Illusion and Reality

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Information from the author

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Preface - The Theme of this Book

We live amid all types of illusions and misunderstandings. Even within close relationships, there are many discrepancies in mutual communication. Even within families, mutual understanding is difficult. Nevertheless, there are often tacit understandings in close relationships, and life continues despite many miscommunications.

However, how do people try to understand each other when they are strangers or do not know the subject? To generalize, how do people try to understand an observed object when there is a spatial or temporal distance between them and the object? Natural and social sciences help us understand the unknown world and its objects, but absolute limits exist to our abilities in time and space. Even scientists have absolute limits to their understanding of the world if they remain in their areas of expertise. Most scientists do not understand many things outside their area of expertise.

We mostly use our imagination to understand things and people that are not familiar to us. Imagination is supported by knowledge and experience, but since our experience and knowledge are not uniform, imagination varies from person to person. Imagination based on ignorance creates illusions. We try to understand the world by imagining things that are not real or do not exist. In human society, ignorance always produces various illusions, and sometimes these illusions lead society in the wrong direction.

As our sphere of activity expands, so does the realm of illusion. Most of the images that the public has of politics and politicians are illusions. Sometimes that illusion deifies a particular politician. Deification begins when one sensibly unites oneself with a particular politician without trying to understand what one does not understand, or when one worships a particular person as one's proxy. Subjective understanding also prevails as people try to understand specific events and people based on a plot that they can understand. Many people are inclined to "conspiracy theories" because they want to interpret things in a way that they can understand and be satisfied with. Therefore, the prevalence of "conspiracy theories" is also a result of the nature of human society, which is dominated by illusions. The same is true of belief in "fortune telling".

The natural world and human society are of a multi-layered, multi-faceted structure. This is also the cause of many illusions among people. Analytical power is indispensable to understanding multi-layered and multi-faceted phenomena. The world we can perceive with our five senses is limited. The world we can perceive with our five senses is the world of phenomena. Only by analyzing a phenomenon can the mechanism that gives rise to that phenomenon be clarified. Phenomena analysis reveals the essence and substance behind the phenomena. Whether we are aware of it or not, our actions to understand things consist of a constant repetition of phenomenon-essence analysis. Most people do not understand events in terms of phenomena and

essence, and their understanding is a vague mixture of phenomenal understanding and vague essence understanding.

Scientists are consciously engaged in understanding phenomena. However, the analysis of phenomenon-essence is not simple. Because the world consists of multiple layers of multiple structures, the scientist's understanding differs depending on which layer and what kind of phenomenon he or she is targeting. In addition, the analysis of a phenomenon is never finished once. In understanding the natural world, which is made up of infinite layers, the analysis of a phenomenon doesn't end at one time but is an endless repetition. The entity obtained by analyzing a phenomenon is itself another phenomenon, and by analyzing it, an even deeper entity (essence) is revealed. There is no ultimate end to this process.

It is not uncommon for even the best scientist to have a misguided opinion about events outside the area of expertise. This is because it is impossible to understand completely the world, which consists of complex, multilayered, and multi-layered structures.

Chapter I

John von Neumann's paper, which had a major impact on the rise of mathematical economics in the postwar era, was so absorbing that it rubbed economics into the world of applied mathematics. The "Neumann Revolution" in mathematical economics led to many mathematicians who turned from mathematics to the field of mathematical economics winning the Nobel Prize in Economics. From here, the applied mathematization of economics began. Today, economic analysis that cannot be formulated in mathematical models is considered sociology or social philosophy. How did Neumann contribute to economics as a social science, or did he damage economics as a social science?

In this regard, attention should be paid to the critique of normative theory that Kornai revealed in "The Economics of Anti-Equilibrium." Kornai severely criticized mathematical models constructed based on a priori hypotheses as normative theories. This viewpoint is related to the overall theme of this book.

There are two academic methodologies: empirical theory, which starts from facts (analysis), and normative theory, which starts from certain theoretical hypotheses. When the analysis of facts is difficult (indeterminate), many natural scientists formulate hypotheses and speculation. Hypotheses must always be tested by experiment. Hypotheses that are not examined remain to be expected. This is the correct scientific method.

In contrast, most normative theories in mathematical economics are not subject to verification by facts. Many assumptions and conditions set by mathematical economics are too abstract and unrealistic and cannot be verified by facts. In this regard, Neumann’s commentary at the end of his paper should be noteworthy (J. von Neumann, “A Model of General Economic Equilibrium”,

Review of Economic Studies, 13, p.9, 1945).

"Note that these characterisations are possible only on the basis of our knowledge that solutions of our original problem exist – without themselves directly referring to this problem".

Neumann notes, "If an equilibrium solution exists, it is possible to prove this." Herein lies the peculiarity of normative theories and models. The argument that "based on abstracted assumptions (hypotheses), if we assume that a solution exists to a problem, we can prove it this way" has nothing to do with real economic analysis. A mathematical model in which a conclusion (existence of a solution) is assumed from the beginning and "the logic that leads to that conclusion is shown in this way" is tautology. Arguments that assume the existence of something that does not exist and mathematically prove its existence may be meaningful as applied mathematics, but they have no meaning as social science. Nevertheless, postwar mathematical economics behaved as if it were an innovation in economics, attracting many mathematicians to "economics." Proving a predetermined conclusion from an a priori abstract hypothesis, rather than starting from an analysis of facts, is an analysis that has no relation to economics as social science, even though it is meaningful as applied mathematics (mathematical logic). Nevertheless, many mathematical economists have acted as if this were modern economics.

In this respect, Kornai's criticism of mathematical equilibrium theory is still correct. Mathematical economists have developed their arguments on the illusory hypothesis of "general equilibrium." Most mathematical economists conduct their mathematical analysis on the illusory world. This is an argument of applied mathematics, but not of economics as a social science. Even for scholars, it is difficult to distinguish clearly between illusion and reality. The first chapter of this book deals with this issue.

Chapter II

Kornai rejected the German classical philosophical concept of phenomenon-essence, which Marxism presupposes. He believed that his task was to analyze the causal relationship of events in phenomena by excluding the concept of invisible essence. This is also the theoretical position commonly assumed by modern non-Marxian economics. Kornai believed that the task of socialist economics lies in clarifying the phenomenon of "shortage" that exists in a socialist economy and that a new theory of socialist economy can be constructed by analyzing the mechanisms of appearance and reproduction of shortage. This is Kornai's intention in writing "Economics of Shortage."

Simply stroking a phenomenon by the five senses is not enough to know how the phenomenon emerges. To understand a phenomenon, it is necessary to analyze the phenomenal facts and to catch the essential mechanism that produces the phenomenon. Tracing only the relationship between the phenomenal aspects, which describes the connection between a typical phenomenon

and other phenomenal facts, does not mean that we have analyzed the essential factors that give rise to the phenomenon. Even if one describes a chain of phenomenal facts, it is not possible to approach the essential mechanism that produces the phenomenon. Herein lies the limitation of phenomenology. However, Kornai, who rejected Marx's theory influenced by German philosophy, insisted on analyzing the phenomenal reproduction of shortage. Kornai's "Economics of Shortage" is a phenomenological theory that deals with the phenomenon of shortage and the theoretical limitation of the "Economics of Shortage" is the limitation of phenomenological analysis.

Although Kornai rejected Marx's ways of analysis, the idea of placing "shortage" as the central concept in economic analysis was inspired by Marx's "Theory of Capital."

Just as "Economics of Capitalism" took the analysis of "commodities" as its starting point, the economics of socialism was thought to be constructed by placing the analysis of "shortage" at its center. However, this analogy is not quite on target. While Marx's analysis of commodity production and exchange allowed him to approach an analysis of the mechanism of the essential relationship of commodity production to the depth of value of labor, Kornai's analysis of shortage has not come close to clarifying the essential mechanism of the socialist economy. If it remains a phenomenological analysis, the elucidation of the mechanism by which shortages are reproduced does not go beyond the realm of a "phenomenology of shortages." Herein lies the limitation of the "Economics of Shortage" as the theory of socialist economy. This is the subject of Chapter II.

Chapter III

The development of the atomic bomb (A-bomb) is intertwined with many historical coincidences and historical inevitability: the rise of Nazi Germany in the first half of the 20th century, the accidental discovery of uranium ore, and the discovery of the enormous energy release from the splitting of the atomic nucleus, which combined to propel the development of the A-bomb. The historical inevitability of the rise of fascism, the scientific progress of nuclear physics, and the coincidence of the discovery of uranium ore made the possibility of atomic energy release a reality, propelling the A-bomb's development.

The A-bomb makes genocide possible. The development of the A-bomb was urged as the ultimate weapon to destroy the fascist state as an absolute evil. However, the target of genocide was not limited to military personnel or military bases. The A-bomb has the power to annihilate cities inhabited by ordinary citizens themselves. How did the scientists involved in the development of the A-bombs view the possibility of mass killing civilians, or did they not consider it at all? Why were scientists unable to imagine the genocidal damage of the A-bombs? There is a kind of illusion of "absolute evil" at work here that fails to capture the reality of human sacrifice. The illusory assumption that "absolute evil must be destroyed" must have dominated the scientists.

The idea that fascist Germany and Japan were enemies of mankind and "deserved to be reduced to nothing" must have dominated the thinking. Therefore, the scientists who developed the A-bombs never felt remorse in their consciences. But was this view correct? Was this not also a kind of illusion toward human society?

The decision to drop the A-bombs was based on imaginary assumptions about enemies and "people living in enemy countries" that they never actually saw. The choice of cities to drop the bombs was based on a will that could be described as arbitrary. Most of the scientists involved in the development of the A-bomb have not given any thought to the human suffering that would result from the bombings. They simply thought that the bombs they developed should be dropped as if they were carrying out a war game. There was no thought about the misery and tragedy that the A-bombs would cause. The sense of destroying an inorganic "hostile nation" as if it were an inorganic object dominates. Here, too, there exists a gap between illusion and reality. The scientists who were engaged in the development of the A-bomb did not know the current situation in the distant enemy nation of Japan or of the people living there, and the sense that the A-bomb, which had been painstakingly completed, deserved to be dropped on them dominated their minds. The fantasy enemies have neither blood nor tears, but the real victims of the A-bombs are people with blood and tears. The scientists who developed the A-bomb were so preoccupied with confirming the actual results of their research and development that they had no mental room to think about the tragedy that would befall the living people they were testing on. In the selection of targets, such as Kyoto were also considered as candidates beside military facilities. Neumann proposed including Kyoto as a target, but in the end, Kyoto was dropped from the list. The decision was also coincidental and arbitrary, but it is a small consolation that Kyoto's historical ruins were excluded from the list of targets.

The U.S. placed the highest priority on seizing international leadership in the postwar world by developing and dropping the A-bombs. The dropping of the A-bombs after the war's outcome had been decided was a nuclear test against humanity to confirm the effectiveness of the A-bombs and an act of intimidation against the Soviet Union. The damage caused by the A-bomb provided valuable data for measuring the actual effects of the bombings.

The development and dropping of the A-bombs were an unfortunate combination of historical coincidence and inevitability, of illusion and reality for human society. This is the theme of Chapter III.

Chapter IV

The socialist policy of industrial nationalization eliminated small and medium-sized enterprises, the foundation of the national economy, and wiped out the very entities of the market economy. As a result, not only was the basic technological basics of industry destroyed, but the code of

ethics that supported market economy activities was also extinguished. It is easy to destroy the market economy, but far more difficult to revive it. This is because the development of a market economy created by independent economic agents requires the accumulation of vast experience and norms in the production and sale of goods and services. It is far more difficult to build a house than to demolish it.

The goal of system transformation should have been to build an independent national economy through the revival and rehabilitation of the market economy. However, the Socialist Party, the successor to the Socialist Workers' Party, had no such vision for the future, and the opposition parties too had no clear vision for reviving the national economy.

Above all, there was a lack of key industries to support the national economy. The small and medium-sized enterprises that supported industrial production had already disappeared, and the large industrial enterprises with only outdated product technology were destined to disappear. As a result of the dismantling of the large socialist state-owned enterprises, the industries that supported the national economy disappeared. The former socialist countries were forced to "create something out of nothing.

The only way to rebuild industry in the transition countries, where the entire industrial sector had been destroyed, was to attract direct investment from the economically advanced countries. With the collapse of socialism, the East-West gap in industrial production technology widened tremendously, and it became clear that most socialist industries were not competitive in the world market. Unable to find buyers for their socialist industrial enterprises, they were doomed to disappear. The only path left was to attract foreign companies with existing advanced technologies.

Fortunately, in the early 1990s, foreign direct investment (FDI) from developed countries was concentrated in Hungary, where there was less reluctance to introduce foreign capital. Within a decade, however, the Czech Republic and Poland changed their socialist-era foreign investment rejection policies and succeeded in attracting more FDI. As a result, Hungary fell behind in its efforts to attract FDI. Moreover, these countries have always tried to foster domestic enterprises with their capital. Hungary, on the other hand, has long been "piggybacking" on foreign companies. This has slowed the growth of the national economic power.

I have characterized the Hungarian economy, which relies on the attraction of foreign industrial companies, as a "borrowed economy." The percentage of Hungary's total industrial production dependent on foreign companies exceeds 50%. This is the highest rate of dependence among the transition economies. Moreover, most of the production of goods based on advanced technologies is carried out by foreign-owned enterprises. The dependence on so-called foreign-owned enterprises is the highest in the EU, both nominally and practically. In the "fashionable" language of politics, Hungary's national economy is the "Dollar Economy." In recent years, however, Hungary has been actively introducing foreign capital from China, so it is becoming a

"Yuan Economy."

FDI was the trump card for economic restructuring in the transition countries, but it is only one aspect of the issue. Foreign-invested companies are not homegrown companies. It is the headquarters of foreign-invested companies that decide their business strategies. The headquarters decides whether the company should continue to stay in the country or withdraw from the country. In other words, the fate of foreign companies in Hungary is in the hands of their parent companies, and the Hungarian government has no say in the matter. Although foreign-owned companies are not different from domestic companies in that they operate under domestic laws, they have the possibility of withdrawing from Hungary at any time. Once they leave, everything disappears like a mirage. Only then will they realize the reality of foreign-owned companies.

As long as Hungary is heavily dependent on foreign industrial companies, Hungarians will be forced to be wage laborers for foreign companies. No matter how advanced the technology of the company, Hungarians exist only as wage laborers. This is the reality of foreign industrial enterprises.

What is even more important for the development of the Hungarian economy is that the various revenues to the state treasury paid by foreign-owned industrial enterprises are distributed unequally to certain businesses in the periphery of the government. In Hungary, where the market economy is still in its infancy, successful business is the path to receive state business orders (government purchases) or subsidies. The profits that can be made through steady economic activity in the market are not large, therefore the acquisition of large state orders or subsidies is directly related to success or failure as a business operator. For this reason, many businesses focus more on obtaining government orders and subsidies than selling products and services in the market. This behavior of business operators also hinders the development of the market economy and the establishment of market economy ethics. I have characterized this phenomenon as the "treasurization" of the national economy.

The "borrowed economy" in the industrial sector and the "treasurization" of the national economy are the two main features that characterize the Hungarian economy. If these two characteristics persist, the Hungarian economy will never become a self-sustaining market economy but will remain a national economy that can only develop slowly. Having fallen into the two traps of a "borrowed economy" and a "treasurized economy," it will be difficult for Hungary to break out of its economic backwardness within the EU. Having achieved a system transformation Hungary is again caught in the paradox of falling back into the economic stagnation of the old socialist era. This is the theme of Chapter IV.

Chapter V

Politics is the arena in which people are most easily deceived. Most people cannot know the true

intentions of politicians and political parties. Politics becomes self-interested in maintaining power. Whether on the "left" or the "right," the essence remains the same. Whether in Russia, the U.S., Japan, or Hungary, the essential characteristics of modern politics are the same. Once in power, even politicians with lofty ideals and goals easily adapt to worldly interests.

During the building of the modern state, many aspiring politicians plunged into the world of politics, throwing away their private wealth. However, in the contemporary state, where huge amounts of wealth can be disposed of at will, politicians have become the ones who work to accumulate private wealth. The enormous wealth that those in power can freely dispose of has transformed the quality of politicians. As a result, politicians, regardless of their initial intentions as politicians, become self-interested in maintaining and consolidating their power. It does not matter whether they are on the left or the right. On the other hand, the public has no way of knowing whether a politician has changed his or her mind, and the biggest criterion for judging politicians is whether they will benefit me or not. This is how the corruption of contemporary politics begins. Unless limits are imposed on the exercise of power, power will gradually become dictatorial. In politically backward countries, bits that prevent power from escalating out of control are removed and the politics becomes a dictatorship.

For politicians not only in Hungary but also in Central and Eastern Europe, maintaining relations with Russia is tied to multifaceted interests. This has not changed since the system transformation, and in recent years, the maintenance of relations with China has become closely tied to political and economic interests. It is a well-known fact that both Russia and China have hidden financial reserves of those in power. In most cases, the source of the money is the acquisition of large profits through kickbacks and ownership interests in state-owned enterprises. The good political and economic relations with Russia and China, where slush funds are prevalent, make the circulation of slush funds possible. If the left is the "Dollar-left," the right is the "Ruble-right" or "Yuan-right.

Even after the regime change, political and economic relations with Russia have been a source of corruption of various kinds: during the Horn administration in the 1990s, intelligence officers and ruling party politicians from the former regime were implicated in the "disposal of Soviet debt" in an attempt to profit from it; during the Gyurcsány administration in the 2000s, the Hungarian Trade Representative's property in Moscow was sold to the Russian government through inexplicable transactions by a Russian oligarch. The mysterious transaction was publicized, but this could not have been possible without the involvement of ruling party politicians. The political decisions regarding the expansion of Russian nuclear power plants and the purchase of vaccines under the Fidesz administration were issues in which the interests of politicians of both countries coincided. It is not expected to unravel the money (corruption) behind the scenes involving Russia and China. The Hungarian prosecutors do not have the ability or

authority to do so. There have been no cases of unexplained transactions with these countries that have been prosecuted and punished.

The darkness in the world of politics runs deep. Only the politicians involved know the deep facts. The public only blindly believes what politicians say and do. This is the theme of Chapter V.

Chapter VI

The world of art cannot escape illusion either. In fact, in no other world is illusion as dominant as in the world of art. For example, the skills and abilities of a soloist on an instrument or a composer of a piece of music can be verified firsthand. However, it is difficult to evaluate a musician exclusively specialized in conducting. It is impossible to judge a conductor's ability without knowing how he or she does practice orchestras. This is because what a conductor can instruct an orchestra to do on the spot at a concert on stage is extremely limited. Although the audience has the illusion that the orchestra's sound is freely manipulated by the conductor's baton, a conductor's show of command with showy movements on stage does not change the sound of the orchestra. This is an illusion created by live performances.

The performing level of the orchestra is almost determined by daily practices and rehearsals. The conductor's tact does not change the sound on stage. In actual concerts, most pieces can be played without a conductor, except for those that are difficult to time. What is important for an orchestra is daily practice and rehearsal. If this is inadequate, the sound played will not shine through even if the conductor shakes his hair and jumps up and down at the concert.

The popularity of a Japanese conductor, Kenichiro Kobayashi lies in his conducting style. To the audience, it appears as if he magically brings out the sound of the orchestra with his flamboyant movements and skillful choreography of the baton. However, this is an illusion. The sound of an orchestra never suddenly changes or shines on stage. However, Kobayashi has created a world of "Kobayashi Magic" with his skillful wielding of the baton. In Japan, he is known as the "flaming maestro." His intense movements and skillful manipulation of the baton attract the audience. His intensity is compared to a "fire flame." The star of Kobayashi's live concerts is not the orchestra, but the conductor. Kobayashi's magic is that he has created a "conductor-first" world. Kobayashi pays that much attention to the choreography of conducting on stage. It is truly a world of "magic," but there is always a trick to magic.

Compared to his passionate conducting on stage, Kobayashi's daily practices and rehearsals are extremely light and short. He gives instructions to the orchestra mostly on an emotional level, with very few instructions based on analysis of the music peace. Those who know Kobayashi well say that he is "strong in the live performance." This is a strange expression, but it conveys Kobayashi's characteristics as a conductor. Even with little practice and rehearsals, Kobayashi

conducts as if he controls the orchestra's sound at the actual concert. It is truly a world of magic.

Kobayashi never executes hard training in an orchestra to lessen the sound mistakes. He does not have the skill or ability to do such diligent work. He considers his role as a guest conductor to be to showcase his conducting skills at live concerts. For him, live concerts are not an "orchestra-first" world, but a "conductor-first" world.

This is Kobayashi's greatest merit and his limitation as a musician. Conductor-first is fine for an amateur audience. However, in the European classical music world, conducting performance is not acceptable. Without demonstrating one's ability as a musician, one cannot compete with the world's top orchestras simply by choreographing on stage. To conduct the world's top orchestras, it is essential to demonstrate the conductor’s ability to analyze and understand music pieces. If he cannot do so, his abilities as a conductor will be despised.

Kobayashi has attracted many amateur audiences to the world of classical music. His achievements are to be commended. In this sense he is regarded as a good conductor. Unfortunately, however, he was never highly regarded as a musician. The disparity between the illusionary world created by his conducting orchestra and the reality of his reputation as a musician is great. This is the theme of Chapter VI.

Chapter VII

For more than a decade, the Japanese economy has been dominated by the illusion of so-called "Abenomics." The Bank of Japan's attempt to break out of deflation by pumping massive amounts of money into the market in a short period, dubbed the "extra-dimensional monetary easing" policy, since April 2013. The result of a decade of massive BOJ (Bank of Japan) purchases of JGBs (Japanese Government Bonds) and the suppression of market interest rates have created a situation in which more than half of all government-issued international bonds are held by the BOJ, and international interest rate disparities have been widened. The so-called "Abenomics" of monetary easing continued for more than a decade until 2024 when the BOJ lifted its zero-interest-rate policy and announced that it would reduce its JGB underwriting. It was a highly unusual policy experiment.

After the collapse of the bubble economy in the early 1990s, the Japanese economy fell into a prolonged stagnation for almost 30 years. The Abe cabinet, which came into power in 2012, set the Bank of Japan on a policy of massive monetary easing and massive underwriting of government bonds and installed economists and bureaucrats at the top of the BOJ who were supportive of this policy. This has allowed Japan's economy to follow the forbidden policies of zero interest rates and central bank underwriting of government bonds for more than a decade. The objective of this policy was to revive the economy into one that could sustain a high rate of economic growth.

Is the long-term stagnation of the Japanese economy due to restrained economic policies or to structural changes in Japanese society? Herein lies the crux of the matter.

It is the quality and quantity of labor that enters the social division of labor that determines the size of GDP. Very few economists are clearly aware of this. If the labor force declines in absolute terms, GDP will shrink unless labor productivity outstrips the decline. This cannot be reversed by temporary economic policies. This is a viewpoint lacking among economists who defend Abenomics. They are obsessed with short-term economic stimulus, and their narrow perspective, which does not allow them to broaden their analysis to the historical changes facing Japanese society, has led them to be obsessed with short-term policy measures.

At the turn of the century, Japanese society reached a historical turning point of declining population. By the end of the 21st century, Japan's population, like Hungary's, will have shrunk by nearly two-thirds. In other words, Japanese society has entered an era of shrinkage for the first time in its modern history. Until now, many economists have assumed that GDP would grow forever. This is an illusion. As the working population shrinks, GDP will naturally shrink. As society shrinks, so does GDP. This is the reality.

Some economists claim that even if the working population halves, if labor productivity doubles, GDP will not decline. This is a mere arithmetic calculation, not an economic analysis. If the working population declines significantly, many commodity products and services are doomed to disappear. A shakeout of production activities will begin. In addition, the vast infrastructure will become almost impossible to maintain. The maintenance of bridges, railroads, highways, and living infrastructure will be greatly affected. Already today, many local governments in Japan cannot repair and manage bridges and tunnels. The problem of vacant private residences is becoming more serious. In Japan as a whole, 10 million housing units are vacant.

Population decline cannot be solved by mere population policies alone. It requires a review of industrial structure and prioritization of public infrastructure management. We are faced with the need to consciously transform local and national economies in anticipation of an era of contraction. In such a historical era, policies stuck in the old economic growth orientation will not succeed.

This is not just a problem for Japan or Hungary. China, which has continued to follow a one-child policy, faces an even more serious issue of population decline. Many countries should prepare for a new world in which we are entering an era of historical social contraction.

I.

Is Economics Applied Mathematics or Social Science?
- The impact of John von Neumann on Economic Science

Among the disciplines called social sciences, only economics has always tried to be "a science" like the natural sciences (physics). The foundation of human society is economic activity, and with the development of the market economy, a discipline was born that attempted to elucidate the basic mechanisms of the national economy. On the other hand, economics (its theory and analysis) has sometimes given rise to intense mutual criticism. Early classical economists who sought to understand the total economic system were also social thinkers. The attempt to analyze the economy in modern society is inseparable from the social thought and philosophy of how to view society. Since economics is not completely distinct from social thought, it is natural that the way in which economics and society are viewed is subject to criticism from those who hold different social positions. Moreover, it is difficult to establish objective evaluation criteria as in the natural sciences, and the empirical criteria for hypotheses and analysis are influenced by the ideological positions of each side, so mutual criticism often does not coincide with each other.

After the birth of economic thought, there was a long period in which "economics" was regarded as social thought (ideology). Marx's economics stands at the pinnacle of social philosophical economic analysis. The grandiose analysis of capitalism developed in Marx's *Theory of Capital* occupies a special place in human economic thought. No other work in human history has analyzed and thought about the whole economic system to such an extent. In contrast to Marx, the philosophical discussion of the whole economic system has never been a major theme in non-Marxian economics. A comparable argument could be considered the "general equilibrium theory, " in which the market for the entire national economy is in harmonic equilibrium. It is a theory that proves that the capitalist economy is an economy based on market harmony (equilibrium) in response to Marx's theory that the capitalist economy is a contradictory entity. The argument on the existence of general market equilibrium has been continued intermittently, mainly among scholars of non-Marxian economics who deal with mathematical analysis.

In the 19th and 20th centuries, Marx's economic theory was regarded as the theoretical basis of the socialist movement, which necessitated an economic analysis that differed from Marx's. From this point, the main goal of non-Marxian economics was to criticize Marxian social analysis (capitalism analysis) and to construct "economics as a science" that is not an ideology. There was a growing need for an economic theory independent of social thought that could compete with Marxian economics as a social philosophy. Methodologically, formal logic, which is clearly

distinguished from dialectical philosophy, was used, and the elaboration of theory backed by mathematics and statistics, following the example of physics. It came to be considered a "scientific method" that could replace economic analysis "distorted" by social thought.

In Europe at the beginning of the 20th century, various currents of economic-social theory came out and debated the validity of its social analysis and the "scientific nature" of theory. At least in the first half of the twentieth century, economists, mathematicians, and physicists engaged in cross-disciplinary debates over the criteria of science, and discussions pursued a unified understanding of science. One such theme was the debate on "making economics a mathematical science." However, the Nazi invasion of Germany interrupted the debate in the European intellectual world, and researchers who fled the grip of fascism formed new research groups, mainly in the United States and the United Kingdom, in disarray.

In the economics world after World War II, models and theories refined by mathematics flourished mainly in the U.S., and neoclassical mathematical economics formed the mainstream of economics in the world. However, has the understanding and policy control of the real national economy progressed dramatically along with the prosperity of neoclassical economics? Looking at actual economic policy debates, it is difficult to say that the "ability to accurately grasp and analyze the real economy" of the discipline called economic science has increased.

This chapter focuses on Neumann's analysis, which ignited the "mathematical science (applied mathematics) " boom in economics after World War II, and examines the role played by Neumann. This is because Neumann is the mathematician who laid the foundation of modern mathematical economics, and by understanding the characteristics of his analysis, we can evaluate the nature of modern mathematical economics. Did the use of mathematics make economics a science? Has economics developed into a "science" free from social thought or is it still a discipline with the character of social thought or ideology (political economy)?

The von Neumann Revolution－Its Historical Background

From the 1860s to the 1870s, around the same time, Marx wrote the *Theory of Capital*, the marginal utility theory was proposed in England, Austria, and Switzerland to oppose Marx's theory of the value of labor, and a non-Marxian economic theory was born. This is not an accident of history. The rise of the capitalist economy demanded a theory to support it. It is no coincidence that Marx's *Theory of Capital* was written in England, an advanced capitalist country. The historical period of the rise of capitalism gave birth to an economic theory with two different values. Different theories emerged depending on the standpoint from which the historical economic society was analyzed.

The examination of the concept of "general equilibrium," which Walras proposed and attempted to formulate mathematically, was passed on to the University of Vienna via Scandinavian economists (Kassel, Wissel). In Austria, which was in the historical twilight of the Habsburg Empire, there was an urgent need to construct a theory that would compete with Marx's economics to overcome the social change from an enlightened monarchy to a republic and to develop a capitalist economy. Eugen von Böhm-Bawerk (1851-1914), a theoretical supporter of Carl Menger (1840-1921), was a scholar known for his sharp criticism of Marx's labor theory of value. Austria, at a turning point in its history, produced economic thinkers such as von Mises, Schumpeter, and Hayek, who left their mark on history. The social changes that followed the collapse of the Habsburg Empire, the revitalization of the socialist movement, and the establishment of a socialist government in Hungary (1919) had a profound impact on the world of thought in Vienna.

Some of the participants of the Mathematische Kolloquium (1928-1936)[1], organized by the mathematician Karl Menger (1902-1985), son of C. Menger, dealt with the problem of proving the existence of the Walrasian general equilibrium solution, and there the young mathematician John von Neumann (1903-1957), Hilbert assistant and then a professor at the Institute for Advanced Study at Princeton University, gave a modern mathematical solution to this problem.

In Vienna at the beginning of the 20th century, the Wiener Kreis (Vienna Circle, Vienna School of Logic and Positivism), led by Schlick (born in Berlin, 1882-1936), was very active, and mathematicians, philosophers, physicists, and others regularly exchanged ideas. Prominent philosophers, mathematicians, and social thinkers from outside of Austria were also guests at the Vienna Circle.

Menger's colloquium, which overlapped in some respects with the Vienna Circle, functioned primarily as a pure mathematics seminar where young mathematicians regularly exchanged ideas. Kurt Gödel (1906-1978) from Moravia, known for his "incompleteness theorems, " was a student of Hans Hahn (1879-1937), a mathematics professor who led the Vienna Group with Schlick, and was a graduate student at the University of Vienna. In 1928, Neumann also gave a presentation on pure mathematics at the colloquium.

Menger's colloquium dealt not only with topics in pure mathematics but also with mathematical economics. Between 1933 and 1936 Wald (Abraham Wald, 1902-1950, born in Hungary), studied with Menger at the University of Vienna, Schlesinger[2] (Karl Schlesinger, 1889-1938, born in Budapest), who moved to Vienna with the establishment of the socialist government in 1919 and worked in finance, and Morgenstern (Oskar Morgenstern, 1902-1977,

[1] The activities of the Mathematics Colloquium are detailed in Stadler (2015) pp. 201-223.

[2] Schlesinger never belonged to an academic institution and received private mathematics instruction from Wald and Menger; he committed suicide after the German annexation of Austria was declared in 1938.

born in Görlitz, Germany and grew up in Vienna) gave presentations on the solution of Walras-Kassel's general equilibrium[3]. Neumann was scheduled to conclude the discussion as a guest researcher in 1936.

The Hungarian mathematician Neumann was not interested in economics in general. He had an interest in mathematical modeling in any field. One of his interests was the mathematical solution of games. The attempt to model various games, for example, card games, has long been one of the topics that fascinate mathematicians. In 1928, Neumann published a paper[4] on the equilibrium existence problem of two-player games. This later led to the generalization of game theory.

Neumann assumed that the two participants play a zero-sum game, and formulated what kind of equilibrium is achieved when each takes actions that symmetrically maximize (minimize) the gain (loss) and minimize (maximize) the loss (gain). Neumann formulated the concepts of maxmin (minimax theorem) and saddle point and gave proof applying the fixed-point theorem. The mathematical formulations that summarized the duality of the forms were later used in the field of economics for linear programming and general equilibrium.

The next interest of the less than 30-year-old Neumann was "proving the existence of general equilibrium," which at the time was known as an unsolvable problem in non-Marxian mathematical economics. He learned of such a problem through a private conversation with Nicholas Kaldor[5] (1908-1986), a Hungarian economist. Neumann was interested in solving various difficult problems as mathematical models, regardless of the field of study.

During the Habsburg period, the social distance between Vienna and Budapest was much closer than it is today, and when the Hungarian Socialist Revolution took power in 1919, the Neumann family temporarily fled to Vienna. This was certainly the reason for Neumann's rejection of socialist ideology and tyrannical power[6]. In Germany, Neumann devoted himself to

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[3] L. Punzo (1989) is a useful reference (M. Dore, S. Chakravarty, and R. Goodwin eds.:1989, pp.29-65). Note that the papers by Schlesinger, Wald, and Neumann are included in W. J. Baumol and S.M. Goldfeld eds. (1968).

[4] Neumann (1928）.

[5] N. Kaldor (1989). Kaldor was five years younger than Neumann and studied at the London School of Economics (LSE) in 1927. At LSE, he met Hicks, who introduced him to the Nordic school of economics, Wicksell. Kaldor, later known as a Keynesian, was initially interested in general equilibrium theory, and in the summer of 1928 he and Neumann had lunch in Budapest on the terrace of the elegant Ritz hotel on the Danube (the site where the InterContinental Hotel now stands). This was the first encounter between Neumann and Kaldor. Neumann was 25 and Kaldor was 20. After that, they met every summer vacation in Budapest. Neumann asked Kaldor questions about problems in economics, and Kaldor introduced him to Visser's Value, Capital, and Rent, which Neumann read in a short time and questioned the approach of the marginal utility school. He wanted to see Walras's original mathematical formulation, from which Neumann learned that there existed a mathematical problem in economics called "proof of the existence of general equilibrium solutions."

[6] Neumann had lectured in Moscow during the Stalinist era and had firsthand experience with the failures of Soviet socialism. He also suggested Kyoto and other cities when deciding on the cities to drop the atomic

research in mathematics and quantum mechanics, but he had no interest in German philosophy or social thought. In economics itself, he was more interested in problems that could be pursued axiologically or in formal logic. That is why he was interested in proving the existence of general equilibrium solution. He had an intuition that the analytical methods used by classical mathematics could not solve the problem, but that topological methods could. This kind of intellectual interest always stimulated Neumann's mind.

Neumann presented his first proof idea for the existence of general equilibrium at a meeting at Princeton University in 1932. Menger then asked him to present his work at a colloquium, and in 1936 he planned to travel to Vienna, but he mailed his paper[7] to Menger from Paris and went back to the USA. The mailed paper was published in the annual report of the colloquium. Neumann used "Brouwer's fixed-point theorem" for the first time in proving the existence of a general equilibrium solution. From this point on, the use of the fixed-point theorem became the standard method for proving the existence of a general equilibrium solution.

At the time the Colloquium's annual report was published, only a few economists had seen Neumann's paper, and it was difficult for classical economists with no knowledge of topology to understand it. Nevertheless, Schumpeter heard of the publication of the Neumann paper and asked his disciple Goodwin to report on it.

R. Goodwin[8] (1913-1996), who had a tumultuous career that included becoming a member

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bombs on Japan. He had a sense of rejection of tyranny, whether socialist or capitalist.

[7] Neumann (1937). This paper was to be presented at the Menger Colloquium on Mathematics after a lecture at the Institut Poincaré in Paris in 1936. The trip to Vienna was also a return trip to Budapest. However, the couple had a critical disagreement in Paris, and Mrs. Neumann returned to Hungary alone (The couple later divorced). For more information on this situation, see Macrae (1992). About 10 years after its publication, the paper was translated in the *Journal of Economic Perspectives* (Morgenstern translation) and attracted the attention of many mathematical economists. The English translator is George Morton, not Oskar Morgenstern because Morgenstern later changed his name. Later, he wrote *Game Theory and Economic Behavior* together with Neumann, but they never met at the Vienna Mathematical Colloquium. Morgenstern, who was born in Germany and became an Austrian citizen in 1925, had studied under von Mises and was present at the Menger Colloquium. Still, he and Neumann did not have the opportunity to meet at that time. After the annexation of Austria, he moved to the United States and met Neumann for the first time at Princeton University (around 1938).

F. Nikaido, a pioneer of mathematical economics in postwar Japan, studied the papers of Wald and Schlesinger in Prof. S. Yanaga's seminar (mathematics) at the University of Tokyo and later studied Neumann's papers to become a mathematical economist. My teacher T. Seki (Hitotsubashi University) was not a mathematician, but he joined the Yanaga Seminar as a research student because of the need to master mathematics. He started his postwar research on mathematical economics by studying the Neumann article with Nikaido and others. After the publication of Neumann's paper, it became popular among mathematicians to use Neumann's method while giving other proofs. This led to the rise of mathematical general equilibrium theory in the 1950s and 1960s.

On a personal note, I was first introduced to the problem of the existence of general equilibrium solutions in the autumn of 1968, in my third year at ICU (International Christian University, Tokyo), when Ken Amamiya, then a research assistant at Stanford University, gave an explanatory lecture on the fixed-point theorem. After graduating from ICU, Amamiya studied at various universities in the US and became an internationally renowned scientist. He is currently Professor Emeritus at Stanford University.

[8] R. Goodwin, "Swinging Along the Autostrada: Cyclical Fluctuation along the von Neumann Ray", M.

of the British Communist Party, returned to Harvard from Oxford University in 1937 to study under Schumpeter. According to Goodwin, around this time (1938 or 1939), he was instructed by Schumpeter to report on Neumann's paper. He was one of the few economists who read the Neumann paper shortly after it was published. At the time, he reported to Schumpeter that it was "just a mathematical piece of work," and afterward regretted that he could not report on the Walrasian equilibrium and the argument that the rate of profit arises from the growth of capital rather than the quantity of capital, which was of interest to Schumpeter. He recalls that he did not fully understand Neumann at the time.

This was the last time the Colloquium's annual report was published. Hitler's annexation of Austria (Anschluss, March 1938) forced the members of the Vienna Circle and the Mathematical Colloquium into exile, bringing an end to the intellectual circle in Vienna. Under the growing influence of Nazi Germany, tragedy struck when Schlick was assassinated by a student (1936) and Schlesinger committed suicide (1938).

Later, Shizuo Kakutani[9] (1911-2004) of Osaka University, Japan, who was studying at Princeton University (Institute for Advanced Study), developed the "Kakutani's fixed-point theorem (fixed-point of set-valued mapping)," an extension of Brouwer's fixed point theorem (point-to-point mapping), under the advice of Neumann. At that time, Neumann's seminars were attended by outstanding mathematicians from all over the world. After World War II, John Nash[10] (1928-2015), while still a graduate student, published an equilibrium proof of a game (1950) using

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Dore, S. Chakravarty, and R. Goodwin eds. (1989), p. 125.

[9] Samuelson, a leading figure in neoclassical synthesis, while reminiscing about Neumann, mentions an episode of Shizuo Kakutani in M. Dore, S. Chakravarty, and R. Goodwin eds. (1989), pp. 114-121. Kakutani was asked by someone, "I think you are a great mathematician," to which he replied, "No way, I am a mere nothing". He was further asked, "If you are not a great mathematician, who do you think is a better mathematician than you?" He thought for a while and answered, "John Von Neumann".

[10] Nash's paper is included in H.W. Kuhn and S. Nasar eds. (2002). When Nash showed this paper to Neumann, Neumann said, "It's trivial, you know. That's just a fixed-point theorem" (Sylvia Nasar: 1998, p. 94). Nash later recalled that "Neumann was jealous [of his talent]". However, this is Nash's innate vanity. From the mathematician Neumann's point of view, there were no new ideas or mathematical discoveries in the Nash paper. That is why he was not interested. In fact, Nash's lack of achievement as a mathematician caused him to develop schizophrenia due to the conflict and frustration of vanity and a sense of inferiority.

In 1994, the Nobel Prize Selection Committee and the General Assembly of the Swedish Academy of Sciences, the final decision-making body, were faced with a number of objections to the award being given to game theory itself, doubts about the evaluation of Nash's work, and doubts about the "scientific nature" of economics, and the decision to award the Nobel Prize to the three winners was made just in time to receive the necessary affirmative votes. The reason for this is related to a point made by Neumann in response to Nash's paper. Mathematicians are potentially frustrated by the lack of a Nobel Prize in mathematics. However, scientists from other fields questioned the awarding of a Nobel Prize for the application of an existing mathematical theorem to an economic problem, even though the mathematician had not done any work as a mathematician.

A. Lindbeck, the long-time chairman of the Nobel Committee on Economics, resigned from his post, taking responsibility for this confusion. The incident showed that there is great resistance among scientists in other fields to consider economics as a "science". For more information, see Sylvia Nassar (1998), Chapter 48, "The Prize".

Kakutani's fixed-point theorem, which won the Nobel Prize in Economics 44 years later in 1994. This year's Nobel Prize in Economics commemorated the 50th anniversary of the publication of *Game Theory and Economic Behavior* by Neumann-Morgenstern, and three researchers in game theory were awarded the Nobel Prize in Economics. John Harsanyi (1920-2000) also received the prize, a junior at Budapest Fasori High School (Budapest-Fasori Evangélikus Gimnázium), where Neumann graduated.

Curiously, many Japanese researchers specializing in game theory explain that the foundation of postwar mathematical economics began with Nash. They base this on the fact that "Nash equilibrium gave a more general solution" with Kakutani's fixed-point theorem, which generalized Brouwer's fixed-point theorem, which Neumann used. The method of using an extension theorem to give a different proof is not uncommon in mathematics. It goes without saying that it is worthwhile to be the first to use the theorem and prove it. Neumann was the first to show that the "fixed-point theorem" was the mathematical core of the proof of the existence of equilibrium solution, and subsequent research on the existence of equilibrium solution has changed the conditions or used extension theorems, and these are second-hand studies that provide alternative proofs to the original research.

It cannot be denied that the foundations of modern mathematical economics on the existence of equilibrium solutions were laid by the mathematical genius Neumann. However, contemporary neoclassical mathematical economists are trying hard to erase Neumann's shadow from postwar mathematical economics. They ignore Neumann and avoid comparisons with him by naming Nash, who left no mathematical achievements, as the founder of the discipline. This is because most of the postwar mathematical economists are those who couldn't make any achievements in mathematics and therefore moved from pure mathematics to mathematical economics as applied mathematics. It is hesitant for such researchers to recognize the economic model analysis initiated as a side work by the mathematical genius Neumann as the starting point of their research. However, whether contemporary mathematical economists ignore him or not, the fact remains that Neumann was a pioneer who paved the way for the rise of contemporary mathematical economics. Scholars who have made the transition from mathematics to economics as applied mathematics can hardly thank Neumann enough[11].

[11] Neumann's contributions to modern mathematical economics go beyond the development of game theory and the use of the fixed-point theorem in equilibrium analysis. Many of the ideas, methods, and concepts used by later mathematical economists, such as the methods and concepts of activity analysis and production aggregates, linear production functions, the description of activity forms by inequalities rather than equations, and the clarification of the concepts of optimal growth and harmonic growth, were mathematically clarified by Neumann. For a detailed discussion of Neumann's contributions to mathematical economics, see M. Dore, S. Chakravarty, and R. Goodwin eds. Mathematical economists who have turned from mathematics to obtain a regular job and fame in "economics" should not be able to forget their appreciation of Neumann, since it was by taking advantage of Neumann's innovations that they were able to win the Nobel Prize, which could not be obtained through mathematics.

As many Nobel laureates in economics have recognized, Neumann made a significant contribution to the development of mathematical economics. At the same time, he distorted the character of economics as a social science. He spread a false perception in the economics community that modern economics is the mathematical modeling of economic analysis, like physics, and that this is the establishment of "economics as a science" that breaks away from social thought such as Marxian economics. As a result, mathematical economics has turned into applied mathematics.

