market Bubble Burst," *The Guardian* (28 December 2019), https://www.theguardian.com/world/2019/dec/28/how-japan-has-fared-in-30-years-since-the-stock-market-bubble-burst

ended. Real estate prices, the stock market, and corporate investment activity reversed course and started to fall. Prices of real estate, for example, plunged about seventy percent between 1989 and 2001. Japan's stock market, in addition, collapsed by about eighty percent between its peak in late 1989 and its pre-Global Credit Crisis trough in the early 2000s.[49]

In conclusion, the economic policy implemented by the Japanese government in conjunction with U.S. assistance -- along with the outbreak of the Korean War and the evolution of technology -- resulted in the Japanese "Economic Miracle." Japan's businesses, especially those in the manufacturing sector, thrived in the post-war period and Japan achieved global trade dominance. After experiencing accelerating economic growth from 1980 through 1988, when Japan's growth peaked, the country's "Economic Miracle" began to unravel and its so-called "bubble" burst.[50] From 1989 through 1999, Japan's economic growth decelerated and eventually turned negative.[51] Though the Japanese "Economic Miracle" ultimately proved unsustainable, it was a truly remarkable "event" in Japan's history in that the government took an economy decimated by World War II and transformed it into the second largest in the entire world.

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[49] Ibid, Ibid.

[50] "G.D.P. Growth (Annual %) - Japan," The World Bank, accessed May 12, 2021, https://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG?end=2005&locations=JP&start=1980.

[51] Ibid.

Bibliography

Allen, G.C. *The Japanese Economy*. New York: St. Martin's Press, 1982.

Beasley, W.G. *The Rise of Modern Japan: Political, Economic, and Social Change Since 1850*. New York: St. Martin's Press, 1995.

Bunker, Stephen G. and Ciccantell, Paul S. *East Asia And The Global Economy: Japan's Ascent With Implications For China's Future*. Baltimore: The John Hopkins University Press, 2007.

Cusumano, Michael A. "Manufacturing Innovation: Lessons from the Japanese Auto Industry." *M.I.T. Sloan Management Review*. 15 October 1988.

Crawford, Robert J. "Reinterpreting the Japanese Economic Miracle." *Harvard Business Review* (January-February 1998).

"G.D.P. Growth (Annual %) – Japan." World Bank. Accessed May 12, 2021. https://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG?end=2005&locations=JP&start=1980.

Hamada, Koichi and Munehisa Kasuya. "The Reconstruction and Stabilization of the Postwar Japanese Economy: Possible Lessons for Eastern Europe?" *Center Discussion Paper, No. 672, Yale University, Economic Growth Center*. September 1992.

Herbener, Jeffrey M. "The Rise and Fall of the Japanese Miracle." Mises Institute. Accessed April 8, 2021. https://mises.org/library/rise-and-fall-japanese-miracle\.

Ito, Takatoshi. "Japan and the Asian Economies: A 'Miracle' in Transition." *Brookings Papers on Economic Activity,* 2 (1996): 205-272.

"Japan's Shipbuilding Industry." Cross Currents. Accessed April 28, 2021. http://www.crosscurrents.hawaii.edu/content.aspx?lang=eng&site=japan&theme=work&subtheme=INDUS&unit=JWORK049#:~:text=Japan's%20modern%20shipbuilding%20industry%20began,shipbuilding%20nation%20in%20the%20world.

Matray, James I. *Japan's Emergence As A Global Power*. Westport: Greenwood Press, 2001.

McCurry, Justin. "How Japan Has Fared in 30 Years Since the Stock Market Bubble Burst." *The Guardian*. 28 December 2019.

"Occupation and Reconstruction of Japan, 1945–52." U.S. Department of State. Accessed May 11, 2021. https://history.state.gov/milestones/1945-1952/japan-reconstruction.

Sakoh, Katsuro. "Japanese Economic Success: Industrial Policy or Free Market." *Cato Journal* 4, 2 (Fall 1984): 521-548.

Samuelson, Robert J. "Japan's Bubble Bursts." *The Washington Post*. 18 March 1992.

Savage, James D. "The Origins of Budgetary Preferences: The Dodge Line and the Balanced Budget Norm in Japan." *Administration & Society* 34, 3 (July 2002): 261-284.

Shirakawa, Masaaki. "The Transition from High Growth to Stable Growth: Japan's Experience and Implications for Emerging Economies." *Bank of Japan Remarks at the Bank of Finland 200th Anniversary Conference* (5 May 2011).

Smethurst, Richard J. "The Allied Occupation of Japan: 1945-52." University of Pittsburgh. Accessed May 10, 2021. https://www.japanpitt.pitt.edu/essays-and-articles/history/allied-occupation-japan-1945-52.

Takada, Masahiro. "Japan's Economic Miracle: Underlying Factors and Strategies for the Growth." *Lehigh University*, submitted to IR 163. 23 March 1999, 1-18. https://www.lehigh.edu/~rfw1/courses/1999/spring/ir163/Papers/pdf/mat5.pdf.

Tetsuji, Okazaki. "Lessons from the Japanese Miracle: Building the Foundations for a New Growth Paradigm." Nippon. Accessed April 16, 2021. https://www.nippon.com/en/in-depth/a04003/.