Applied mathematics is undoubtedly a discipline, but the mathematization of economics has not contributed to a deeper understanding of the real national economy. The "economic behavior" of extremely abstract assumptions and economic agents is so far from reality that, compared to the sophistication of the models, there is little that contributes to a realistic understanding of the economy. To avoid the difficulty of analyzing the real economy, researchers seem to have fled to the world of abstractions that can be processed mathematically. This is a similar phenomenon in Marxian economics that has degenerated into an exegetical study of the *Theory of Capital* by Marx. Researchers who have moved from the field of mathematics to mathematical economics are rarely interested in real economic problems but rather focus exclusively on simplified abstract mathematical spaces. They rarely have anything to say about the real economy based on the results of their own research, and rarely do they speak on real economic issues. Economics, as applied mathematics, may exist as a discipline, but it does not contribute to the analysis of economic society. This is extremely unfortunate for economic science. Neumann's innovations have distorted the character of economics as a social science. However, this is not Neumann's fault, but rather the result of the secular calculations of mathematicians who turned to economics and the peculiarities of American economics education[12].

Neumann himself was not interested in economics as a social science (philosophy or ideology). He may have thought that economics would become a "science" if it could be expressed in mathematics like physics. However, after game theory, Neumann was never involved in economic problems. Perhaps he did not think that economics was a science that could yield practical results. His interest gradually turned to the realities of the Cold War, and he devoted himself to the development of the atomic bomb and the computer.

Mathematical economics, which was inspired by Neumann, is now at its peak, and there is a widespread misconception in the economics community that creating mathematical models

[12] A. Leijonhufvud's (1973) fable, "Life among the Econ", is an ironic allegory of the American economist community. The social class hierarchy of the Econ (the economics village) consists, at the top of mathematical economists, followed by microeconomists, macroeconomists, development economists, empirical researchers, and so on down the hierarchy. This hierarchy is ranked according to the ability to create sophisticated mathematical models. Microeconomists are depicted as a group whose totem is the supply-demand curve, and macroeconomists as a group whose totem is the LM-IS curve.

constitutes "science". Any economic analysis that cannot be turned into a mathematical or statistical model is regarded as a social ideology or ideology. In the early years of the Nobel Prize in Economics, the prize was awarded to the founder of a theoretical analysis of the total national economy, but after that phase, the prize has been awarded to the developer of a mathematical model of a partial economic phenomenon. Nowadays, political economy analysis has been excluded from the nomination for the Nobel Prize in Economics from the beginning.

Are mathematical economic models "scientific economics" and political economics an ideology? It is not that simple. No matter how popular mathematical models become, they do not seem to have improved the accuracy of economic analysis. No matter how sophisticated the models become, they have not helped to solve real national economic problems. Why is this?

Neumann's Trap - Mathematical Models are Tautological

In general, in model analysis, a conclusion is first reached, then the logic that can reach that conclusion is found, and the variables and preconditions that are adaptable to that conclusion are constructed. Instead of analyzing actual concrete facts, model analysis retroactively finds the logic and preconditions that generate the conclusion and reconstructs the logic from there. The success or failure of a model constructed by such a method is judged by the validity of the premises and the consistency of the logic that leads to the conclusion. Whether or not the model has a realistic basis (supported by facts) is not relevant in determining the success or failure of the model. A model is valid if it is rigorously defined and if the logic leads to the conclusion without contradiction.

A mathematical model is tautological in a sense because it is constructed so that a conclusion is reached from the beginning. In the sense that the logic that leads to the conclusion is worked out before the proof procedure is performed, it is also a tautology as an actual act of thinking.

The Neumann model is no different in this respect. At the end of his paper, Neumann wrote the following note.

"Note that these characterisations are possible only on the basis of our knowledge that solutions of our original problem exist – without themselves directly referring to this problem. Furthermore, the equality of the maximum in the first form and the minimum in the second can be proved only on the basis of the existence of this solution".[13]

This note reminds the reader that "proof of the existence of an equilibrium solution does not prove the actual existence of the solution, but shows that if an equilibrium solution exists, it is possible to prove it in this way". In short, he asserts that the argument over the existence of general

[13] Neumann (1945), p.9.

equilibrium solutions is an argument that has nothing to do with whether actual equilibrium states exist or not.

Neumann's eight-page paper was described by Weintraub as "the single most important article in mathematical economics"[14]. It is littered with ideas and mathematical methods that have become the foundation of contemporary mathematical economics. Subsequent mathematical economists have established themselves as mathematical economists by deciphering Neumann's article, further developing his ideas, and providing alternative proofs. In this sense, Neumann's pioneering work is unparalleled. Of course, not all the ideas presented in the eight-page paper are original by Neumann. Neumann did not note anything about how he learned his economic ideas and from whom he learned them. It is certainly the basic ideas based on formulations by Cassel and Wald, but it is not known whether Neumann met Leontief, who was in Berlin at the same time.

One thing is clear, however: the use of the fixed-point theorem for equilibrium proofs was Neumann's original idea, and it must have been an idea that came to his mind instantly when he heard from Kaldor about the problem. He was a proponent of the modernization of mathematics based on axiomatic principles and excelled at constructing models and theorems based on axioms. The problem of the existence of a general equilibrium solution was another example of axiomatic model building for Neumann, demonstrating the effectiveness of his mathematical approach.

It was Neumann's idea that it was impossible to solve the existence problem of general equilibrium solutions using classical functional analysis, but that topological mathematics could be used to prove the existence of such solutions. Brouwer's fixed-point theorem shows that there exists a fixed point on a self-mapping (continuous function) on a compact convex set. If we construct a model in which this fixed point is the equilibrium point, the problem of the existence of a general equilibrium solution is solved. This is Neumann's goal. Kakutani's fixed-point theorem, which Nash used, is a natural extension of Brouwer's theorem, and Neumann also gave advice on the completion of Kakutani's theorem. Therefore, it is assumed that the reason why contemporary mathematical economists are so eager to praise Nash and ignore Neumann is that they do not want to admit that Neumann is the starting point of contemporary mathematical economics.

Be that as it may, as the Neumann model shows, the crux of the model analysis is how to use the mathematical theorem that provides the solution to the problem. Here, the economic problem

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[14] Weintraub (1983), p.13. Weintraub relates a story he heard from A. Leijonhufvud about a seminar in Berlin attended by J. Marschak. At that time, Leo Szilárd, a Hungarian physicist, was presiding over a seminar of mathematicians and physicists in Berlin, and he apparently asked Marschak to give a presentation on the topic of economics. When Marshak introduced Walras's general equilibrium theory, one of the mathematicians challenged him, saying that he should use inequalities instead of equations. The mathematician was Neumann, who is estimated to have been around 1928. For more information on Szilárd and other Hungarian scientists of this period, see Georgy Marx (2001).

is reduced to a mathematical problem. The problem is being replaced with how to use mathematical theorems. So, conversely, even if a solution to the problem is given, it does not prove the existence of equilibrium in the real economy.

The axiomatic approach is based on very strict logic (mathematics). Conclusions are drawn by applying the strictest possible formal logic to the most abstract object possible. Logical models do not require any empirical support for their conclusions. A logical model is, in this sense, tautology. Even if it makes sense as mathematics or logic, it is not an argument of social science as an empirical science. An economic analysis that is not based on an analysis of the actual social economy cannot be that of a social science.

The study of mathematical economic models using modern mathematical methods inspired by Neumann had a revolutionary rise in the world of economics during the 1950s and 1960s. The study of equilibrium models became the sole domain of applied mathematicians who had moved from mathematics[15].

Naturally, there were critical arguments against the rise of deductive general equilibrium models.

One was the proposal of the "imbalance (imperfect competition)" theory in contrast to the equilibrium (perfect competition) theory. There are various imbalances in the real world. In particular, the imbalances in the capitalist economy in the 1930s gave rise to Keynesian economics. Kaldor, who had studied general equilibrium theory, became a Keynesian in the 1930s and broke away from the general equilibrium school. In 1925, Kaldor[16] spent a summer vacation with his family in Bavaria. There, he encountered the German hyperinflation after world war I. This attitude of facing real problems rather than abstract models paved the way for Keynesians to deal with macro imbalances. Keynesians also created mathematical analyses of imperfectly competitive market models and developed mathematical models of macro imbalances. However, the mathematical methods used in the mathematical modeling of imbalances are basically based on the description of imbalances in physical phenomena and lack the characteristics of socioeconomic analysis (see below).

From the 1950s to the 1960s, mathematical modeling of general equilibrium became the mainstream of mathematical economics. However, general equilibrium models gradually fell out of the mainstream of mathematical economics as economic reforms in socialist countries failed and the social turmoil caused by the Vietnam War continued. It was at this time that Kornai's *Anti-Equilibrium*[17] attracted attention. Kornai argued that the deductive method based on axioms (normative theory) was a tautology and that it was necessary to describe the economy using

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[15] The successor to Neumann's article, which became the postwar merkmal of mathematical economics, is K. J. Arrow and G. Debreu (1954).
[16] Kaldor (1986).
[17] J. Kornai (1970).

inductive empirical theory.

Kornai introduced the concepts of "shortage" and "surplus" as descriptive, rather than mathematical concepts of disequilibrium, and distinguished between shortage and surplus economies. Kornai's theory of socialist economies as typical shortage economies attracted attention as a theory of system transformation in the socialist bloc and became the theoretical basis for the intellectuals who led the system change. Kornai's theoretical advocacy is noteworthy in the sense that it became an intellectual force that moved the real world. Although he deserved the Nobel Prize in Economics, he was not awarded the prize because of the analytical characteristics of the political economy.

It should also be noted that Leontief warned against the abstract mathematical modeling of modern economics when Kornai published his *Anti-Equilibrium*. In his presidential address[18] at the annual meeting of the American Economic Association in December 1970, Leontief criticized the current state of economics, which has become extremely mathematical-statistical, and emphasized the importance of research supported by empirical facts. The following is a list of his main points.

"I submit that the consistently indifferent performance in practical application is in fact a symptom of a fundamental imbalance in the present state of our discipline. The weak and all too slowly growing empirical foundation clearly cannot support the proliferating superstructure of pure, or should I say, speculative economic theory" (Leontief [1971], p.1)

"Uncritical enthusiasm for mathematical formulation tends often to conceal the ephemeral substantive content of the argument behind the formidable front of algebraic signs" (Leontief, ibid. p.1-2)

"In no other field of empirical inquiry has so massive and sophisticated a statistical machinery been used with such indifferent results. Nevertheless, theorists continue to turn out model after model and mathematical statisticians to devise complicated procedures one after another. Most of these are relegated to the stockpile without any practical application or after only a perfunctory demonstration exercise. Even those used for a while soon fall out of favor, not because the methods that supersede them perform better, but because they are new and different" (Leontief, ibid. p.3)

"True advance can be achieved only through an iterative process in which improved theoretical formulation raises new empirical questions and the answers to these questions, in their turn, lead to new theoretical insight. The "givens" of today become the "unknowns" that will have to be explained tomorrow. This, incidentally, makes untenable the admittedly convenient methodological position according to which a theorist does not need to directly verify the factual

[18] W. Leontief (1971) pp. 1-7.

assumptions on which he chooses to base his deductive arguments, provided his empirical conclusions seem to be correct" (Leontief, ibid. p.5)

Both Kornai and Leontief argued that the method of economic analysis should be inductive and empirical, based on empirical facts, rather than the deductive model setting. Kurnai's work was not about the existence of equilibrium, but about how we should view the imbalances that exist in the real economy. Leijonhufvud's "Fable" written in 1973 was also published during this period. It tells us that an innovation in economics to replace the deductive equilibrium theory was the need of the era.

In the 1960s and 1970s, the United Nations Statistical Commission took the lead in developing a macroeconomic statistical system for standardization to integrate input-output tables and various economic accounts to capture the real and financial flows of a country. The international standardization of economic statistics occupies an important place in the history of economics in terms of establishing a reliable system of empirical data.

However, compared to the development of these economic statistical systems, economic theory and analysis have not evolved to the point of making the mechanisms of the national economy controllable. No matter how much we may draw on the theorems of physics and mathematics, economic analysis cannot progress without analyzing the economy and society itself. It will be a long time before economics can become a science.

Equilibrium, Balance, and Growth

Ex-ante and ex-post

As Neumann's statement above makes clear, the proof of the existence of an equilibrium solution that analyzes models in an axiomatic or deductive way is the theory of ex-ante equilibrium. Whether or not actual equilibrium exists is not the issue here. Since equilibrium is assumed to exist, it can be characterized as an ex-ante equilibrium theory.

In contrast, an argument based on an accounting balance is an ex-post equilibrium. For example, the Input-Output Table developed by Leontief is an example of the ex-post equilibrium. All national accounts tables, including the Input-Output Table, are accounting balances and describe ex-post equilibrium.

At the time of the Russian Revolution, Leontief was interested in the material balance tables developed by the USSR Bureau of Statistics and wrote articles[19] about the significance of the material balance methods in the Bureau's journal. These were written during Leontief's years as

[19] The Balance of the Economy in the USSR in N. Spulber ed. (1964). This is an English translation of a short article published in Gosplan's journal *Плановое Хозяйство* (December 1925, pp. 254-257). Spluber's volume contains English translations of the main articles published in the journal. The full text of this volume is available in the public domain (https://doi.org/10.2979/FoundationsofSovietS).

a Leningrad University student. He attempted to develop material balances into the input-output tables and their analytical methods based on them, which he devised after emigrating to the West.

The Neumann model is an ex-ante equilibrium model, and the Leontief model is an ex-post equilibrium model. All accounts in the national accounting system represent an ex-post equilibrium called "balance". Ex-post equilibrium is a balance that is recorded regardless of whether there is a surplus or a shortage and does not represent a market equilibrium in the sense that supply and demand coincide, but rather a concept that represents the ex-post balance on the accounting. In this sense, the term "ex-post equilibrium" is misleading. However, the theoretically assumed ex-ante equilibrium and ex-post balance are clearly distinguishable concepts, and as a practical matter, it is the ex-post balance that can be captured by statistics.

Leontief not only extended the material balance tables of the USSR Central Statistical Office but also developed a method of input-output analysis based on them. Assuming the input-output structure obtained from the input-output balance to be invariant and by interpreting the accounting balances as a causal relationship, the input-output analysis can be described as a functional relationship where final demand determines output. This is a method for analyzing the spillover effects of changes in final demand, assuming the production structure (input-output relationship) is unchanged.

The input-output table for year t can be described by using an input-coefficient matrix (A), output vector (x), and effective demand vector (f) as follows.

$$A_t x_t + f_t \equiv x_t$$

Although it involves the a priori operation of calculating input coefficients, the equation expresses thus far a matrix and vector representation of the input-output balance. To that extent, the above is an identical equation. By reading this equation as a function with X as a variable, it can be interpreted into a functional equation that determines the output in year t+1 from the effective demand in year t+1, assuming that the input-output structure in year t is unchanged, where I is the unit matrix and $(I-A_t)^{-1}$ is the inverse matrix of $(I-A_t)$.

$$x_{t+1} = (I-A_t)^{-1} f_{t+1}$$

Can this production decision mechanism be characterized as ex-ante equilibrium theory? Kornai recalls that he didn't feel an affinity with Leontief's analysis because he considered this analytical method "deterministic"[20]. However, Leontief's input-output analysis is a formula for determining the level of production in the next period based on the ex-post equilibrium of the previous period and therefore essentially differs from the ex-ante equilibrium theory. In other words, it is a determinant that assumes the ex-post equilibrium of the previous period.

In other words, in this case, by adding a causal interpretation to the accounting balance, the

[20] Kornai (2006), p. 141.

input-output relationship is read as a causal equation (functional relationship). The balance table itself represents the ex-post equilibrium, but by reinterpreting it as a causal relationship, it is converted into an expression for determining the output in the next period. However, input-output analysis cannot be said to be an ex-ante equilibrium theory in the sense that it is based on the ex-post equilibrium of the previous period.

Identical Equation and Causality

The accounting balance displays an identity relationship. Like the input-output table, gross domestic product (GDP) is also statistically defined as the balance between gross output (GDP on the production side) and gross expenditure (GDP on the expenditure side). Gross domestic product is the total domestic value-added output from the production side and is calculated from the accumulation of corporate income. On the other hand, what is produced and sold is assumed to be purchased and consumed (expenditure), and the total consumption (expenditure) of goods is assumed to be equal to the total production. From this, we obtain the following identical equation.

Gross Domestic Product (GDP) ≡ Gross Domestic Expenditure (GDE)

where GDE≡ domestic consumption (C+G) + investment (I) + net exports (ΔE), C is private consumption and G is general government consumption.

In macroeconomics, this identical relationship is called the two-sided equivalence. Since there is a distributive process in the process from production to expenditure, the above identity can be further described as follows.

Gross Domestic Product ≡ Distributed Domestic Income ≡ Gross Domestic Expenditure

In Japan, this identical relationship is called the three-sided equivalence.

However, no macroeconomics textbooks accurately describe two-sided and three-sided equivalence. Most economics textbooks simply refer to these equivalences as the "principle of macroeconomics", but do not explain what exactly it means. Do the principles mean "axioms" as "self-evident truths" and "equilibria" that always hold? If so, what is the “equilibrium that always holds”? No textbook has accurately described these identical relationships, even though it is stated as if it were a natural truth. This ambiguity is the cause of the misinterpretation of GDP growth factors that we will see later.

GDP statistics are adjusted to determine the accounting balance based on the assumption that total production and total expenditure should be equal ex-post. Errors that cannot be compensated for are treated as "statistical discrepancies". In this sense, two-sided equivalence or three-sided equivalence is an expression of the accounting balances of GDP and has no further meaning. To call them as if something special like "two-sided" or "three-sided" is tautology. Moreover, it is a double fallacy to treat it as an axiom, as in the "principles of macroeconomics".

Many economists, however, read these identical relationships as causal relationships.

Theoretical economists do not make any clear criticism of this type of misunderstanding. This is the reason why the erroneous argument is left unchecked.

Not only economic commentators and economists but also politicians who take this argument seriously argue as if increasing consumer spending is a sufficient condition for GDP growth, since consumer spending accounts for more than 70% of GDP. This argument is a simple tautology. A numerical example of this is as follows.

Given a simple identity like 7+2+1 ≡10, and if you can change 7 to 8, then you can get 8+2+1≡11.

This argument is a mere arithmetic tautology that discards the analysis of GDP growth factors.

Of course, the identical equation can be read as a functional equation, as in input-output analysis. For example,

GDP = F (C, G, I, ΔE),

but there is no guarantee that GDP is a simple linear function of private consumption. It is a simple tautology to assume that GDP will grow if consumer spending increases without analyzing under what social conditions consumer spending will increase or decrease. It is an elementary error of analysis to draw causal conclusions directly from the identical equation.

Inorganic and Organic Equilibrium

Equilibrium treated in mathematical economics is the same as those treated in physics (inorganic world), which is incorporated into economic topics as mathematical applications. Therefore, it is important to consider the degree of closeness and similarity between the problems in economies and those in the physical world.

The equilibrium state that physics treats is not the equilibrium of the entire world, but the equilibrium of a well-defined system. It is an equilibrium in a laboratory where conditions are limited, and its reproducibility can be verified. When the system under study is in a state of inactive equilibrium, we can observe how external factors disturb the equilibrium act, and how the results of these actions behave and converge (diverge) to the equilibrium state.

In contrast, the "market" targeted by mathematical economics does not specify what kind of real market is assumed and what kind of assumptions are made. It only discusses variants based on a simple supply-demand curve. This cannot be a theory of the real economy and is a crude argument that cannot even be compared to the study of equilibrium states in physics.

In the world of mathematical economics, the basic question of whether human economic activities can be discussed based on equilibrium conditions such as those assumed in physical phenomena has not been discussed. In all the enthusiasm for the inclusion of physical mathematics, the basic question that the analogy with physical phenomena is possible or not is missing from the discussion. The first question that needs to be asked is whether it is appropriate to talk about

human economic activity as an analogy for the equilibrium state of physical phenomena.

There is no static equilibrium in human economic activity as assumed by physics and mathematics. Supply and demand are never in equilibrium, whether in individual markets or at the national economic level. There are always surpluses and shortages in the production and sale of all commodities, and surpluses are cut off (discarded) and shortages are replenished. This trial-and-error process is repeated constantly. This process of adaptation continues indefinitely, and through this process of "selection (adjustment)," a posteriori equilibrium is achieved. Neither in the short term nor in the long term is there an equilibrium as assumed by mathematical economics. There exists only an ex-post equilibrium, which is a temporary state achieved through an "infinite selection (adjustment) process" of constant disposal and replenishment. Even in economies where there is no economic growth, there is an infinite process of elimination and replenishment. The real equilibrium captured by economics exists only as an accounting balance of income and expenditure at the end of a certain period.

In this view, economic fluctuations and equilibria can learn more from biology (including biomedical science), which analyzes the organic world, than from physics, which analyzes the inorganic world. Economists should learn more from the growth and adaptation processes in the organic world, such as biology and biomedicine, rather than being stuck in the abstract world with an inclination toward mathematics and physics.

Balance, Growth, and Decline in the Organic World

Is the fact that the national economy has grown without going broke proof of a balanced economy, and therefore, the meaning of discussing general equilibrium? The essential difference between equilibrium in the inorganic world and equilibrium, growth, and decline in the organic world is not considered in this assertion.

Human beings as living organisms and economic societies are in the organic world. In the inorganic world, once a state of equilibrium is achieved, it does not change unless an external force is applied. It is this kind of equilibrium in the inorganic world that is expressed in mathematics. In the organic world, such as the human body, however, the components (cells, organs, and organs in the human body) are always active and maintain a state of dynamic balance[21]. Unlike the inorganic world, where the components are in a state of inactive equilibrium, in the equilibrium state of the body, chemical actions and electrical signal transmission are always in operation, and this dynamic equilibrium state maintains the normal functions of the organism. Even if a chemical or electrical disturbance occurs for some reason, the equilibrium state of the

[21] In this usage, *balance* means a state of equilibrium in motion, i.e. not a fixed state, but a state of equilibrium that is constantly moving within a certain range.

human body is maintained if the action of restoring normal values is functional. In other words, the equilibrium state of the human body is a dynamic equilibrium state, which should be considered a state of balance as distinguished from a physical equilibrium state. This is the decisive difference from the equilibrium state of the inorganic world.

If the dynamic equilibrium state is disturbed for some reason and does not return to the normal equilibrium state, various inconveniences will occur. Drugs and surgery are used to restore the body's chemical and electrical functions to normal, but excessive drug administration or too much invasive intervention can prevent the return to equilibrium and cause various deviations from the dynamic equilibrium state. This leads to more serious problems.

From childhood to adolescence, cells proliferate, and muscles and brains grow, but this is a diminishing process, and after a certain age, the process of degeneration (shrinkage) begins. Once the process of shrinkage begins, no matter how much nutrition is provided, the musculature does not proliferate, and excess energy is stored in the body and put a strain on internal organs and organs.

Human society, like living organisms, is stabilized by maintaining a state of dynamic equilibrium. Equilibrium is not a world of inactivity, as in the inorganic world, but a world in which dynamic equilibrium is maintained through constant activity. All activities in human society, whether in growth or in decline, are carried out without interruption. The equilibrium state during growth or decline is also one stage of dynamic equilibrium.

Whether in growth or in decline, fiscal and monetary interventions, and measures to stimulate the real economy can be counterproductive if not properly managed. Therefore, it is necessary to determine what kind of dynamic equilibrium a country’s economy and society are in, whether it is an economy that continues to grow as cells multiply or an economy that continues to decline as the population decreases and the society shrinks. Without such socioeconomic analysis, if economic policies are implemented based on the unrealistic assumption that the economy will continue to grow unilaterally, the policy measures will eventually turn into factors that impede the normal functioning of the economy and society.

If we ignore the essential difference between the equilibrium state of the inorganic world and that of the organic world, we will not be able to correctly grasp the development (growth) and stagnation (contraction) of the economy and society, and we will not be able to make appropriate policy recommendations. No matter how much we rely on mathematical modeling to mathematically elaborate the equilibria and divergences of the inorganic world, we will always be far away from grasping the real world. Rather than attempting to understand reality with existing mathematical theorems and tools, it is necessary to take a research stance that starts first and foremost with an analysis of the political, economic, and social realities. Otherwise, economics will end up being a house built on sand and an arcane spell of the Econ-tribe.

Restoration of the Political Economy

The desire of economists to "scientify" the discipline of economics by using mathematics is understandable, but the reduction of an economic problem to an applied mathematical problem and the finding of its solution does not "scientify" economic analysis. What is solved using mathematics is the "economic problem" that is reduced to an infinitely abstract mathematical problem. Therefore, even if an applied mathematical solution is obtained, it does not help to solve a real economic problem.

Most of the applied mathematical "economists" have no experience working in the real economic world as businesspeople. Moreover, most of them have no interest in real economic problems. No doubt that applied mathematics-oriented "economics" is also a discipline, but it is a field of study that has nothing to do with the real economy. Therefore, it is not surprising that no matter how many Nobel laureates there are in economics, fewer results are useful for real economic problems than in other scientific fields.

Some mathematical economists believe that economics can become a "precision science" by utilizing the mathematical methods used in physics, taking a cue from the fact that physics has become a precision science with mathematics. However, false analogies and imitations do not produce results.

Physics deals with the inorganic world. It is not an organic world like the biological (human) world. It is a mistake to think that theorems and laws of the inorganic world can be applied directly to the organic world. Regardless of whether it is inorganic or organic, mathematics is a science that treats quantity as a form that discards the qualities of the world. Furthermore, the ideas and mathematical methods of physics used in economics are not systematically applied to the whole economy, but rather subjectively to partial economic phenomena (subjective facts that one considers to be phenomena) to which one considers applying mathematical theorems being available. If economic analysis is to be considered a social science, it is necessary to empirically verify the subjective facts one assumes before applying mathematical methods. Otherwise, it is just applied mathematics.

The material capture of physics is a separate field of study in the areas of elementary particles, atoms, and molecules. Solid-state physics, geophysics, and astrophysics also form relatively independent research areas. Although physics has a systematic structure from the world of elementary particles to the universe, it is far from being able to elucidate the transient world that connects the various fields, and the current system of physics does not fully understand the entire world and universe. Therefore, the environmental (experimental) conditions are always clearly set for the problems discussed in physics. Moreover, the environmental conditions of the experiment must be reproducible no matter where the experiment is done. Anything that is not

reproducible is not considered scientific proof.

In contrast, many of the problems discussed by "economists" who have become applied mathematicians do not specify any realistic environmental conditions. They are reduced to abstract mathematical problems without specifying what kind of economy, what kind of market, and what kind of economic agents they are discussing. An argument that applies to any economy is an argument that is contentless for the social sciences. Merely applying the arguments of physics and its mathematical formulations to "economic problems" does not constitute an argument for economics as a social science. No matter how many mathematical models are created, arguments without realistic support are useless for understanding the real world.

Economics as political economy or the sociology of political economy needs to clarify once again the foundation on which the discipline relies. Rushing to produce a paper and creating an applied mathematical model that lacks content is not economics research as a social science.

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II.

The Trap of Normatism
- Kornai Position in Neoclassical Economics[22]

Encounter with Kornai's Theory

I first came across Kornai's work when I was a graduate student in the early 1970s. At the time, I had doubts about general equilibrium theory, and Kornai's *Anti-Equilibrium* (Economics of Anti-Equilibrium) was timely. A graduate school friend suggested that we translate and publish it together, but a Japanese translation was soon published by Nihon Keizai Shimbun (NIKKEI) in 1975. The translator was Atsuko Iwaki, a physicist who had studied in Hungary (the translation was a joint translation with Hiroshi Iwaki). NIKKEI published it through the good offices of Prof. Masahiko Aoki, who was a colleague of Kornai at Stanford University.

This work made Kornai, virtually unknown in the Japanese academic world, a focus of attention among theoretical economists. Although the book was a commercial publication that ended up losing money and selling only a few hundred copies, Kornai became known among theoretical economists in Japan.

After graduating from graduate school and obtaining a position as a full-time lecturer at Hosei University Tokyo in 1975, I looked for a chance to study abroad. I didn't have any intention to go to Hungary, and I had never imagined studying there. The research environment at Hosei University was so bad that I was looking for research opportunities abroad. At the time, I received advice from my former professor at Hitotsubashi University, Professor Yoshimasa Kurabayashi (former chairman of the United Nations Statistical Commission), who said, "In Hungary, they are doing interesting comparative research on the national economic accounting systems of the West and the East." Thus, I decided to take the government exchange student program and study abroad in Hungary. Rather than for any spontaneous or proactive reason, I decided to go to Hungary because I was eager to leave Japan as soon as possible. Prof. Kurabayashi gave me a letter of introduction to Dr. László Drechsler and Dr. János Árvay of the Hungarian Central Statistical Office, whom Prof. Kurabayashi had met at international conferences and the United Nations Statistical Commission.

Under the socialist system, government agencies would not accept foreign researchers, so the Department of National Economic Planning at the Karl Marx University of Economics was

[22] Mathematical economics, which is at the pinnacle of modern economics, is called neoclassical economics. This forms the mainstream of the economics world. In this chapter, we also use this term in this sense.

designated as Hungarian host institution. Ernő Zalai, József Móczár, and Richárd Bugnics were my laboratory colleagues of the same generation. At the Central Statistical Office, I mainly deepened my exchanges with Piroska Horváth. During this period of study abroad, I never visited the Academy's Economic Research Institute, and I had no contact with Kornai.

After returning to Japan in 1980, I learned that Kornai's book *Economics of Shortage* (North Holland, 1980, original title: A hiány) had been published. In the spring of 1982, when I visited Hungary for a short time, I met Kornai and talked about a short-term invitation to Japan. At the time, there was a project at the Faculty of Social Sciences at Hosei University, where I was affiliated, to celebrate the 30th anniversary of the foundation of the faculty. It had been decided that a commemorative lecture by a foreign researcher would be held. So I proposed inviting Kornai, and I obtained the agreement of the faculty council to invite Kornai[23].

On the other hand, I proposed to the university's executive board that we conclude a faculty exchange agreement with the Karl Marx University of Economics[24], and the agreement was also realized. At the signing of the exchange agreement at the end of 1982, President Ernő Csizmadia visited Hosei University. After that, Csaba Csaki, Tibor Palankai, Tamás Meszáros, Ernő Zalai, János Stahl, József Móczár and others visited Hosei University using this framework. When a seminar by Iván T. Berend was planned with experts on Eastern European studies, I arranged a meeting room and a small honorarium to be paid from Hosei University. In addition, some of the government and party officials invited by the Japanese Ministry of Foreign Affairs paid a courtesy visit to Hosei University. Among the politicians who visited Hosei University, I entertained János Berecz, Secretary of the Central Committee of the Socialist Workers' Party, and Rezső Nyers, who had been relegated to the Institute of Economics at the time. I organized a seminar for Eastern European researchers with Nyers and accompanied him around the university for sightseeing. Thanks to these activities, when I was appointed as a specialist researcher at the Japanese Embassy in Budapest in 1988, I visited the Socialist Workers' Party headquarters to see party leader Nyers a few times. I had the opportunity to meet regularly with Iván T. Berend, who had become the President of the Hungarian Academy of Sciences.

Returning to the subject, Kornai's visit to Japan was realized in January 1983. It was his first

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[23] As none of the members of the faculty knew Kornai, to make the decision to invite him was difficult. In the end, as there were no other strong proposals, it was decided that it would be fine if I took full responsibility for organizing the event. It was a reluctant decision.

[24] In January 1990, Prime Minister Kaifu paid an official visit to Hungary. This was the first visit to Hungary by an incumbent Japanese prime minister. One of the highlights of the visit was a dialogue with students at the Marx University of Economics. The existence of an exchange agreement with Hosei University led to the realization of this dialogue program. At the time, I was working as a specialist researcher at the Japanese Embassy, and I was put in charge of this event. Together with Zalai, who was serving as Vice-Rector, I organized the dialogue meeting. Rector Csáki was on an overseas business trip, and Vice-Rector Zalai served as the MC for the event, which was completed without a hitch.

trip to Asia. At the commemorative lecture at Hosei University, Prof. Hirofumi Uzawa (University of Tokyo), Kornai's colleague at Stanford University, gave the opening lecture. The day after the lecture, a seminar was held to discuss "The Economics of Shortage", and socialist researchers from all over the country gathered. Prof. Uzawa served as the chairman of the seminar. Furthermore, I asked Prof. Aoki, who had moved from Stanford University to Kyoto University, to organize a lecture at Kyoto University.

Kornai Commemorative Lecture at Hosei University, Tokyo, January 1983

I organized all the programs for Kornai's two-week stay in Japan. Still, the university could only afford a limited amount, so I had to scramble to find cheap accommodation and rent university holiday homes. People in charge of sightseeing around Tokyo and staying in Kyoto found the money for those expenses. In socialist countries, the government took care of such things those days, but that was not the case in Japan where a hard budget constraint works.

I compiled a collection of Kornai's papers to coincide with his visit to Japan. It was published under the title "Anti-equilibrium and the Economics of Shortage " (in Japanese published by Nippon Hyoronsha, January 1983)[25]. The following year, in 1984, I edited and translated a

[25] I first approached Nikkei about publishing the book, but they turned me down, saying they could not accept it because "The Economics of Anti-Equilibrium" was a loss-making publication. The first edition of this collection of essays, published by Nippon Hyoronsha, sold out and a second printing was successful. It did not result in a loss for the publisher. I edited and translated the collection (the sixth article is a revised version of the translation by Mr. Kadowaki and Mr. Fukaya). The articles included are as follows.

1. Gazdasági rendszerelmélet és általános egyensúlyelmélet, Közgazdasági szemle, 1970 szeptember
2. Nyomás és szívás a piacon, közgazdasági szemle, 1971 január
3. Gazdasági viselkedés normái és a norma szerint szabályozás, Közgazdasági szemle1976. Január
4. A hiány merésről, Statisztikai szemle 1975. dec.
5. "Kemény" és "puha" költségvetési korlát, Gazdaság, 1980. 4. szám
6. A hiány újratermelése, Közgazdasági Szemle, 1978. szeptember

collection of papers entitled "The Political Economy of ‘Shortage’ " (in Japanese published by Iwanami Shoten)[26], and in 1986 he published a collection of papers entitled "The Possibility of Economic Reform" (in Japanese published by Iwanami Shoten)[27]. These three books were successful in both sales and their influence on the academic world. Kornai's name became well known in the Japanese economic academic world, and a Kornai boom occurred in the Japanese academic society of socialist economies.

In January 1990, I visited Kornai in Boston and interviewed him for a Japanese newspaper. After that, I stopped translating Kornai's works for 15 years, because he began to make policy proposals in the wake of the regime change, and I felt that he began to show ~~a~~ concessions to American neoclassical economics. I could no longer relate to his various policy proposals and research style compared to his theoretical works up to that point. This chapter will address this issue.

When Kornai's autobiography (2005) was published, Kornai invited me to lunch at his home. I was unaware that his autobiography had been published, but after lunch, Kornai enquired about the possibility of translating it into Japanese. I couldn't give an immediate response. After looking at the overall structure, I decided it would be worth introducing the translation. However, the problem was finding a publisher willing to take on the publication.

It is difficult to sell an economist’s autobiography of nearly 500 pages to general readers, even

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7. Hatékonyság és szocialista erkölcs, Valóság, 1980. május

[26] The lectures and papers included in this book are as follows. I also edited and translated this book. This book was reprinted immediately, and the publisher did not suffer any losses.

1. Lecture on Economics of Shortage, presented at Hosei University, 1983.
2. Alkalmazkodás a mennyiség és árjelzésekhez a szocialista gazdaságban, Prepared for the IEA Conference in Athen, 1981.
3. Az egyensúly mint közgazdasági kategória, Magyar Tudomány, 1982/8-9.
4. Közgazdaságtudomány és pszichológia, Pszichológia, 1981, (1), 3.
5. Bürokratikus és piac koordináció, Közgazdasági Szemle, 1983. szeptember.
6. A paternalizmus fokozatai, A hiány, Közgazdasági és Jogi könyvkiadó, Budapest, 1980.

[27] This book was also edited and translated by me. The lectures and papers included in this book are as follows.

1. Some Lessons of Hungarian Experience for Chinese Reformers, Presented on the Bashan, China, 1985.
2. A magyar gazdasági reform jelenlegi helyzetéről és kilátásairól, Gazdaság, 1983. 3. szám.
3. The Soft Budget Constraint, Presented at the University of Pittsburgh, 1985.
4. A költségvetési korlát puhaságáról: vállalati adatok alapján, Gazdaság, 1983. 4. szám.
5. Convergence Theory and Historical Reality: 21 years after Tinbergen’s Article, Presented at Hosei University, Tokyo, 1983.

in the case of an economist who is well known among experts. At most, it would be possible to sell a few hundred copies to specialist researchers, students, and graduate students. However, if the price is too high, the book will not sell. As is common knowledge in the publishing world, even if the author is a Nobel Prize winner, specialist books by economists do not sell well. For publishers, publishing specialist books is extremely difficult due to budget constraints. There is no translator's fee from the start. I am not sure that Kornai understood the harsh reality of capitalist society, because he had only experienced having all his expenses covered by the host organization and subsidies.

Some of the publishers we approached were not at all interested. This is because there is no reason for publishers to take a loss on publishing the autobiography of an economist to whom they have no obligation. This is what hard budget constraints mean. The only last resort was to propose that the translators cover the initial costs of publication. The condition for convincing the publisher's management is that the translator bears the total cost of printing plus certain editing costs and a small profit. However, at any price, it is not logical for the translator to bear the additional publishing costs after six months of translation work. However, the editor pushing for the publication of the autobiography proposed that he bear half of the initial costs, and we would publish it[28]. If the book sold well, a substantial portion of the out-of-pocket expenses would be returned. Thus, the decision was made to publish Kornai's autobiography. I explained the publishing scheme to Kornai, and he said he wouldn’t ask for any copyright fee. Sixteen months after the publication of the Hungarian version, the Japanese version was published in 2006. This was the first foreign translation of Kornai's autobiography.

Contrary to expectations, the publication was a great success as a professional book[29]. Four national daily newspapers published reviews of the book, and major economic weekly magazines also featured Kornai's autobiography in their book review sections. Especially, in the Nikkei newspaper, Professor Aoki took up a large page to introduce Kornai's autobiography. As a result, Kornai's autobiography was ranked in the top ten out of approximately 800 economic books published in Japan in 2006 in the Weekly Economic Review's annual ranking of economic books based on a poll of experts. The book was also profitable for the publisher, which recouped a significant portion of the initial costs incurred by the translators and editors. For the publisher, the publication also earned the honor of being ranked in the Top Ten.

To digress, in 1991 and 1992, after the regime change, I was asked by the Nikkei newspaper to prepare an "expert commentary" on Kornai's winning the Nobel Prize in Economics. However, that comment was kept in storage. With the publication of Kornai's autobiography, I thought that

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[28] Of course, it was a personal understanding between me and the editor that the editor would cover part of the expenses.
[29] Despite its success, the number of books sold was limited. The actual number of copies sold was about 1,500, but for a book priced at nearly $50, the initial expenses can be covered by selling 500 copies.

once again, the Nobel Prize in Economics might budge, but it did not happen. I do not believe that the Nobel Prize in Economics is worthwhile, but I do believe that Kornai economics played a significant role in the ideological role of regime change. For that alone, it is worthy of the economics prize, but once again we find that mainstream economics has very different tastes. After the system transformation, Kornai began writing works that seemed to have a close affinity with mainstream economics. However, it would have been better to continue to make his position against mainstream economics clear, as he did in his early works. I think compromising with mainstream economics halfway through weakened the uniqueness of Kornai economics. This chapter starts with this doubt.

Kornai's Research History

In the 1950s Kornai wrote his doctoral candidate thesis on the criticism of centralized economic management, in the 1960s he explored the possibilities of mathematical economic models, in the late 1960s and 1970s he turned to the criticism of general equilibrium theory, in the late 1970s - 1980s he conceived of "economics of shortage", in 1990s in the wake of the system change he began to make proposals for economic policy in the, and in the 2000s he published a treatise on the comparative consideration of capitalism and socialism. Kornai's theoretical reputation changes depending on the era focused on.

Kornai first came to international attention after his doctoral candidate thesis on a critical examination of centralized economic management published in English, 1957. In a socialist society, where there was strict control over speech, the publication of a treatise that could be interpreted as a criticism of the system, and its introduction to the Western world, led to Kornai's name becoming known among socialist researchers.

Later, in the 1960s, Kornai changed his research area to the world of mathematical economics through joint research with mathematicians, to secure his position in the international academic world. However, as a non-mathematician, Kornai couldn't create a mathematical model for planning problems. Therefore, by cooperating with a mathematician, Kornai came up with the idea, and mathematician Tamás Lipták turned it into a mathematical model. Among their works, the "Two-Level Planning"[30] attracted attention as an alternative to the Dantzig-Wolfe linear programming decomposition method. This paper, which discusses a decomposition method for large-scale linear programming problems, is still considered a classic paper in this field. It was Lipták who carried out the mathematical formulation of this applied mathematics paper. Nevertheless, this paper brought Kornai to the attention of the world of mathematical economics.

[30] J. Kornai, T. Liptak (1965), pp. 141–169.

However, it was an overestimation to consider Kornai a first-class mathematician.

He must not have felt comfortable being called a mathematical economist because of his mathematical models. Furthermore, Kornai, who had doubts about the practical effectiveness of mathematical analysis, could not have consider various mathematical models detached from real economic problems effective. Having given up mathematical modeling, Kornai turned his attention to criticizing general equilibrium theory, which was at the peak of mathematical economics in the late 1960s. This work resulted in the *Anti-Equilibrium* (*Economics of Anti-Equilibrium*).

As Kornai recalls, this work caught the attention of the leading figures in mathematical economics, K. Arrow and T. Koopmans[31], and Kornai's name became known among neoclassical mathematical economists. With this work, Kornai gained a certain position in the international world of economics. It was also around this time that he met Prof. Uzawa and Prof. Aoki at Stanford University. *Anti-Equilibrium* was seen as an ambitious experiment and a challenge to mainstream economics, and it drew the attention of many economists to Kornai's research. *Anti-Equilibrium* is not a completed theory, but a conceptual work, but it is an ambitious work that shows the direction that economic analysis should take. Therefore, attention was focused on what grand theory could be constructed from *Anti-Equilibrium*[32].

Kornai's next goal was to construct a system for analyzing socialist economies from the perspective of *Anti-Equilibrium*. There is no equilibrium in the real economies, and what is observed is a general surplus in capitalist economies and a general shortage in socialist economies. Kornai's task was to depict economic systems using the concepts of surplus and shortage, which are non-equilibrium concepts. This culminated in his 1980 book, *Economics of Shortage*. Kornai aimed to construct a general theory of socialist economics using "shortage" as a key concept.

There should have been a debate over the theoretical validity of Kornai's *Economics of Shortage*, but things did not go in that direction. The long-term stagnation of the socialist economy led to a change in the system. It became clear that the lifespan of the socialist economy was coming to an end, and that the existing Communist Party power had no power to stop the trend of social change. In the 1980s, fundamental social change began in the socialist countries in Central and Eastern Europe. In the midst of this social movement, Kornai's *Economics of Shortage* came to play an ideological role in social change.

In every age, social change requires not only a rise in social contradictions to a level that

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[31] For neoclassical mathematical economists, Neumann was a special figure. They saw the shadow of Neumann in the mathematical model of Kornai-Lipták, (also of Hungarian origin), and this aroused their interest in Kornai.

[32] For Kornai it was rather unfortunate that economists interested in *Anti-Equilibrium* did not promote research in the same direction. The attempt to develop a disequilibrium theory that would contribute to the elucidation of reality was extremely difficult. Kornai was forced to fight alone. Compared to the initial high level of interest in Kornai, there was no continuation of research aimed at developing his theory, and this led to a decline in interest in Kornai's theory. Kornai couldn't become 'Neumann' in social sciences.

prompts people to act but also an ideology to guide that action. "As long as Communist Party rule continues, there will be no economic development, and the normalization of commodity shortages will not be resolved." The theoretical basis for this understanding was Kornai's *Economics of Shortage*. Like Marx's *Capital*, Kornai's *Economics of Shortage* was not a book for the public. Even intellectuals who talked about Kornai probably never read his work thoroughly. However, by conveying the messianic message that "as long as socialism continues, there will be no escape from the economy of shortage", Kornai fulfilled the role of ideology in making people aware of the need for a change in the system. It was this ideological message from Kornai that accelerated the debate on economic system reform in China in the early 1980s. The practical sense of urgency that China's poverty could not be solved without a bold transition to a market economy spurred economic reform in China and led to the abandonment of Soviet-style socialist economic administraation. Kornai did not present any concrete reform proposals. Rather than Kornai providing a guideline for reform, the messianic message of *Economics of Shortage* was used as the ideology of economists who promoted economic reform in China.

It is not true that economic or social theory is read by many people and then forms ideology. Rather, it is the case that the implications of theory become the ideology of social change when activists responsible for social change turn these implications into slogans. Both Marx's *Capital* and Kornai's *Economics of Shortage* have played such a historical role. Marx's theory became the theoretical background of the ideology that pointed out the path from capitalist society to socialism, while Kornai's theory became the theoretical background of the ideology that encouraged a return from socialism to a market economy and capitalist society.

Of course, there is no direct relationship between the correctness of a theory and the revitalization of a political movement. There is no direct relationship between Marx's *Capital* and Lenin's revolutionary movement. Likewise, although the message of Kornai's theory has been used as a slogan for social change, the validity of Kornai's theory as an economic analysis must be considered separately from its ideological role.

After the regime change, Kornai began to make various policy proposals. Kornai looked back on the events of 1956 and, as an experienced economist at the time of the 1989 regime change, he was proud that he could propose far more appropriate reform policies than in his inexperienced youth. However, being a theorist skilled at constructing abstract theories does not necessarily mean that he is also a good policy advocate. Policy advocacy requires a variety of experiences in social life and a cool-headed observation. No matter how long Kornai lived in the American society, there are not many things that a theoretical economist can experience in actual social life. One can construct abstract theories in a university research lab, but one cannot make accurate policy proposals without knowing the reality of multifaceted social life.

Similarly, a realistic policy cannot be proposed based on a single theoretical proposition. Some

economists draw the simple conclusion that "the problem will be solved if the budget constraint is made hard" from Kornai's single proposition of "soft budget constraint", but this is a mistake. It is a mistake to equate reality with abstract propositions and directly link abstract theoretical propositions with policy proposals. Simplifying real world problems does not contribute to solving them.

Furthermore, in his later years, Kornai published several articles based on a simplistic dichotomy between capitalism and socialism. As people get older, their thinking becomes more simplistic. In this respect, ordinary people and academics are no different. However, is Kornai's simplistic dichotomy due to his dulled thinking, or is it due to his way of thinking and analysis? We will not explore this issue in depth in this chapter, but it is one issue that should be considered.

How was the *Economics of Shortage* received?

Kornai believed that 'shortage' was the key concept for analyzing socialist economies. This idea of Kornai (the starting point of his theory and the title of his book) was taken from Marx's *Capital*[33].

Marx placed the analysis of commodity production at the starting point of his theory, and he conducted a brilliant analysis that logically elucidated the historical development of the evolution of barter into commodity production and the creation of money. The method of constructing historical processes as logic is a social philosophical method based on German philosophy.

Following Marx, Kornai also places the key concept of 'shortage' at the starting point of his theoretical construction. However, his method of constructing theory is completely different from that of Marx. Kornai does not make any clear statements about his method of constructing theory, but he does not adopt the social philosophical method of analysis used by Marx. For example, he rejects analytical methods such as "extracting the essence from the phenomenon". Kornai, who was once devoted to Marxism but broke with it in the wake of the 1956 uprising, rejected the theory of labor value and rejected prophetic conclusions such as the theory of impoverishment. As Kornai later said, it is more accurate to say that he rejected the Marxist doctrine of political movements than that he abandoned the Marxist theory of social composition[34]. Kornai criticizes

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[33] When I expressed this view regarding my evaluation of Kornai's theory to Ernő Zalai, he said "this point is not wrong", since Kornai had indeed once mentioned to him that he had taken the idea from Marx' *s Capital.*"

[34] In 2008, Kornai was invited to speak at the 80th anniversary of Kanagawa University, where he elaborated on his relationship with Marxian theory. Kornai's commemorative lecture was entitled "Marx through the Eyes of an East European Intellectual" and is included in his Hungarian-language book 'Gondolatok a kapitalizmusról' (Akadémiai Kiadó, 2011).

Marxists for abandoning the practice of checking Marx's propositions against reality. He emphasizes the importance of starting with facts and developing an analysis from there, including the processing of scientific data (including mathematical processing). Therefore, Kornai thought that the social philosophical method of analyzing the ‘essence’ that exists behind various social phenomena was not scientific. Kornai thought that the analytical expression of "phenomenon and the essence underlying it" was Marxist and that it could be used figuratively, but not as an analytical method. In this sense, he shared the same belief as neoclassical mathematical economists that social philosophical analysis (political economy[35]) based on the German philosophy was not a method of science.

However, as we saw in detail in Chapter I, it cannot be said that "using mathematics and statistics in economic analysis is scientific and at the same time an analysis of facts". On the contrary, in contemporary mathematical economics, model analysis and mathematical statistical analysis that do not obtain any refutation from facts cannot be said as a social science.

The economics of shortage can be said to be a "phenomenology of shortage" in the sense that it describes the causal relationships that give rise to and reproduce shortage. The social philosophical analysis of what essential relationships give rise to shortage was excluded from the outset. This work reveals Kornai's true value in thoroughly analyzing causal relationships. This work attracted the attention of intellectuals living in socialist societies, but it is difficult to say that it was highly regarded in the international world of economic theory. It failed to attract sufficient attention from both mainstream economics and Marxian economics. Why is that?

Firstly, for mainstream economists, economic issues in socialism were not a primary concern, and they did not even consider the strange concept of ‘shortage’ to be a main subject for economic analysis.

Secondly, in contemporary economics, the focus is on model analysis of individual phenomena and issues, and grand theories that target the entire economic society are not the subject of debate. This is because they make it essential to have a social philosophical discussion on how to view the economic society. For contemporary mainstream economists, who have excluded social philosophy, this kind of discussion is outside the scope of economics. Consequently, it is plausible that there are very few mainstream economists who have read Kornai's *Economics of Shortage*. Of course, excellent social theory will eventually attract attention, but the fact that the subject is limited to socialist economies has prevented it from

[35] The recognition that political economy is not an economic science, but is instead philosophy or sociology, is a common perception among mainstream economists. On the other hand, Kornai's theoretical position was recognized as belonging to the institutional school within mainstream economics. The institutional school does not have a high status within the Econ tribe.

gaining wider interest.

Thirdly, unlike the classical era of economics, in contemporary economics, where the application of mathematical models to analyze individual phenomena is popular, the impact of economic analysis on social change was not considered. Therefore, there was no evaluation mechanism in mainstream economics to measure the impact of Kornai's theory on system reform in China and the collapse of the socialist system in Central and Eastern Europe. This was the main reason for his failure to win the Nobel Prize in Economics in the early 1990s.

Fourth, because Kornai's analysis of socialist economies was so far removed from traditional Marxist analysis, it did not attract the attention of so-called orthodox Marxist economists. They didn't have an interest in reading the *Economics of Shortage*.

Fifth, for Marxist economists interested in Kornai, it is thought that his analysis lacks a political-economic analysis or a social-philosophical methodology like Marx's. Therefore, Kornai would be criticized for not being a successful analyst of socialist economies as only tracing the causal relationships of shortage.

Regarding this last point, Kornai states that he engaged in self-censorship in writing *The Economics of Shortage* and therefore he couldn't step into an analysis of political power. In *The Socialist System* (1992), which supplements the *Economics of Shortage* and is a theory that encompasses the entire socialist system, he touches on topics such as Communist Party power, ideology, political freedom, and the possibility of reforming the system. Kornai clearly changes his analytical method from the 'pure' economic to the political-economic argument[36]. This was an essential attempt to analyze the entire economic society. Kornai, who had once rejected Marxism, couldn't find a social theory to replace Marx's theory of social formation (Gesellschaftsformation). Therefore, if he aimed for a political economic analysis, he had no other choice but to return to Marx's social theory. However, rather than adopting a social philosophical approach as an analytical method, he aimed to construct a theory that covered the whole of society by expanding the scope of his analysis from the economic field to the political field.

In any case, while *Anti-Equilibrium* attracted the attention of mainstream economists, these same economists showed little interest in the *Economics of Shortage.* On the other hand, there was a great deal of interest in Kornai's theory among economists in the socialist bloc and those who were interested in the future of socialism. *The Socialist System*, which Kornai aimed to

[36] Before Kornai visited Japan in 2008, I gave him a short memorandum on his theory. Kornai emphasized that my point that "*The Socialist System* is a return to Marx's theory of social formations" was incorrect, saying that "Marx thought that the lower structure of society determined the upper structure, but this book implies that the upper structure acts on the lower structure." The idea that the economic foundation unilaterally determines the political superstructure is a dogmatic (fundamentalist) understanding. The understanding that the economic foundation and the political superstructure are relatively independent of each other and interact with each other, or that the political superstructure acts on the foundation, is also based on the understanding of the social construct 'foundation-superstructure'.

finalize his theory, became a political economy that transcended the realm of mainstream economics, and a work that was outside the scope of neoclassical economics.

Normative Interpretation of 'Soft Budget Constraint'

The world of contemporary economics is in an unfortunate situation as a social science. Rather than studying various solutions to real economic problems, economists are more interested in how to create elegant models. They are always looking for problems (themes) suitable for model analysis. They do not care about the importance of the problem, or about what kind of real-world relationships the problem has if it can be modeled mathematically. If a problem can be formulated as a smart mathematical model, it will be highly evaluated as a paper regardless of its actual importance.

This tendency is also clearly seen in the evaluation of Kornai's *Economics of Shortage*.

For mainstream economists today, Kornai is not known as the author of *Anti-Equilibrium* or *Economics of Shortage*, but as an economist who proposed the concept of "soft budget constraint". A single concept, discussed under a subheading in one of the chapters of *Economics of Shortage* was taken and treated as if it were an important concept in contemporary economics.

It is a strange phenomenon. However, it is interesting as a symbolic example of the trivialism and normative theory that modern economics has fallen into.

The issue is discussed in just a few pages in the book. Nevertheless, without being evaluated for its theoretical system, it caught the attention of mainstream economists. Originally, the concept of "budget constraints for firms" in microeconomics is an abstract fact. It is a representation of the general fact that capitalist firms operate under budget constraints. In other words, the observation that the budget constraint is hard in capitalist companies but soft in socialist companies is a representation of an abstracted fact.

In actual capitalist companies, the budget constraint can be flexible through bank loans and the issuing of corporate bonds. Being hard is only one aspect of the truth. On the other hand, in socialist economies, where the capital market does not function, the deficits of state-run companies are covered by bank loans or state subsidies. In socialism, there is no established system of loan discipline, so loans can easily be converted into subsidies, and there is a system in which the state covers the bank's deficits.

The debate over whether budget constraints are hard or soft is not so much an analysis of the facts as it is a debate about the abstract ideas of economists. Kornai metaphorically characterized capitalist companies as hard and socialist companies as soft, which symbolically shows the differences between the two types. This is a clever metaphor, but it is not a deep analysis that clarifies the essence of the problem. Without developing a deep discussion of why soft

management is common in socialist companies, only the interpretation of representational facts became the subject of discussion. This witty contrast became the subject of modeling by mainstream economists. The soft budget constraint was generalized as "a problem of inconsistency in which the conditions set at the beginning of a game are changed during the game," and it was modified into a normative proposition that explains the behavior patterns of game theory, various organizations, and public organizations as the "soft budget constraint syndrome."

In this way, the "softening of budget constraint" was incorporated into the glossary of neoclassical economics and was upgraded to a normative concept of behavior that refers to "behavioral patterns that lack consistency". Kornai himself was satisfied that the metaphor he had developed had become a normative proposition discussed by mainstream economists, and he was actively receptive to its development into game theory. However, this kind of discussion is exactly the kind of normative analysis that Kornai criticized in *Anti-Equilibrium*. Kornai must have felt uncomfortable that, rather than evaluating the entire theoretical system, one metaphor within the theory was being treated as if it were the greatest discovery of Kornai's theory. Furthermore, it is also strange that the supporters of Kornai's theory all treat the "softening of budget constraint" as if it were one of Kornai's greatest theoretical contribution.

The causes of the softening of budget constraint vary depending on the type of organization or the activity environment. Without analyzing each condition, it is difficult to find the true causes of the softening and the issues involved in overcoming it. However, economists looking for themes that can be modeled take the behavior of inconsistency as a normative proposition and try to understand various facts from this norm. Rather than obtaining a certain conclusion from the analysis of facts, they find the behavior of subjects and organizations that conform to the established norm, model it, and interpret it. Factual analysis requires a lot of time and effort in collecting and analyzing data, but this type of normative analysis can be mathematically modeled if you have the right idea. This is the way of study and evaluation system in contemporary economics. Finding a topic for writing thesis is a daily challenge. Finding a topic that can be modeled and then creating a mathematical model is a common technique used by mathematical economists of the neoclassical school.

Normative Approaches to Understanding System Transformation

Topics related to system transformation discussed by neoclassical economists include the speed of reform and understanding of corruption. The discussion on "radical reform vs. gradual reform" in shock therapy and the speed of privatization became very popular topics involving many neoclassical economists. The debate on explaining the phenomenon of corruption in terms

of rent-seeking is another topic concerning understanding corruption in transition countries. These topics became the subject of mainstream economic modeling that abstracted away the factual content (without analyzing the actual issues).

G. Roland constructed a model and compared the two models in terms of radical privatization versus gradual privatization. This is not a study based on an analysis of the facts, but a normative model analysis[37]. The conclusions drawn from the normative analysis are compared with arbitrarily selected real data to examine whether the analysis is supported or not. This argument does not reflect historical reality at all. To begin with, the privatization of socialist industrial enterprises, which lacked capital, technology, and management skills, was unfeasible, and the only option for most socialist industrial enterprises was to be liquidated. Privatization discussion in Central and Eastern Europe that ignores this historical fact lacks practical relevance.

Privatization without the introduction of foreign capital cannot succeed, and the radical coupon privatization implemented in all countries failed. Even if one can buy and sell uncompetitive socialist industrial enterprises in a 'monopoly game', one cannot transform these enterprises. This is a historical fact. Those who praised coupon privatization as radical privatization failed to understand that privatization in former socialist countries took place in a completely different historical environment than that in capitalist economies. Research focusing on building models in a laboratory far removed from the actual situation is a fanciful discussion having no relation to the facts. The idea that you can get answers by creating a mathematical model without investigating and analyzing the facts is commonly observed in neoclassical economics. This kind of a priori normative argument does not contribute to solving real world problems. This is the fundamental problem of contemporary economics.

For researchers who think in their laboratories far away from Central and Eastern Europe, it is enough if they can create a clever model. The debate over whether to pursue a radical or gradual policy has become a favorite topic for Western European and American economists[38] and has even been abstracted into a philosophical debate[39] over whether we should be radical or gradual. If the discussion on 'the speed of reform' becomes so generalized, it can be applied to the debate on "Which is better for our health, walking or jogging?" This is a classic example of an argument divorced from reality becoming an empty proposition. It is a symptom of the decline of economics.

Similarly, rent-seeking theory does not analyze the reality of corruption and classify it but rather deals with real-life corruption as an example based on general norms that have been set up

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[37] G. Roland (2000).

[38] I. Iwasaki ed. (2020). See Chap. 2. This is a huge collection of literature on this theme, classified by date and theme.

[39] K. Arrow (2000), pp.9-18. Arrow's argument does not distinguish between the radical macroeconomic policies to suppress hyperinflation immediately after the regime change and the radical privatization policies, as typified by coupon privatization. These two policies are completely different and should not be understood simply in terms of the speed at which they were implemented. The further away we get from the actual issues involved, the more abstract and meaningless the discussion becomes.

conceptually. It is an analysis that subordinates facts to normative propositions and is a case of putting the cart before the horse. It is typical of normative analysis to abandon the difficult task of investigating and analyzing the reality of corruption and to judge which pattern a real corruption phenomenon fits into based on a priori-set criteria.

As discussed in the previous section, the approach of viewing Kornai's soft budget constraint as "soft budget constraint syndrome" and trying to find examples of this is also a normative analysis. Although Maskin et al. argue that the discussion on the soft budget constraint is an empirical debate[40], it is a normative debate about abstract facts. The "softening" phenomenon in each management body or organization has its specific causes. Unless each of these is analyzed individually, it will not be possible to indicate a solution to the problem.

This is like the medical example that determining the name of a disease (syndrome) does not mean that the cause of the disease has been identified. Merely assigning a name to a disease based on the commonality of its various symptoms does not mean that the cause or mechanism of the disease has been clarified. Even if the symptoms are similar, the causes are often different. Unless we can explain how each symptom arises, only naming has no use in treatment. In medicine, unless the mechanism of action is clarified, it cannot be said that the medical treatment of the disease (syndrome) has evidence. In the same way, even if we list similar phenomena in the economic society, it does not mean that we have clarified each phenomenon.

Contemporary economics puts normative analysis first, and once a certain normative proposition is established, it is thought that the tools for clarifying the facts are in place. In his article discussing the pros and cons of radicalism, Arrow concludes as follows:

"**Drastic changes in economic organization, even if in the direction of reducing state power, cannot easily be imposed. To use a term suggested to me by Rudolf Richter, institutional change is expectation-dependent as well as path-dependent**."

Arrow himself supports gradualism in the sense that he is negative about big-bang solutions (radical policies), but this last sentence best expresses neoclassical normative theory. Arrow concludes that "since institutional change is expectation-dependent as well as path-dependent, drastic change is not easy (so it has to be gradual)."

In neoclassical economics, a method of understanding reality is to devise normative concepts explaining individual events and to connect related concepts. The expectation-dependent and the path-dependent are concepts that focus on the historical past before the problem occurred and show that conventional expectations or paths largely determine the present. These terms are communication jargon within neoclassical economics and are the common language used by neoclassical economists. When discussing real world issues, they serve the role of understanding

[40] Kornai-Maskin-Roland (2003), pp. 1095-1136.

the issue in question by combining several jargon terms without analyzing the facts. They are truly the Econ language of the Econ tribe.

A similar neoclassical jargon is the so-called Washington Consensus of Williamson. This is a summary of the ten-point policy axis for supporting developing countries by the IMF and World Bank[41]. The shock therapy implemented by J. Sachs of Harvard University in partnership with Balcerowicz when Poland fell into hyperinflation included almost the entire policy package of Williamson and is often cited as a successful case. However, Poland was the only country to fall into hyperinflation in central Europe, and it was necessary to implement emergency policies to bring the hyperinflation under control in a short period. This kind of shock therapy was not adopted by other Central and Eastern European countries. This means that there was no discussion on employing shock therapy in these countries.

However, regardless of the historical facts of Central and Eastern Europe, the term Washington Consensus has become synonymous with the neo-classical policy package that should be adopted when providing economic assistance to developing countries. In other words, it has become an expert term that refers to the normative policy system of neo-classical economics, which could be called the "Ten Commandments of Williamson".

Although there is no systematic economic and social theory in neoclassical economics, it creates normative propositions from the facts and explains actual economic and social problems by combining them. In this way, it is thought to be possible to understand all the economic and social systems of the world from Washington or university laboratories without having to go through the process of collecting data and analyzing facts on the ground. Thus, neoclassical economics had become a normative theory that allowed us to understand everything in the world in our heads, just like Marxist theory. J. Sachs made a good amount of money advising the Polish government using the neoclassical package. Similarly, some macroeconomists who won the Nobel Prize in Economics have been invited by the Japanese government or have become contributors to national newspapers, earning high fees. They gave advice based on standardized normative policies without analyzing the current state of the Japanese economy in detail[42].

Neoclassical economics creates the illusion that reality has been clarified by classifying facts according to established normative propositions. However, this is nothing more than an illusion. As Kornai says, Marxism declined because it tried to understand the world through Marx's propositions rather than addressing real-world problems. In the same way, neoclassical economics

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[41] The ten policy areas listed by Williamson are as follows: fiscal discipline, redirection of public expenditure priorities, tax reform, interest rate liberalization, competitive exchange rate, trade liberalization, liberalization of inflows of foreign direct investment, privatization, deregulation, and secure property rights. Williamson announced this common package of policy support in 1989 and has since announced a revised version (https://www.piie.com/commentary/speeches-papers/what-washington-means-policy-reform).

[42] For criticism of the lecture by Stiglitz in a Japanese governmental committee, please see Chapter VII. Krugman (P. R. Krugman) praised Abenomics, which is discussed in Chapter VII, but later criticized the policy.

has also reached the hubris of thinking that the world can be understood by creating a system of norms. This is why it is called neoclassical imperialism.

Normativism is the pedantry pervading contemporary economics, a normative analysis that neglects factual analysis. It is strange to be pleased that the "soft budget constraint" has been incorporated into the pedantry of neoclassical economics.

Rethinking Marx's Social Theory: Apoptotic Society and Necrotic Society

Since contemporary economics does not have a theoretical framework that can capture the whole of economic society, if we try to develop a political economy that includes power relations, we will inevitably end up with Marx's theory of social formations. It is no coincidence that Kornai returned to Marx's theory of social formations in *The Socialist System*.

However, a question arises here. Can the collapse of socialist systems at the end of the 20th century be explained by Marx's theory of social formations? This poses a critical question for Marx's social theory. It not only calls into question the validity of Marx's social theory but also questions sustainability of socialist societies as the self-reliant entity. If it was an unsustainable economic society, how can we understand 20th century socialism from Marx's social theory[43]? Furthermore, as an implication of this question, the question "If the existing socialist society was an unsustainable economic society, is it possible to establish a systematic theory (grand theory) for such an economic society?" is raised.

If we set 1989 as the year of the collapse of Soviet and Eastern European socialism, then it means that Soviet socialism only lasted for 70 years, while Eastern European socialism only lasted for 40 years. Even though the Soviet Union lasted for 70 years, there was a world war in the middle, so the lifespan of peaceful socialism was even shorter. In any case, we need to debate whether a society that collapses after 40-50 years can be called a self-sustaining social entity.

Capitalist societies based on market economies have a solid, self-sustaining economic foundation. They are capable of continuous reproduction, function independently, and have the basic power to change themselves developmentally. In contrast, the economic foundations of 20th century socialist societies, which suppressed market-based freedom and operated under top-down government control, were weak, and instead of developing and functioning on their own, they followed a path of self-destructive decline. While capitalist societies have demonstrated a flexible ability to adapt, socialist societies have only had a very rigid, handicraft-like ability to adapt, and

[43] Not only have the communist parties of Western Europe disappeared, but there are now very few advocates of Marxism, so it is impossible to confirm a common view on this issue. The only political party in the developed world with any influence, the Japanese Communist Party, has stated that “the fundamental cause of the collapse of 20th century socialism was that it deviated from true socialism”. This argument is merely an “excuse” for failing to investigate the issue.

have gradually deteriorated.

What were the principles that governed the economic management of 20th century socialism? In the Soviet Union, which established socialist power, various material balances were created, and attempts were made to develop means of planned management. However, this was an attempt to create a national economic plan using pencils and paper, and it was impossible to formulate and implement a workable economic plan using simple and naive methods. Even after the socialist regime was established, it was only possible to nationalize companies and thoroughly suppress the market economy, but it was not possible to formulate and implement an active and sustainable economic planning. At best, it was only possible to create a wartime mobilization-style project. What this means is that, in practice, economic planning was left in the hands of the Politburo, and the reality of the socialist planned economy was managed by the Politburo. It is presumptuous to call socialism a planned economy. There is no way that an economic plan decided by the Politburo could be sustainable.

However, as a practical matter, the Communist Party could not utilize planning or progress management tools. This was the historical limit of economic management in 20th century socialism.

The only planning tool in the first half of the 20th century was the experience gained from the wartime rationing system during World War I. Socialism, which emerged in the 20th century, the century of war, couldn't break free from the economic management based on the rationing system from beginning to end. In other words, 20th century socialism couldn't shed its wartime socialist character, and its political and economic systems were imitations of wartime controls. This was what decisively defined 20th century socialism.

From its birth to its death, 20th century socialism was unable to change its character as wartime socialism, and its economy was nothing more than a controlled economy that mimicked a wartime economy. The essence of this system can be defined as "allocation (quota) economic management"[44]. This type of management system has the following characteristics[45]:

1. Communication is one-way (unilateral), and transaction language is based on a physical unit.
2. The goods distribution system requires bureaucratic (hierarchical) organization.
3. The hierarchical relationship between organizations is dependent on personalities in the sense that specific human relationships are brought about and have an uncivilized nature.
4. Organization is a closed system with secrecy.
5. Dependence on and subordination to authority become dominant in social behavior.

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[44] This is not limited to a direct distribution system for goods but refers to the entire mechanism for the distribution and coordination of goods from above.

[45] For details, please see Morita (2014) 33.-35. old.

6. The complexity of social activities declines and degenerates into simplicity.

7. Both organizations and individuals follow a trend of deterioration and degeneration and are self-destructive.

I define a socioeconomic system that is sustainable and has the potential for self-development, such as a market system, as an 'apoptotic society', and a wartime-controlled society based on a distribution system such as 20th century socialism as a 'necrotic society'. While the apoptotic type resolves internal contradictions developmentally, the necrotic type self-destructs due to internal contradictions.

In cell biology, there is a distinction between cell death (apoptosis) in which old cells die and help to generate new cells, and cell death (necrosis) in which old cells die but no new cells are born. In the same way, there are human societies that progressively resolve problems and societies that degenerate and collapse in a self-destructive manner. Using this analogy, "20th century socialism has died in a necrotic way". Marx constructed his social theory around the developing apoptosis-type society, but he never considered a necrosis-type society like 20th century socialism. The fact that socialist society, which was supposed to have been born as an apoptosis of capitalist society, followed a path of necrosis (necrosis), is an extremely paradoxical outcome.

While Marx could develop a theory of how money and then capital is born from the internal contradictions inherent in commodity production and exchange, Kornai's approach was phenomenological, examining the causal relationship between the creation and reproduction of 'shortage'. Kornai's aim of creating a 'capital theory' of socialism was not achieved. This was because the subject itself was not an existence that would allow dynamic logic to develop. Although it is to be commended that the *Economics of Shortage* brought to light a typical example of wartime distribution, it failed as a grand theory of socialism.

On the other hand, since Kornai rejected the traditional Marxist social theory, he needed to develop an alternative social philosophical approach. However, because Kornai rejected the methodology of analyzing essence from phenomena, he could not carry out his deep social-philosophical analysis, and in his political and economic analysis he had no choice but to revert to the traditional Marxist social theory.

Concessions to Mainstream Economics

In the American economics community, where neoclassical economics is strutting its stuff, political economy analysis is not a weapon to secure a position. While mathematical models such as two-level programming may be highly regarded, political economics such as *The Socialist System* is not. Under such circumstances, certain theoretical concessions must be made if one tries to attract the attention of mainstream economics. That would be a concession to mainstream

economics. The debate over "soft budget constraint" was one such example.

Did Kornai welcome the development of "soft budget constraint" as a neoclassical model? Did he think that accepting game-theoretic developments was the way to secure his position in mainstream economics? Was there any theoretical compromise there? Was he not impatient with not being fully recognized by mainstream economics, even though he was considered a candidate for the Nobel Prize in economics? Since his political economy analysis was unpopular with neoclassical economists, he might have welcomed the fact that "soft budget constraint" could at least be discussed as a mathematical model favored by mainstream economists. In this respect, Kornai's methodological attitude is not consistent.

Another thing that concerns me from the perspective of mainstream considerations is that he named the economic crisis in system transformation as a transformational recession[46]. In my 1994 book, I defined the economic situation in transforming countries as an "economic crisis of system transformation" or an "economic crisis of system collapse"[47]. This is because a 30-50% drop in industrial production, price increases ranging from tens to thousands of percent, and a 30-50% drop in GDP is nothing but an economic crisis that can hardly be compared to a business cycle recession. However, Kornai named this situation a recession. He avoided a term that would evoke Marx's theory of crisis (Krise). This may be the result of his concession to mainstream American economics.

Kornai's paper lacks a keen historical awareness and is generally lackluster. He cites a shift from a seller's market to a buyer's market, a change in the size distribution of firms, a failure of market coordination to replace bureaucratic coordination, and the backwardness of the financial sector as causes of the recession. The narrative is redundant and lacks clarity. It fails to make clear that the collapse of the industrial sector due to the bankruptcy and liquidation of state-owned industrial enterprises is the essence of the economic crisis.

The economic crisis that immediately followed the system transformation and the years that followed, was not a phase of a business cycle. It is a long-term socio-economic crisis in the process of the collapse of one regime and the establishment of a new one. Overcoming this crisis will not be accomplished through ordinary measures such as government fiscal stimulus, interest rate change, or exchange rate adjustments. It is a crisis that will force a fundamental transformation in the economic structure[48]. The economic crisis required a long-term structural

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[46] Kornai (1994), pp.39-63.

[47] Morita (1994), p. 180. This book was published as volume 20 of the New Economics Library, which was compiled as a university textbook.

[48] Shock therapy in Poland is not a system transformation policy, but an emergency macroeconomic stabilization policy to control hyperinflation. In Poland, the system's transformational policies were gradually implemented after macroeconomic stability had been achieved. Therefore, it is a mistake to say that the Polish system reform was radical. The 'radical vs. gradual' argument, which does not distinguish between the transitional issues in a short time and a long-term structural transformation, is a fictitious argument that ignores historical reality. Poland's privatization policy

transformation that took 10 years in Central Europe and 15 to 20 years in the former Soviet republics. During this process, the socialist industry collapsed and was replaced by foreign companies with direct investment from the West. The financial sector also underwent a general ownership transformation. Even after 30 years of the system transformation, more than 50 % of financial institutions are owned by foreign firms in many transition countries.

Given this historical process, the economic crises of the transition countries in the 1990s and 2000s were the result of the collapse of large socialist enterprises, and the recovery by domestic capital was not possible. To view this as a ‘recession’ is an argument that ignores the dynamic historical and structural changes.

As will be recounted in Part IV, the collapse of socialist enterprises brought about an economic crisis that could not be remedied by privatization as conceived in the capitalist economy. Socialist enterprises that could not compete with capitalist enterprises in capital, technology, or management had no other choice but to disappear. However, if the major industrial companies collapse, the clues to reestablish the national economy will also disappear. I have named this insoluble contradiction the "aporia of system transformation".

If the industrial enterprise collapses, it will return to nothing. How can the economy be restored from nothing? Economic recovery was tantamount to "creating something out of nothing". However, something cannot be created from nothing. This is an ‘aporia’.

This aporia cannot be solved by privatization based on the capital market as Western economists conceive. Before discussing the speed of privatization, there were no economic conditions for successful privatization, which had no capital market and limited participation of foreign capital in the first place. Coupon privatization was considered a radical privatization strategy. However, the scheme is a game of Monopoly in which state-owned enterprises are bought and sold for domestic savings. No one can revive a company in a game of Monopoly. It was no surprise that coupon privatization in all countries failed[49]. The ultimate solution to the aporia of creating something out of nothing was foreign direct investment (FDI, foreign direct investment).

Without understanding the dynamics of this historical reality, it is a moot point to discuss the speed of privatization and economic cycles. Kornai had a mission to convey the historical facts of Central and Eastern Europe to the world of mainstream economics, but he failed to do so. Of course, mainstream economics is not interested in historical realities such as privatization that cannot be modeled. Such analysis is merely a study of history in which mainstream economics

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went through a decade-long process of trial and error, and privatization was not completed until foreign capital was introduced.

[49] Of course, some became emerging industrialists by making huge profits from the insider trading of coupons. However, even those companies that barely managed to prolong their lives through coupon privatization had difficulty revitalizing their enterprises until foreign capital was brought in.

doesn't have any interest. This is an example that shows the difficulty of analyzing and understanding historical realities in contemporary economics.

Methodological Reflections by Kornai

Although few works by Kornai discuss his methodology, some essays discuss mainstream economics. Kornai (2011) in his preface[50] discusses the relationship between his analytical methods and neoclassical economics.

In this preface, Kornai describes his position as being half (one foot) inside neoclassical economics and half (the other foot) outside. This expresses the delicate position he occupies in the American academic world of economics. While he highly values the mathematical methods and statistical processing of neoclassical economics, he points out the weaknesses of neoclassical economics in terms of its analysis of the overall system. This latter point is also an expression of his dissatisfaction with the fact that his work, which attempted to capture the paradigm of society, was not always well received. However, his evaluation of the mathematical methods is somewhat lacking in clarity. It is an ambiguous evaluation that pays homage to mathematical formulation while, on the other hand, only pointing out that it is not necessarily an appropriate explanatory power. Many models of neoclassical mathematical economics constitute typical cases of normative analysis, but Kornai does not criticize the neoclassical mathematical models to be normative.

This ambiguity also applies to the distinction between ‘positive’ and ‘normative’ explanations in his preface. The methodological distinction between positive and normative analysis is clearly stated in *Anti-Equilibrium*, but in this preface, there is confusion between normative methodology and ethical norms. Kornai states that, while neoclassical economics does not make a distinction between ‘positive’ and ‘normative’ analysis, his research is based on normative evaluation in the sense that it expresses ethical thought. In this context, ‘normative’ is used in the sense of ethical norms, and not in a methodological way.

This methodological ambiguity is consistent with the welcome attitude toward game theorizing of the "softening of budget constraint". Kornai welcomed the direction toward game theorizing but failed to recognize that the modeling is a normative one. The overestimation of mathematical models has blurred the methodological distinction.

As Kornai describes, "softening of budget constraint" is a witty metaphor. In many of his writings, Kornai used metaphors and analogies to give readers concrete images: Paternalism, the contrast between bureaucratic and market coordination, and the welfare state born as a premature

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[50] Kornai (2011).13-25 old.

baby. What role do these metaphors and analogies play in economic analysis?

Metaphors and analogies are methods of representing abstract phenomena in a witty way, but they are not analyses. Social science study begins by analyzing the representations (Darstellung) expressed by metaphors and analogies. Mathematical modeling is not immediately a scientific method. Starting from the analysis of facts, and then elucidating the essential mechanisms that produce the phenomenon should be found. Research that does not start with an analysis of the facts is not useful for clarifying problems.

Natural philosophy has been replaced by natural science, but social and economic philosophy cannot be replaced by neoclassical economics. If economics excludes social philosophy, economics will not execute meaningful analysis as a social science.

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III.

Coincidences and Historical Reality
- "Oppenheimer" Movie and the Hungarian Scientists

The controversial American film "Oppenheimer" is difficult to watch without prior knowledge. It is not difficult to obtain information on the life of Robert Oppenheimer (1904-1967), as many books have already been published on the subject. Director Christopher Edward Nolan wrote the screenplay based on the book Prometheus: The Triumph and Tragedy of J. Robert Oppenheimer. The film seems to be sprinkled with devices and original ideas not found in the original work.

The film centers on the daily life of the Los Alamos Research Institute (established in 1943), which developed the A-bomb, and the Oppenheimer hearings (April 1954).

The film begins with Oppenheimer at the hearing. In line with what was pursued at the hearing, the film depicts Oppenheimer's research career and friendships, even his personal relationships with women, before he became the head of research and development at Los Alamos.

After the war, Oppenheimer left Los Alamos and returned to the university, and then he was appointed director of the Institute for Advanced Study at Princeton University in 1947 and was welcomed by Institute Trustee Strauss (Lewis L. Strauss[/ˈstrɔːz/ STRAWZ]). Strauss was the one who was jealous of Oppenheimer, prepared a document accusing Oppenheimer, and sent it to the FBI. Although Strauss succeeded in getting Oppenheimer exonerated at the Oppenheimer hearings (1954), his own appointment as Secretary of Commerce was rejected by a Senate resolution (1959) based on the hearings (which lasted two months) that determined his appointment as Secretary of Commerce. Oppenheimer's honor is later restored, and the film ends with him being presented with the Enrico Fermi Award at the White House in 1963, where scientists who testified against him at the hearings also come to celebrate.

Strauss's one-sided envy and hostility resulted in Oppenheimer's decertification. Strouse is a founding member of the Atomic Energy Commission (AEC, United States Atomic Energy Commission). Still, he is a businessman (investment banker), not a scientist who studied physics in college. His academic complexes greatly influence Strouse's actions. It is through his financial and political power that Strauss[51] was able to exercise such influence as becoming a trustee of

[51] In movies and various literature, Strauss is described as "a shoe salesman without a college degree who rose to prominence," but he is not that simple a man. His interest in nuclear power began when his mother died of cancer. When Strauss learned of the possibilities of radiation therapy, he sought the advice of the Hungarian physicist Szilard and funded Szilard's project. His interest in nuclear energy began there. He

the Institute for Advanced Study at Princeton University and chairman of the AEC.

When Oppenheimer was greeted by Strauss upon his arrival as director of the Institute for Advanced Study, Strauss' self-esteem was severely damaged when he was asked whether he had studied physics at university and when Einstein, after a private conversation with Oppenheimer, left the scenery as if to ignore Strauss. He mistakenly believed that Einstein and Oppenheimer gossiped about Strouss and became hostile toward Oppenheimer, who boasted of his fame from this first encounter. He seems to have been a man obsessed with worldly honor and status, as evidenced by the fact that he included his name as the fifth on the list of director candidates prepared for submission to the faculty committee during the director selection process. He was also rooted in Oppenheimer's comments at the AEC Advisory Committee in 1949, in which Oppenheimer ridiculed his ignorance in relation to the export ban on experimental isotopes that Strauss had raised.

These events unfold out of chronological order, making it difficult for viewers with no prior knowledge to follow the film's plot. The Hungarian physicists played an important role in the development of the A-bomb and subsequent international diplomacy over nuclear weapons. Edward Teller (Teller Ede), who feuded with Oppenheimer over the development of the hydrogen bomb and testified against him at the hearing, promoted the development of the bomb at Los Alamos after Oppenheimer left. John von Neumann (Neumann János), a professor at the Institute for Advanced Study in Princeton, was not part of the political fray, but led important numerical calculations at Los Alamos, including bomb detonation, and united young mathematicians, which is not depicted at all in this film. As an aside, Neumann was interested from this time on in developing a computer capable of high-speed numerical calculations. On the other hand, Szilard (Szilárd Leó) was politically influential in encouraging Einstein to send letters to Presidents Roosevelt and Truman, and after the war, he was instrumental in organizing the Pugwash conferences. Although these Jewish Hungarians in exile were able to argue with each other, it is not difficult to imagine that each of them had a rather strong personality.

Discovery of Uranium Ore and Successful Fission Tests

In 1938, with Nazi Germany on the rise, news of a successful test of nuclear fission in Germany broke out, and Western scientists feared that Nazi Germany would proceed with the development of an A-bomb. Szilard persuaded Einstein to write a letter to President Roosevelt, suggesting that

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later made a fortune and entered politics, becoming a Republican politician who represented the views of military hawks.

they develop an A-bomb ahead of Germany. Eugen Wigner (Wigner Jenő, one grade above Neumann at Budapest Fasori High School and a professor at Princeton University) joined Einstein in the meeting. This led to the realization of the Manhattan Project. Wigner was involved in the design of the nuclear reactor in the Manhattan Project and was awarded the Nobel Prize in Physics in 1964. In addition, Szilard and the Italian physicist Enrico Fermi (Nobel Prize in Physics, 1938) succeeded in building mankind's first nuclear reactor at the Metallurgical Laboratory in Chicago (Chicago Pile-1, 1942). Szilard and Fermi jointly applied for this reactor patent (1944).

The New York Times

FRIDAY, MARCH 20, 1998

Hungarian Fingerprints All Over the 20th Century

By JANE PERLEZ

BUDAPEST — He was a man of brilliant and diverse intellectual energy who discovered the nuclear chain reaction, went on to help develop the atom bomb and then tirelessly campaigned against it.

He soaked in the bath three hours a day, thinking up incredible inventions, needled his scientific colleagues with puckish humor and refused to flush the toilet in his room at the University of Chicago in the 1940's, insisting that it was "maid's work."

So it was with ambivalent pride and a sense of lost glory that Hungary celebrated the centenary of Leo Szilard, who died in 1964. Szilard (pronounced SIH-lahrd) was perhaps the most quixotic of the renowned physicists and mathematicians who were born and educated here but who fled, often, like Szilard, under the shadow of anti-Semitism, to the United States.

Hungarian scientists have had a deep impact on the 20th century. John von Neumann made fundamental contributions to quantum theory as well as the development of the atomic bomb and the high-speed electronic computer. Albert von Szent-Gyorgyi was credited with first isolating vitamin C. For a country of its population (10 million), Hungary has produced an immoderate number of Nobel Prize winners. Hungarians who became American citizens, including Szilard, Eugene Wigner and Edward Teller, played a major part in the Manhattan Project in World War II.

But few in this pantheon of Martians — a nickname spun from the scientists' superhuman intelligence and their unearthly Hungarian language — so keenly felt that the pursuit of science also carried political and personal responsibilities.

"The Hungarians have plenty of first-rate scientists and Nobel Laureates to celebrate," said Szilard's American biographer, William Lanouette, who was among those at the ceremonies in February. "Yet Szilard alone personifies the moral and ethical responsibilities of science. He had the drive to foresee the social and political consequences of discovery."

Mr. Lanouette records in his book "Genius in the Shadows" how Szilard, at the start of the war, drafted the letter signed by Albert Einstein that urged President Roosevelt to speed up work on the nuclear bomb before the Germans developed it; after the war he spent much of his time trying to ease the arms race that he helped create.

With a combination of banter and logic, Szilard persuaded Nikita S. Khrushchev, the Soviet leader, that a hot line between the Kremlin and the White House was a good idea. During the Eisenhower and Kennedy years, he flooded the State Department with nuclear disarmament programs that were mostly rebuffed.

A tubby figure who loved to eat fatty Hungarian delicacies, Szilard was often thought of as maddeningly eccentric. Sometimes this eccentricity produced breathtaking flights of fancy: He came up with the idea of electrifying barbers' chairs so that a man's hair would stand on end, allowing the barber to do a fast mowing job.

For Hungarian intellectuals who remained in Hungary, Szilard and his émigré colleagues represent a bittersweet phenomenon. On the one hand, there is pride that Hungary has produced so many important minds. Yet there is also sadness that so many fled — and that the new generation of best brains continues to leave.

Now, instead of being enticed by the ferment in German and American universities as their elders were between the two world wars, young Hungarian scientists are wooed abroad by Western companies.

"Today the most gifted Hungarians leave the country while they are graduate students," said Gabor Pallo, the deputy director of the philosophy institute at the Hungarian Academy of Sciences.

After more than 40 years of Communism and a rough transition to a market economy, Hungary lacked the financial resources to keep them.

In the popular mythology, this crew of geniuses are shadowy figures in Hungary. For most of the cold war, they were considered soldiers in the enemy camp and banned in the media and school texts. Then in the early 1980's, when the Hungarian leader Janos Kadar was eager to improve his nation's profile in the West and wanted to pump up sagging intellectual morale at home, the émigré scientists were dusted off.

Mr. Pallo said that by 1983, he was allowed to publish some of his research on the scientists and in 1985 he was asked to give a lecture at the prestigious Academy of Sciences on Hungarian-born Nobel Prize winners. Some of the scientists came back in their old age for short visits before the collapse of Communism; the fiercely anti-Communist Mr. Teller waited until after 1989.

But like Andrew Grove, who as a young science student fled Hungary after the failed 1956 uprising and is now chairman and chief executive of the computer giant Intel, Szilard showed little interest in Hungary, Mr. Pallo said.

Even so, Szilard is now buried here. At least, part of him.

Szilard's ashes, kept in a California crematory after his death, were reburied in a cemetery during the centenary ceremonies. According to his family's wishes, half of his ashes were sent to Budapest. The other half were dispatched to upstate New York, where his wife is buried.

This is not quite what Szilard had in mind. Before he died in La Jolla, Calif., he said he wanted his ashes tied to a helium balloon and sent into the sky. People, he said, should look up rather than down.

"March of Time"/Time-Life Films, courtesy of SFM Entertainment

A film "still" from a 1946 "March of Time" production in which Albert Einstein and Leo Szilard recreated the day in 1939 when they drafted a letter to President Roosevelt urging that work on an atom bomb be speeded before Germany developed one. This led to the formation of the Manhattan Project.

Remembering a giant of nuclear physics.

Note: A film "still" from 1946 "March of Time" production in which Albert Einstein and Leo Szilárd recreated the day in 1939 when they drafted a letter to President Roosevelt urging that work on an atom bomb be speeded before Germany developed one. This led to the formation of the Manhattan Project.

Source: The New York Times, March 20, 1998

NHK's special documentary "A-bomb, Secret Records: Mysterious Merchants and the Battle for Uranium" (broadcast on August 6, 2023) revealed some interesting facts about uranium ore. Edgar Sengier, an engineer for the Belgian company Union Minière du Haut Katanga, who was engaged in copper mining in the Congo, accidentally discovered high-purity uranium ore in a copper mine (1920). Thinking that the ore might be useful for something in the future, Sengier began mining uranium ore and stored more than 1,000 tons of it in the Congo. However, mining of the uranium ore, which had no use, was halted in 1937, and the mine was closed.

However, in 1938, news of a fission reaction (a chain reaction of nuclear fission caused by bombarding uranium 235 with neutrons) sparked a surge of interest in uranium ore. In the film, Lawrence (Ernest Lawrence, Nobel Prize in Physics 1939) reads the newspaper article in his barber shop and runs out of the store. Sanger, fearing that the Congolese uranium ore would go to Nazi Germany, sent his entire inventory of 1,200 tons to New York. On the other hand, 100 tons of uranium ore was sent to Belgium, which eventually fell into German hands, and then the Soviet Union, which had occupied Germany, searched for this uranium ore and took it to the Soviet Union.

Negotiations began (1942) between Sanjeh of Union Minières and U.S. military material procurers over the uranium ore sent to New York, and eventually, the U.S. government bought all 1,200 tons of uranium ore and not only reopened uranium mines in the Congo but also accelerated mining. In the U.S., a uranium enrichment facility was built in Oak Ridge, and the enriched uranium was shipped to Los Alamos, which was developing an A-bomb.

By coincidence of history, the uranium ore discovered in Congo in 1920 was used to produce the A-bomb that was dropped on Japan.

Los Alamos

The U.S., which had already set its sights on producing enriched uranium ahead of Germany, decided to devote all its energy to developing the A-bomb. Under the general leadership of General Groves, the A-bomb Research and Development City was built on the vast prairie of Los Alamos (1943). Oppenheimer was chosen as the director of the National Laboratory, which united the R&D workers. Lawrence, who had a proven record in physics, was also a candidate, but Oppenheimer was chosen because of his popularity. Los Alamos gathered the best minds in physics, mathematics, and engineering from all over the United States. Teller and Neumann set up their laboratories at Los Alamos, but Szilard, more of a scientific politician than a researcher, was uninvited from the start. However, it seems that he often visited Los Alamos, much to the annoyance of General Groves. Wigner stayed in Chicago to work on the development of the nuclear reactor and was not involved in Los Alamos's research, which was primarily aimed at

bomb-making.

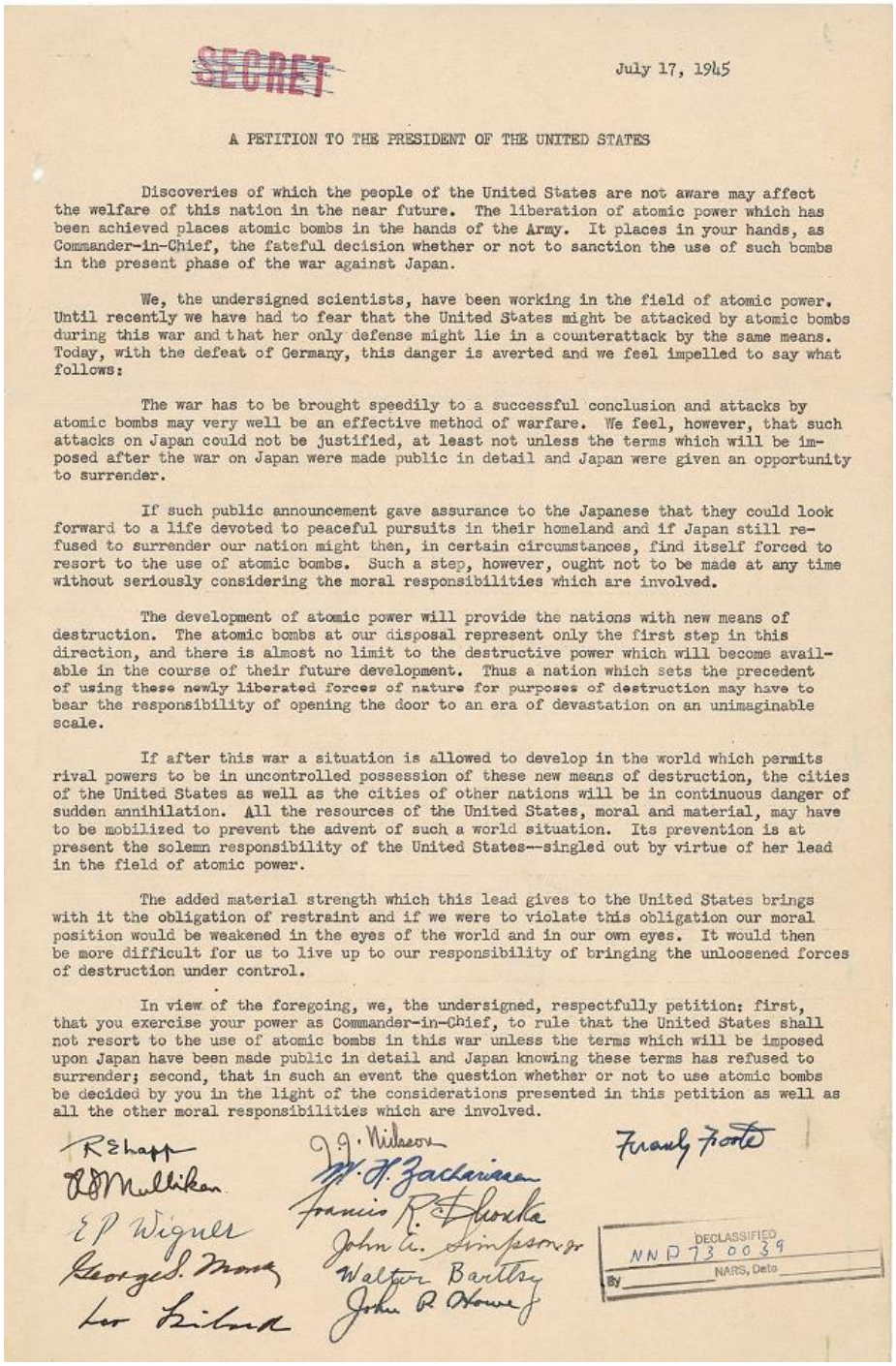
Neumann wanted to do something to meet the needs of the times as the world was going to war. The Ballistics Institute at Aberdeen had Theodor (Tódor) Kármán (an authority on fluid dynamics from Budapest known for his "Kármán Vortex Flow"), and there Neumann was working on shock wave analysis as a member of the scientific advisory board of the institute. At Los Alamos, Neumann worked on numerical calculations of implosion (the nuclear material set in the center of a bomb is subjected to a strong shock wave with an explosive to bring the nuclear material to a critical state). Without the accurate calculation of this shock wave, the A-bomb would not have been completed. For this work, he invited Ulam, a Polish mathematician to Los Alamos. After the war, Ulam teamed up with Teller to pursue research on the hydrogen bomb.

Los Alamos was a place where experimental physicists and engineers were well represented, but Neumann, one of the world's leading authorities on mathematics, held a special position. With the completion of the A-bomb in sight, The Interim Committee (chaired by Secretary of War Stimson) was established with the approval of President Truman to determine the target of the bombing. To prepare a draft proposal for this committee, General Groves held a meeting of "The Targeting Committee" in Los Alamos. Neumann attended and presented the results of the explosion altitude calculations. He also endorsed the Air Force's proposals for Kyoto, Hiroshima, Yokohama, the Imperial Palace, the Kokura munitions depot, and Niigata as targets, but opposed the Imperial Palace and endorsed the three cities except Niigata and the Kokura munitions depot because of the lack of information on Niigata. Finally, the Target Committee submitted five targets to the Provisional Committee: Kyoto, Hiroshima, Yokohama, Niigata, and the Kokura Munitions Factory.

The committee to determine the targets was called the "Provisional Committee" (consisting of eight members, including Stimson) because it was temporarily set up under the direct control of the President, and it met eight times beginning on May 9, 1945. At this meeting, Stimson opposed dropping the bomb on Kyoto, Tokyo near Yokohama had already been bombed, and therefore Nagasaki far from Tokyo, was floated. In the film, Stimson stated that Kyoto would be dropped from a list of 12 possible locations (the intelligence service had also listed munitions factory targets) because Kyoto was a cultural center and honeymoon spot. Thus, after much discussion, three targets were selected and one was finally dropped on Hiroshima on August 6, when the weather was good, and the second candidate, Nagasaki, was chosen as the target on August 9, because the weather in Kokura, the first candidate, was bad.

The Interim Committee, the supreme decision-making body for determining drop targets, established a Scientific Panel to hear from scientists who had participated in the Manhattan Project. The panel included Oppenheimer, Lawrence, Fermi, and Compton. The panel was established because of the growing frustration and fear among scientists about the effects of the

A-bomb and the postwar arms race, as well as the publicity of Szilard's petition.



SECRET

July 17, 1945

A PETITION TO THE PRESIDENT OF THE UNITED STATES

Discoveries of which the people of the United States are not aware may affect the welfare of this nation in the near future. The liberation of atomic power which has been achieved places atomic bombs in the hands of the Army. It places in your hands, as Commander-in-Chief, the fateful decision whether or not to sanction the use of such bombs in the present phase of the war against Japan.

We, the undersigned scientists, have been working in the field of atomic power. Until recently we have had to fear that the United States might be attacked by atomic bombs during this war and that her only defense might lie in a counterattack by the same means. Today, with the defeat of Germany, this danger is averted and we feel impelled to say what follows:

The war has to be brought speedily to a successful conclusion and attacks by atomic bombs may very well be an effective method of warfare. We feel, however, that such attacks on Japan could not be justified, at least not unless the terms which will be imposed after the war on Japan were made public in detail and Japan were given an opportunity to surrender.

If such public announcement gave assurance to the Japanese that they could look forward to a life devoted to peaceful pursuits in their homeland and if Japan still refused to surrender our nation might then, in certain circumstances, find itself forced to resort to the use of atomic bombs. Such a step, however, ought not to be made at any time without seriously considering the moral responsibilities which are involved.

The development of atomic power will provide the nations with new means of destruction. The atomic bombs at our disposal represent only the first step in this direction, and there is almost no limit to the destructive power which will become available in the course of their future development. Thus a nation which sets the precedent of using these newly liberated forces of nature for purposes of destruction may have to bear the responsibility of opening the door to an era of devastation on an unimaginable scale.

If after this war a situation is allowed to develop in the world which permits rival powers to be in uncontrolled possession of these new means of destruction, the cities of the United States as well as the cities of other nations will be in continuous danger of sudden annihilation. All the resources of the United States, moral and material, may have to be mobilized to prevent the advent of such a world situation. Its prevention is at present the solemn responsibility of the United States--singled out by virtue of her lead in the field of atomic power.

The added material strength which this lead gives to the United States brings with it the obligation of restraint and if we were to violate this obligation our moral position would be weakened in the eyes of the world and in our own eyes. It would then be more difficult for us to live up to our responsibility of bringing the unloosened forces of destruction under control.

In view of the foregoing, we, the undersigned, respectfully petition: first, that you exercise your power as Commander-in-Chief, to rule that the United States shall not resort to the use of atomic bombs in this war unless the terms which will be imposed upon Japan have been made public in detail and Japan knowing these terms has refused to surrender; second, that in such an event the question whether or not to use atomic bombs be decided by you in the light of the considerations presented in this petition as well as all the other moral responsibilities which are involved.

R E Lapp
R S Mulliken
E P Wigner
George S. Monk
Leo Szilard
J. J. Nickson
W. H. Zachariasen
Francis R. Shonka
John A. Simpson Jr.
Walter Bartky
John P Howe
Frank Foote

DECLASSIFIED
NND 73 0039
By _____ NARS, Date _____

Note:The signatures are as follows: R. E. Lapp, R. S. Mulliken, E. P. Wigner, George S. Monk, Leo Szilard, J. J. Nickson, W. H. Zachariasen, Francis R. Shonka, John A. Simpson Jr., Walter Bartky, John P. Howe, Frank Foote

Source: National Archive Catalog

Once the A-bomb was completed, Szilard sent a petition to President Truman. The letter, also signed by Wigner, was dated July 17, 1945. The letter argued that the Japanese surrender should be sought first: "The bombing of Japan should not be carried out without prior warning and the offer of terms of surrender." Szilard, through Teller, asked for the signatures of the Los Alamos scientists, but none signed.[52]

Neither the scientists involved in the development of the bomb nor the government and military, which were aiming for military supremacy after the war, would have thought of letting it lie in storage after two years and a huge budget had been spent to complete it. Szilard appears only briefly in the film, and there is no place for him in the film.

Nevertheless, although the Interim Committee had on its agenda the "possibility of dropping the bomb with a warning" and the invitation of foreign observers to the test site, none of these were ever carried out. Also, at the Potsdam Conference in July, President Truman only hinted to Stalin about the existence of a new type of bomb. However, the Soviets had already obtained information from Los Alamos, and Stalin is said to have listened to Truman, pretending that he did not understand the importance of the A-bomb.

Allegations against Oppenheimer

Without exception, anyone involved in Los Alamos development research or other work was subjected to rigorous security checks.

As for Oppenheimer, who was originally known to be a liberal thinker, his wife Kitty (Kitty Harison), Jean Tatlock (Jean Tatlock), his lover before he knew Kitty, and his parents and siblings were investigated. Kitty was a former Communist Party member, Oppenheimer’s brother (Frank Oppenheimer, experimental physicist) was also a former Communist Party member (he left the party in 1939 and later worked on the Los Alamos A-bomb tests at his brother's request), and Jean was an active Communist Party member. Although he was not a member of the Communist Party, he sent support money through the Communist Party to the People's Front fighting the Spanish Civil War. This political relationship became one important theme of the later hearings.

Oppenheimer, who had married Kitty in 1940 (Kitty was his fourth marriage), spent the night with Jean when he went to Berkeley in June 1943 to recruit assistants. The whole affair was monitored by the Intelligence Service. This was the last time Oppenheimer saw Jean, who committed suicide in January 1944 by putting his face in the bathtub. However, it is still considered inconclusive whether it was really suicide or murder by an intelligence officer. As if

[52] Mainly the scientists who were working on the development of Chicago-Pile 1 signed. The movie depicts Oppenheimer meeting Szilard at a hotel in Washington, D.C. and being asked by the scientist accompanying him (D. Hill, an experimental physicist) to sign the petition, which he somewhat abruptly refuses.

to suggest this, the film shows a black glove holding Gene's head in the bathtub for a moment. A scenario exists in which Jean was assassinated to completely cut off his ties to the Communist Party from the director of the Los Alamos Institute, which is a state secret.

Another allegation leveled against Oppenheimer is his reluctance to develop a post-atomic hydrogen bomb. At Los Alamos, Teller and Oppenheimer were often at odds. When Teller argued for the development of a more powerful hydrogen bomb (super) over the development strategy after the A-bomb, Oppenheimer worried not only about the technical difficulty of producing a fusion bomb but also about the possibility of an unchecked arms race. Teller could not stand this reluctance.

Moreover, despite predictions that it would take the Soviet Union much longer to develop an A-bomb, a successful Soviet A-bomb test in 1949 took the United States by surprise. Suspicions were raised that the secrets of Los Alamos had been leaked and that there might have been spies. In fact, Klaus Fucks[53] (a British national), a German physicist who participated in the Los Alamos experiment, had been leaking information he learned to the Soviet Union from the beginning. In the film, Fucks appears at the site of the experiment. So, when Truman suggested to Stalin at the Potsdam Conference that he had completed a new type of bomb, Stalin already knew that it was an A-bomb, but he acted as if he was indifferent to the development of the A-bomb. Hitler never proceeded to develop an A-bomb because he believed that quantum mechanics was a delusion of Jewish scientists, but American politicians underestimated the capabilities of Soviet scientists.

Even with these problems, it is impossible to disparage Oppenheimer's career, in which he fulfilled his job as the person responsible for the development of the A-bomb. However, the development of postwar world politics led to the Cold War and the rise of military hawks, and a political movement began to decry scientists, politicians, and government officials who were reluctant to engage in military competition with the Soviet Union.

The rise of military hawks due to the intensification of the Cold War entered the political arena in the form of Senator McCarthy's "Red Hunt". Scientists who advocated peaceful coexistence with the Soviet Union and international control of nuclear weapons, as well as Communists and their sympathizers in various fields, became victims of this movement. Then, with the inauguration of President Eisenhower (January 1953), Strauss was approached to become chairman of the AEC. The condition that Strouse demanded at that time was that Oppenheimer be removed as an AEC advisor. This is where the political movement to oust Oppenheimer, led by Strauss, began.

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[53] Joint U.S.-U.K. Soviet code-breaking (the Venona Project) exposed Fuchs's espionage activities, and his confession in January 1950 earned him a 40-year sentence at his March trial; after his release in 1959, he moved to East Germany and helped develop the A-bomb in the Soviet bloc.

Security Hearing

Against this political background, a hearing was held (April 1954) to question Oppenheimer on the allegations against him. This hearing was not a trial for espionage, but rather a background investigation committee within the AEC. Moreover, its final decision was simply to "revoke security clearance" from Oppenheimer, which would do no real harm to Oppenheimer, who was already not participating in active development. The fact that the small and shabby conference room at the AEC was used as the room for the hearing was also intended to damage Oppenheimer's self-esteem.

Because the hearing was not a trial, there was no prior disclosure of documents (documents sent by Strauss to the FBI) or confirmation of the credibility of the testimony, and the "defendant" Oppenheimer and his attorney were given various testimonies and documents on the spot at the hearing. Therefore, Oppenheimer's attorneys could not prepare in advance, and Oppenheimer was forced to repeat contradictory testimony from memory.

Ultimately, Teller's testimony at the hearing is said to have influenced the committee's final decision. McCarthy had publicly stated that the development of the H-bomb in the U.S. had been delayed because of leftist physicists, so Teller's testimony, which was constantly at odds with Oppenheimer on the development of the H-bomb, was extremely important. In this regard, Strauss expected Teller to give definitive testimony. In line with this expectation, Teller agreed with Oppenheimer's "revocation of his security clearance" on the grounds that "American nuclear policy should be entrusted to a more secure leader ". With this testimony, Teller lost the confidence of his fellow scientists.

The hearing judge ruled that "there is no doubt about Oppenheimer's patriotism, but by a 2-1 resolution, Oppenheimer's access to classified documents is revoked ".

Strauss and Oppenheimer afterward

Although Strauss succeeded in removing Oppenheimer from the AEC, an unexpected pitfall awaited him. In June 1959, five years after the hearing, Strauss was to have been nominated by President Eisenhower to become Secretary of Commerce. At the hearing to review Strauss's suitability, an unexpected witness appeared. Hill (played in the film by actor Rami Malek), an experimental physicist who had worked with Szilard, testified on behalf of the scientists. Hill affirmed that the Oppenheimer denial hearings had been orchestrated by Strauss's personal enmity and that many scientists would not support Strauss in assuming such a high position. By this time, it was common knowledge among scientists that the Oppenheimer hearings had been orchestrated by Strauss.

At the time, the Eisenhower administration was being lame-ducked by the Democrats, who had flipped seats in Congress. Nevertheless, the nomination for Secretary of Commerce, a less important post, was expected to pass the Senate without a problem. At first, the Democrats were leaning toward accepting Strauss's appointment, but political forces were working to make this a decisive blow to the Republicans. Then came Hill's testimony.

The Senate voted just after midnight on May 19 to reject Strauss as Secretary of Commerce, with one of the three holdout senators being John F. Kennedy, who explained that he did not agree with Strauss's position on Oppenheimer. This was an unusual event, only the second time in the past 69 years that a presidential nomination for a cabinet position had been rejected and is remembered not only as a major embarrassment to Strauss but also as an incident that marked the end of Eisenhower's reign.

Kennedy became president in 1961, and Oppenheimer's honor was restored; the 1963 Fermi Prize was awarded to Oppenheimer. However, due to the assassination of President Kennedy in November, Johnson, who became president from vice president, was to present the Fermi Prize to Oppenheimer at the December award ceremony. Many of his scientist friends attended the award ceremony. Teller, who had won the Fermi Prize the previous year, also attended and shook hands with Oppenheimer, but his wife Kitty refused to shake Teller's hand.

The film ends with Strouse's defeat and Oppenheimer's reinstatement.

A Hungarian Scientist Living in the Turbulent 20th Century

As the twilight of the Habsburg Empire approached, Hungary was in the throes of nation-building like the Meiji Restoration in Japan. Educational reforms led to the establishment of world-class high schools from the 19th to 20th centuries, and these schools produced many of the scientific leaders of the 20th century. Most of them were brilliant geniuses who grew up in wealthy Jewish families: Tódor Kármán (1881-1963), Károly Polányi (1886-1964), Mihály Polányi (1891-1976), Leó Szilárd (1898-1964), Jenő Wigner (1902-1995), János Neumann (1903-1957), Ede Teller (1908-2003).

All these geniuses graduated from high school in Budapest, studied at German or Swiss universities, and then fled the persecution of Jews to the United States. Although not a scientist, Koestler (Kestler Artúr, 1905-1983), known for his "Darkness at Noon," was also an intellect who lived during this period.

They were born in the twilight of the Habsburg Empire (the Austro-Hungarian Double Empire), experienced World War I, and spent their adolescence in the political storms of Hungary's socialist and then right-wing regimes. During the subsequent persecution of Jews and the outbreak of World War II, each played a historical role. Szilard joined the Socialist Student

Union and supported the Hungarian socialist government in 1919 but fled to Vienna when the regime collapsed. Kármán became Undersecretary of Education in the socialist government and fled to Germany when the regime collapsed.

Because Kun Béla and other leaders of the socialist government were Jewish, the right-wing government that was formed after the collapse of the socialist regime pursued an anti-Semitic policy and restricted Jews from entering universities. This led Wigner to move to the engineering institute in Berlin to study under Michael Polanyi, who had emigrated earlier. Neumann grew up in Budapest in the family of a wealthy banker, and when a group of activists entered their home during the establishment of the socialist government, the family fled to Vienna and returned to Budapest with the fall of the socialist regime.

The youngest of these scientists, Teller was born into a family of lawyers, and when his father realized his son's potential, he took Teller to see Neumann, Wigner, and Szilard; in 1926, he left Hungary and enrolled at the University of Karlsruhe.

Koestler also moved to Vienna with the fall of the socialist regime, and from there he traveled the world. His masterpiece, Darkness at Noon (1940) is a novel based on the real-life experiences of Eva Striker, the daughter of Polányi Laura (sister of M. Polányi). Laura married and took the surname Striker, and her daughter Eva (Eva Striker, 1906-2011) married Austrian physicist A. Weissberg and moved to the Soviet Union. There, her husband fell victim to the Stalinist regime, and she herself was arrested and imprisoned for allegedly plotting to kill Stalin. After many twists and turns, she returned to Vienna in 1937. Koestler, who heard the whole story, wrote a novel about it. Eva Striker and Koestler had been childhood friends since kindergarten in Budapest.

Hungarian scientists working in Europe and the United States kept in touch with each other and had read Kösztler 's novel. Neumann had lectured in Moscow and intuitively felt that Soviet socialism had not succeeded.

The thoughts and feelings of the Hungarian scientist were not simple, having gone through the historical vicissitudes of the collapse of the Habsburg Empire, World War I, The Naci anti-Semitism, the Stalinist regime of the Soviet Union, which combined socialist ideology with Russian imperialism, World War II, and the establishment of American military supremacy. Szilard believed that humanity could not survive without international cooperation between the U.S. and the Soviet Union, while Teller believed that maintaining absolute U.S. dominance through the development of the hydrogen bomb would contribute to world stability. Neumann did not take part in the political debate and watched the situation unfold.

Oppenheimer, Neumann, and Fermi were all diagnosed with cancer and passed away before they could reach their full potential. It is thought that this may have been due to their frequent presence at A-bomb tests. Neumann himself seemed to have realized this. He underestimated the effects of radiation on the body.

Was the A-Bombing Inevitable and Necessary?

The screening of this film was delayed in Japan, the first country to be hit by an A-bomb. The reason was that the film did not depict the damage caused by the A-bomb, and it was argued that if the history surrounding the bomb's development was to be depicted, attention should have been paid to the actual damage caused by the bomb. This is also an issue concerning the legitimacy of the A-bombings.

Was it indispensable for the U.S. to drop A-bombs on Japanese cities in August 1945? Was the dropping of the A-bombs in August 1945, when the state of the war was almost decided, an A-bomb test against mankind, a needless massacre for the U.S. to gain international leadership in the postwar period? How did the researchers who participated in the development of the A-bombs think about the carnage caused by the bombings, or did they not have the mental capacity to consider the human casualties? If so, why did they lack such awareness and thinking? They lacked the imagination to imagine that the A-bombings were not just a massacre, but the seriousness of the lifelong suffering of those who suffered radiation damage.

Tokyo city center after the Great Tokyo Air Raid (around March 10, 1945)

Note: Photographed by Koyo Ishikawa, who ran a photography studio, joined the Tokyo Metropolitan Police Department at the time and oversaw photography as a police officer, traveling around the city to photograph the damage caused by the Great Tokyo Air Raid. The smoke rising suggests that this photo was taken shortly after the raid. It is captioned "Ushigome Ichigaya area".

Source: Tokyo Great Air Raid Secret Photo Album (Yukei Publisher, 1953), pp.116-117

First, regarding the war situation on the Japanese mainland, the U.S. began to strengthen the bombing of Japanese cities in 1945. In March of the same year, the bombing targets were expanded from military facilities to urban areas, and a scorched-earth strategy was deployed in the cities. Although only the pros and cons of the A-bombings have been discussed because this detailed fact has not been shared internationally, scorched earth operations were carried out in the urban areas of small and medium-sized regional cities as well as the large cities of Tokyo and Osaka a few months before the A-bombings. Large numbers of fighter planes were deployed, and huge numbers of bombs (incendiary bombs) were dropped on cities throughout Japan. Among these, the Tokyo air raids that began in March 1945 resulted in more than 100,000 deaths, 150,000 injured, 3 million people affected, and 700,000 damaged housing units, with an area of approximately 1.4 million km^2 destroyed. The air raid almost destroyed Tokyo's civilian life.

After the Great Tokyo Air Raid on March 1945

Tokyo Air Raid Damage Area on the west bank of the Sumida River. The white area is the burned-out area. The river on the right is the Sumida River. (JP Press, Source: Library of Congress)

The U.S. placed 180 small and medium-sized cities throughout Japan on its bomb list, and finally, in July 1945, it targeted 137 cities for intensive bombing and obliteration of their urban

areas. As a result, a total of 225,000 people were killed, not including the 340,000 who died in the bombings of Hiroshima and Nagasaki. The number of injured and destroyed houses is innumerable.

The great air raid on Toyama City (August 1945)

Note: This picture is not that of Hiroshima or Nagasaki, but the central area of Toyama city after the US raid of August 1 and 2, 1945. This is the still picture shot by the local newspaper, Kitanihon Shimbun.

U.S. Army leaflet warning of an air raid

Source: Josette Williams, "The Information War in the Pacific, 1945", '*CIA Studies in Intelligence* Vol. 46, No. 3 (2002), https://www.cia.gov/resources/csi/studies-in-intelligence/volume-46-no-3/the-information-war-in-the-pacific-1945/

The situation in Japan in early August 1945 was so dire that the country was no longer capable of waging war. Despite this, the U.S. decided to invest in the A-bombings of Hiroshima and Nagasaki. It was the last crushing blow to a country that had already lost the will to fight.

There was no reason for the U.S. government not to test the A-bombs that it had successfully developed at such great expense and ahead of the Soviet Union. It was the most important means to establish its leadership in the postwar world. Reducing American casualties is only a pretext to drop the bomb. On the other hand, the scientists involved in the development of the A-bombs never considered avoiding dropping the bombs. Even for scientists, crushing a fascist state was absolute justice, and there was no reason for them to hesitate. Above all, it is easy to imagine that scientists could not resist the desire to see the effects of nuclear energy in action. Since all their wisdom and abilities were directed toward the actual release of nuclear energy, it would be natural for scientists to want to see its final effects on the devil. Scientists felt no pang of conscience in destroying the absolute devil. However, what the scientists engaged in the development lacked was the imagination for the mass slaughter of living human beings.

Certainly, the fascist state is an absolute devil and should be dismantled. The "absolute devil" doesn't have any blood or tears. Such a devil deserves to be destroyed. However, the actual victims are ordinary people with blood and tears. Where does the idea come from that such people should be buried? An absolute devil is a kind of illusory existence. It is only because they lacked the imagination to realize that people living in a fascist state are human beings as well.

In the Vietnam War, the U.S. also carried out a scorched-earth strategy. This was another example of the idea of using any means necessary to destroy socialism as an absolute devil. The idea and ideology that anything is permissible against the absolute devil has dominated.

Here too, there is a great disconnect between illusion and reality.[54]

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[54] NHK (broadcast 20 June 2024, https://t.co/01RN4bkXMQ) reported on Oppenheimer's meeting with atomic bomb survivor physicist Shono Naomi at Princeton University's laboratory in June 1964 as part of the "Hiroshima-Nagasaki World Peace Pilgrimage". According to the interpreter, as soon as Shono entered the laboratory, Oppenheimer began to weep uncontrollably, apologizing repeatedly between incessant tears.

Yoko Teichler, who was present at the time as an interpreter, gave a description of the meeting in a testimony to a Hiroshima NGO in 2015 (which was also video recorded).

However, according to Teichler, in a meeting with former President Truman, Truman reiterated the traditional view that dropping the A-bombs was necessary to end the war.

Oppenheimer visited Japan in 1960 but did not go to Hiroshima. Nor did he work for the abolition of nuclear weapons after the tearful meeting. Oppenheimer seems to have spent his life torn between pride in the success of the atomic bomb and remorse at the damage it had caused.

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IV.

The Traps of Borrowed Economy and Treasurized Economy

- Why is personal income not increasing?

Thirty years have already passed since the system transformation of the socialist system. What has changed and what has not changed after the regime change? I have been observing the regime change in Central and Eastern Europe with this question in mind[55]. Certainly, the political system has changed, and the market economy has begun to function. Have these changes brought fundamental changes in Hungarian society? Have the attitudes and behaviors of politicians, the social ethics of people, and the ethics of businesses fundamentally changed compared to the socialist era? Or do the social ethics and behavioral patterns shown in the previous system still dominate the norms of social life today without undergoing essential changes?

How has the system transformation changed the Hungarian economy? What kind of characteristics can be observed? Why has Hungary's income level stagnated at a low level among the countries undergoing system transformation?

Table 1 shows the level of GDP per capita measured in purchasing power parity relative to the EU average. The table shows that Hungary not only lags the development of the Czech Republic and Poland but has also been caught up by less developed countries such as Romania and Croatia, causing its ranking to drop.

In any case, it is unlikely that Hungary's economic downturn is not simply due to the result of falling behind in the battle to attract FDI. It should be considered that there are structural problems in the development of the domestic market economy.

Rebuilding the National Economy through FDI

With the system transformation, the so-called socialist industry almost disappeared. During the transformation, national economies had been opened to the rest of the world and suddenly faced an overwhelming technological gap between East and West. Most socialist industries had no choice but to disappear. The former socialist countries where major industrial sectors were dismantled experienced a transformational crisis. The rebuilding of national economies in these countries was a process of "making something out of nothing." Of course, something does not come from nothing. What helped rebuild the national economies? The savior was foreign direct investment (FDI). In other words, countries that had lost the core of their industrial sectors sought

[55] Morita Tsuneo (2009, 2014, 2021).

Table 4.1 GDP per capita (EU=100, 2013-2023)

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Luxembourg	279	283	282	278	269	260	252	259	266	256	239
Ireland	133	138	181	176	183	190	189	207	221	235	211
Netherlands	137	133	131	129	129	129	127	130	131	131	130
Denmark	130	129	128	128	130	129	126	133	135	136	127
Austria	133	132	131	130	127	128	126	125	122	124	123
Belgium	121	121	121	120	118	118	118	118	120	120	118
Germany	125	127	124	125	124	124	121	123	120	117	115
Sweden	128	126	128	124	121	119	118	122	122	117	114
Finland	115	113	111	111	111	111	109	114	112	110	108
Malta	90	93	98	98	102	103	104	99	103	104	105
EA20	108	107	107	107	107	106	106	105	105	104	104
France	110	108	107	106	104	104	106	105	103	100	101
Italy	101	98	97	99	98	97	97	94	96	98	97
Cyprus	84	81	83	88	90	91	93	91	94	94	95
Slovenia	83	83	83	84	86	87	89	89	90	90	91
Czechia	86	88	89	89	91	92	93	93	92	90	91
Spain	90	90	91	92	93	91	91	83	84	85	88
Lithuania	74	76	75	76	79	81	84	88	89	89	86
Portugal	78	77	78	78	77	78	79	76	75	79	83
Estonia	76	78	76	77	79	82	83	85	86	85	81
Poland	67	67	69	69	69	71	73	76	77	80	80
Romania	55	56	57	59	63	66	70	73	73	75	80
Hungary	68	69	70	69	69	71	73	74	75	76	76
Croatia	62	61	61	63	64	65	67	65	70	73	76
Slovakia	78	78	79	73	71	70	71	74	73	71	73
Latvia	63	64	65	66	67	69	69	72	71	72	71
Greece	72	72	70	68	67	66	66	62	63	67	67
Bulgaria	46	47	48	49	50	52	53	55	57	62	64
Norway	187	179	159	146	151	157	147	143	172	218	173
Switzerland	171	171	171	166	160	158	153	155	157	159	154
Iceland	126	126	131	134	133	131	129	122	123	133	134
Türkiye	62	65	68	66	66	63	59	61	61	67	73
Montenegro	41	41	43	45	46	48	50	45	47	50	52
Serbia	41	40	39	39	39	40	41	43	44	44	46
North Macedonia	38	39	39	41	40	41	42	42	43	42	41
Albania	29	30	30	30	30	30	30	31	31	34	35
Bosnia and Herzegovina	31	30	31	31	31	32	33	33	34	35	35

Megjegyzés: countries are sorted according to their 2023 volume index per capita for GDP

Forrás: Eurostat (online data code: prc_ppp_ind)

to attract companies from developed countries, because FDI comes together with advanced technology, capital, and management.

However, Poland suffered from accumulated external debt in the socialist era, and the Czech Republic, which had restricted investment out of caution toward foreign capital, could not distinguish between financing and direct investment and did not welcome FDI. On the other hand, foreign companies were not interested in the Balkan countries because of their remoteness from the EU market. Among these countries, only Hungary adopted a policy of openness to FDI, and immediately after the regime change, Hungary received a larger amount of foreign investment than in other countries.

In the former half of the 1990s, countries avoiding foreign capital (or where foreign companies avoided investing) sought to rebuild their national economies through coupon (voucher) privatization. Except for Hungary, all the countries that underwent system transformation implemented privatization policies through coupons (vouchers). However, privatization that excluded foreign companies (capital) was not successful.

First, it is impossible to rebuild a national economy through a "monopoly game" of buying and selling socialist companies that cannot compete with international competition. The Czech Republic and Poland beginning to recognize this fact, have been actively attracting direct investment since the end of the 1990s. Other countries also began to understand that coupon privatization could not restore their economies. However, the decision right of investment is not in the hands of the country, but in the hands of multinational companies.

In this battle for attraction, Hungary gradually began to lag the Czech Republic and Poland, which found Hungary less attractive than the Czech Republic and Poland in terms of access to the EU market, especially the German market, and in terms of market size in the case of Poland. From around the change of the century, the speed of development of the Hungarian national economy also began to lag.

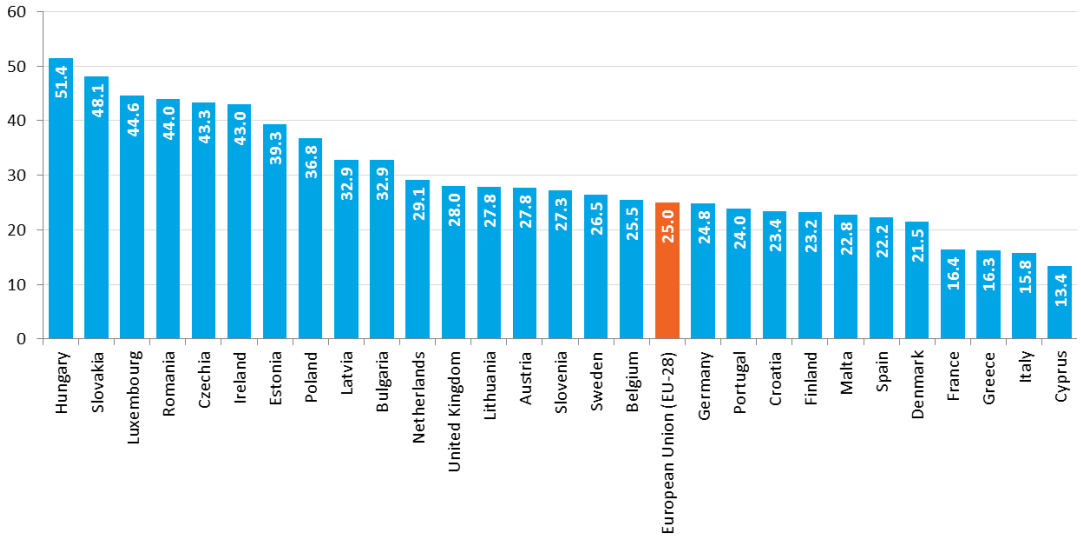
Anyway, the three Central and Eastern European countries of Hungary, the Czech Republic, and Poland continued to be targets of FDI due to their proximity to the EU market. As a result of the tremendous flow of FID, foreign companies in the industrial sector have come to dominate in the given countries. Thus, the industrial sectors of the transition countries all became completely dependent on foreign companies. Having lost the foundation of their small and medium-sized industrial enterprises during the socialist era, these countries had no choice but to become dependent on foreign enterprises.

As a result of the process, the core of industry was dominated by foreign-owned enterprises, which now account for more than 35-50% of the value-added production in the manufacturing industry in the transition countries. It is worth mentioning that foreign-owned enterprises account for the majority of value-added produced by the manufacturing industry in Hungary (see Figure

1).

Figure 1 shows data for the manufacturing sector excluding the financial sector, while Figure 2 looks at dependence on foreign firms, including those of the financial sector. The data are also the most recent situation.

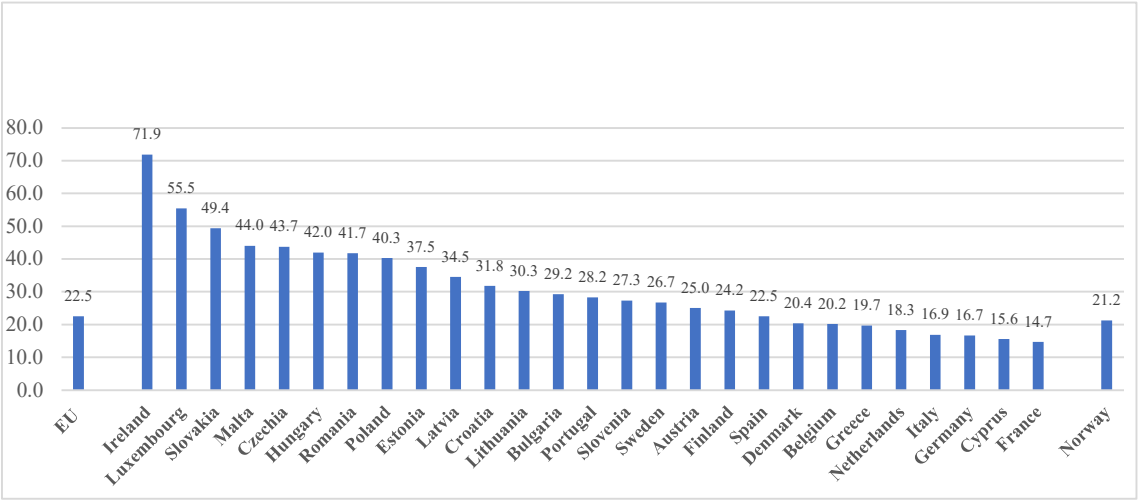
Fig. 4.1 Share of Value Added by Foreign-Controlled Enterprises in the Non-Financial Business Economy, 2016(%)



Note: Greece data are provisional

Source: https://ec.europa.eu/eurostat/web/products-eurostat-news/-/DDN-20190411-1

Fig. 4. 2 Share of foreign-controlled business market enterprises, 2021 (% of total)



Note: the business market enterprises are defined as NACE Sections B-S.

Source: Eurostat (online data code: fats_activ)

This figure shows the contribution of foreign firms to the value-added of firms engaged in commercial activities in the national economy. Except for countries with special policies, such as Ireland and Luxembourg, which aim to become financial hubs, the top countries are all transition countries (former socialist countries).

Figure 2 shows that the Czech Republic is more dependent on foreign capital than Hungary. This is because foreign ownership has largely occupied the financial sector of the Czech Republic, whereas the Hungarian government recently purchased ownership of financial institutions from foreign capital through the nationalization policy. Thus, the figure shows that the Czech Republic is slightly more dependent on foreign capital than Hungary.

"Borrowed Economy" within the National Economy

There is an interesting word in Japan, "borrowed landscape." The Entsuji temple in Kyoto is famous for its borrowed landscape. We can watch the beautiful scene of Mt. Hiei from the terrace of the temple garden. It is "borrowed," because the landscape is not in its ownership, but can be enjoyed as if it were its own.

The concept of "borrowed landscape" reminds me of national economies where multi-national companies have an overwhelming weight in the industrial sphere. Figure 1 shows a fascinating fact about the "borrowed economy", where multi-national companies in the manufacturing industries have an extraordinary presence in transformed countries.

Economists treat the "borrowed economy" as an integrated part of the national economy, and don't distinguish it from the other part of the national industry. However, multinational companies easily withdraw their capital from the invested country if there are changes in the world market. The "borrowed economy" seems to be the country's own, but this is practically not so. A national economy with overwhelming foreign capital tends to be very vulnerable. If a foreign company decides to withdraw from a given country, there are no ways to prevent it, and it becomes clear that the borrowed economy is not its own. The same happens when someone builds a high-rise building between Entsuji temple and Mt. Hiei. No one can complain and make resistance to the decision. Therefore, a regulation of building construction should be enforceable in Kyoto city.

Thus, the manufacturing sphere of Central-Eastern European countries has held a very vulnerable part of the national economy. Besides this fact, foreign industrial companies producing commodities exclusively for export don't contribute much to the development of the domestic economy in each country. The sphere of multinational companies is relatively isolated from the part of the national economy because companies produce commodities mainly for export to Western Europe and have no mutual and organic relationship with the

domestic market. In the absence of the multiple effects with the internal transaction, the contribution of the ‘Borrowed Economy’ to job creation and wage increases is limited. In this sense, multinational companies scarcely contribute to the domestic market development, which explains the relatively slow convergence of income to the West despite the tremendous investment of foreign capital in Central-Eastern Europe.

Therefore, we must treat a "borrowed economy" separately from other parts of the national economy with special care. Nevertheless, many economists treat it as an integrated part of the national economy.

Workers under the "Borrowed Economy"

Typical behavior of workers is observed under the "borrowed economy." Workers employed by multinational companies in the Central-Eastern European countries behave like guests in their own countries. The workers going abroad for a higher salary for their family are called guest workers. They have a hungry spirit for hard work. However, the workers of multinational companies manifest behavior like a "guest" in their homeland. The guest workers in their homeland have no feeling of belonging to the company, but work while they feel well, and leave the company when they find a better job in another company. Multinational companies are not their home companies and only occasionally supply a chance to earn money. Work in multinational companies is a type of wage work and not more. Therefore, workers try to utilize their benefits to the maximum: making full use of regular leave which reaches a maximum of 7 weeks for newly graduated and 9 weeks for older workers including sick leaves[56]. If every worker maximally uses their leaves, companies must employ 25% more workers to complement drops in the workforce.

The behavior of a guest worker is a kind of symbiotic phenomenon with multinational companies. We can explain the behavior as follows.

First, the worker protection system of the old socialist system has been inherited in the transformed countries, and therefore the "hungry spirit" has never been brought up. The worker protection system had been maintained to the level of the Western countries in the socialist era and the regulation continued after the system transformation. Without economic development, the labor protection system is maintained at the level of developed countries, which cuts the channel to be sensitive to the severity of the market economy. In an age when it is necessary to catch up to the economic level of the developed countries, an excessive protective law of labor is eating away the working spirit of the worker.

[56] See Morita (2014), pp. 57-62.

Second, the labor shortage became clear when a large amount of direct investment flowed within a short period, which resulted in the seller market for workers. This has worsened work morale. The sense of security that a job can be easily found at any time has diminished the loyalty to the workplace.

Third, workers in the manufacturing industry in Central-Eastern Europe are still far richer than those in the poor countries in Asia. There is no sense of urgency that they must work long hours at low wages. It makes sense to take a good rest, a periodical vacation, and occasionally take a part-time job to complement a living if necessary. If there comes another company that provides higher wages, there is no hesitation for workers to leave the company.

Fourth, all important matters of companies are handled by the foreign managers dispatched by the multinational company. There is no delay in wage payment, so it is easy to rule the passive action of workers that "it is sufficient to exercise the right to the maximum, and to fulfill the minimum obligation to the extent to be not fired." This is true not only for workers but also for local management staff.

Five, crucial decisions of a company are made not by dispatched staff, but by the headquarters of the mother companies. Managers dispatched from the parent company are responsible only for matters of daily work and local managers are alienated from important decisions that affect the fate of the local company.

Six, multinational companies are not for workers and local managers. If companies are domestic, managers and workers might share a sense of belonging to companies and actively cooperate. However, foreign companies are not their own.

Thus, in multinational companies, whether workers or managers they are, the feeling of "guest" spreads and the sense of loyalty cannot be fostered. Even though a market economy is beginning to develop, the advancement of multinational companies does not automatically establish the work ethics necessary for a developed market economy.

There is also an argument that multinational companies can develop domestic subcontractors and the market economy. However, many subcontractors are accompanied by the parent company from their home countries, and localization of the subcontracting parts industry has been limited. Most of the subcontractors' products and technologies will be withdrawn and disappear if the parent company withdraws from the given country.

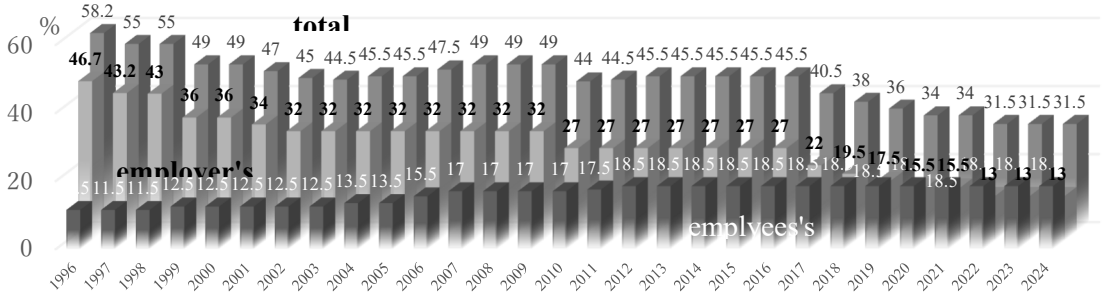
What makes Private Consumption Low?

Even after the system transformation, income centralization has been high for more than 30 years. Figure 3 shows the facts.

Through the 1990s, the centralization of income, consisting of social contributions from

employees and employers, went beyond 50% of companies' payrolls. By limiting the investment of the companies and consumers' consumption, the heavy burdens of social insurance caused the restriction of market development in Hungary during the 1990s. Two factors explain the high centralization rate of income in Hungary.

Fig. 4.3 Contributions of Social Insurances



Source: NAV

First, Hungary had succeeded in a heavy burden of external indebtedness during the socialist regime. This forced heavy tax collection during the 1990s.

Second, the Socialist Party, the successor of the previous ruling party in the socialist era reigned long after the system's transformation and didn't have a clear concept of developing the market economy by activating private investment and consumption.

The two factors accustomed the socialists to the old-style governmental administration as in the socialist era. Therefore, when Fidesz got back into administration, it was inevitable to cut the social contribution burdens for employers and employees. By decreasing the social contribution burden of employers and employees, the company's investment and individual consumption were expected to grow. However, the expectation doesn't come true. Table 4 shows that the personal consumption level of Hungary became the lowest among the EU countries even after decreasing the social insurance burdens.

The individual consumption level of Hungary had been in the lowest group among the transition countries, but still higher than that of Romania and Bulgaria in 2013. The level has increased since 2018, but the recent increases in Romania and Bulgaria are larger than in Hungary. Thus, Hungary has dropped to the last place in individual consumption among the EU countries.

The fact is not contradictory to daily experiences. As many Hungarians have experienced, consumer goods in other EU countries are cheaper and more abundant than in Hungary. What causes the phenomenon? What defines the level of individual consumption?

Table 4.2. Actual Individual Consumption (AIC) per capita, 2013-2023, (EU=100)

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Luxembourg	157	155	155	151	151	152	146	139	143	138	138
Austria	126	125	123	122	120	119	117	115	118	118	117
Netherlands	121	119	117	114	114	115	113	114	114	116	117
Germany	124	125	123	124	124	123	122	124	120	118	116
Belgium	118	118	118	116	114	114	114	114	115	115	114
Denmark	119	118	118	116	116	117	115	121	121	110	110
Finland	116	115	116	115	114	113	111	114	112	110	109
Sweden	119	120	121	117	115	113	111	113	114	112	109
France	115	114	113	112	110	109	109	110	110	107	107
EA20	107	107	107	107	106	106	105	104	104	104	104
Italy	103	101	100	101	101	100	100	97	97	100	101
Cyprus	91	91	92	94	95	95	97	96	96	98	99
Ireland	97	96	97	97	95	96	95	89	91	94	94
Lithuania	80	83	85	86	89	90	93	94	96	94	92
Romania	56	57	59	64	69	74	78	81	83	85	89
Spain	88	90	91	91	93	91	91	84	86	86	88
Portugal	83	83	84	84	83	85	86	84	84	87	88
Slovenia	80	79	78	79	79	81	83	83	86	87	87
Poland	75	75	77	76	77	78	80	83	85	87	86
Malta	85	85	84	85	84	85	87	81	83	83	85
Czechia	79	80	80	81	83	84	85	85	86	83	81
Greece	81	81	79	77	78	77	77	75	75	78	79
Croatia	64	63	63	64	65	66	67	69	73	76	78
Estonia	69	70	72	73	73	75	76	78	79	78	77
Slovakia	76	76	76	70	68	68	70	76	75	77	75
Latvia	66	66	67	68	70	71	71	72	74	76	75
Bulgaria	51	53	54	55	55	57	58	60	64	69	73
Hungary	64	64	64	64	64	65	67	70	69	70	70
Norway	138	138	133	130	133	132	128	127	127	128	126
Iceland	121	121	121	119	120	118	117	124	123	123	121
Switzerland	137	137	137	133	127	125	122	123	120	117	118
Türkiye	63	66	69	68	69	66	64	65	67	77	86
Montenegro	53	54	55	57	57	59	60	59	59	63	65
Serbia	49	49	48	48	48	48	49	51	52	53	54
North Macedonia	44	44	46	46	46	46	47	48	51	50	52
Bosnia and Herzegovina	41	41	41	41	40	40	41	41	41	41	44
Albania	37	38	39	38	38	38	38	39	39	41	42

Megjegyzés: countries are sorted according to their 2023 volume index per capita for AIC

Forrás: Eurostat (online data code: prc_ppp_ind)

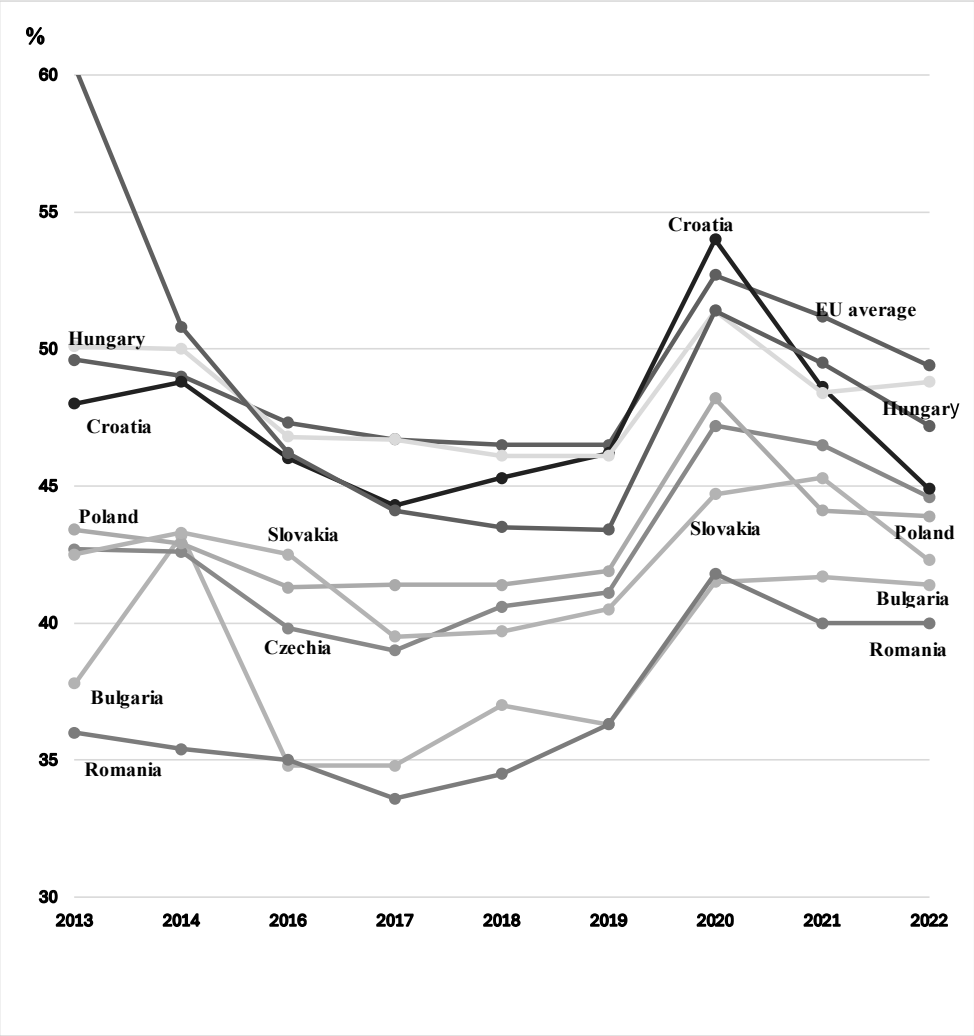
Three factors can be pointed out: income level, heaviness of taxation, and foreign exchange policy.

The foreign exchange rate of Forint might be managed by lifting a little bit higher than the actual rate. Although social contribution and personal income tax have decreased in recent years, personal disposal income is still not high. Under the present taxation system, the net income is roughly 65.5% of the gross income after deducting 15 % of personal income tax and 18.5% of social contribution. The net-gross ratio is not extraordinary in the EU. If 10 % of net income is directed to saving or repayment of loans, then the actual disposal income will be 55.5% of the gross income. Hungarians must pay 27% VAT for buying consumer goods roughly equivalent to

15% of the disposal income. Thus, real disposal income[57] will be around 40% of the gross income.

The 40% real disposal income compared to the gross income might be standard among the European welfare states. However, the income level is far higher in these welfare states than in Hungary. That is, the real disposal income is quite low compared to the income level in Hungary, which results in the lowest ranking of AIC in the EU.

Fig. 4.4 Trend of the Redistribution rate among the Transition Countries



Forrás: Eurostat (online data code: gov_10a_exp)

Low Income, High Redistribution Rate, Dependence on the EU Subsidy

Stagnating the domestic market and wage work of the multinational companies have kept

[57] In this context, a real disposal income is the net amount of the gross income that can be really spent on consumer goods excluding a VAT.

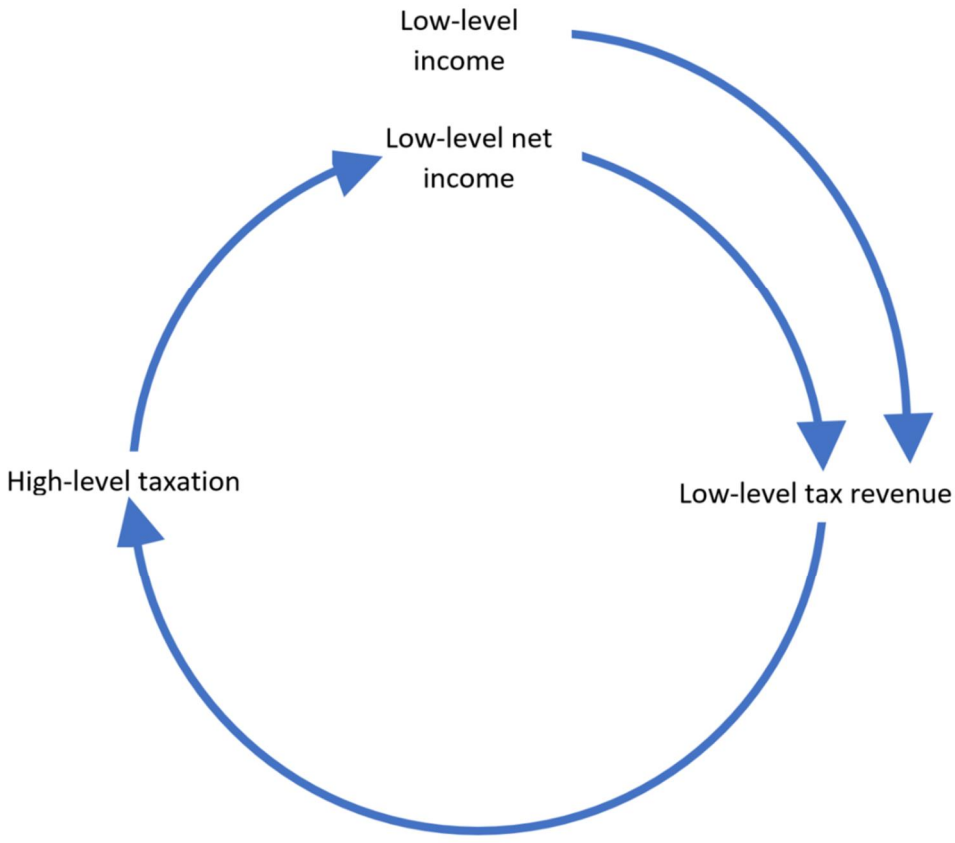
repressing the growth of personal incomes. Therefore, the government must continue high taxation to maintain the central and local government management.

There are several ways to measure the centralization of income (redistribution rate) to the government. The government expenditure (spending) on the GDP is one of the clear indicators of the centralization level. In the 1990s, the redistribution rates had been very high in Hungary and other Central Eastern countries. For example, the rates of Hungary in 1995-1996 resulted in 55-60% of the GDP when the crisis of the external debt payment had worsened. However, even after the crisis had gone the high level of income redistribution has characterized the Hungarian economy.

Fig 4.4 shows the redistribution rates among the transition economies.

Thus, a vicious circle between low personal income and high government taxation has been working through the socialist and Fidesz administrations. The average rate of government spending to GDP during 1995-2023 is 49.31% in Hungary. The rate is not so high compared to the Northern European countries. However, Hungry is not a highly developed welfare state like the Scandinavian countries.

Fig. 4.5 Vicious Cycle of Low Income and Taxation



There should have been a discussion on decreasing the centralization of income in Hungary to activate private entrepreneurs' investment and private consumption[58]. This is the sole way to develop a market economy. However, very few economists tried to discuss how the government should take measures to decrease the size of income redistribution. On one hand, the socialist party didn't have any ideas to expand a market economy but just welcomed foreign capital, and on the other hand, the Fidesz used to proclaim defending people from brutal capitalism that the socialists approved. The Fidesz assertion was an illusion because there has been no established capitalism nor a developed market economy in Hungary. The common defect of the two parties' ideas lies in neglecting the importance of developing the market economy. Here is the point of how the welfare state should be constructed.

A "welfare state" with an underdeveloped economy in the socialist era was characterized as a premature welfare state ("koraszülött jóléti állam") by Kornai. That is, the "welfare state" in the previous regime is a mere formal imitation[59] of the Western welfare state to show that the socialist system had the same advantages as the Western welfare states. Essentially, it was a system of sharing poverty equally. Even 30 years after the regime change, Hungary has not encountered an essential change into a welfare state with a developed economy and continued to stay in a premature welfare state like in the Kadar era.

Although government spending reaches more than 49% of the GDP in Hungary, government tax revenue including social insurance revenue remains around 36-39% of the GDP in recent years. What is the gap between the two figures? The gap consists of borrowing from abroad and the EU subsidy. Hungarian society cannot survive without the EU subsidy and external borrowings. Despite the crucial facts, Hungarian political leaders denounce that the EU's policies violate the sovereignty of its member states and seek brinkmanship diplomacy toward the East to resist EU interference.

What is important for Hungary should not be the brinkmanship diplomacy that pulls the country to Central Asia beyond the Balkan countries with Chinese funds but rather the establishment of an independent national economy that can stand sustainably on its feet.

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[58] Zsigmond Jarai had kept the policy idea to lessen the redistribution rate under 40% of GDP to vitalize the market economy by cutting government expenditures. however, neither Gyurcsány nor Orbán couldn't agree with his ideas, and finally, after a long-term cooperation with Orban Viktor Jarai departed from him in the middle of the second Orban administration.

[59] The paid holidays and sick leaves were set at the level of the Western countries in the socialist era to show that the socialist system could afford the same wellness in the West. The previous regime gave people free time instead of material abundance. Thus, politicians tried to convince people that the socialist state was worker-friendly, although the income level was far lower than in the West.

Table 4.3 Public Balance and General Government Debt, 2020-2023 (a GDP %)

	Public balance (net borrowing / lending of the general government sector)				General government debt (general government consolidated gross debt)			
	2020	2021	2022	2023	2020	2021	2022	2023
EU	-6.7	-4.7	-3.4	-3.5	90.0	87.4	83.4	81.7
Euro area 20	-7.0	-5.2	-3.7	-3.6	97.2	94.8	90.8	88.6
Belgium	-9.0	-5.4	-3.6	-4.4	111.9	107.9	104.3	105.2
Bulgaria	-3.8	-3.9	-2.9	-1.9	24.6	23.9	22.6	23.1
Czechia	-5.8	-5.1	-3.2	-3.7	37.7	42.0	44.2	44.0
Denmark	0.3	4.1	3.3	3.1	42.3	36.0	29.8	29.3
Germany	-4.3	-3.6	-2.5	-2.5	68.8	69.0	66.1	63.6
Estonia	-5.4	-2.5	-1.0	-3.4	18.6	17.8	18.5	19.6
Ireland	-5.0	-1.5	1.7	1.7	58.1	54.4	44.4	43.7
Greece	-9.8	-7.0	-2.5	-1.6	207.0	195.0	172.7	161.9
Spain	-10.1	-6.7	-4.7	-3.6	120.3	116.8	111.6	107.7
France	-8.9	-6.6	-4.8	-5.5	114.9	113.0	111.9	110.6
Croatia	-7.2	-2.5	0.1	-0.7	86.1	77.5	67.8	63.0
Italy	-9.4	-8.7	-8.6	-7.4	155.0	147.1	140.5	137.3
Cyprus	-5.7	-1.8	2.7	3.1	114.9	99.3	85.6	77.3
Latvia	-4.4	-7.2	-4.6	-2.2	42.7	44.4	41.8	43.6
Lithuania	-6.5	-1.1	-0.6	-0.8	46.2	43.4	38.1	38.3
Luxemburg	-3.4	0.5	-0.3	-1.3	24.6	24.5	24.7	25.7
Hungary	-7.6	-7.2	-6.2	-6.7	79.3	76.7	74.1	73.5
Malta	-9.4	-7.6	-5.5	-4.9	52.2	53.9	51.6	50.4
Netherlands	-3.7	-2.2	-0.1	-0.3	54.7	51.7	50.1	46.5
Austria	-8.0	-5.8	-3.3	-2.7	82.9	82.5	78.4	77.8
Poland	-6.9	-1.8	-3.4	-5.1	57.2	53.6	49.2	49.6
Portugal	-5.8	-2.9	-0.3	1.2	134.9	124.5	112.4	99.1
Romania	-9.3	-7.2	-6.3	-6.6	46.7	48.5	47.5	48.8
Slovenia	-7.6	-4.6	-3.0	-2.5	79.6	74.4	72.5	69.2
Slovakia	-5.3	-5.2	-1.7	-4.9	58.8	61.1	57.7	56.0
Finland	-5.6	-2.8	-0.4	-2.7	74.7	72.6	73.5	75.8
Sweden	-2.8	0.0	1.2	-0.6	40.2	36.7	33.2	31.2

Note: data was extracted on 22.04.2024.

Source: Eurostat (gov_10dd_edpt1)

What hinders the development of the market economy? – The Trap of a "Treasurized Economy"

Nowadays, the largest economic actor in the Hungarian economy is the government, which holds half of the national economy in its hands. This fact teaches us that a business's success cannot be realized without government procurement, public work orders, and subsidies. It is natural for private companies to keep market activity at a minimum and to maximize getting public work orders or subsidies. The economic success of private companies overwhelmingly depends on the competition to get orders and/or subsidies from the central and local government, not on the competition in the market. I describe this kind of national economic phenomenon as a "treasurized

economy,"[60] which also characterized economic management in the previous socialist regime.

The system transformation in the central-eastern countries at the end of the 20th century opened the way to developing a national economy by establishing a market economy, which might realize the welfare state with a developed economy as a firm foundation. However, Hungary hasn't succeeded in establishing a developed market economy but maintains a treasurized economy as in the socialist era. The treasurized economy has the same characteristics as the premature welfare state of the old regime in the sense that a state doesn't have an economic foundation of a developed economy. Although many sports facilities have been built over 10-15 years, many hospitals and schools remain in miserable conditions like in the previous regime even after 30 years of system transformation[61].

For whom and what are the advantages and disadvantages of this system?

First, the treasurized system is very convenient in handling enormous amounts of public money for the ruling party politicians, government leaders, and their surrounding businessmen. In quasi-dictatory political circumstances, the ruling party politicians can do anything at their will[62] and even make their private wealth through various tricky schemes.

Second, the system easily degenerates into a politically distorted "development dictatorship" that leads the society to nepotism.

Third, in a nepotism society, people are accustomed to indifference towards corruption. Everyone tries to get some connections to the ruling party politicians to get a benefit, and once the practice becomes normal, people lose the sense of corruption. Especially in a transitional society where civil ethics and norms are quite weak, people become easily indifferent to the corruption of politicians like in the socialist society.

Fourth, the ruling party politicians and surrounding businessmen are also losing the sense of corruption. They lose the sense of distinguishing private money from public money. Therefore, when one gets a huge amount of public work orders, many businessmen without exception buy

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[60] In Hungary, the economy of the old regime was named "kincstári gazdaság". The author applies this characterization to the national economy after the system transformation "treasurized economy".

[61] In Japan, even veterinary schools are equipped with MRI machines for human use, but in Hungary, even general hospitals do not have MRI machines, and for MRI examinations, patients must wait for an order in advance at a hospital specializing in this field. In this respect, there is little difference from the old system.

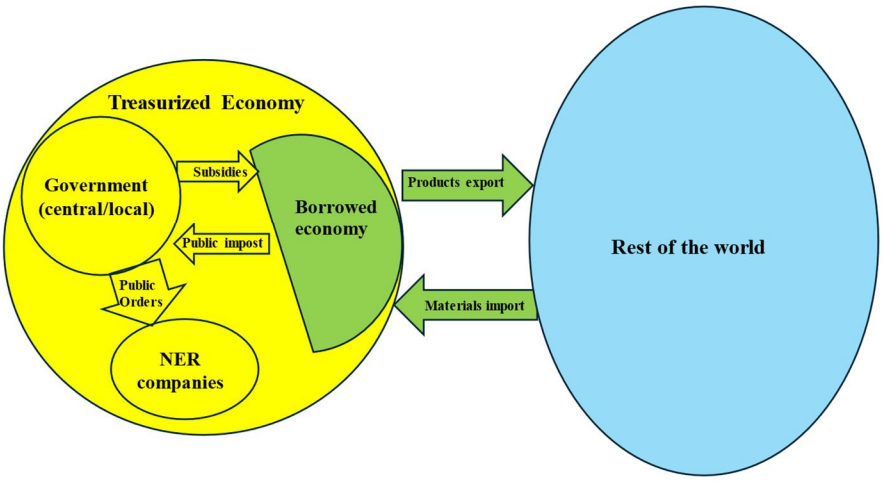
[62] For example, Antal Rogán (Minister in charge of the Council of Ministers in the Prime Minister's Office), who is known as the No. 2 or No. 3 in the Fidesz administration, obtained an EU development grant for software development (256 million Ft) through a company he was part of the management team of when he was mayor of Budapest's 5th district, and he succeeded in getting the government to accept the software. Rogán, who is not an IT engineer, is one of the patent applicants (developers). Either it was developed by someone close to Rogán, or it was a business deal colluded with Rogán by someone who wanted to make a buck by working with Rogán. This overly obvious insider trading is just one of many. Breach of trust by taking advantage of one's position, which is considered a crime in developed countries, is tolerated as a legal transaction in Hungary.

expensive automobiles and luxury wristwatches that cost tens of millions Forint[63]. This is a phenomenon typically seen in developing countries. In this sense, Hungary has been recurring to the previous society or a developing country.

Fifth, those companies that cannot get government subsidies and public work orders have been suffering in the narrowed market from maintaining and growing companies. The underdevelopment of market activity cannot nourish the ethics and norms of civil society for executing business.

Sixth, the underdevelopment of the market economy causes many problems in people's daily lives. The lack of market competition causes a shortage of small services that gives room to manipulate transactions. The ethics of the market economy cannot be fully grown under the quasi-market economy.

Fig 4.6 Structure of the Hungarian Treasurized Economy



Seventh, the treasurized economic society, like the socialist system, is governed by the principle of top-down distribution. If the market economy operates on the give-and-take principle, this kind of society operates on the principle of give-but-obey. This socioeconomic principle also guides the development of social ethics and norms[64]. In other words, a society based on the give-and-take principle creates equality between economic actors. In contrast, a society based on the give-but-obey principle creates a hierarchical relationship between giver and taker. In this sense,

[63] Ruling party politicians, the government leaders, their sons-daughters, and their friends are enjoying the elite positions getting access to a large amount of public money and changing it to private wealth. Some vulgarized people act ungraciously, stashing wads of cash in their pockets and scattering their chips like a man who has risen from the ashes.

[64] For details see Morita (2021), Chap. 2.

a treasurized economic society has the same characteristics as a socialist society. If the 'give-but-obey' principle prevails, civil society principles cannot take root in society. It is natural that the idea of "illiberal democracy" comes from politicians in government because they stick to the top-down distribution to keep possibly long ruling of the country. It is essentially the same as the 'democratic centralism' of the socialist era, where civic ethics and civil society norms cannot be nurtured.

Thus, the treasurization of the national economy hinders the healthy development of the market economy and has brought out a nepotism type of economic society. The treasurization of the national economy and the overwhelming dependence on the borrowed economy characterize the Hungarian economy, and these two factors set an absolute limit on the growth of wages and personal income of the country.

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V.

Hungary's Brinkmanship Diplomacy
- The Hidden Intensions of its Eastern Diplomacy

In early February 2022, Hungarian Prime Minister Orbán flew to Moscow on short notice to meet with President Putin. The visit came amid news of preparations for war. The lengthy meeting was reportedly related to oil and gas supplies and the progress of nuclear power plant construction, but the content of the meeting has not been made public. The press conference following the meeting was unusual in that President Putin spoke unilaterally and left the stage alone, without accompanying Prime Minister Orbán as he left. President Putin's nerves seemed to be on edge in anticipation of a war of aggression.

Perhaps because of the lack of assurances about oil and gas supplies, Hungary's Minister of Foreign Economic Affairs has frequently visited Russia since the start of the invasion of Ukraine, holding meetings with Foreign Minister Lavrov and Gazprom executives as if the Russian aggression had never happened. The Hungarian government's diplomatic stance of promoting economic negotiations with Russia without condemning Russian aggression has been frowned upon by EU countries.[65]

For more than two years after the war began, not a single Hungarian government minister, let alone Prime Minister Orbán, visited Kyiv. In early July 2024, Hungary, which was holding the rotating EU presidency, sent Prime Minister Orbán to Kyiv to develop diplomacy as the country's president. While leaders from neighboring countries were visiting Kyiv one after another, Orbán finally made his visit to Kyiv two and a half years after the start of the war. After meeting with President Zelensky, Orbán returned to Hungary, but soon visited President Putin, and held talks with President Xi Jinping and former President Trump.

Orbán informed Russia in advance about his visit to Kyiv but did not inform President Zelensky of his intention to visit Moscow. This was a clear demonstration of Prime Minister Orban's stance on the war in Ukraine. On the other hand, EU leaders expressed their displeasure at Prime Minister Orban's behavior, which was as if he were an EU leader, and took countermeasures against Hungary's infringement of authority by stripping it of the right to host various council meetings scheduled to be held in Hungary, the country holding the rotating presidency.

What is the Hungarian government's intention behind this ostentatious stance of prioritizing

[65] Politician Orban holds the view that "Russia's invasion of Ukraine was an unavoidable war provoked by Ukraine's provocations". All Orban's arguments and actions stem from this.

Russia (and ignoring Ukraine)? While brushing aside criticism from EU countries and securing energy supplies from Russia, Hungary is not only reaching out for EU subsidies but is also developing a foreign policy that is likely to provoke EU countries. What is behind Hungary's brinkmanship diplomacy, which is trying to chase two rabbits at once? What is the true intention behind this showy diplomacy with the East?

Orbán the politician

Under the old regime on the eve of the so-called "Eastern European Revolution," Viktor Orbán (1962-) founded Fidesz (Youth Democratic Union) in 1988 against the youth organization of the former Communist Party (Hungarian Socialist Workers' Party). Ten years later, in 1998, he took power for the first time and became Hungary's prime minister at the young age of 35.[66]

The experience of the first Orbán administration (1998-2002) taught the student leader from the countryside the magic of rising to the top of national politics. His first diplomatic trip to France shortly after the inauguration of Prime Minister was to coincide with the World Cup soccer finals (July 12, 1998). He was shown on the sports channel Eurosport in the VIP seat watching the final with his eldest son, a kindergartener, between his legs[67]. For Orbán, an unrivaled soccer fan, the trip to France to watch the World Cup final was his "reward" for becoming prime minister, and a natural right of prime minister. At the time, I wrote about my concern about this mixing of public and private interests. As well known, in the former socialist society, the distinction between public and private was blurred, and there were no ethics or norms of civil society. Being an anti-establishment activist did not mean that one had a different social ethic from those in power. Since they lived in the same society, breathed the same air, and lived by the same social norms, only dissidents could not have had different social ethics and norms.

When Fidesz lost the ruling position in the 2002 general elections, Orbán felt a sense of loss.

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[66] As to the Hungarian political development after 1989's change, see Morita (2021), chap. 6.

[67] Since then, Prime Minister Orbán has traveled to every World Cup soccer final, almost always on a private jet owned by OTP, Hungary's largest bank. In Russia in 2018, he watched the France-Belgium match in St. Petersburg, followed by the final in Moscow. To give the appearance of an official visit, he met briefly with President Putin before the final.

When asked by opposition members of parliament in October 2018 about the private jet reception, Prime Minister Orbán brushed off the issue, saying, "I don't see what the problem is; I have been doing this [watching sporting events] for 30 years and I will do so again next week." Prime Minister Orbán has no notion of conflict of interest, bribery, or corruption.

Nor is it a coincidence that MOL, Hungary's largest company, became a sponsor of the prime minister's local soccer club. An arrest warrant was issued by the Croatian government through Interpol for MOL Chairman and CEO Hernádi on suspicion of having given $10 million in back taxes to the Croatian Prime Minister Sanader (arrested in 2011 and currently imprisoned) in connection with the acquisition of shares in Croatian Oil Public Company. The Hungarian government has consistently refused to extradite him and is protecting him. It makes sense to think that the MOL sponsorship of the club is a quid pro quo to the protection.

Orbán, who had only known the world of politics since his student days, experienced the pleasure of being at the pinnacle of power and the emptiness of losing it. Therefore, the 2006 general election was a fight for his life as a politician.

During this election campaign, Orbán publicly declared that he would not stick to his position as a candidate of the prime minister if he could wrest power from the Socialist Party. He proposed Péter Ákos Bod[68] (economist, Minister of Industry after the first free election, and then the Hungarian National Bank governor) as a prime minister's seat candidate. However, this concession did not work. In the general election, he failed to seize power from the Socialist Party by a narrow margin. The shock of this defeat was so great that Orbán even considered resigning as leader of Fidesz and retiring from politics.

However, an unexpected stroke of "good fortune" befell the discouraged Orbán. In a closed-door internal policy debate in May 2006, shortly after winning the general election, Gyurcsány, the leader of the Socialist Party and the prime minister, made a fatal gaffe: "Obviously, we've been lying for the last year and a half or two years. We lied morning, night, and evening". A recording of this speech was leaked[69] and only the part of "We lied morning, night, and evening" was cut out, and the phrase was played on TV and radio every day. This brought the Fidesz activists back to life. Street demonstrations and vandalism began, and Budapest was in a state of mayhem.

Orbán, once politically dead, was revived by this mayhem. "The cause of the mayhem was the politics of lies of Gyurcsány and the Socialist Party", which fueled street actions that the people need not follow a "lying" government. Furthermore, the "Lehman Shock" damaged the

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68 Bod is an intellectual who does not belong to a political party. He describes Orbán as "a strange and incomprehensible man". The mind of a true politician is difficult for the average person to understand. As the Orbán administration became more and more prolonged, intellectuals who had supported the Fidesz coalition government and/or served in its ministries left Orbán one after another. Orbán, who has made it clear that the support of intellectuals does not bring in votes, does not seem to have any special feelings about the defection of these intellectuals.

69 An investigation was conducted within the Socialist Party into the leak of a tape recording of a closed-door debate. It is presumed that forces within the party who did not like the arrogant attitude of Gyurcsány, who was elected leader of the Socialist Party at a young age as a rival to Orbán, were involved in the leak. Gyurcsány seems to have used government intelligence agencies to identify most leakers, but he has refrained from making them public because public disclosure would not turn back the clock. The leak dealt an irreversible blow to the Socialist Party, the successor to the former Socialist Workers' Party (Communist Party), and ended the politics dominated by the "reformists" of the former Socialist Workers' Party that had been in place since the regime change.

Socialist government. The historic appreciation of the euro (Hungarian currency, the forint) led to the spread of bank loans denominated in foreign currencies (yen) with low-interest rates, and Hungary was enjoying a real estate boom before the Lehman shock. The sudden shock caused the forint to plummet, and the number of people unable to repay their loans skyrocketed. The Socialist government was blamed for its failure to regulate loans denominated in foreign currencies.

For the Gyurcsány administration, the domestic turmoil and the Lehman shock were a powerful double whammy, and it quickly became a lame duck less than two years before the 2010 general elections. To regain the prime minister's seat, Orbán held a series of dialogues with foreign chambers of commerce and continued his campaign to dispel the fears of foreign companies by assuring them that he would not change the preferential treatment for foreign investment even if the government changed hands.

As expected, the 2010 general election ended in a landslide victory for the Fidesz coalition, which won 263 seats, and the Socialist Party lost 131 seats, halving its vote share. This was the beginning of the second Orbán administration, which has dominated Hungarian politics for a long period of time up to the present day.

Belief Change of Orbán

Ahead of the 2010 general elections, politician Orbán had displayed political stances and values that were diametrically opposed to those of the present.

On March 30, 2007, at a congress celebrating the 19th anniversary of the founding of Fidesz, Orbán criticized the Socialist Party's proximity to Russia and offered a history lesson to the gathered youth: “Having been liberated from the most cheerful barracks of the Soviet system, we must not turn them into the most cheerful barracks of Gazprom”. He even went so far as to say, “Oil may come from the East, but freedom always comes from the West. We must stand by western Hungary; we must not allow Hungary to be diverted from this path”. This is the opposite of what Prime Minister Orbán is saying and doing today.

In addition, when Russia invaded Georgia in the summer of 2008, Prime Minister Orbán expressed solidarity with the Georgian people, praised the courage of the leaders of Poland, Ukraine, and the Baltic states who visited Georgia during the war and sent a letter to these leaders demanding the immediate and unconditional withdrawal of Russian troops from the country. The purpose of this letter is posted on the website of the Democratic Christian People's Party, which is still in coalition government (https://kdnp.hu/news/orban-viktor-leveleben-eliteli-az-orosz-katonai-agressziot- video).

In this letter, he calls for the immediate accession of Georgia and Ukraine to NATO and calls for a united NATO and EU countermeasure to the then government of Gyurcsány. This is an

unimaginable assertion from the figure of Prime Minister Orbán, who does not demand the withdrawal of Russian troops from the current aggression against Ukraine and continues to present a bystander-like pro-Russian view, saying that “Ukraine cannot win,” “I do not consider President Putin a war criminal,” and “Ukraine's NATO membership is a postwar issue”.

Going further back in history, at the “Reburial of Imre Nagy and the Martyrs” (June 16, 1989), which marked a turning point in the so-called “Revolution in Eastern Europe” and was the stage for the debut of the young activist Orbán, Viktor Orbán made a speech calling for the withdrawal of Soviet troops from Hungary and made his name internationally known.

At the military review of the state funeral ceremony on October 6, 2012, the conversation between Prime Minister Orbán and the chief of ceremonies was incidentally picked up on the microphone: “They look good...no fat generals among them... This is how a soldier should be”. Orbán at the time also had a lean figure and set an example himself. Later, however, his physique began to collapse in tandem with the change in his values. From his current appearance, imagining the young officer-like politician Orbán is difficult. His physical shape seems to change due to stress-induced binge drinking and eating.

The year after the third Orbán government began in 2014, and as the problems of the influx of Syrian and African refugees and migrants worsened in 2015, a shift in Prime Minister Orbán's external political stance became clear. Believing that Western liberal democracies could not protect his country, he looked to “illiberal democracies”[70] as models and considered Russia, China, and Turkey to be successful examples, and later he began to feel a kinship with President Trump. He rationalized his political stance by saying, “Democracy based on community, rather than democracy based on individual liberalism, is an effective way to develop a middle-income country like Hungary”[71]. He became convinced that Hungary's future lay in a tyranny that looked to the East for a model. Clearly, this change is symbolic of the fact that the maintenance of power

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[70] Ironically, this argument bears a striking resemblance to the argument for a "democratic centralized system," which is the organizing principle of the Communist Party. The shift from the anti-authority to the power side has resulted in a return to the practices of the old regime.

[71] On July 29th, 2024, Orban gave a speech at the annual summer university in Tusnádfürdő (Băile Tușnad, a summer resort in the Transylvanian region of Romania), and expressed his opinion that “the world is currently undergoing a period of transition in the world order that has not been experienced for 500 years”. He argues that “Asia, not America or Europe, will become the center of the world” and that “countries centered on China, India, Pakistan and Indonesia have the population, technology, capital and military superiority in Asia, and that Asia is home to global financial funds and major corporations, the world's best universities and research institutes, the largest stock markets, and cutting-edge space development and medical research”. However, this is not a general statement about Asia but refers specifically to China. He asked whether this shift in the world order would mean a crisis for Hungary or provide opportunities, and he developed his own theory, saying, “If it means a crisis, we need to work with the US and the EU, but if it means opportunities for our country, it is in Hungary's interests to move down the path of exploring those opportunities.” He also said, “The EU and the US have nothing to offer Hungary, and only China is proposing attractive projects for Hungary.” This is Orban's “public logic” that justifies his approach to China (https://www.facebook.com/watch/?v=1015172346927752).

and the solidification of its foundations had become Orbán's self-objectives.

Ideological Changes of Fidesz

The political organization Fidesz, founded by the politician Orbán, has also undergone a major change of ideology: Fidesz started out with the slogan “Radicalism, Liberalism, and Alternativism,” but has shed that slogan one by one as it has deepened its entry into the political arena.

After the first free elections, Fidesz dropped the slogan “radicalism” (1992 Party Congress). As a legitimate party, Fidesz may have felt that it was not appropriate for the party to keep up the slogan “radicalism” forever. At the party congress, the party decided to join the Liberal International.

However, after the Socialist Party won the general election in 1994 and the liberal SZDSZ (Liberal Democratic Union) formed a coalition government with the Socialist Party, Fidesz was forced to change its political strategy. The traditional slogan did not make the distinction between the political lines clear. So, as a political force against the leftist bloc, it sought a future for Fidesz based on civic conservatism and at the receiving end of those who would be victims of the liberal market economy.

At the 1995 party congress, Fidesz changed its name to the Fidesz Hungarian Civic Party (Fidesz-Magyar Polgári Párt), dropping the banner of liberalism and defining liberalism, which promotes market economic liberalism, as the enemy of citizens. By turning to conservatism, the party chose to gain a new raison d'etre. Accordingly, in 1999 it signed an agreement with the Hungarian Christian Democratic People's Party, and in 2000 it left the Liberal International and applied for membership in the European People's Party[72].

From this point on, the Fidesz coalition reestablished itself as a party of civic conservatism and Hungarian nationalism and redefined itself as a party that defended its citizens against the left-wing liberalism of the Socialist Party and others. From this point on, it became increasingly critical of the Socialist Party and its predecessor, the Hungarian Socialist Workers' Party (Communist Party), and sought to become a viable alternative to the Socialist Party.

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[72] In March 2019, the membership of Fidesz was suspended by the Congress of the European People's Party for his derogatory criticism of European Commission President Juncker, who was from the People's Party. In March 2021, following the People's Party's passage of a constitutional amendment that led to Fidesz's expulsion, the leader Orbán decided to leave the European People's Party. As a result, Fidesz became an independent party that did not belong to any faction of the European Parliament, thus narrowing the avenues for its influence.

What Changed Politician Orbán?
- The Radical Change during the Second Orbán Government

After losing the 2002 general election, Orbán learned two lessons from the failures of the first Orbán administration (1998-2002). The first was the failure to exercise the party's influence over the media, and the second was the failure to accumulate the party's monetary fund. The first administration was too politically naïve to take measures to bring the media under its control and to create a slush fund. He became convinced that overcoming these two problems was a prerequisite for the longevity of his administration. This change of political stance made a radical change in the characteristics of the Orbán administration. It was all about a shift in thinking that had the maintenance and consolidation of power as its self-imposed objective.

The turning point was the expansion of the Paksi nuclear power plant, built with Soviet technology. For Central and Eastern European politicians, Russian money is a forbidden fruit[73]. The attitude of politicians changes drastically depending on whether they have access to it.

In the early 1990s, immediately after the regime change, the countries of Central and Eastern Europe reached an agreement with the Russian government to settle the accumulated Soviet-era claims in kind. Based on this agreement, the countries transferred their claims against the Russian government to businessmen around the government at a low price, which led to corruption around the governments. In the 2000s, the disposal of assets held by Hungary since the time of the former Soviet Union came to the fore. The sale of a huge amount of real estate owned by the Hungarian Commercial Representative Office in a prime Moscow location was rushed through, and an opaque sales contract was concluded with the Russian side. The case, which led to the arrest and indictment of those involved upon the inauguration of the Fidesz government in 2010, ultimately resulted in the acquittal of all parties involved[74]. It is understandable that unraveling transactions involving the Russian government is almost impossible. Similarly, transactions through offshore companies are impossible to even prosecute due to the difficulty of investigation and poor prosecutorial skills.

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[73] Gerhard Fritz Kurt Schröder, former leader of the German Social Democratic Party and Chancellor of Germany became a member of the board of Nord Stream AG soon after leaving office with the promise of a huge reward, and his political stance continues to be questioned. Since then, he has been named to the boards of a succession of Russian-related companies and has even dabbled in China, where he was listed in the "Paradise Papers" (ICIJ: International Consortium of Investigative Journalists). Like Prime Minister Orbán, he has had a close personal relationship with President Putin with his pro-Russian position clear. Former Czech President Zeman (Social Democrats) also acted like Prime Minister Orbán, not only by dipping into Russian funds and making his pro-Russian stance clear but also by trying to get closer to China and giving Chinese interests to related companies. President Zeman, however, was so unpopular that he is regarded as the worst president in history, and he was unable to extend his influence as Orbán had done. What all three had in common was that exorbitant economic interests dictated their political stance. Secular interests thus outweigh lofty ideas.

[74] None of the politicians were arrested or prosecuted.

The expansion of Hungary's nuclear power plants, which are due to expire in late 2030, was first proposed at the end of the Socialist government of Gyurcsány (2009), but its realization was left to the Fidesz government. In the fall of 2013, just before the general elections in 2014, the project took a sharp turn for the worse. At the time, nuclear power plant manufacturers from around the world were lobbying in concert with their own governments in the belief that an open bidding process would take place. However, during a visit to Moscow in January 2014, Prime Minister Orbán surprised all concerned by signing a contract with President Putin, naming Rosatom as the prime contractor. This sudden decision without public bidding was viewed as problematic by the European Commission, and the expansion of Hungary's nuclear power plants took a twist from there[75]. Be that as it may, it is natural to assume that there was a backroom deal in this sudden decision. There must have been something between them that Prime Minister Orbán would have jumped at, with the general election just around the corner. Since a huge investment deal has been settled, I assume that the two leaders had agreed to "leave the rest to distribute profit among the parties concerned". From this point on, Orbán's attitude toward Russia took a 180-degree turn.[76]

The radical change of the second Orbán government became apparent in the second half of the administration: In January 2013, the Hungarian government decided to sell "the state bond with immigration right" to foreigners. The puzzling government business decided by the Parliament's "Economic and Information Committee" is the so-called "Golden Visa," a business of selling immigration rights[77]. Although ostensibly a decision to procure advantageous foreign

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[75] Ten years have passed since this agreement was reached, and not even the foundation work has begun. Rosatom was unable to procure equipment from Germany and other countries, making its prospects uncertain. Neighboring countries are changing their nuclear fuel suppliers, increasing the likelihood that Rosatom will be subject to sanctions. The expiration date of existing nuclear power plants is concentrated around 2035.

[76] From this time on, the political stance of Fidesz politicians changed significantly. In 2008, before taking power, Orban criticized the 10- or 30-year confidentiality (prohibition of disclosure) of various government contracts imposed by the Socialist government, and harshly attacked the fact that state agreements (contracts) related to people's lives were designated as confidential (https://www.youtube.com/watch?v=NGyscqVXiy4). However, the Orban administration designated the agreement with Rosatom, which had decided on the expansion of nuclear power plants, as a state secret for 30 years. In response to a reporter's question (about the contradictory stance), Prime Minister Orban maintained his stance of ignoring the question.

In addition to the nuclear power plant expansion project, the current Orban administration has also designated as state secrets for 10 or 30 years the Budapest-Belgrade railway modernization project and other important investments designated by the government. Investments related to the construction of a battery factory in China are also included in the state secrets.

[77] The Hungarian government suspended this business in March 2017, fearing inconvenient information would emerge. After Russia's invasion of Ukraine, the European Parliament passed a proposal to restrict the opaque Golden Visa business to prevent wealthy Russians from obtaining permanent residency in EU countries (https://www.europarl.europa.eu/news/en/press-room/20220304IPR24787/meps-demand-a-ban-on-golden-passports-and-specific-rules-for-golden-visas).

funds for Hungary, the reality is that it is a fraudulent business involving an offshore company with an opaque owner, a crime that would be punishable by charges of breach of trust in a developed country[78].

The government bonds were sold not through a government agency, but through intermediary companies established in Cyprus and Liechtenstein by businessmen around the administration. The ownership and business details of the intermediary companies are considered state secrets, and the government has not disclosed any related information. In a court case in which an anti-government portal (G7.hu), with the support of Transparency International, demanded that the National Debt Management Center release information, the government side lost the case and certain information was made public in 2018. According to G7.hu[79], which released the information, about 20,000 foreigners, including their family members, purchased government bonds under this scheme and obtained the right of immigration. Seventy percent of them are Chinese, followed by Russians (384 purchasers, 1256 family members in total). The Russians include individuals sanctioned for the invasion of Ukraine, but the Hungarian government has not released their personal information.

The business is an immigration rights sale targeting Chinese and Russians (85% of worldwide sales). It is believed that the business was conducted with brokerage fees of $30,000 to $50,000 per transaction from wealthy Russian and Chinese political and business figures and that a portion of the interest on government bonds was also obtained. All the proceeds from this business went to offshore companies, but where they went after that is unknown. It is natural to assume that the proceeds flowed through several offshore companies to an offshore account related to the ruling party. The total proceeds are assumed to be more than 100 million dollars.

Transactions with Russian and Chinese counterparts, which are beyond the reach of prosecutors, are a lucrative business. The administration officials and politicians of the ruling party, who have gotten a taste of this business, have also been making back taxes for the new Coronavirus. The Hungarian government, which quickly approved Russian and Chinese vaccines, had an import company established with entrepreneurs around the administration, imported Chinese vaccines at ten times the market price, and imported nearly 16,000 ventilators made in China. More than half of the vaccines have been discarded, and almost 70% of the ventilators remain stacked in warehouses. Again, the government is spending a huge amount of money, but a significant portion is believed to have been kicked back to offshore companies that serve as recipients of the ruling party funds outside of the country.[80]

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[78] On details of the golden visa corruption in Hungary, please see Morita (2021), pp.128-132.

[79] https://g7.hu/kozelet/20181221/fiktiv-kotvenyekkel-is-uzleteltek-a-letelepedesi-programban-amely-162-milliardot-hozott-a-fidesz-kozeli-offshore-cegeknek/.

[80] According to the contract (January 29, 2021) made public by the government, the price of the Sinopharm

An extension of this Chinese business is the construction of the Budapest campus of Fudan University[81] and the construction of a huge battery plant by a Chinese company.

All Russian and Chinese economic transactions are accompanied by back taxes. Once one has forbidden money, it is difficult to get rid of it. Not only for economic gain, relations with these countries can also be used as a bargaining card against the EU. Prime Minister Orbán's decision to turn from Western diplomacy to Eastern diplomacy was based on this two-birds-with-one-stone effect. By turning toward the East, he could consolidate his power base.

Thus, the second Orbán administration, midway through its term as the 2014 general elections approached, turned its attention to backroom business[82] and steered a major course toward Eastern diplomacy, starting with economic deals to the East.

Eastern Diplomacy as a Negotiating Card

The German newspaper Bild published an exclusive interview with Prime Minister Orbán (June

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vaccine (2 doses) imported by Hungary was 60 euros, 10 times the price of the AstraZeneca vaccine. Danbia Pharma Kft. (a company with six members including directors), which imported the vaccine, was merged into another company, and disappeared at the end of the same year. Similarly, Sputnik V in Russia costs $19.90 for 2 doses. Pricing far above market prices would be unthinkable without the presence of back margins. See the following website (https://www.portfolio.hu/uzlet/20210214/mennyibe-kerulnek-a-koronavirus-vakcinak-es-miert- tizszer-olyan-draga-a-kinai-mint-az-astrazeneca-vakcina-469746). Of the 6 million doses of Sinopharm vaccine imported ($183 million), approximately half were discarded.

In addition, Chinese ventilators were purchased from intermediary companies, one of which imported 7,000 units (totaling 176 billion Ft, or approximately 600 million dollars in exchange at the time) from a Malaysian company. Again, a hastily established company (Fourcardinal Tanácsadó Kft.) imported the goods and earned a profit of 20 billion Ft (approximately 67 million dollars) through this intermediary alone. The company subsequently went into liquidation, and the Ministry of Foreign Economic Affairs reportedly destroyed some of the contracts related to this transaction in November 2021, just before the general elections in the spring of the following year (https://atlatszo.hu/mutyimondo/2023/05/26/ledaraltak-a-lelegeztetogep-biznisz-papirjait-brutalisan-no-a-korhazak-adossaga/).

In total, 16,000 ventilators were imported, with a total purchase value of Ft300 billion (approximately 1 billion dollars). Only 3,300 were used in hospitals in Japan, and the rest were stored in rental warehouses. The survival rate of Chinese ventilators is low, and according to the director of Székesfehérvár General Hospital, 84% of patients fitted with ventilators have died (https://24.hu/belfold/2021/04/26/bucsi-laszlo-szekesfehervar- korhazigazgato/). Subsequently, after the data public, the government banned the release of this type of information.

[81] For various reasons, it seems that the Fudan University campus construction project has been removed from the government's projects in 2024. It was a project with many problems from the start.

[82] The Fidesz politicians who won the 2010 general election insisted that they would not be like the Socialists who get their hands dirty with black money. For example, János Lazár, who was appointed as a minister in the Orbán administration, emphasized in a July 2011 meeting, quoting Orbán's words, that “we must never touch dirty money” (https://www.facebook.com/reel/896749179006820). Ten years later, László has used public funds to develop a vast mansion and grounds in the countryside, which he has then converted into private property. On the eve of the third Orbán government, the Fidesz politicians' attitude towards accumulating wealth underwent a sudden change. The main catalyst for this was the issuing of government bonds with settlement rights and the conclusion of an agreement with Russia to expand nuclear power plants. While taking on a legal appearance, they have become actively involved in businesses that allow them to obtain huge amounts of black money.

27, 2023)[83]. In this interview, Prime Minister Orbán emphasizes that "it is not historically correct to say that Hungary and Russia are historical friends," and that he is "not interested in what happens to Putin or Russia," emphasizing that Hungary First is his political position.

Indeed, for politician Orbán, the top priority is Hungarian domestic politics and maintaining his own power. Prime Minister Orbán's true intention is that "this war is a civil war between Slavic peoples," and that "Hungary does not need to be involved in it". However, he is thorough in using everything related to this war to consolidate his domestic power base[84]. Therefore, he has no shame or hesitation in pursuing economic diplomacy with Russia without condemning the invasion.

Orbán, a politician who has become self-interested in maintaining his power, is no longer as passionate as he was in 2007-2008. His main concern is "how it will affect his own maintenance of power". This is reflected in his thoroughgoing bystander attitude toward the war of aggression.

On the other hand, while saying that he is "not interested in Russia's future," he cannot abandon his care and consideration for Putin. This attitude cannot be explained simply by the fact that Hungary is dependent on Russia for its energy supply. Despite the clear evidence of massacres and destruction of civilian life by the Russian military, politician Orbán has made it clear that he defends Putin, saying, "I don't think Putin a war criminal". We can only assume that this is because he is tainted by Putin's dirty hands. While repeating the humiliating assertions that "Ukraine is not a sovereign state," "Russia will not be defeated," and "a ceasefire will be realized if the U.S. is so inclined," on the other hand, Orbán says that "ceasefire and peace are matters for Ukraine as an independent state". Politician Orbán's assertions are a mixture of his real intentions and his pretensions.

The main motive for the political shift to brinkmanship diplomacy in the East is to consolidate domestic power and to secure political capital to support it. Externally, he has spread EU skepticism and set main enemies, saying that the European Commission is treating Hungary unfairly and that the international investor Soros is working with the European Commission leaders to impose sanctions on Hungary. Internally, the opposition party that associates with Gyurcsány is the "hateful leftist". The fictitious structure of "Orbán's government defending the people against Hungary's two enemies" is the basis of the campaign to stay in power. Through public broadcasting, criticism of the EU and the opposition is repeated all year round, and Soros and Gyurcsány appear as Hungary's enemies on every issue[85]. The strategy is to target rural

[83] https://www.bild.de/politik/ausland/politik-ausland/ungarns-ministerpraesident-orban-putin-ist-stabil-84474096.bild.html.

[84] For a summary of a report that tracks developments in the Hungarian government (ruling party Fidesz) since February 2022, see the following (https://www.direkt36.hu/en/orban-a-haboruban/).

[85] S. Guriev and D. Treisman name the 21st-century dictatorship based on media domination, disinformation, and vote manipulation as the Spin Dictator. The word "spin" used here has the connotation of spinning (manipulating) information.

residents and pensioners who only watch public broadcasting. If they can control these two segments of society, they will not lose the elections.

The brinkmanship diplomacy of showing the depth of relations with President Putin and President Xi Jinping is a political pose and a bargaining card to make politician Orbán and Hungary look bigger than they deserve, but within the EU, the bargaining card has already turned into a risk card[86]. For Prime Minister Orbán, the post-Putin and EU de-risking of China (China risk aversion)[87] will be a critical moment in his eastern brinkmanship diplomacy.

Birthmarks of the Old Society Lurking in the Corruption of Ruling Part

Even though the politicians involved in the founding of Fidesz had condemned the corruption of the Socialist Party and declared that they would not follow the Socialist Party's example, before long, the politicians in Fidesz have followed the same path as the politicians in the Socialist Party. Whenever Fidesz is criticized for embezzling state assets, the party retorts that the Socialist Party stole more public money, but it is not persuaded. It is true that since the change in the regime, the Socialist government has used various mechanisms to turn public assets and public money into private property[88]. However, even the Socialist Party did not go so far as to own private jets and luxury yachts, which became fashionable under the Fidesz regime. The private amassing of wealth under Fidesz during the last decade is so massive that it cannot be compared to that of the Socialist era. Anger at this corruption is the driving force behind the Tisza party's breakthrough in 2024.

Still, why is such blatant corruption so prevalent in a society that has undergone a regime change, and why do so many citizens not raise their voices in protest? We need to look back to the social ethics of the socialist era. This is because many of the current political leaders, including Prime Minister Orban, grew up in socialist societies. What was wrong with the social ethics of socialist society and why there has been no improvement in social ethics even after regime change is a question that observers of social phenomena should elucidate. This kind of question cannot be clarified by rent-seeking theory, which neoclassical economists rely on.

I have analyzed the socialist society of the old regime as a society characterized by semi-

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[86] Hungary was subjected to 27 conditions for the disbursement of huge EU subsidies, including reconstruction subsidies from the Corona disaster. This is a harsh response by the European Commission and the European Parliament to Hungary's brinkmanship policy and tyrannical political system at home (https://ec.europa.eu/commission/presscorner/detail/en/ip_22_7273). Hungary's delayed ratification of NATO membership of Sweden is a childish "resistance" to the Nordic countries who execute strong criticism of Hungary.

[87] Foreign companies and NGOs looking at Ukraine's postwar reconstruction are focusing on Poland, avoiding Hungary, which has strong ties to Russia. In Central and Eastern Europe, de-risking of Hungary is underway.

[88] As to the corruption of the socialist ruling after the system change, please see Morita (2021), Chap. 4.4.

feudalism and militarism. These two characteristics can still be observed in societies that have undergone regime change. The social ethics that have defined social norms do not change automatically along with changes in the political system. There is continuity in people's social consciousness and ethics, and a shift in consciousness and ethics requires a long time.

The 20th-century socialism that emerged in Russia was not exempt from the influence of tsarism. The Communist Party organization at the top of power inherited a system of monarchical rule like that of the imperial era. By having the head of the Communist Party replace the emperor as the "secular king," Communist rule permeated not only within the Communist Party but also throughout society. The Eastern European socialist system that emerged after the war was a direct transplant of the communist ruling system in Russia. The system was established as an entity that transcended the state, and the general secretary of the communist party reigned over the organization like a czar until his life ended, unless he was disqualified in an internal party struggle. Clearly, 20th-century socialism did not break through the limits of history, not an immediate transition to a democratic society, but rather established a "Communist Party ruling system with a mother birthmark of feudalism" that inherited the ruling system of the absolute monarchy of the 19th century.

Furthermore, the historical situation of the 20th century, a century of war, greatly defined the economic system of the nation. Without being able to devise an effective economic planning method, the economic management of 20th-century socialism was effectively forced to adopt a wartime economic system. Economic management such as the national mobilization system is a wartime system itself, and is economic management based on top-down distribution. State-led economic management is, in effect, economic management by the Communist Party, and is a management system by making the most of political power. The historical conditions that lacked the means for planned economic management justified the Communist Party leadership (Politburo) managing the economy through planned economic management. The illusion that the mechanism of economic management decided politically by the Communist Party Politburo was a conscious and leading planning was fostered in society under the Communist Party rule. However, the development of the capitalist economy revealed the fiction of the Communist Party's economic management, and the national economy fell into dysfunction. This resulted in the collapse of the socialist system at the end of the 20th century.

How will the formation of social norms be achieved after the end of Communist Party rule? The development of equal exchange relationships between individuals based on the development of a market economy is essential for the formation of new social norms. The regeneration and development of market (exchange) relationships, which were denied and eliminated in socialist society, is an essential condition for the transformation of social norms. Only through this development will the birthmarks of the old society, such as semi-feudalism and militarism, be

gradually removed, and new social ethical norms will be born.

However, in the case of the regime change in Hungary, the direction of developing a market economy was not set as a clear goal, and state-led economic management (state-run economy) has continued. The social inertia of the old society has continued to dominate the Hungarian economy after the political regime change. On the other hand, for the ruling class, state-led economic management became an important means of maintaining their own power base. And to justify this economic management, Prime Minister Orban has formulated an Eastern strategy that looks to Russia and China as models for Hungary.

The Fidesz leadership, which had been so critical of the plundering of state assets before taking power, changed its stance in 2013-14. To consolidate their power base, they began to work on forming slush funds, and the plundering of politicians' public assets began. Of course, this was not a simple plundering carried out amid the confusion of the system transformation. By establishing public funds, corporations and private funds as recipient of public subsidies, real estates owned by the state are repaired and renovated, and then the real estates are further sold to private funds and persons with low prices. To prevent the inconvenient facts from spreading, the ruling party has designated them as state secrets and has used offshore companies. To suppress criticism of the government by the mass media, they have used advertising and subsidies to bribe them, and even set up organizations to coordinate this.

In this way, Fidesz's 14 years in power have created a system by which public money and subsidies flow to specific businesses. For businesses that have received public money and subsidies, and for politicians who have amassed private wealth using public funds, Fidesz's pseudo-despotic rule has created a paradise on earth. Many of the Fidesz-supporting businesses that have been awarded public contracts are enjoying the fruits of their success by buying luxury foreign cars and watches worth tens of millions of forints each. Many of these are politicians and their families who grew up in rural villages and towns, as well as the businessmen around them.

There are also some “ill-bred” people who show off their wads of new bills when they travel abroad and pay generous tips. Prime Minister Orbán and his family are examples of such “upstart” people[89], so Orban cannot control the behavior of other politicians and businesspeople. This is the

[89] For more information on the behavior of Prime Minister Orbán's second daughter (Orbán Sára) and her husband on their honeymoon in Japan (giving tips to geisha from a wad of yen notes at a Kyoto restaurant), please see page 122 of Morita (2021). Fidesz MEP Deutsch Tamás is fawning over Prime Minister Orbán, saying, “There is no one who lives a puritanical, frugal life like Prime Minister Orbán.” This is just flattery. Magyar Péter, who was plotting a rebellion against the Orban regime, has been developing criticisms of the wealth accumulation of Tibor Toth Istvan, the son-in-law of Orban, and Antal Rogan (Minister in charge of the Office of the Prime Minister), who is the Prime Minister's right-hand man and the mastermind behind various public money frauds and the formation of slush funds, but he has avoided mentioning Orban personally. However, in a post on his Facebook page on February 14th, 2024, he describes the actions of Prime Minister Orban. According to him, when he attended a meeting of the European Council as a diplomat in Brussels seven or eight years ago, Orban took a bundle of 500 euro note out of his pocket and

social background that led to the Tisza Party rebellion by Magyar Péter.

It will take far more time before the Hungarian society can rid itself of the birthmarks of the old regime and acquire new social ethics and norms.

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VI.

What Exactly does a Music Conductor do?
- Conductor Kenichiro Kobayashi's Glory and Frustration

In 2024, conductor Kenichiro Kobayashi celebrated 50 years of his debut in Hungary. I want to write about my thoughts and feelings through my friendships with Maestro in Hungary over the past 30 years.

Although I am a complete amateur in the field of music, I was always fascinated by opera, and when I was assigned to the Japanese Embassy in 1988, I frequented the opera house. At the time, the Hungarian currency was overvalued due to the exchange policy of the socialist regime, and thanks to this, piano scores of the opera (Edition Peters Klavierauszug) were sold at unbelievably low prices. It became a routine for me to go to the music bookstore in downtown Budapest during my lunch break and buy piano scores of all the major operas. Then I would enjoy my favorite arias and duets on my poor piano.

In the early 1990s, I met Kenichiro Kobayashi in Budapest. In the 1970s and 1980s, when Kobayashi debuted in Hungary, the number of Japanese expatriates in Hungary was small, and Kobayashi's name was unknown among Japanese businessmen. He was isolated and helpless in the Japanese society in Hungary. Japanese companies operating in the region should do more to help Kobayashi, who became a rising star in the Hungarian classical music world. We thought it was part of the job of Japanese companies operating in Hungary to help Japanese artists who are active in a foreign country as much as possible.

Through my encounter with Kobayashi, I became acquainted with the symphony. I was impressed by Kobayashi's dynamic conduct at live concerts. While organizing various music events relating to Kobayashi, I made friends with Hungarian musicians and got acquainted with the orchestra managers. Music students naturally began to gather at my home.

On the other hand, as I met various musicians, I began to think about the role of a conductor. My simple questions and interests grew: what exactly does a conductor do, what does a conductor give to an orchestra, how do orchestras practice and rehearse daily, what is the role of a conductor in a concert, and can a concert be held without a conductor if the rehearsals are well done? These questions and concerns were heightened. Whenever I watched Kobayashi's rehearsals and concerts in person, I always thought about these issues. I will write down my conclusions on these questions.

Kobayashi, a Hungarian Legend

The "First International Competition for Conductors" held in Hungary in 1974 was a major event sponsored by the Hungarian National Broadcasting Corporation with strong financial support from the government. It was a month-long competition with prominent musicians from all over Europe as jury members. At the time, the only television broadcasting service available was the national broadcaster, which broadcast the competition every day in prime time. This was a time when there was very scarce entertainment in the society. The Hungarian people were happy or sad at the results of the selection in the contest, and they watched the outcome of the competition. Kenichiro Kobayashi, from Japan, won the competition by coming out on top in the four rounds of the selection, ahead of all the other contenders from Europe and the United States. Overnight, Kobayashi became a legend in Hungary that will be talked about for a long time. Kobayashi wrote a detailed account of this event (Kobayashi Kenichiro, *Conductor's Hitorigoto*, Kiko Shobo, Tokyo, 1993).

In 1994, the 20th anniversary of Kobayashi's début in Hungary, I organized a commemorative concert. Three years earlier, in 1991, I had planned to celebrate at the National Gallery to commemorate the establishment of the Nomura Investment Bank in Hungary, with the Hungarian State Concert Orchestra (the predecessor of the National Philharmonic Orchestra before 1997) playing the leading role. However, due to the scandal of "compensating investor's loss" done by Nomura Securities in Tokyo, all kinds of celebrations were world widely canceled. Therefore, I couldn't fulfill my promise to the Hungarian State Concert Orchestra and Maestro Kobayashi. To make up for this, I organized a concert celebrating the 20th anniversary of Kobayashi's Hungarian debut in the grand hall of the Kempinski Hotel, which had just opened, with the participation of Japanese residents in Hungary.

The event featured a variety of programs, including an entertainment program by members of the State Concert Orchestra, an appearance by the Waseda University Glee Club, which was on a tour of Hungary, a joint performance by pianists Ayano Kobayashi and Hiroshi Kato, and singing by soprano Júlia Pászty. Unable to sit at tables because of the capacity, Glee Club members remained standing by the wall from 7:00 pm until nearly midnight. Unfortunately, there was no corporate support for the event, which relied solely on the admission fee income from the individual sales to expatriate representatives of Japanese companies, therefore the hors d'oeuvres and beverages prepared by the hotel ran out quickly. Neither the glee club members nor the TV crew had enough food and drink. Nevertheless, the venue was filled with laughter, and I remember that it quickly passed 23:00. The event was even turned into a 50-minute documentary on Hungarian national television.

After this, in 2004 and 2014, respectively, the 30th-anniversary concert (in the Great Hall of

the Hungarian Academy of Sciences) and the 40th-anniversary concert (a concert series featuring major orchestras) were organized, but looking back, the 1994 celebration was the most spectacular.

In 1996, the State Concert Orchestra and Kobayashi planned Mahler's "Symphony of a Thousand (No. 8)" to coincide with the Japanese Musashino Chorus' Hungarian tour. However, the Philharmonic couldn't raise the rent for the sports hall and asked me for help. I planned to sponsor this concert as a fifth-anniversary event for Nomura Investment Bank and got funds from the Tokyo headquarters.

The following year, Nomura's head office also provided emergency support for the shortfall in funds for the National Choir's Japan tour. The support for the National Philharmonic Orchestra led by Kobayashi and the National Chorus went smoothly, as Nomura Securities had just undertaken the role of lead manager for Hungary's Samurai Bond and held an investment seminar at Nomura Securities' head office in conjunction with Prime Minister Horn's visit to Japan.

Kobayashi's Hesitation and Decision

After Maestro Janos Ferencsik's death, Kobayashi reached the pinnacle as a conductor when he was appointed permanent conductor (later music director) of the Hungarian State Concert Orchestra in 1987. However, his exaltation did not last long.

One reason was economic problems. The income level in Hungary at that time was low, and even for a permanent conductor of the Hungarian State Concert Orchestra, the salary was not high enough to guarantee a satisfactory life for his family. After the first few years, Kobayashi was based in Hungary, and he shifted his focus to Japan. Although he was a permanent conductor leading the orchestra, practically he became a visiting conductor for the orchestra, spending much of the year in Japan[90]. The State Concert Orchestra, which could not afford to pay him a high salary, allowed him to do so as he wished.

Another reason was that he came to recognize the limits of his talent as a musician in classical music. There are tremendously talented musicians in the world. Especially in Central Europe, the Mecca of classical music, one genius appears after the other. By conducting concerts in Hungary, he encountered many world-class talents.

During our conversations, there was a moment when Kobayashi suddenly revealed his true feelings. I knew that Kobayashi did not favor Kocsis Zoltán. But there was a moment when I knew it was jealousy of Kocsis's talent. Kobayashi suddenly revealed his feelings: "I think that if Beethoven had lived, he would have been just like Kocsis."

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[90] One of the complaints of the members of the National Philharmonic Orchestra was that their permanent conductor (music director) Kobayashi had never conducted the season-opening concert in September. This was because he had scheduled a concert in Japan. Kobayashi did not understand the importance of the season-opening concert. He lacked the awareness of his role as music director.

Hungary has produced world-class musicians and composers such as Liszt, Bartók, and Kodály. Even in recent years, there have been outstanding musicians such as pianist and conductor Zoltán Kocsis (1952-2016) and Péter Eötvös (1944-2022), known as a composer and conductor of contemporary music. For those who fulfill the role of permanent conductor (music director) in Hungary, it is impossible to avoid the works of these musicians. However, taking up works by musicians who had never studied in Japan would force him to study hard. Kobayashi reaching a stage of maturity as a conductor, stood at a crossroads as a classical musician. To break new ground, he had to choose whether not to take the easy way out and risk his life as a musician to face the works of these musicians[91], or whether to avoid their works and take the easy way out by simply conducting the music he had studied.

Kobayashi does not prefer the works of so-called contemporary composers. He explained that he was uncomfortable with music in which dissonance plays a leading role. However, it sounded like a mere excuse to me. I think it is because it requires a new and rigorous study of unknown music. Kobayashi avoided that tough path. And just as he encountered these doubts, Kobayashi fell in love with golf. This was the pitfall of avoiding the tough path. After being appointed permanent conductor of the Hungarian State Concert Orchestra, Kobayashi increased his devotion to golf. Every time he finished practicing with the State Concert Orchestra, he would go out to play golf in the suburbs of Budapest. Mrs. Meizl (Meizl-mama) of the Ferenc Meizl family (at that time a clarinet professor at the Liszt Music Academy), with whom Kobayashi was boarding at this time, used to say, "You have to study more. Don't be lazy." Members of the State Concert Orchestra also used to whisper behind his back, "He could be a better conductor if he studied harder and spent less time playing golf."

Also, the unease of Kobayashi was the rise of the Budapest Festival Orchestra, founded by Iván Fischer and Zoltán Kocsis. The two young musicians worked together to create an elite orchestra. After Kobayashi became music director of the State Concert Orchestra, the Festival Orchestra continued to attract new members even from the State Concert Orchestra, and the Festival Orchestra became even more capable than the State Concert Orchestra. Their joint efforts to constantly improve the orchestra's performance through strict selection of members and rigorous rehearsals raised the level of the Festival Orchestra. In fact, in the 2000s, the Budapest Festival Orchestra was rated among the top ten orchestras in the world. On the other hand, it was almost impossible for Kobayashi to create such an orchestra.

At the beginning of rehearsals for the 1996 "Symphony of a Thousand," Kobayashi frequently announced to the orchestra members, "I want to quit conducting the State Concert." He repeated his intention to resign at every rehearsal. In 1987, the orchestra members voted to appoint

[91] According to the memories of the orchestra members, when they asked him why he didn't conduct Bartok, he replied, "Bartok's music isn't beautiful, " surprising the orchestra members.

Kobayashi as the Permanent Conductor with unanimous support. So, he wanted to confirm the will of the members again.

I suspected Kobayashi had a conflict[92] in his mind that he couldn't demonstrate his ability to conceive and lead the orchestra in a manner befitting his position as music director of the State Concert Orchestra of Central Europe with a long tradition. After one year of vacillating between "resigning" and "not resigning," in 1997 Kobayashi officially resigned as music director. Zoltan Kocsis, who had parted company with Ivan Fischer, became the new music director. Kocsis did not want to work with Fischer merely as a soloist, but to lead the entire orchestra based on his conception and understanding of the music.

Thus, Kobayashi's ten years as music director came to an end. It is not easy to evaluate these ten years of Kobayashi's management. Surely, Kobayashi's appointment as music director paved the way for regular tours to Japan, which benefited the State Concert Orchestra. On the other hand, it cannot be said that the performance level of the State Concert Orchestra has improved during Kobayashi's ten years in charge. The gap between the State Concert and the Festival Orchestra only widened. The strict expert's assessment that "Kobayashi has exhausted the legacy of Ferencsik" is not false to me.

Sensory Instructions without Music Analysis

Kobayashi participated in an international competition in Hungary after the age of 35. This was too late to go abroad. The biggest obstacle was his language ability. He could speak a few words in German and English, but communicating with the orchestra was difficult. He would have never thought of learning Hungarian at nearly 40. However, to understand Bartók and Kodály, understanding Hungarian is essential. For example, to understand Bartók's opera "Bluebeard's Castle," knowledge of Hungarian is vital. Lack of language skills limited the scope of Kobayashi's musical and international activities[93].

Although it has been 50 years since he won the Hungarian competition, his Hungarian vocabulary is less than 100 words. Even his English pronunciation is strange because of his Japanese language education. Through rehearsals with the State Concert Orchestra, he learned

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[92] At the time, Kobayashi wanted to continue working as a guest conductor rather than taking on the responsibility of a permanent conductor or music director. This was because he was unable to carry out the training and study required for such a position. It was a burden for him to lead a traditional orchestra in Central Europe. Finally, he was given the title of "Permanent Conductor Laureate" by the orchestra, and he left the National Philharmonic Orchestra in 1997.

[93] Michiyoshi Inoue conducted a Hungarian-language performance of Bartók's opera "Bluebeard's Castle" with the Tokyo Philharmonic Orchestra in 2013 (Bluebeard: István Kovács, Judith: Andrea Meláth). This performance should have been planned by Kobayashi, but he had no musical or philosophical interest in this opera. In 2024, "Bluebeard's Castle" was chosen as one of the performances for the Japanese tour of the New York Metropolitan Opera, and it was performed in Hungarian.

some standardized Hungarian phrases that he could use in rehearsals. However, the orchestra members did not correct Kobayashi's pronunciation and continued to leave him with strange pronunciation, resulting in a Hungarian that only they understood.

As I learned from witnessing Kobayashi's rehearsals, he does not give analytical explanations of the music to the orchestra. He provides instructions by expressing his feelings to music parts at key points in the piece. He uses metaphors such as "like scratching out your guts," "going around and around like a necklace," and "like you have climbed to the top of the clouds of heaven and emerged from the clouds," but it is not clear what exactly he means by these expressions. Kobayashi himself cannot express himself in words, therefore he tries to express instructions in various feeling expressions, but it is unclear to the orchestra members what the conductor wants. If an interpreter were available, he would say, "Please interpret," but it is difficult to interpret feelings that Kobayashi himself cannot express in words. He didn't want to stop the rehearsal by interpretation, Kobayashi went on without checking whether his intentions had been conveyed to the orchestra or not. It is strange for me to see the advance of his rehearsal.

After all, "Shinari" and "Meri-Hari" are still spoken of as the instructional words that Kobayashi emphasized during practice with the National Philharmonic Orchestra. "Meri-Hari" means to be crisp, i.e. not much different from putting the accent. He used a golf swing as an example to explain the "Shinari," which refers to playing the bow all the way through on a stringed instrument. The golf club grip comes out first, and the head arch follows. After becoming the permanent conductor of the State Concert Orchestra, he frequently used these two terms.

Kobayashi is skillful in music with the chorus. He can pay careful attention to the delicate structure of Mozart's "Requiem." His conducting of Orff's "Carmina Burana" was exquisite, as the timing of the chorus' entrance was difficult. In conducting Kodaly's "Dances of Galanta" he conducts with a crisp command of the Hungarian atmosphere. Even without verbal communication, Kobayashi shows first-rate conduct in these pieces.

Unfortunately, while Kobayashi is good at conducting music with a clear structure, he has avoided music with a complex structure. In 2019, concerts were held in Budapest and Tokyo to commemorate the 150th anniversary of the conclusion of the Japan-Hungary Treaty of Commerce and Diplomacy. Among programs, he was asked to conduct Bartók's "Violin Concerto (Suite)." Kobayashi hesitated to take on this work because he never conducted it before, but finally, he agreed to perform it one year before the concert. However, he had not studied the piece in Japan and tried to study it overnight after arriving in Hungary but couldn't do it. He said to me that he could study only half of the piece. "Is it not possible to conduct only half of the music?" This surprised me. These were not the words of a musician. Of course, the orchestra didn't permit him to perform only half of the piece, and the program was changed to the "Dances of Galanta", a piece Kobayashi was familiar with.

Composing a Commemorative Piece and Indecisiveness

As a highlight of the "150th Anniversary of the Treaty of Commerce and Diplomacy between Japan and Hungary," the Hungarian government proposed Kobayashi to compose a piece (an idea from the Hungarian ambassador to Japan). I conveyed the request to Kobayashi. There is a historical background to this commission: In 1940, the Japanese government asked major countries to compose a celebratory piece to commemorate the 2600th anniversary of the Japanese Empire as a show of national prestige. The commissions were made to the partner governments in form, but they were intended for prominent musicians in their respective countries. Britten of Great Britain, Richard Strauss of Austria, and Bartók of Hungary were expected to compose commemorative pieces. The person involved is already gone from Hungary, and it is not certain how the actual composition request was made in Hungary. The request for Hungary was made with Bartók in mind. However, Bartók didn't accept the commission and turned over the memorial work to his pupil Sandor Veress. The composer was rewarded with a substantial sum of money (a commemorative gift), which was quite generous for the time. The Hungarian Ambassador followed suit and came up with the idea of commissioning Kobayashi to compose a commemorative piece.

As a side note 1990, when I was working at the Japanese Embassy, Ikuma Dan, a Japanese composer asked a Hungarian opera orchestra to perform a piece for his opera at Japan Week in Belgium. Before leaving for Belgium, he was in Budapest accompanied by his wife for a rehearsal and demonstration in Budapest. It would be cheaper to send a Hungarian orchestra, even when paying the airfare than to rent an orchestra in Belgium. He also told me that if sending the score in advance, the orchestra would be able to play it without any problems after a few days of rehearsals. At this time, Mr. Dan wanted to know why Bartók had not accepted the commission, and where the substitute, Sandor Veress, was doing. In 1940 Kunihiko Hashimoto, Dan's teacher at the Tokyo School of Music (the predecessor of the Tokyo National University of Fine Arts and Music), conducted Veres's piece when the performance recording of the dedication piece was made. After research, it is clear that Veress had defected to Switzerland and continued his musical activities there. However, I couldn't inform Dan of this before his death.

To return to the story, there was a mess over the commissioning of a piece. Kobayashi had always expressed his desire to compose music. In 1999, he was commissioned by a Japanese company in the Netherlands to compose a piece to commemorate the 400th anniversary of Japan-Netherlands relations. He completed the piece "Passacaglia" with struggles. It forced hard work for him because he had no other classical compositions. When I intermediated the request, Kobayashi immediately replied, "I would be happy to accept the commission." However, he

called me the next day and told me, "My wife is against it, so I can't accept the proposal. I caused trouble for my wife when I composed the Passacaglia because of a time shortage." This also surprised me. I wondered if any musician would not accept a composition for such a reason.

Over the next six months, Kobayashi and I exchanged "accepts" and "rejections". I was discouraged by Kobayashi's reluctance to compose a piece, even though he had expressed such a desire to do so. He finally agreed to take on the project after receiving advice that he should use phrases he had composed so far and summarize them into a piece of about 10 minutes. Borrowing an idea from Geza Kovacs, former manager of the National Philharmonic Orchestra, we suggested "Two Homelands" as the title of the commemorative piece.

However, the messiness surrounding the composition did not end there. Just before the rehearsals for this new piece began, the orchestral parts were finally sent from Japan. Normally, the composer only creates the main melody line, and the orchestration (creation of the parts) is the arranger's job. Because of the delay in completing the main melody, the so-called "partitura (full score)" was not completed. Although the pre-concert complications were unavoidable, once the concert was over, it was a matter of course to complete the full score and deliver it to the Hungarian government. It is a courtesy of a musician to do so. However, Kobayashi had no such idea. The time, effort, and outsourcing to create a complete score were expensive, and he thought that once the concert was over, that was the end of everything. However, he was commissioned to do this work for a high honorarium, and it is his minimum duty to prepare a finished product (a complete score) with subsequent revisions.

This was not the only problem I sensed. The main melody of the 10-minute piece had an unfinished part. During the rehearsal, Kobayashi told the musicians, "In this part of the piece, I want each of you to freely play a melody from a Hungarian folk song or other melody." I was astonished at this. How could such a halfway-work composition be allowed? It was an event that made me realize that Kobayashi lacked creativity as a composer. Why does Kobayashi lack the will to create and the ability to conceive a music piece? This became my suspicion.

European Music Education to Broaden Repertoire

Where does a musician's creativity and conceptual ability come from? Without a certain level of competence as a soloist on the piano or violin, it would be impossible to discern the subtle difference in sound or the wrong note. Similarly, without the high ability of a soloist, it would also be impossible to come up with creative ideas for conceiving a piece of music. This is my conclusion after a long association with Kobayashi.

Kobayashi is known to play the piano. However, his playing ability is far below the level of a soloist. He can improvise, manipulating chords with his left hand and melodies with his right

hand, but he has no further skill. Thus, he can do the work of composing school songs, but not the work of creating a classical piece (composing a piano score). In 2008 a facsimile edition of Bartók's autograph score for "Bluebeard's Castle" was published by Balassi Publishing Co. The work of Bartok was written at the age of 30 years old. I presented a copy to Kobayashi, and it seemed that this was the first time he had seen the score of the opera. Bartók, a master of the piano, prepared the piano score of the opera by himself. Without a certain standard as a soloist, it is impossible to create such a score.

Kobayashi's repertoire is known to be narrow. Without a willingness to explore new territory of music, creativity and conceptual ability of music cannot be developed. If one only conducts standard pieces all the time, imagination and creativity will only grow dull. Kobayashi, who had never been exposed to the music of a wide variety of composers, suffers from great limitations in both conducting and composition.

One of the challenges for music students studying at the Liszt Academy of Music in Hungary is that they are assigned one piece of music after another. While students learn at Japanese music schools, completing a single piece of music takes six months or a year, here in Budapest, new pieces are assigned every two or three weeks, which forces hard study.

Each educational method has its rationale.

Education that does not end with halfway mastery, but rather with the perfection of a piece of music over a long period, is the usual way to make a piece of music one's own. The more time one spends on a piece of music, the more complete it will become. However, if one spends a long time on a single piece of music, it is impossible to work on many pieces during the school year.

On the other hand, by learning several pieces parallelly, it becomes clear to understand the characteristics of each piece and composer. It also broadens one's repertoire. In European music education, it is common practice to study several pieces simultaneously, which results in broadening interest in different pieces of music and expands the range of music.

In Europe, however, the focus is on educating a limited number of talented students, and it is not expected that students will leave music after graduation, as is the case at Japanese music colleges. Therefore, it is inevitable that the methods of education are different.

Interestingly, the orchestral music preparation process is different between Europe and Japan. Japanese orchestras are generally well-prepared for concert rehearsals. Before the rehearsal, the performance is almost 80-90% complete before a guest conductor comes. Therefore, it is easy for a guest conductor to work with orchestras in Japan. Thus, Kobayashi has been accustomed to the Japanese easy style.

On the other hand, European orchestras, which rehearse multiple pieces in parallel, do not come to rehearsals with the same level of preparation as in Japan. They wait to see what instructions the conductor will give them. Therefore, the degree of perfection of the first rehearsal

is not high. However, once the orchestra knows the conductor's intentions, it can quickly adapt to them. Therefore, the guest conductor needs to present his conception and understanding of the music, otherwise, orchestras play as they are accustomed to their original ways.

As a guest conductor, I have observed Kobayashi's rehearsals, which are simple rehearsals in which he gives instructions only for the main points, just as he conducts a Japanese orchestra. In other words, he rehearses with a Japanese orchestra that is 80% finished, and then he finishes the remaining 10-20% of the points. This would be fine with the National Philharmonic Orchestra, which knows Kobayashi's taste. However, with an orchestra that has never played with Kobayashi, he would have to actively analyze the piece and show his understanding of the music, otherwise, his conducting ability will be questioned.

Kobayashi is not used to presenting an enlightened analysis of a piece of music, and he doesn't like to discuss his understanding of a piece of music with musicians. Several prominent musicians visiting Hungary have requested to meet with him, but he has always avoided doing so. Not only was it painful to speak analytically in words and a foreign language, but he also wanted to avoid being tested in the depth of his music analysis.

Conducting Music as an Entertainment

Suppose an orchestra's daily practices are done in a well-organized order and concert rehearsals are properly executed. In that case, a concert can be performed even without a conductor, except for pieces that are difficult to synchronize tones. Whether the conductor shakes his hair or jumps up and down does not change the orchestra's sound. Kobayashi, however, did just the opposite. He can get through a live concert without much rehearsal. He is one of those rare conductors who can compensate for the lack of orchestral skill with his onstage acting ability.

It is sometimes said that "Kobayashi is strong in the concert performance." This is a curious expression, but it conveys Kobayashi's role as a conductor well. Even without rigorous rehearsals, the audience is enlivened by the choreography of his conducting during live performances. This is the meaning of "strong in the concert performance". What makes him strong? The onstage conducting choreography, or "conducting performance" in the extreme, is excellent. The audience is so impressed by his dynamic movements and the swing of his baton that it is almost as if the conductor controls the tones of the entire orchestra. This is the style (Kobayashi Magic) in which Kobayashi has consciously created a position for himself, and he captivates the audience with his dynamic tact following the music. Kobayashi Magic is a world of "conductor-first" entertainment. In this type of entertaining live performance, the quality of the orchestra and soloists is not questioned.

Kobayashi thought he could make up for the lack of musical talent with his conducting

performance. He thought he could secure a unique position with skillful manipulation of the baton and physical movements. Indeed, his dynamic conduct attracted Hungarian audiences and broadened the base of classical music fans. That is fine in the world of amateurs. However, a conductor cannot convince professionals and world-class musicians of his or her abilities exclusively based on conducting performance.

In Europe, a musician who tries to supplement his lack of musical talent with exaggerated physical movements is called "becoming a clown". As entertainment for amateurs, clowning is fine. However, the situation with professional musicians is different. Professionals are always looking for a depth of understanding of the music. The world of clowns fades away when the insight and knowledge of how well he or she understands a piece of music is questioned. When confronted with the world's finest orchestras and if a conductor only gives instructions with vague, emotional expressions, he or she will be quickly dismissed by the orchestra. At best, they will think his/her expression or movement is interesting. And on stage, exaggerated movements don't help either. Conductors invited to conduct the Berlin Philharmonic, or the Vienna Philharmonic once but never called back again, have reasons. This is because they are judged to lack the ability to understand and analyze the music, although Kobayashi did not receive any invitation from a world-class orchestra.

I have an interesting experience. When I sat at the Yomiuri Symphony Orchestra concert conducted by Kobayashi in 2007, I found two foreign professionals in the last row of the Tokyo Suntory Hall. They had each with a large score open, checking each measure with a pencil. They must have been scouts for a certain orchestra since they traveled to Tokyo to check Kobayashi's conduct. However, Kobayashi was never approached by any orchestra before or after that.

After winning the 1974 Conductors' Competition, Kobayashi was inundated with conducting requests from orchestras all over Europe. However, after the initial enthusiasm waned, the invitations from outside Hungary faded away. It was not just a lack of language skills. It was also because his understanding and analytical ability of the music were tested and evaluated. Nevertheless, some orchestras were interested in his conducting performance. The Arnhem Orchestra in the Netherlands was one of them. When the confusion around resigning or not resigning as the Music Director of the Hungarian Philharmonic Orchestra, Kobayashi was invited to conduct the Czech Philharmonic Orchestra as a guest conductor, and he had the honor of conducting Smetana's "My Homeland" at the Prague Spring Festival in 2002. However, once after the change of music director of the Czech Philharmonic Orchestra, Kobayashi didn’t have an invitation from the orchestra again. The Czech Philharmonic's website does not mention Kobayashi's name in its history of the orchestra. It is strange to see that as if there was no such thing as guest conducting. However, Kobayashi's website lists his title as "Permanent Guest

Conductor of the Czech Philharmonic Orchestra".[94]

To rise to a higher level, not as a conducting clown, but as a musician, requires constant effort and study. However, Kobayashi avoided this path. He chose the way to specialize as a guest conductor which didn't require hard work to brush up on orchestras. As a guest conductor, he was required to give minimal instructions to the orchestra and finish the concert with an onstage conducting performance. This is the style Kobayashi has established. This was a possible way to compensate for his lack of talent as a musician.

Kobayashi succeeded as a "conducting entertainer" in Japan and Hungary. However, not every Hungarian musician holds Kobayashi in high esteem. Those who consider him a conducting clown do not appreciate him. There are indeed musicians who marvel at his dynamic conducting movements. Not everyone can wield the baton like Kobayashi, so he has his fair share of fans. Encouraged by the enthusiastic cheers of such supporters, both professional and amateur, Kobayashi finished his 50-year conducting career in Hungary in 2024.

Where is Pride as a Musician?

While I had personal contact with Kobayashi, I was periodically annoyed by his frivolous words and promises. He easily reverses promises made or words he has said. I have experienced many requests to cancel a concert in Hungary after a concert schedule has already been set because another concert has been scheduled in Japan. When requesting to compose the commemorative piece for 2019, I was plagued with changes of mind over more than six months, from "accepting" to "not accepting". I was troubled by the change of heart. The reasons are many.

One reason was that he couldn't prepare well. "When I accepted, I thought I could do it. But I couldn't do it or didn't want to do it anymore." If cancellation had been done before printing the program, we would have been able to accommodate them without any problems. I experienced several times disappointment of wondering why he couldn't tell it earlier, instead of just after printing the programs or a few days before the concert. Kobayashi makes decisions based on his feelings on the spot. Therefore, he doesn't have the ethics to stand by his decision and promise once made. Because he makes all decisions based on his feelings of the moment, he does not consider contradictory judgments wrong.

The second is the conceit of the conductor. After securing his position as a conductor, he has come to have the illusion that the conductor is an absolute being. In addition, he is aware that

[94] Kobayashi likes and uses this title. However, "Permanent Guest Conductor" is a contradiction in terms, and there is no such title in the official title of classical music. The title "Principal Guest Conductor" does exist, but since he cannot use it (and is not given that title), he uses it as his second-best title. Of course, this title is not an official one; Kobayashi came up with it.

since he conducts orchestras with a low honorarium in Hungary, any demands should be accepted. On the other hand, the management of the Hungarian State Concert Orchestra after Ferencsik did not function well amid the social changes of regime change. The malfunctioning of both sides created a situation in which conductor Kobayashi's selfishness was accepted.

The compensation for Japanese concerts was much higher than that for Hungarian concerts. Therefore, even if the Hungarian concert was scheduled first, he prioritized the Japanese concert. He lacks awareness of social ethics and norms.

Third, what governs Kobayashi's behavior is his emotion in his every moment, leaving very little room for reasonable thinking. This type of behavior is commonly observed in artists and is a propensity that those who have never experienced social life outside of their field are prone to fall into. Since the feelings of the moment determine one's sense of self, one does not feel a reasoning contradiction. Normally, the leader of the organization to which the artist belongs is supposed to control such selfishness. However, Kobayashi's behavior is defined by the fact that he stayed in the organization without a leader for a long time and was not strictly warned about his selfishness by anyone.

Fourth is the issue of his ear as a musician. Although many people admire Kobayashi's dynamic baton-wielding, orchestra members have always felt that he shows a deficiency in distinguishing between orchestral sounds. Whether in rehearsal or concert, orchestra members were dissatisfied with the fact that Kobayashi did not warn those who played the wrong notes. He asked to applaud performers who played the wrong notes at a concert. Soloists who performed with Kobayashi also pointed out the same problem. Rehearsals continued without correcting the orchestra's incorrect notes, even though the orchestra's parts were playing incorrectly. From these facts, many musicians feel that Kobayashi cannot distinguish punctually between sounds. This is the reason why musicians used to say that "Kobayashi is a good conductor, but not a great musician." If performers are treated the same whether he or she plays properly or incorrectly, the orchestra's performance ability will not improve. However, it was not a problem for Kobayashi, because he thinks of a conductor first in concert.

It is also well known that Kobayashi has a good memory. He has an excellent memory, as shown by his ability to play Shogi (Japanese chess) only by memory. Therefore, people tend to think that Kobayashi who conducts without a score has the whole score in his head, but this is not the case. He memorizes only the main melody and the key parts of the score. Even at these key points, he rarely pays attention to the entire part, but only to the part that plays the main melody.

This point can be seen in the way Kobayashi prepares for a concert. Kobayashi does not have the habit of repeatedly reviewing the score but rather takes a sound recording of the rehearsal and listens to it to check his baton movements. Rather than carefully listening to the sounds, he repeatedly checks to see if his baton is being wielded without error. In other words, he is checking

the conducting performance of each piece.

Fifth, the question of pride as a musician. While his former wife Yuriko is a musician who also graduated from the Tokyo National University of Fine Arts and Music, his current wife Yoko is an amateur in music who has never received any musical education nor learned to play an instrument. Although Yoko was humble at our first contact early 2000's, she began to intervene with Kobayashi's musical activities at one point. There is a Japanese proverb: "The boy in front of the gate reads a sutra that he does not learn." She thought she had learned music by accompanying her husband's music activity in rehearsals and concerts. She began to comment on musicians in the orchestras or soloists: "That girl is good, this boy is poor," or "The brass in this orchestra is ugly, so it is better to remove the brass part and replace it with the Japanese orchestra's part at the invited concerts in Japan," as if she could choose the orchestra members and soloists on Kobayashi's behalf.[95]

I once asked Kobayashi, "Why do you allow an amateur to meddle in matters related to the content of a performance?" Kobayashi replied apologetically: "It seems that she gained confidence through managing the activity of the 'Kobayashi and his Friends Orchestra,' and from there she began to express her opinions. But for my part, I don't like to quarrel with Yoko, because once she is angry, I cannot get meals at home. Therefore, I keep quiet." Kobayashi knows firsthand how his wife "gets out of hand when she gets angry" on various occasions. I know that, but I was at a loss for words when I heard his pathetic answer. It was a moment of disappointment for Kobayashi. I wondered whether he had any pride as a professional musician and had any sense of 'Meri-Hari' in his private life while emphasizing the 'Meri-Hari' in music performance.

Farewell to Kobayashi

Since organizing the 30th anniversary of Kobayashi's debut in 2004, I have managed his performances in Hungary. Since 2010, I have been accompanying Kobayashi once a year for a month-long concert in Budapest and local cities in Hungary.

In 2022, after the Corona disaster had passed, Kobayashi toured Hungary for the first time in three years. Before he departed Japan, concert dates were finalized in 2023 and 2024 for the "50th Anniversary of Debut." Kobayashi looked tired after his first overseas journey since 2019 but completed all the performances. During his stay in Hungary, we talked about the concert schedule for 2023 and 2024. 2023 is the 100th anniversary of the founding of the National Philharmonic Orchestra. The orchestra was inviting prominent musicians from abroad, including Kobayashi.

[95] Many people say that Mrs. Kobayashi is not a musician, so she makes rude remarks about soloists and orchestras. Kobayashi should have reprimanded his wife for her rude remarks to point out her ignorance (arrogance), but he did not dare to do so.

The program for the other concerts was also finalized before Kobayashi departed from Japan.

Before he departed from Japan to Hungary, he told me that he had been diagnosed with a rather large prostate cancer and asked me for advice on various matters. I just advised better to avoid highly invasive tests and treatments because of his age. Since he felt no complaints, he decided to avoid the tests and surgery and came to Hungary.

During his stay in Hungary, Kobayashi suddenly requested that all concerts for the following year, 2023, be canceled. He said it was because he was not confident in his physical strength. The programs of the concerts had been decided just before his arrival and had already been printed. Nevertheless, he strongly wanted to cancel the concerts, so I sent an e-mail to each orchestra explaining the situation and asking for their understanding. Since Kobayashi's change of mind is well known, I advised the National Philharmonic Orchestra to try changing his mind[96] during the Japan tour planned for January 2023.

Furthermore, after Kobayashi returned to Japan, he called me directly. He said: "I decided not to go to Hungary anymore. So, please cancel all performances for the 50th anniversary in 2024." However, this decision was not only due to physical problems but also because he did not like what I proposed to Kobayashi. During his stay in Hungary, I proposed: "Let's say goodbye to Hungary after 50 years because it would be strange to celebrate the 50th anniversary and come back in the 51st year. So, at the reception to be arranged after the National Philharmonic concert, let's say a few words to say thanks for the hospitality received for a half-century." At that time, Kobayashi replied that it was only natural. However, he asked me not to have a post-concert celebration reception and not to prepare a booklet to commemorate the 50th anniversary. I did not understand what he meant by that. However, I heard his true intention from Japanese friends that Kobayashi didn't want to finish the conductor's life in Hungary. Therefore, he doesn't want to hear any plan to remind him of the end as a conductor in Hungary. However, as a practical matter, as Kobayashi had to cancel concerts one after another, then he should decide to say farewell to Hungary at the 50-year mark. In the last message I got from his wife, Yoko via a Line that I should not decide arbitrarily the end of his career against his will. Then I came to notice his intention via his wife's Line message. Thus, I decided to cut my ties with Kobayashi forever.

Anyway, after receiving Kobayashi's call, I again sent e-mails to the various orchestras requesting the cancellation of concerts in 2024, mentioning his prostate cancer conditions.

When I met Kobayashi in the 1990s, he used to say: "I didn't want to be like a certain

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[96] The National Philharmonic has asked him to reconsider his decision to cancel his participation, as this is the 100th anniversary celebration concert series to which other world-famous musicians have been invited. Nevertheless, Kobayashi declined the invitation. For Kobayashi, the 100th anniversary celebrations were not important because of a lack of pride in his past as a music director. This attitude clearly shows that Kobayashi did not feel that his 10 years as a conductor at the orchestra was a success, and therefore he did not feel any obligation to participate in the 100th anniversary program.

conductor who is over 70 years old and is just swinging a stick. At that age, I want to quit conducting once and for all and concentrate on composing." However, he could not bear to be told, "Let's finish Hungary," even though he was over 80 years old, and that is why he did not want to say goodbye to the National Philharmonic Orchestra. In a recent interview with a weekly magazine, Kobayashi told his hope as a conductor. "My mother lived to be 98. If I had been able to conduct at that age too, I would have been so happy. I still have many studying to do" (*Shukan Gendai*, September 9, 2022). His mind had been changing even now.

When Kobayashi performed with the Hungarian National Philharmonic Orchestra in Tokyo in January 2023, as expected, he changed his mind[97], saying, "I want to perform in Hungary again." Once he proclaimed to me that he would never go back to Hungary. Therefore, he couldn't tell me about his desire for a concert in Hungary again and asked a Japanese lady who accompanied the orchestra as an interpreter to organize concerts in 2024. Since the dates of 2024 canceled had been left open for each orchestra, it was not difficult to secure concerts in 2024. I gave various advice to the lady in charge of organizing work, listed points to keep in mind, and handed the job over to her, and I settled my relationship with Kobayashi.

Evaluating a Conductor Is Not Easy

A classical musician's skills are measured by his or her ability as a composer or soloist. However, there are only a limited number of instruments, such as piano and violin, for which there are many competitions and in which performers' abilities are regularly tested. Except for piano and violin, there are no competitions of the instruments at all, or if existed, competitions are held only rarely. In most instrument cases, the evaluation of orchestral musicians' skills is tested only in the orchestral entrance examination. In addition, composition competitions in which commemorative pieces are entered are rare, if any, and general composition competitions do not exist.

Of all musicians, conductors are the most difficult to evaluate. Conductors are not evaluated by the actual sound they produce by playing instruments, nor do they compose the music they perform. Most of the audience will think that the evaluation can be made by the conductor's behavior on the concert stage and the quality of a conductor can be judged by the visual movement

[97] In relation to the announcement of Maestro Michiyoshi Inoue's retirement, Kobayashi said, "I hear that Mr. Inoue says he's retiring this year. In three months, he'll probably say he wants to come back. I also thought about quitting for real when I turned 60, but I couldn't. Maybe it's because I have a personality that makes me want to accept concerts when I'm asked to do them" (Asahi Shimbun, July 18, 2024). Maestro Inoue is not saying that he wants to stay in the live fever forever, like Kobayashi, but that he has decided as a musician. Maestro Inoue says he's quitting conducting because his illness prevents him from leading the orchestra the way he wants to. He also says he has no regrets because he has completed all the composing and performing, he set out to do. Kobayashi doesn't understand that. The reason is that as a musician, he does not have the same pride and goals as Inoue.

on the conductor's podium, where the swing of the tact is crisp and clear as if he seems to control the orchestra. It is true that the conductor's movements in a live performance appeal to the audience's senses, but this is a kind of illusion that a live performance provides.

Regardless of how the conductor behaves in a live concert, the orchestra's ability to perform is mostly determined by the orchestra's ability and the rehearsals and practices before the performance. Regardless of the conductor's movement on stage, the quality of the sound produced by the orchestra is limited by the orchestra's potential. Any conductor cannot bring out more than the orchestra's ability on stage, although the skills of a conductor decide the degree of drawing potential of an orchestra's performance. Furthermore, if properly practiced and rehearsed, most pieces can be performed without a conductor through the concertmaster's movements.

In short, it is almost impossible to judge a conductor's ability based on their movements during a live concert. Unless you know how the conductor trains the orchestra in practice, how they draw out the orchestra's strengths in rehearsals, and how they draw the orchestra into their own vision, it is impossible to evaluate the conductor. It is extremely difficult to know the accuracy of the conductor's instructions to the orchestra and their understanding of the music within the limited time of a conductor’s competition. This is why judging a conductor’s competitions can be influenced by the judges' assumptions and subjectivity. This can lead to a mistaken assessment of the conductor's quality.

What a guest conductor can do with only a few rehearsals is limited. Most guest conductors prepare for a performance with only two or three rehearsals, each of which lasts only a few hours. For example, it is difficult for a conductor to make a big impact on an orchestra in a 5-6 hour rehearsal over two days. Unless a piece is extremely difficult or new to the orchestra, the conductor's intentions will not be fully reflected in the orchestra. However, a guest conductor does not play such a difficult piece or a piece new to the orchestra in a short rehearsal.

The orchestra prepares for a reasonable period before the guest conductor begins rehearsals. The orchestra's permanent conductor or an assistant conductor rehearses the orchestra. For difficult pieces, rehearsals are held for weeks. On that basis, a "well-known" conductor is brought in as a guest, but there is only so much that a guest conductor can add to the orchestra's performance in a short time. A guest conductor is usually invited to catch the audience by his name.

As a permanent conductor or music director, he or she practices daily with the orchestra and is involved in the process of improving the orchestra's performance based on the conductor’s understanding and analysis of the music. The performance is completed based on mutual communication between the conductor and orchestra members. The orchestra's ability and skills are determined by long-run practice. Only the performance of an orchestra by a conductor who has gone through such a process can be described as "conducted by whom". It is wrong to

describe a guest conductor as a music creator of an orchestra who does not engage in such a long-time process.

"Borrowed Orchestra" and Japan Money

It is misleading to use the adjective "conducted by whomsoever" with special mention of the conductor for CD productions of guest conducting or in which an orchestra is borrowed for a short period. For example, although the details of the subsidies are not fully publicly informed, Japanese corporate foundations give Japanese performers and conductors a large sum of subsidies to produce CDs with internationally known orchestras. These are so-called "borrowed orchestras." The "orchestra rental fee" varies depending on the rating of the orchestra, but tens of millions of yen are paid to rent an orchestra for about one week in effect. Even first-rate orchestras are not in an easy financial situation. For orchestras struggling to make ends meet, this is a tasty business. It helps the orchestra's management, and the orchestra members also receive extra bonuses. However, CDs produced by "borrowed orchestras" should not be taken at face value.

The Royal Philharmonic Orchestra and the London Philharmonic Orchestra in the UK are in the "orchestra on loan" business to soloists and conductors. However, the meaning is different in the case of soloists and conductors. It would make sense for soloists who are not fortunate enough to perform with an orchestra to release a CD with a first-rate orchestra, even if they must pay for it. However, it would be wrong for a conductor to release a CD in which he conducts a "borrowed orchestra." It is a kind of fraud to name a CD made by the borrowed orchestra as "conducted by A or B". It is a mere product of the London Philharmonic Orchestra or the Royal Philharmonic Orchestra. It does not matter who the conductor is, the CD will be produced with no difference. Japanese companies should refrain from paying big money to support such CDs[98]. If they have that much money, they should allocate it to nurturing young musicians. I welcome corporate support for musicians. However, it is a waste of money to channel it into the sideline business of a well-known orchestra.

Guest conducting is somewhat like conducting a "borrowed orchestra". It is difficult to evaluate guest conducting without seeing the actual rehearsals. A guest conducting and conducting of "borrowed orchestras" are essentially the same, just a flow of money is the opposite.

As far as Japanese money is concerned, when Japanese choirs and orchestras rent venues in Vienna, they must pay a large amount of the rental fee. The standard amount for renting a major venue in Vienna (Musikverein, St. Stephen's Cathedral, Burg Palace Concert Hall, etc.) is almost

[98] From 2013 to 2018, Kobayashi released CDs with the London Philharmonic Orchestra. Based on the author's calculations, the total amount received by the London Philharmonic Orchestra to produce these CDs is likely to be no less than 2 million dollars. This is a welcome source of additional income for the orchestra.

30,000 euros (one-third of the amount is an intermediary fee of an organizing company). This is a huge amount of money compared to the rent of the Suntory Hall in Japan. The Musikverein Hall is a well-equipped concert hall, but the halls at St. Stephen's Cathedral and the Burg Palace have only simple lighting systems and no real equipment. Still, they demand exorbitant fees. Amateur choirs and orchestras are willing to pay a large amount of money to use internationally known venues. It is a "venue rental business" in Vienna city that targets wealthy groups. Japanese amateur groups and university orchestras also scatter their hard-earned money to pay for these venues in Vienna. It is a business aimed at Japanese money, not at appreciating borrowers. Therefore, we should not easily fall for this type of business.

Conductors Overrating and Underrating - Kobayashi and Kocsis Zoltán

It is not fair to compare Kobayashi's conducting, which is specialized in conducting, with that of Kocsis, a pianist and composer. However, the comparison between these two musicians is interesting.

Any ordinary audience who has seen these two conductors in a live performance would probably give Kobayashi the edge. Kocsis, a musical genius, is no match for Kobayashi in conducting performance. It is inconceivable that Kocsis would practice his conducting movements in a mirror to appeal to the audience. Kocsis would never think about exercising conducting performance, nor would he practice swinging his baton. For Kocsis, daily practice with the orchestra is everything. No matter how he conducts an orchestra in a live concert, the orchestra's performance level has already been confirmed during daily practices and rehearsals before concerts, therefore there is no need for him to practice a conducting performance for a live stage.

Under Kocsis, the music director, the sound of the National Philharmonic Orchestra had been created by Kocsis for 20 years. No matter how Kobayashi wields the orchestra, the basic sound was created by Kocsis. No matter how Kobayashi moves on the stage, the basic sound was created by Kocsis. Kobayashi performs as if he is spinning the tunes. But it is an illusion of the audience caused by skillful choreography of conducting. Therefore, without seeing the daily practices and rehearsals, the true role of the conductor cannot be understood.

Meizl Papa, with whom Kobayashi sojourned and was taken care of, used to say, "If Kocsis trains the orchestra, and Kobayashi conducts the orchestra, then it will achieve the best combination." However, this can only be said about live concerts with entertainment elements.

When the conductor is also in the orchestra pit, as in opera, there is no room for Kobayashi's conducting performance, although Kobayashi has no opera repertoire. He had a chance only to conduct Puccini’s "Madama Butterfly" a few times. Since there was no musical environment to

conduct opera in Japan, expanding his musical field to include opera would require a new study. Of course, there were opportunities to expand his operatic repertoire in Hungary, where opera was more readily available, and Kobayashi had the time to do so. However, not only does an opera conducting require the attention of the choreographer of the singers' movement, but also rehearsals and opera performances continue for several weeks. So, inevitably, the time restraints are longer. Furthermore, this does not significantly increase the conductor's remuneration, and during conducting operas he cannot practice with the National Philharmonic Orchestra. It seemed to Kobayashi that conducting opera was a lot of work with little gain. For these reasons, Kobayashi could not add opera conducting to his repertoire.

Live conducting performances involve not only aural sounds but also the visual element of movement of the conductor's body. Therefore, the more flamboyant the action, the better it looks. As an entertainment of classical music, Kobayashi can show better than Kocsis. That is why Kobayashi conducted most of the National Philharmonic concerts in Japan, and Kocsis was given only one or two conducting opportunities. The promoters believed that no matter how excellent a musician Kocsis was, he was only recognized as a pianist in Japan and that concerts would not be able to attract an audience unless Kobayashi conducted. However, from the side of the National Philharmonic Orchestra, the exclusion of Kocsis, who creates the sound of the orchestra, from conducting is an act of lack of respect for the music director, and this is a cause for complaints from the Hungarian side. Eventually, the Japanese market is an entertainment world, and there is no other way but to give up.

Kocsis's daily practice was known to be rigorous. If a wrong note was made, he would immediately stop conducting and criticize the false note severely. He never left a wrong sound unattended, as Kobayashi did. He also devoted much of his practice time to analyzing the music. Some orchestra members recall that 70% of their practice time was spent analyzing and explaining the pieces. Kocsis would present analyses that ordinary musicians would not notice, so it is said as if listening to a university lecture. There was no way and no room to resist Kocsis, who could see everything, therefore they were forced to endure the rigorous practice sessions. Some members even took tranquilizers to practice. So, when Kobayashi came as a guest performer, it was a moment of relaxation.

Kobayashi would give orchestras instructions on how he would like to listen to sounds by emotional words and expressions. On the other hand, Kocsis would teach them how to play with explanations based on analyzing the music. Kocsis is known for his keen understanding and analysis of the score, and in an interview with a magazine, he said, "I can understand a Bruckner symphony in a day." He could read a score in one day, which would take an ordinary conductor several months. He had the hearing ability to know whether each part was being played correctly or not. Furthermore, through analysis of the music, he could see where the composer had

inadvertently written. Therefore, he could not resist the urge to correct those parts. It is like Liszt's arrangement of a piece of music based on an existing composer's piece with his interpretation. The musical geniuses of Central Europe are capable of this kind of work.

One more thing to add is that Kobayashi does not care much about the quality of the soloists. Of course, good soloists are welcome. However, it is not important for Kobayashi how good the soloists are. Even if Kobayashi has a standard for how good or bad a soloist is, he does not have the ear to evaluate how good they are. In contrast, Kocsis, who can hear the exact notes, asserted, "I can evaluate the competence of soloists on almost all instruments, except for singing."

In this regard, I have an episode of my experience concerning the Hungarian Radio Symphony Orchestra's tour of Japan in 2019. István Várdai was selected as a cello soloist. Just because Kobayashi performed a concert with him in Budapest. Kobayashi didn't know him before and thought him not a bad choice for a Japanese tour. At that time, at the age of 33, Várdai was selected to become head professor of the cello department at the University of Music in Vienna (Universität für Musik und Darstellende Künste), having developed an international reputation as a cellist by that time. The contract with him had to be concluded through his management firm, which offered a performance fee (6,000 euros per performance, or just over 700,000 yen at that time). I conveyed the information to the organizers in Japan. However, Kobayashi was immediately furious when he heard the amount of compensation and said, "I don't need someone who demands such a high amount of money when I am paid only about 300,000 yen in Hungary. There are many cellists of his caliber in Japan." This was not a matter of management of the tour that needed to be brought to Kobayashi's attention, but the Japanese contact uncarefully informed him. Again, I had to apologize and cancel Várdai's participation in the tour.

Kobayashi's statement that he had received only 300,000 yen was not true, moreover, a Japanese organizer had to pay a larger fee to a Japanese cellist than Várdai's office demanded. The incident made me realize that Kobayashi was incapable of appreciating soloists. I sent an e-mail to Várdai's office saying, "Since we could not obtain a public subsidy, we are giving up the invitation to Várdai this time," and asked for their understanding. When the Hungarian friends of music were told of this, they were all astonished. They said, "Kobayashi must not know the world level of cellists."

Kobayashi cannot chart his path as a musician, but Kocsis had a clear goal and vision. He continued his extensive musical activities, including the recording of Bartók's complete piano works, piano transcriptions of classical pieces (Wagner, Rachmaninoff, Bartók, Debussy, etc.), composition of the final third act of Schönberg's unfinished opera "Moses and Aron" (premiered in full at MUPA in 2010). In between, he composed some operas. Just as he was about to turn to serious composition, he fell seriously ill. The strain of running at full speed through his life as a musician accelerated the progression of his cancer and caused the aneurysm to rupture.

Live Performance and CD Recording

Live performances are rarely sold as CDs. No matter how inspiring, a live performance has many small errors that make it impossible to sell as a finished product; if the wrong sound is heard every time the CD is played, it is unbearable to listen to it.

This is the same relationship that exists between live lectures and book publishing. No matter how delighted and excited the audience is at a lecture, it cannot become a book if it is written down as it is. Accuracy of expression is indispensable in writing, and if wrong expressions or errors are left as they are, they will be criticized. However, audiences are excited by the words of the flesh and blood. Appealing to the senses, rather than to reason, moves people far more. To use reason, you must use your head. Since many people avoid such a hassle, agitators who move the masses emerge at any age.

The relationship between live performances and CDs (recordings) is also like the relationship between education and research. A good educator is rarely a good researcher, and vice versa. Few people can teach and research at the same time. The key to educational instruction is to appeal to the sense of the audience, to give them "motivation" and "tips on how to play." On the other hand, when conducting a high-level orchestra, the ability to understand and analyze a piece of music is critically important. This is like research that involves discoveries. If you can do that, you will be recognized as an excellent musician. The difference between ending up as a mere conductor or an excellent musician lies in these criteria.

The recording of the complete Beethoven symphonies with the Hungarian State Concert Orchestra, which ended in 1994, was unsuccessful. This was a symbolic event that showed the relationship between Kobayashi and the Hungarian State Concert Orchestra. Kobayashi doesn’t like studio recordings. This is because, as with opera, it is a labor-intensive job. That is why he tried to produce a complete Beethoven cycle with live performances. However, the exuberance of the audience and the finished sound are two completely different things. One can rarely listen to a tape recording after a performance and be satisfied with it. Moreover, if it contains many wrong sounds, it cannot be used as it is.

If there are many wrong notes, it must be a problem in his daily practice as music director. It is his responsibility as music director that he could not improve the perfection of the Hungarian State Concert Orchestra's Beethoven.

After leaving his position as music director of the Hungarian State Concert Orchestra, Kobayashi had the opportunity to conduct the Czech Philharmonic as a guest conductor. The level of the Czech Philharmonic Orchestra at that time was considered to be higher. Kobayashi completed the recording of Beethoven with the Czech Philharmonic, which he had failed to do

with the Hungarian State Concert Orchestra. At that time, the members of the National Philharmonic were critical of Kobayashi's behavior. He was lured by a beautiful young woman and, as if abandoning his wife of many years, he inclined toward the Czech Philharmonic. Since he had resigned from the National Philharmonic Orchestra, he should not be blamed as an "adulterer." However, he continued to conduct the Hungarian National Philharmonic in Budapest as a guest conductor on the same program before rehearsing the Czech Philharmonic in Prague. Many members of the orchestra took it that Kobayashi utilized the Hungarian orchestra as a springboard to prepare for rehearsals with the Czech Philharmonic. It was an unfortunate incident. However, as already mentioned, his collaboration with the Czech Philharmonic did not last long, and even his footprints have now been erased. The only orchestra that stayed with Kobayashi until the end was his old wife, the Hungarian National Philharmonic Orchestra.

VII.

Japanese Society in a Historical Turning Point
- Illusion of Abenomics and Historical Reality

In Japan, the policy of "large-scale monetary easing" has now been in place for more than 10 years. What "scientific" hypotheses and analyses support this policy? What is the reality of "scientific" economics? Do the hypotheses and analyses supporting this policy correctly reflect the reality of the national economy? Can the 'economists' who have supported the implementation of this policy be regarded as scientific or merely ideological supporters of the politicians' agenda? This paper examines the hypothetical assumptions underpinning the implementation of the policy and points to the limitations that economics has yet to overcome.

To evaluate the "scientific nature" of contemporary economics, Japan's large-scale monetary easing policy, which has been in place for more than a decade, is an ideal test case. A period of 10 years, which in normal times would be considered an unprecedented long-run policy experiment, is sufficient time to study the effects of the policy.

Many economists have distanced themselves from this policy to avoid political considerations and political involvement, in which politicians have intervened heavily. However, those who claim to be genuine economists, including these researchers, should clarify their own views on the hypotheses and policy implications of the strongly supported policy, which is supported by various assumptions. Was the policy of large-scale monetary easing, promoted as "Abenomics", a measure that stands up to scientific scrutiny, or was it merely political propaganda (economic ideology)? If the latter is the case, then mainstream economics, which excluded political economy and promoted mathematical modeling, could not influence the implementation of economic policies that would affect a country's economy and society for decades. The gulf between theory and policy and between theory and practice is so wide that economics itself - whether mathematical or political - must be questioned as a 'social science' that solves the real problems of the national economy. Is economics really a 'science' that can solve the problems of the national economy?

This chapter does not discuss the advantages and disadvantages of a policy of large-scale monetary easing but rather clarifies the author's views on the various hypothetical assumptions underpinning this policy.

Responsibility and Pride of a Researcher

There were several important policy (hypothetical) goals for an unusually large amount of monetary easing which was initiated by the Abe cabinet and the Bank of Japan in 2013.

(1) If price increases of around 2% can be generated, deflation can be overcome. For realizing the target, inflation targeting (price increase target) is introduced based on the assumption of rational behavior of consumers.

(2) A virtuous cycle is achieved in which consumption stimulates production, which in turn generates higher wages and further increases consumption.

(3) Gradual and long-term expansion of the money supply is not effective for achieving this goal. To accomplish this goal, the Bank of Japan should supply enough large amounts of money in a possible short period.

(4) Low-interest rates and ample supply of funds promote investment, stimulating not only production but also the stock market, while the yen's depreciation expands exports.

(5) The BOJ's underwriting of JGBs will not cause problems, because the government and the BOJ are in the relationship between parent and subsidiary companies.

The last of these hypotheses is not an easing policy hypothesis, but a hypothesis developed by some economists as an argument that downplays the problem of government debt accumulation in a situation where the government continues to accumulate further public debt resulting from the monetary easing policy. After stepping down as prime minister, Shinzo Abe stated in a series of speeches that there would be no problem in increasing the amount of public debt because the credit of BOJ would offset the debt of the government, based on the "BOJ is a subsidiary of the government" theory. In response, opposition party lawmakers submitted a written question to the government. In its written response to the letter of inquiry, the government denied the assertion that "the Bank of Japan is a subsidiary of the government" (written response dated May 24, 2022)[99], but it is puzzling that no scholars from the standpoint of economic theory have clearly stated their opinions on this argument. In the West, such arguments are not overlooked by economists. Although theory and policy are two different things, one cannot call oneself a social scientist if one avoids policy evaluation and judgment of such a crucial policy as large-scale monetary easing.

In this section, I will provide my own evaluation of each of the hypothetical assumptions listed

[99] This answer is a legal statement that "the Bank of Japan is not a subsidiary in the sense of the Companies Act," and does not indicate a judgment as to whether the BOJ plays a subsidiary role in terms of economic function. As will be discussed in detail later, the actual economic functional relationship between the government and the BOJ should be the issue rather than the legal relationship. The relationship between the general government and the BOJ should also be clarified from the standpoint of national accounting, and this issue should not end with the confirmation of the legal relationship.

here in turn. Beforehand, I would like to say one thing about responsibility and attitude as a researcher or a scientist.

When a government economic policy is implemented based on hypothetical assumptions, it is fundamental for researchers and scientists to examine the effects of the policy after a certain period has elapsed. Science always requires the reexamination of theories and hypotheses. Kikuo Iwata (then a professor at Gakushuin University), who provided the theoretical basis for the large-scale monetary easing and was given the role of implementing the policy, was to be at the forefront of the easing policy as deputy governor of the Bank of Japan. Upon accepting the position, Prof. Iwata confidently stated that he would resign as deputy governor if the Bank of Japan failed to achieve its goals within two years[100]. This was a very honest attitude of taking responsibility as a policy advocate and a demonstration of his confidence in his policies and his pride as a researcher.

If a policy is not effective, it must be promptly reconsidered, especially if it has the potential to pose a significant risk to Japanese society in the future. It is a natural stance for a researcher (scientist) to reconsider a policy or the hypothesis that led to it if the effect cannot be confirmed through verification by facts.

However, even though the policy did not produce the desired effect in the targeted two years, Deputy Governor Iwata did not resign or reconsider the policy, but instead completed his five-year term of office, saying, "Although my judgment was not good enough, I will work to realize the policy without resigning". Since then, large-scale monetary easing has continued to the present, but the original objective has not been achieved. However, not only Prof. Iwata but also other economists who have supported the policy of large-scale monetary easing have maintained their stance of supporting the policy for more than 10 years without reconsidering their original hypothesis, forcefully claiming that "partial results have been achieved".

This is no longer the stance of a researcher, but more akin to that of politicians. Those are the researchers who did not spare any “theoretical” support for the policy, even if the policy was initiated by politicians. Although no researcher, except for Prof. Iwata who was responsible for policy implementation, can be held politically responsible, it is the proper attitude of scientists and researchers to thoroughly review the assumptions and hypotheses of policies with the pride and conscience of being a researcher. Otherwise, they are no better than politicians who do not take responsibility for their policy recommendations and are always making excuses.

If economics claims to be a science, it should evaluate policy implementation (experiments) as appropriate. Researchers who leave policy evaluation to bureaucrats and politicians cannot be called “scientists”. If one is not able to seriously evaluate the hypotheses he or she proposes, the policy formulation based on those hypotheses, and the implementation of the policy, his or her

[100] Statement of Position and Answer to Questions at the House of Representatives (House Steering Committee) held on March 5, 2013.

qualifications as a social scientist will be questioned.

False Hypothetical Assumptions of Price Targeting Policy

In 2013, the inflation target of around 2% per annum was announced, with large-scale monetary easing to be implemented until the target is achieved. The consequences need no explanation. However, strangely enough, no verification of "why the initial targets were not achieved" has been conducted even though 10 years have passed since the policy was implemented. In the field of natural science, prompt verification is required. However, those who are involved in the formulation of economic policies are not willing to verify them. This is because, in the case of policy implementation by politicians, if they admit that their assumptions were false, the policy has been wrong from the beginning. Admitting this would require their exit from the policy arena. It is understandable that politicians do not want to admit the fallacy of implemented policy, but if "scholars" act like politicians, they can no longer be called researchers or scientists.

In the verification of natural science, if the achievement of a goal cannot be confirmed after a certain period, it will be concluded that the hypothetical assumption itself was wrong. In the case of the large-scale monetary easing policy, the following points should be discussed first.

(1) What was the ground for believing that a shift from deflation to inflation could be achieved without fail? Was the assumption correct that consumers would rationally respond to the price target?

(2) Was the hypothesis wrong from the beginning that consumers (households) and producers (firms) would act in the same direction in response to the monetary easing policy?

The assumption that economic actors with adequate information and rational behavior can act properly in predicting future price (interest rates) increases can generally be applied to institutional investors in the financial market, because analytical methods have been developed in the financial economy, and computer programs have been developed to calculate investment returns. Markets themselves operate based on short-term and long-term forecasts. In financial markets, where money moves in large units, even a price movement of 0.1% can induce a large movement of money if a reliable forecast is made.

However, it is unrealistic to think that the average consumer will react to the annual 2% inflation forecast; a price increase of 2% will not prompt consumers to rush to purchase non-essential consumer goods. If they knew that prices would rise by 10% tomorrow, they would purchase before the price increase, but that would be panic behavior. Large-scale monetary easing is not based on the assumption of panic behavior of consumers, but rather on the assumption that consumers will behave rationally, taking future price hikes into account. Clearly, the very assumption of this argument is unrealistic.

The behavior of institutional investors in financial markets and the behavior of consumers in real economic markets are not isomorphic. International experience has shown the effectiveness of policies that set a certain price target and raise the interest rate to prevent high inflation. However, when trying to stimulate both consumers and producers to promote economic growth, as in the case of Japan's monetary easing policy, differences in the behavior patterns of each economic agent and differences in markets (financial markets or real markets) cannot be ignored.

Japan's price targeting policy does not distinguish economic agents' responses between the financial market and the real market and assumes that rational economic behavior sensitive to the rate of increase will occur both in the real market and in the financial market. However, the behavior of consumers and producers in the real economy is fundamentally different from that of economic agents in the financial economy. This is the critical point of the discussion on the monetary easing policy. While contemporary economics can successfully model the financial economy mathematically, it fails in creating effective models for the real economy. Therefore, many of the major "theorems" (common tools used in analysis) of the real economy in contemporary economics are imported from financial economic analysis. However, these are only analogies and do not capture the actual economic behavior of production and consumption. This is where contemporary economics stumbles.

However, in an economy such as the U.S., where a high percentage of consumption is through credit card loans, it can be assumed that even ordinary consumers behave similarly to financial market participants. However, Japanese consumers are not in the habit of using bank loans for everyday purchases except for large purchases such as real estate. Moreover, if interest rates are extremely low, there is no need to rush into making purchases. Since the bank's lending rate remains low while announcing an increase in consumer prices, the effect on consumer behavior via the loan rate is almost zero. Under these circumstances, the announcement of the annual 2% price increase to general consumers should be considered to have no effect. It is not surprising that even if monetary easing continues for 10 years, there will be no significant change in the behavioral patterns of general consumers. This was fully predictable from the beginning.

Then, what was the basis for believing that Japan's price target policy would work?

There is a theoretical hypothesis that the expected inflation rate converges to a certain level because of the rational behavior of economic agents. This is the theory of rational expectation formation for price increases. To avoid complicated mathematical formulations, let us look at the formulation of the so-called adaptive expectation. The following equation assumes that the economic agent assumes the expected inflation rate for the current year, considering the price inflation rate in the preceding year.

$\Delta\pi_{t+1}=\theta(P_t - \pi_t)$ where P_t is the rate of a price increase at time t, π_t is the expected rate of increase at time t, and θ is the adjustment coefficient, $0 < \theta < 1$.

In this formulation, the adjustment coefficient is set to 1 or less, so the actual rate of price increase converges to a constant value (expected value). Assuming that the information necessary for rational judgment is available and that people act rationally, the expected rate of price increases converges to a constant value. Rational expectation theory is also a variety of adaptive expectation and is a model in which people's expectation becomes optimal forecast.

Rational expectation theory assumes that economic agents act rationally. This type of model is a normative argument that does not explain real economic phenomena. It is a mathematical model that assumes the existence of convergent values and optimal expected values from the beginning and is not a hypothesis that explains people's actual behavior in response to real price increases. Therefore, the rational expectation theory cannot be a hypothetical assumption that supports the price-targeting policy. The assumption that "since prices are expected to rise, wise consumers with perfect information and rational behavior will increase consumption to prepare for the future" is not confirmed by empirical facts and is no more than a normative hypothesis. Arguments based on such hypotheses cannot be the base for large monetary easing policy.

To analyze real economic behavior, one must distinguish between financial markets and real markets, between consumers and producers, between consumers who make financial investments and those who do not, and between firms that engage in financial investment and those that do not. Arguments that start from normative hypotheses without collecting and analyzing empirical facts are idealistic and cannot capture the actual behavior of economic actors in the real economy.

The price target argument, which was a major premise of Japan's large-scale monetary easing, was an argument based on an imaginary economic space. This is why a political economy and sociological analysis of the real economy and society is needed.

Where Has Eased Money Gone?

What about the hypothesis that because interest rates are kept at a nearly negligible level through large-scale monetary easing, firms find it easier to borrow funds for investment, new businesses (technological innovations, new products) are launched, and consumers find it easier to take out loans?

Naturally, even if interest rates are low or zero, the borrowed money must be repaid. Unless there is an investment that is sure to yield a profit, there is no such thing as a good deal. For most small businesses, investing in a new business is a matter of life or death. With a non-repayable grant, the company will not go out of business even if the new venture fails. However, a bank loan is money that must be repaid, no matter how low the interest rate on the loan. If the business started with the loan fails, the repayment of the funds will be delayed, and the company's survival will be in jeopardy. Therefore, no matter how low the interest rate is, small and medium-sized

enterprises cannot easily borrow funds to launch a new business. Furthermore, Japan's population (market) is shrinking, and demand for consumer goods will surely shrink over the long term. Considering this, even if there is a temporary increase in demand, even existing businesses cannot easily expand. This is the business reality of small and medium-sized enterprises.

In contrast, large companies with retained earnings and ample funds are different. If they can borrow low-cost funds, they can use the inexpensive funds for financial investments that are not their core business. Moreover, the prospect of long-term easing, which is expected to invigorate financial and real estate markets, provides an opportunity to invest retained earnings, and the use of easing funds for financial investment will increase the company's profits. Although even large companies must be cautious about investing funds in new businesses, financial and real estate investments are far less risky and more efficient than the development of new businesses, which carry greater risks. Therefore, whether a manufacturer or a trading company, if a company can obtain inexpensive funds through monetary easing, it will first consider using the funds for financial and real estate investments. It is too naïve to assume that the borrowed funds will be used for technological innovation or new product development.

On the other hand, what about consumers (households)? Japanese consumers are not likely to rush to take out a loan to purchase durable consumer goods just because interest rates are low. Even the decision to replace existing consumer durables would not be so easy. This is different from American consumers. For the average consumer, a low-interest loan would first and foremost be used to purchase a house or a flat. Consumers with more funds to spare may also consider purchasing real estate for investment purposes.

This pattern of behavior reveals where the easing funds will be directed. One is the financial market, and the other is the real estate market.

While it is difficult to say the exact size of individual firms' financial investment without a survey, the market capitalization of the stock market has expanded by about 400 trillion yen since the large-scale monetary easing in the spring of 2013 (Table 7.1). The BOJ itself has been actively acquiring equity assets (approximately 40 trillion yen as of May 2023), and the GPIF (Government Pension Investment Fund) has increased its domestic equity assets (approximately 30 trillion yen) by raising its equity investment limit. Commercial bank lending has expanded by about 130 trillion yen over the 10 years of the easing policy. These loans and retained earnings of companies were used for financial investment in anticipation of higher stock prices due to the easing policy.

The real estate market has shown a similar trend. Monetary easing has led to an increase in residential real estate purchases. The real estate market in the Tokyo metropolitan area has seen a steady increase in prices since 2013, when the monetary easing policy began (Figure 7.1). Consumers (households) are likely to buy their own homes or condominiums as investment assets

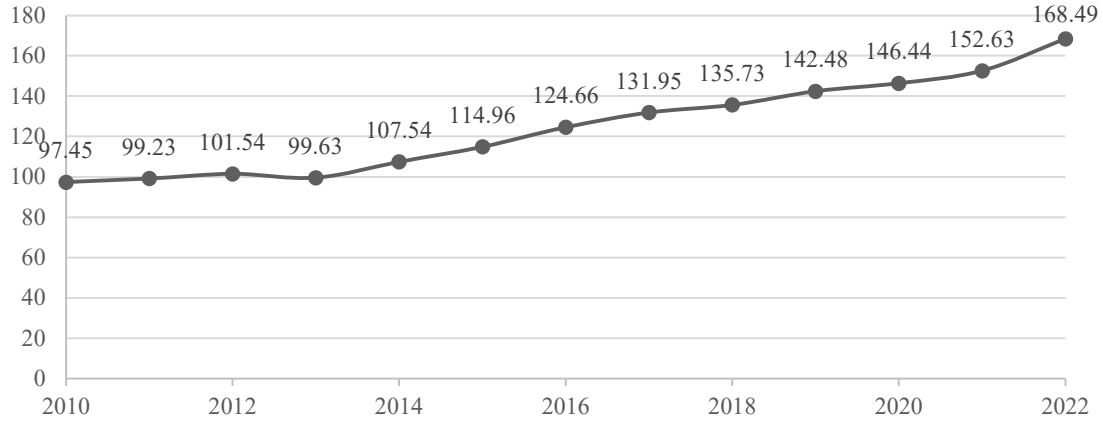
when interest rates are kept low. They will postpone the purchase of consumer durables and use the inexpensive funds for asset building.

Table 7.1 Trends in TSE 1st Section Market Capitalization (Unit: trillion yen)

year	end of Dec.
2022	714.3
2021	728.4
2020	666.8
2019	648.2
2018	562.1
2017	674.1
2016	560.2
2015	571.8
2014	505.8
2013	458.4
2012	296.4

Source: Tokyo Stock Exchange (rounded down to the nearest 100 billion yen)

Figure 7.1 Real Estate Price Index (South Kanto Region, Condominiums)



Note: Index for January of each year, with the 2010 average as 100.

Source: Real Estate Information Center, Real Estate Industry Statistics, Real Estate Distribution, p. 25 (revised September 2022).

Firms are also likely to allocate money not only to financial assets but also to real estate investments. The policy of large-scale monetary easing was envisioned as a cycle in which

mitigated money would be used to finance investment in the manufacturing sector, stimulating investment and increasing the production of goods, thereby raising wages, which in turn would raise consumption among consumers. Even if the easing money revitalizes the financial and real estate markets, they do not create a virtuous circle in the national economy. If firms and individuals with ample money on hand use the easing money for financial investment, the working population in the financial and real estate sectors will increase without growth in the processing industry (expansion of the working population).

This is evident from the change in the working population (see Table 7.2). The reflationary camp emphasizes that the 4.3 million increase in the number of workers due to monetary easing is a result of the policy. Although the length of this article does not allow for a detailed explanation, the increase in the number of workers is attributable to a 10% increase in the employment rate of women (2 million) and a 5% increase in the employment rate of men and women aged 65 and over retiree (3 million). Most of the increase in the number of workers is due to employment to maintain the standard of living. The only real increase in the number of workers is in the finance, insurance, and real estate industries, where there is a net increase of 400,000 workers. The massive supply of funds over the past decade has brought prosperity to the finance and real estate industries, and the easing funds have only created asset bubbles.

Table 7.2 Number of workers by industry (Unit: ten thousand)

calendar year (end of Dec.)	number of workers (industry total)	primary industry	seandary industry	tertiary industry	Finance, Insurance and real estate
2012	6,280	241	1,539	4,500	276
2013	6,326	234	1,544	4,548	276
2014	6,371	231	1,553	4,587	268
2015	6,402	229	1,545	4,628	275
2016	6,470	223	1,544	4,703	287
2017	6,542	221	1,556	4,765	294
2018	6,682	228	1,572	4,882	294
2019	6,750	222	1,570	4,958	297
2020	6,710	213	1,547	4,952	307
2021	6,713	208	1,533	4,972	310

Note: The last column shows the figures for "Finance, insurance, and real estate" in the tertiary industry separately.

Source: Statistical Information, Japan Institute for Labour Policy and Training (updated May 8, 2023)

In this view, the use of easing money is different from what the policy envisioned. Once it became clear that the easing funds could not be used to increase investment in the manufacturing sector, the easing policy should have been revised. As long as the BOJ continues its accommodative policy, asset bubbles will continue to swell, while the BOJ's underwriting of JGBs will remain unchecked, and the BOJ's degree of freedom in monetary policy will narrow. Therefore, the BOJ should have decided to revise its accommodative policy at least five years after the policy was implemented. However, politics did not allow this, and economists were also unable to recommend a sensible decision due to the momentum of the reflationary camp.

Social-Economic Conditions for Consumer Spending to Grow the Economy

Economists who supported the policy of large-scale monetary easing assumed that the easing funds would increase consumer spending, which in turn would boost GDP. The tautology emphasized at this time was that "consumer spending accounts for 70% of GDP, so increasing consumer spending will increase GDP". It is still fresh in our minds that they argued against raising the consumption tax, which would limit consumer spending, relying on this tautology.

This point has been discussed in detail in section "III-2 Identical Equation and Causality", and will not be discussed again, but this argument is based on the misconception that accounting balance (identical equation) is considered a causal relationship. It is a simple tautology to draw conclusions based solely on the accounting relationship without analyzing the social-economic conditions under which a continuous increase in consumer spending occurs.

Did the large-scale monetary easing really lead to an expansion of personal consumption? The "National Disposable Income and Spending Account" of the National Accounts shows the trend of personal consumption (see Table 7. 3).

Table 7.3 Real final consumption of households and government (calendar year, in billion yen)

	2013	2014	2015	2016	2017	2018	2019	2020	2021
Household real final consumption	356,968	361,692	364,360	363,013	368,002	371,855	372,756	360,053	366,381
Government real final onsumption	39,782	40,687	41,255	41,770	41,413	41,935	42,886	44,290	45,316

Note: Real final consumption is a figure that takes into account the portion of general government final consumption that is redistributed to households.

Source: National Disposable Income and Use Accounts (National Accounts Tables for FY2021)

Despite the combined efforts of the BOJ and the government to provide huge amounts of money to the market, consumer and general government final consumption has remained at a level of almost ¥400 trillion over the past decade. Why has consumer spending failed to increase despite the massive injection of money into the market?

The Japanese economy has entered a period of stable maturity after the high growth period and has entered a historical period in which the working population is aging and shrinking. Without this historical and social awareness, it is impossible to understand the situation. The answer can be found by considering the conditions that supported the high economic growth achieved by China in recent years and by Japan in the postwar period.

For economic growth to occur, surplus labor must enter the web of the social division of labor in a market economy. As is evident from the economic growth of modern capitalism, the achievement of high growth rates coincides with the process of sustained integration of rural surplus labor into the social division of labor as the market economy expands. The new labor force increases value-added production, which increases wages paid to workers and increases consumption expenditures. The rapid emergence of a labor force temporarily tightens the supply and demand for consumer goods, but the total amount of wages paid increases, and effective demand also expands, creating a cyclical upward effect that leads to an increase in the production of consumer goods.

In fact, the number of workers in Japan increased from 40.9 million to 52.59 million during the 18-year period from 1955 to 1973, which is considered Japan's high-growth period. Nearly 650,000 new workers were brought into the Japanese economy each year. The number of workers included in the social division of labor has increased by approximately 30% during the period. The manufacturing sector alone experienced a rapid expansion of more than 80%, from 7.57 million to 13.83 million workers, during the same period from 1955 to 1973. This supported Japan's high growth. The demand for consumption by workers that emerged in the market pushed up bottlenecks in the consumer goods market and stimulated the production of consumer goods, creating a growth cycle. The same situation can be observed in China, where the transition to a market economy has been rapidly continuing.

In contrast, looking at the period from 1990 to the present, the period known as the "lost 30 years", the number of workers in 1990 was 62.5 million, while the number of workers in 2012 was 62.8 million, almost unchanged. There has been no quantitative change in the labor force captured by the social division of labor. Subsequently, the number of workers in the tertiary industry increased by about 4,300,000 as a result of large-scale monetary easing, but the number of workers in the manufacturing industry has not increased at all, from 10.41 million in 2013 to 10.45 million in 2021. Furthermore, the number of workers in the manufacturing sector is almost the same as in 1962. In other words, the number of workers in the manufacturing industry has shrunk to the level of the early years of Japan's rapid economic growth.

Thus, it is impossible to correctly understand the current state of the Japanese economy without examining its historical structural changes of growth, maturity, stagnation, and contraction. However, those who call themselves "reflationist" ignore the historical changes in

the Japanese economy and focus only on the phenomenon of deflation, arguing as if the quantity of currency determines economic growth. Moreover, even the perception of deflation is not uniform. Many economists explain deflation as "a phenomenon in which prices continue to fall". However, while prices have not risen, they have not continued to fall. They simply call the fact that prices are not rising deflation. Not only are they mistaken in their recognition of the facts, but they are blinded only by the level of prices and fail to recognize the historical problems facing the Japanese economy.

This leads to the "good inflation" or "bad inflation" argument. This argument is also a tautology, because "good inflation" is defined as "good inflation" in terms of prices. This argument is also a tautology; "good inflation" is a case in which rising prices stimulate demand and production, creating a virtuous cycle, while "bad inflation" is a case in which only prices rise without creating a virtuous cycle. This is not an analysis, but a meaningless tautology because it is the same as saying that "good inflation produces good results (a virtuous cycle)" and "bad inflation produces bad results (a vicious cycle)"[101].

As the historical case of high economic growth clearly shows, when new labor enters the market, consumer demand expands and the supply-demand balance of consumer goods becomes tight, which in turn induces a sustained price increase. On the other hand, the expansion of production due to the expansion of the labor force increases the total wage payment, and production also increases in response to demand because the situation in which goods can be sold if they are produced is sustained. This is the "virtuous circle" seen during periods of high economic growth. The virtuous circle is not a monetary phenomenon, but a phenomenon in which demand causes a continuous expansion of supply due to structural changes in the market, such as an expansion of the labor force. The social conditions that would induce such a cycle no longer exist in the Japanese economy. On the contrary, the Japanese economy is entering an era in which the working population is decreasing. Although the overall working population has not yet begun to decline due to a slight increase in the number of workers in the tertiary industry, the working population in the manufacturing industry is already in the process of shrinking.

Without analyzing these historical and social conditions, discussions on the quantity of money and the price level will not yield any results. Discussions that focus on quantitative economic growth as the supreme objective has lost their validity as socioeconomic analysis.

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[101] It is common to refer to the demand-pull type as good inflation and the cost-push type as bad inflation. However, the way to proceed with the discussion is completely different depending on whether one is discussing individual markets or the national economy, and whether one is trying to understand inflation as a short-term phenomenon or a long-term phenomenon. A discussion of the long-term national economy requires an analysis of the socioeconomic conditions that generate inflation. For this purpose, it is essential to analyze the dynamic changes in the industrial population and the quantitative and qualitative changes in the labor force market. Without this analysis, its propositions are contentless tautologies.

Government Debt Accumulation Problem
- What kind of bond is a government bond?

The large-scale monetary easing has been mainly implemented by the BOJ through purchasing large amounts of JGBs from the market. In the 10 years since the BOJ started its easing policy, all the JGBs issued by the government have accumulated as the government's debt. During the 10 years, an additional 300 trillion yen of JGBs have been issued, bringing the total amount of outstanding JGBs (not including 200 trillion yen of accumulated JGBs and municipal bonds) to more than 1,000 trillion yen by 2021. This is equivalent to 190% of GDP (more than 200% if municipal bonds are included), or about 20 years of tax revenues. Annual deficit financing as a percentage of general government expenditures has remained at about 45%, which is equivalent to 75% of tax revenues. Japan is the only economically advanced country with a budget deficit of this magnitude. Furthermore, Japan's fiscal deficit cannot be maintained without deficit-covering government bonds, and the accumulation of deficits cannot be stopped, and Japan's fiscal deficit will continue semi-permanent financial bottoming down for other decades. Even at this stage, politicians are irresponsible in their words and actions, covering up the problem, and the people are so blinded by the irresponsible incitement of politicians that they are unable to understand the seriousness of the problem.

Table 7.4 JGB Issuance and its Indicators (each year, Unit: 100 million yen, %)

fiscal year	JGB Issuance (100 million yen)							dependency on JGBs (%)	outstanding amount of ordinary JGBs (100 million yen)	outstanding amount/GDP (%)
	article 4 bonds	special bonds	pension special bonds	restruction bonds	FILP bonds	refunding bonds	total			
Heisei 25	70,140	338,370	26,035	-	107,000	1,101,569	1,643,114	40.8	7,438,676	145.1
26	65,770	319,159	-	1,200	140,000	1,193,728	1,719,857	39.0	7,740,831	147.9
27	64,790	284,393	-	13,200	134,000	1,142,308	1,638,691	35.5	8,051,482	148.9
28	89,014	291,332	-	7,909	196,000	1,094,798	1,679,053	39.0	8,305,733	152.4
29	72,818	262,728	-	768	120,000	1,063,820	1,520,134	34.2	5,831,789	153.5
30	80,972	262,982	-	-	106,300	1,032,853	1,483,107	34.8	8,740,434	157.1
Reiwa 1	91,437	272,382	-	8,100	125,500	1,042,383	1,541,801	36.1	8,866,945	159.1
2	225,960	859,579	-	8,100	125,500	1,042,383	2,568,553	73.5	9,466,468	176.8
3	91,680	484,870	-	400	101,446	1,428,502	2,106,897	39.9	9,914,111	183.0
4	87,270	537,519	-	-	165,000	1,484,872	2,274,662	44.9	10,424,369	188.5

Note: JGB dependency ratio is (Article 4 bonds + special bonds)/general account expenditures.

Heisei 25 is from April 2013 to March 2014 and Reiwa 1 is from April 2019 to March 2020.

Source: Ministry of Finance, "Trends in JGB Issuance (actual basis)".

On the other hand, the Bank of Japan supports the government's issuance of deficit-covering JGBs. Immediately prior to the implementation of the large-scale monetary easing, the BOJ's

holdings of JBG were about 113 trillion yen (January 15, 2013). After 10 years of the easing policy, it is approximately 587 trillion yen (May 12, 2023). The increase in JGB holdings far exceeds the amount of new JGB issuance over the 10-year period. This is the result of aggressive purchases of existing JGBs in the market. As a result, the BOJ now holds 57% of all JGBs issued by the government, which has created a de facto fiscal financing situation.

Even with this accumulation of government deficits and the deterioration of the BOJ's assets, the working population, except for the financial and real estate sectors, did not expand, nor did it increase consumer demand or stimulate the manufacturing sector. Despite this, the government and the BOJ have refused to review their policies and have only continued the large-scale monetary easing policy. It is as if the elderly with underlying diseases is being overfed and given large doses of useless drugs. Excessive nutrition leads to excess energy that accumulates in the body, resulting in unhealthy obesity, and excessive drug administration increases the severity of the underlying disease.

Even under these circumstances, economists who have supported the monetary easing policy have persisted to advocate the continuation of the policy by calling for an "end to deflation". Some economists have also joined irresponsible politicians in calling for the aggressive use of BOJ finance through further JGB issuance, on the basis that government bond issuance has not caused hyperinflation. The following two points are being argued as the basis for this argument.

One is that if the government deficit is backed by domestic savings, the government is not vulnerable to speculative investment from abroad. The second is that the government and the BOJ are both government branches and if they are integrated into one, the government's liabilities and the BOJ's assets will be offset which results in a drastic reduction of the government's debt. These two arguments were "discovered" for proving that accumulated debt is not a problem and for explaining the reasons why hyperinflation does not occur even with this level of fiscal financing.

Since World War II, the capitalist economy has grown in basic strength through economic development, and the economic structure has become more complex. The disparities in economic development and inflation among national economies have not remained simple. Therefore, there is no longer a simple relationship between fiscal finance and immediate hyperinflation.

On the other hand, even in prewar capitalist economies, where the basic economic strength was much weaker than today, hyperinflation did not occur easily. The occurrence of hyperinflation depends on the social conditions that induce it. Historically, hyperinflation has occurred during wartime and after the end of the war. If a large amount of government bonds is issued during wartime, which is not backed by production or savings, hyperinflation will be triggered easily. Or, after a certain time lag, the shortage of goods at the end of the war makes the economic law of nullification of wartime debts without production support prevail. This is postwar hyperinflation. Many countries, including Japan, experienced postwar hyperinflation after World War II. The

collapse of the socialist system at the end of the 20th century also triggered transformational inflation, which was an explosion of public debt that had accumulated under the socialist system which had not been manifested in the previous social system. The magnitude of hyperinflation is proportional to the size of each country's latent debt. The record hyperinflation that occurred in Serbia during the civil war that followed the dissolution of the Yugoslav Federation is a typical example of an explosion of wartime debt in addition to public debt hidden under the socialist system. The potential for hyperinflation is always triggered by certain social changes.

The acceptable size of accumulated public debt is related to the basic strength of the national economy. Even if the economic fundamentals are solid, massive government debt will limit the government's freedom of economic and social policy. The probability of Japan starting a war is infinitesimally small, and the probability of forced procurement of wartime supplies causing hyperinflation is close to zero. So, is the Japanese economy solid enough to continue fiscal financing? The greatest threat to Japanese society is a natural disaster (a large-scale earthquake). If an earthquake of a massive scale were to occur, resulting in the loss of large amounts of assets, a situation like that at the end of the war would be created. Even in this case, if the level of government debt is low, it is possible to control inflation caused by the expansion of fiscal spending. However, if debt accumulation is already saturated, the inflation induced by a general shortage of goods is likely to turn into hyperinflation. In the case of Japan, where the government does not have the fiscal capacity, massive additional government spending is likely to cause commodity prices to skyrocket, which in turn will cause generalized hyperinflation. Fiscal financing far more than current levels would cause major social problems.

"The government bonds are backed by domestic savings" means, conversely, that domestic savings are used as collateral for the government debt. Deficit government bonds are collateral securities backed by "cash flows in the form of future tax revenues". However, if hyperinflation occurs, as it did immediately after the end of the war, the price of government bonds will plummet and domestic savings as collateral will depreciate without limit. Everything will break down, and the creditor-debt relationship will be reset. With the forced termination of claims and debts, the national debt will be extinguished, but the savings as collateral will also become worthless. To avoid creating such a situation, it is important to properly manage the level of government debt from normal times. This is why the EU strictly controls the government debt ceiling. In the U.S., the debt ceiling is regulated by law (although it has been revised repeatedly). In normal times, the impact of a debt ceiling crisis on the national economy is not so great. Nevertheless, controlling the debt level is meaningful because it is a pearl of wisdom to maintain the government's ability to control and protect the economy and society from the danger of collapse in the event of war, natural disasters, and other events with enormous social costs. It is a historical lesson inherited from the wars of the 20th century. Thinking only of the immediate economic boom without

preparing for future crises is the thinking of the grasshopper in Aesop's Fables.

This view reveals the fragility of the argument that "there is no problem with debt accumulation as long as it is backed by domestic savings". This is the same as the argument that "there is no need for special preparations because there is no immediate risk of Tokyo Metropolitan Area Inland Earthquake at present".

Can the Government's Debt and the BOJ's Claim be Offset?

What about the other argument? From the standpoint of economic substance, since the government and the BOJ have a parent-subsidiary economic relationship, can it be said that the debts and credits of both parties are offset? The issue here is not the legal relationship as stated in the government's official response, but the actual economic relationship. In the case of the BOJ's fiscal financing, the BOJ is subordinate to the government and acts like a de facto subsidiary. On the other hand, what is important is the national accounting treatment between the government and the BOJ. Therefore, the following points should be discussed here.

The government and the BOJ are not legally parent and subsidiary (legal relationship). However, since the BOJ is subordinate to the government policy and finances the government substantively (substantive economic relationship), can the income and expenditure accounts of the government and the BOJ be consolidated in the national accounts (possibility of consolidated settlement)?

First, the national accounting system clearly separates the financial and non-financial sectors. This is because the financial sector is not directly involved in the production and distribution transactions of the nonfinancial sector but records the money-handling relationship resulting from that transaction relationship. Therefore, financial, and non-financial transactions cannot be offset among the accounts of the national accounting. This is not only a formal problem of the national accounts system, but also a process that corresponds to the real economics world.

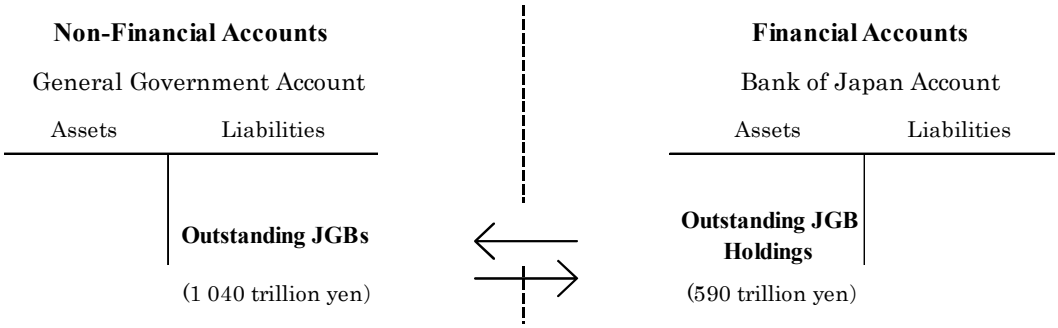
Leaving national accounting behind, we can better understand what happens to the credit-debt relationship between the parties involved in a business merger. For example, when two non-financial firms merge, their mutual claims and debts are offset, but this offset does not cause the absorbed firm's debts to disappear like air. The assets of the other company are simply reduced by the amount of the absorbed company's debt. The same is true in the case of a corporate merger between financial institutions. The extinguishment of one party's debt by setoff reduces the other party's assets by the amount of the setoff.

On the other hand, if a non-financial company and a financial company are under the same umbrella and have one owner, will the claims and obligations of the two companies disappear because of offsetting? In this case, if the debts of the non-financial company are offset against the

claims of the merged financial company, the assets of the financial company will be reduced by that amount. Mergers (or consolidations) do not make claims and debts disappear like magic tricks.

In the offsetting of parent-child loans and debts, the debt owed by the child to the parent becomes a “gift” and is not “canceled as if nothing had happened”. The debt held by the child against the third party is offset in the form of a reduction of the parent’s assets. Thus, the question is "To whom are the government’s bonds owed?” JGBs are collateral securities backed by future tax revenues, and are a debt held by the government for the people. The BOJ’s holding of JGBs does not change this character. The BOJ can only lend funds against the collateral securities called JGBs, but it cannot “cancel” the collateral securities to the public as a third party.

Figure 7.2 General Government Account and Bank of Japan Account



Note: The so-called "integrated government" theory assumes that the JGB debt of the general government account (1,040 trillion yen) and the JGB claims of the Bank of Japan (590 trillion yen) will be offset, resulting in a significant reduction in the government's JGB debt. The figures are approximate figures for the spring of 2024 and do not include the 200 trillion yen in municipal debt.

Let us summarize the above. As shown in Figure 7.2, the JGB claims-debt relationship is depicted between the government and the BOJ. “Integrating the two accounts together” is an argument that claims that the general government’s JGB debt (1,040 trillion yen) is offset by the BOJ’s holdings (590 trillion yen), resulting in a net government debt of 450 trillion yen. If this were possible, the government’s JGB debt would be reduced to almost zero if the BOJ held more JGBs. Moreover, the government would no longer need to collect taxes. This is the alchemy of our times. This is exactly what the late Shinzo Abe insisted on in his touring lectures around Japan[102]. Nothing comes from nothing. There are only phenomena that appear to exist. To avoid

[102] For example, in a speech held in Sanjo City on July 10, 2021, he said, "The Abe administration has always been criticized for ‘not passing on the bill to our children's generation’, but that criticism is not correct. The reason is that the government and the Bank of Japan are working as a combined force in the

the illusion that mirage-like phenomena are true, an analysis of political economy is necessary.

As mentioned above, the BOJ supplies currency using JGBs as collateral, but the BOJ cannot say, “Let’s pretend this collateral does not exist”, because this collateral is a debt held by the government against the people. JGBs are a debt held by the government against the people as a third party, so even if the BOJ were a subsidiary of the government, it is a debt instrument that cannot be erased. Therefore, they do not constitute a consolidated account in the national accounting.

Instead of just offsetting in one’s mind, one should consider the actual procedure when the BOJ’s claims are offset against the government’s liabilities. Offsetting the BOJ’s offsetting declaration means that the BOJ “forgives the government’s debt”, which means that the BOJ immediately becomes insolvent. The government’s JGB debt would be reduced by the offsetting amount, but on the other hand, the BOJ’s account would become heavily over-indebted, which would create a situation in which the very existence of the BOJ would be at stake. If the BOJ declares that it will forgive the government’s debt, the BOJ will lose its mission as a central bank, the Japanese yen and stock market will plummet, and the Japanese economy will be on the verge of collapse.

Those who believe that the government’s debt and the BOJ’s credits will be offset seem to think that “offsetting” will “make the credits-debts disappear”, but this is a simple misunderstanding. Even if it is possible to add and subtract numbers in one’s head, it is not possible to “make something that actually exists into something that does not exist”. This is where the poverty of contemporary economic thought is truly shown. By excluding political economy, contemporary economics has become too much absorbed in the world of illusionary thinking and is unable to distinguish between reality and thought[103].

In other words, it is only possible to offset the value of the BOJ’s JGB holdings as a thought experiment. The claim by some economists that government debt and BOJ claims can be offset by integrated thinking because the government and BOJ belong to the government sector is not possible from the standpoint of national accounting nor from the standpoint of actual procedures.

Corona measures, but the BOJ buys almost all the government bonds issued by the government," he said. "Do you think the BOJ borrows money from somewhere? That's not true. The bank prints bills with paper and ink, and you can make a 10,000-yen bill for 20 yen. The Bank of Japan is a subsidiary of the government, so to speak, and in fact, it is not even a debt of the government in the consolidated financial statements. So ‘don't pass the bill on to your grandchildren and children’ is not correct". The audience applauded Abe's words and actions (https://www.youtube.com/watch?v=5sI70EEeJR8). Taro Yamamoto of the Reiwa Shinsengumi (opposition party) agrees with Abe's argument.

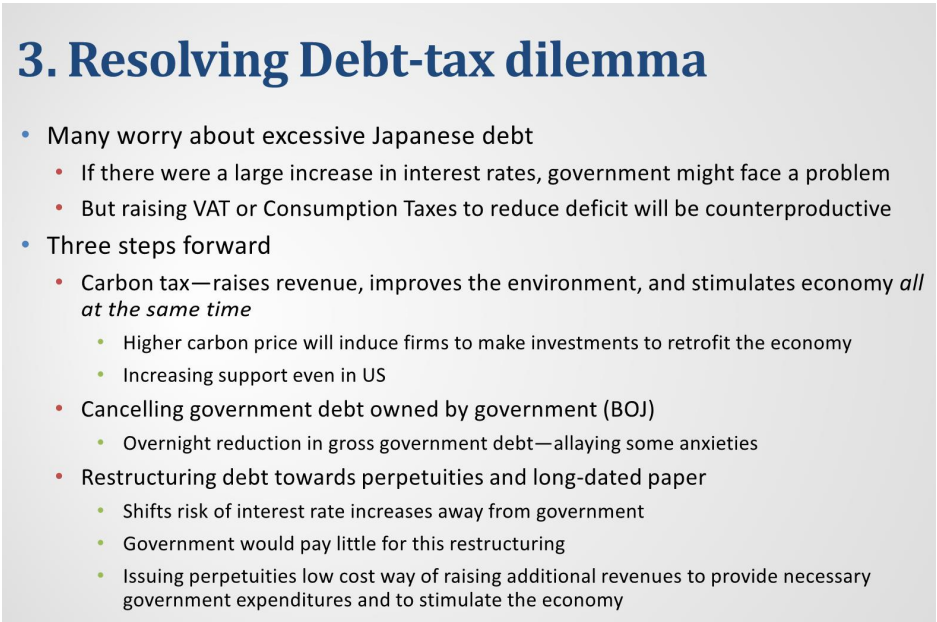
[103] As you see in the next section, this argument stems from a statement in a document that J. Stiglitz (Columbia University) gave at the invitation of the Japanese government at the meeting of the Council on Economic and Fiscal Policy on March 14, 2017. Stiglitz's argument is only two lines of text and does not develop a basis or argument for offsetting. He makes an elementary error in his national economic accounting.

It is a fanciful illusion to think that integrated “thinking” will reduce the amount of government debt.

Fallacy of Stiglitz

This debate in Japan stems from the wording in the materials used by J. Stiglitz (Columbia University) in his lecture at the Economic and Fiscal Policy Council meeting held on March 14, 2017, at the invitation of the Japanese government (Figure 7.3). On one of the slides he prepared, Stiglitz wrote in just two lines: “Cancelling government debt owned by government (BOJ) /Overnight reduction in gross government debt - allaying some anxieties. The gross government debt is reduced instantly - some anxieties are allayed”. Some populist economists have used this to argue that ‘there is no fiscal crisis because the debt claims of the government and the Bank of Japan cancel each other out’. Stiglitz's argument was based on just two lines of text, and it did not develop any arguments or evidence to support the idea that debts and credits could be offset. Still, it does not seem that Stiglitz was rigorously thinking about this issue. He made a basic error in national income accounting. Some economists have taken the Nobel Prize-winning economist's careless words as if they were a golden rule and are using them as evidence that there is no fiscal crisis.

Fig. 7.3 One Page of Lecture Slides by J. Stigliz



Note: Materials from March 14, 2017, meeting of the Council on Economic and Fiscal Policy. Page 15 of the lecture slide prepared by J. Stiglitz.

Source: https://www5.cao.go.jp/keizai-shimon/kaigi/minutes/2017/0314/shiryo_01-1.pdf

As we saw in Figure 7.2, this argument is based on the idea that if we roughly assume that the government's outstanding debt (government debt) is 1,000 trillion yen and the Bank of Japan's holdings of government bonds (Bank of Japan assets) are 500 trillion yen, then the government debt and Bank of Japan assets cancel each other out, and the government's net debt on government bonds falls sharply to 500 trillion yen.

However, it is a mistake to think that these two figures can be offset. Government bonds are not a debt to the Bank of Japan, but a debt owed by the government to the people. The government bonds owned by the Bank of Japan are government debt that must be redeemed using the future tax revenue of the people, and they should not be treated as a debt-credit between the parties (the government and the Bank of Japan) as is the usual accounting procedure between companies. Therefore, the accounting procedure for offsetting the two figures should not be applied.

At first glance, the relationship between the government and the central bank regarding the buying and selling of government bonds looks like a debt-credit relationship between two companies. However, this is not just a borrowing-lending relationship between two organizations. The central bank, as the lender of last resort, purchases government bonds as an economic act, and this act serves the function of supplying funds to the government using government bonds as collateral. This is why the central bank is called the lender of last resort. This is the essential function of the central bank, which differs from the lending relationship between a normal company and a commercial bank. This is why the debts and credits between the government and the central bank should not be treated like in corporate accounting.

In this way, you will understand why the national accounts system does not integrate the accounts of the general government and the Bank of Japan. Unlike commercial banks, the central bank occupies a special position as the lender of last resort. As the lender of last resort, the central bank must have a clear record of the basis for backing the money supply. If it neglects this duty and participates in the politicians' actions to print more money, it will lose its mission as a central bank and the last bastion will collapse. The government's (politicians') arbitrary instructions to print more money will cause hyperinflation. Shinzo Abe's thoughtless and frivolous understanding of the functions of the Bank of Japan is a logic that will lead the country to collapse.

Simply put, the economic function of the government bonds owned by the BOJ is to serve as collateral for BOJ loans. Therefore, the BOJ cannot make the government bonds it holds as collateral disappear. If the BOJ were to take such a measure, it would immediately become insolvent, and the Japanese economy would be in danger of collapsing. This is why Abenomics is the biggest economic policy blunder of 21st-century Japan.

Will Government Debt Disappear if We Consider the Country's Balance Sheet?

Some so-called “populist economists” are not satisfied with the reduction of the national debt to 500 trillion yen and insist that Japan does not have a debt problem in the first place. Their argument is based on an IMF report that studied the balance sheets of country (IMF [2018]).

This IMF report calculates that Japan's national assets amount to 311% of GDP. Populist economists jumped at this figure. If we assume that the cumulative debt (gross amount) of the government sector, including local governments, amounts to 220% of GDP, then the net assets on Japan's BS are calculated to be around 91% of GDP (about 500 trillion yen). From this, they argue that there is no financial crisis in Japan, and on the contrary, in a very healthy financial situation because it has net assets. Therefore, they claim that the Ministry of Finance, which is promoting fiscal austerity measures, is a group of conspirators infected with “fiscal balance fundamentalism”.

Fig. 7.4 Japanese National Balance (based on an IMF Study)

<table>
<tr><th>Assets</th><th>Liabilities</th></tr>
<tr><td rowspan="2">Assets (current and fixed)
GDPx311%</td><td>Liabilities
GDPx220%</td></tr>
<tr><td>Net Assets
GDPx91%</td></tr>
</table>

Note: The IMF (2018) roughly assumes the Japanese BS in this way. The public sector BS used in the IMF's research is constructed by adding the assets and liabilities of public corporations to that of the general government.

Unfortunately, the “balance sheet of a country” that some populist economists are shouting about so loudly is not an established concept, and there are no official statistics. There is also no established method for measuring it (international standard system), but research on the balance sheet of a country from the perspective of effective use of public assets is being published intermittently. All of this is still at the level of tentative theories by researchers. This is because, while a country's monetary debt can be relatively clearly defined, it is extremely difficult to evaluate a country's public assets. Apart from liquid assets that can be sold at any time, it is difficult to determine and evaluate fixed assets held by the public sector, such as real estate, ports, highways, and various types of infrastructure, in the same way as the sale of corporate assets in normal economic times. Not only are most assets not tradeable, but in a crisis where the sale of national assets is imminent, asset evaluation will change drastically. In most cases, they will be

valued at a much lower amount than they would be in normal times. Asset valuations in a crisis will be completely different from those in normal times.

For this reason, although the concept of a country's balance sheet exists, it does not exist as an actual statistics.

A study published in 2018 by IMF economists was an analysis that combined stress tests for the US and developing countries and attempted to measure a country's balance sheet from the perspective of effective use of public assets. As part of this study, they estimated the balance sheets of several countries, and in the case of Japan's balance sheet, they estimated national assets at 311% of GDP. However, there is no mention of how this figure was arrived at. Unless this is made clear, it is impossible to use this figure as a reliable figure.

As mentioned above, evaluating the assets of a country is not easy and requires a huge amount of data and analysis. Data that is not backed up by such analysis is a rough, unreliable personal estimate. The relevant IMF study omits the huge amount of data analysis work and is merely a rough estimate.

In fact, even in the IMF's study, it is noted that this discussion of “national BS” is merely a tentative theory of IMF economists. The research report includes the following note to draw attention to the fact that this research cannot be applied to real-world problems.

“Recognizing assets on the balance sheet does not negate the vulnerabilities associated with high public debt. Many assets are illiquid or not marketable and would not be available to meet rollover or deficit financing needs in the short term. Asset valuations are also more volatile than debt and can be highly correlated with the economic cycle－meaning their values can be at their nadir when financing needs are most pressing. Therefore, the assessments of gross debt, deficits, and financing needs remain important for fiscal policy.

The analysis of PSBSs (Public Sector Balance Sheets) has several limitations. First, data quality can be an issue, especially when looking at the broader public sector. Second, valuation can be a challenge, particularly for nonfinancial assets that are rarely traded, and with differing approaches taken for different components of the balance sheet across countries. These limitations have been addressed to the extent possible in making international comparisons, although some residual issues remain (see Annex 1.2 for details). Third, the public sector consists of many different entities, with each facing its own constraints and risks, often requiring analysis of specific entities. Fourth, the conclusions depend on the robustness of assumptions— issues that gain prominence when projecting over the very long term in an intertemporal balance sheet, as evidenced by sensitivity analyses. More broadly, while the balance sheet enriches the assessment of public finances, it cannot be interpreted in isolation from other factors, such as institutional

quality, access to markets, and the monetary and exchange rate regime."[104]

Most of the state's assets are assets that cannot be sold on the market, and cannot be liquidated like a company, so this teaches us that we must not ignore the government's debt problem by offsetting the assets and liabilities of the state. However, some Japanese populist economists are searching for arguments to support the non-existence of the government's accumulated debt problem to support the idea of using fiscal financing to boost the economy. This argument is no more than a mental exercise that tries to make the impossible possible in an imaginary way.

As a practical matter, the BOJ should have a greater sense of urgency since it is underwriting half of the JGB debt. In Japan, where there is no legal limit or even discussion of a debt ceiling if a debt is allowed to accumulate unchecked, the Japanese economy will lose its capacity and be forced into a situation where there is no more room for growth. While the rest of the developed economies are trying to keep their debt ceilings in check, Japan is the only one that is accumulating debt without limit. It continues to accumulate like magma forming underground. The "bill" to be paid by future generations is the explosion of that magma.

It is extremely puzzling that there has been no clear criticism of this issue from scholars specializing in theoretical economics. Are they trying to distance themselves from the issue because they consider it a political debate, or are they not interested at all, or do they not have the knowledge to judge this debate? The situation in the Japanese academic community that distances itself from the evaluation of economic policies despite the seriousness of the government's accumulated debts is extraordinary.

At some point, the accumulated debt will have to be resolved in one way or another, partially or fully. Regardless of the explanation and excuse, government bonds are collateral securities backed by future tax revenues, and government debt is still an anticipation of future tax revenues. If the current budget deficit continues, not only can the accumulation of government debt not be stopped, but there is no prospect that a declining labor force and the shrinking economy will be able to solve Japan's ever-accumulating debt problem. When the Nankai Trough earthquake or an earthquake directly under the Tokyo metropolitan area, which are predicted to occur in the near future, there is a strong possibility that the government (local governments), which are saddled with massive debts, will issue even more massive earthquake reconstruction bonds, triggering hyperinflation. At that time, it will be too late. Claiming that the accumulated debt can be reduced by thought experiments is no consolation. While economists are repeating abstract thought experiments on mathematical models, the economic crisis is quietly progressing.

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[104] IMF (2018), p.2.

Once Again on Contemporary Economics

Among the social sciences, only economics is eligible for the Nobel Prize. However, although the Nobel Prize was established in 1969 to commemorate the 300th anniversary of the founding of the National Bank of Sweden, it was not initiated by the Nobel Foundation. The Nobel Foundation does not recognize it as a Nobel Prize but officially refers to it simply as the "Prize in Economics. The selection of the economics prize has often been controversial, with members of the selection committee from other fields casting a critical eye on the "scientific nature" of the prize. Even if the Nobel Foundation does not recognize the prize as a Nobel Prize, the actual attendance at the ceremony and the awarding of the medal do not distinguish it from those of other fields. Only the prize money is paid by the Swedish National Bank, not by the Nobel Foundation. Thus, Prize in Economics is the "Nobel Prize, but not the true Nobel Prize".

As we have seen in this paper, there are many doubts about the science and validity of economics. Doubts are expressed at every turn about how accurately the theoretical analysis that economics captures the real economy. On the other hand, politicians with little or no background in economic theory lead the economic policies of their countries, and some economists who support them fight economic debates with simple hypotheses. We see a strange social phenomenon in which even laymen can participate in economic discussions and take the lead in the policymaking of government, while “economists” are unable to pass judgment on actual economic policies.

This situation naturally raises the question of whether "economists" are social scientists at all. Is economics a science, a social philosophy, or merely an ideology? The current state of economics is closer to the latter.

This doubt is not only held by scientists in other fields but also by scholars specializing in economics themselves. This is where the desire to “make economics more like science” comes from. Mainstream economists (in the world of economics) believe that “mathematical modeling” is the way to make economics a science, and they try to exclude from “scientific economics” problems that cannot be modeled mathematically or economic theories that cannot be modeled mathematically.

This book calls attention to this trend in contemporary economics. From the modern starting point of mathematical economics, the paper clarifies the nature of the theory and argues that mathematical modeling does not deepen our understanding of economic facts but is no more than a thought experiment in an abstract and simplified world. Such analysis cannot deepen our understanding of the real national economy and make policy decisions. As a concrete example, we examined the hypotheses underlying the policy of large-scale monetary easing that has been in place in Japan for more than a decade. This specific case study reveals that the analysis and

hypotheses that should serve as the basis for actual economic policy formulation and development are extremely weak and that sometimes ideologies based on specific economic ideological beliefs are deployed. The fact that there has been so little examination and criticism of these weak hypotheses by theoretical economists is a clear sign of a major gap between theory and policy.

The massive monetary easing measures deployed in Japan over the past decade have created a load that will constrain the Japanese economy and society for at least the next 30 to 50 years. It will cause economic and social problems comparable to those of a coming major earthquake. The risk of a massive natural disaster triggering massive damage to the Japanese economy is a certainty. Yet most economists are indifferent to future crises, and economists do not analyze them.

Mathematical economics has lost its raison d'etre as a social science. More specialists should develop political economy and sociological analysis in all directions, to gain a firm understanding of the problems facing the national economy, and to show the way forward for Japan's economy and society. I hope for the revival and reemergence of the political economy.

The Pitfalls of Tautology and Analogy

As we come to the end of this chapter, I would like to summarize the analysis traps into which contemporary economic analysis tends to fall.

Explaining Reality from Normative Propositions

In contemporary economics, where mathematical analysis has come to dominate, model analysis, which simplifies reality so that existing mathematical theorems can be applied and draws certain conclusions from the simplified premises, has become the standard for evaluating researchers' achievements. Finding a problem to which a mathematical theorem can be applied and modeling it, rather than constructing a model based on a factual analysis of the real economy, is a typical example of normative analysis. This is nothing more than a priori idealism.

In mathematical modeling, the emphasis is on logical consistency, but it hardly matters how well the model reflects reality. That is fine for mathematics and logic, but as a social science, it falls short of the mark. However, many mathematical economists who work on applied mathematical analysis are not very interested in real economic society. Mathematical economists who are not interested in society and are absorbed in normative analysis are not social scientists. They have little awareness that they are social scientists. They are applied mathematicians whose research topics include abstract and imaginary "economic" problems. Therefore, it is obvious that the research of such a researcher cannot accurately grasp the real economy and contribute to policy development.

In short, it is not only Marxian economics that has deteriorated and lost the raison d'etre. Non-

Marxian economics has also deteriorated into a normative analysis rather than a social science that captures reality. Marxian economics has degenerated into exegetics, while non-Marxian economics has also fallen into the trap of normative analysis, and as a result, both have lost the ability to analyze reality. Especially, behind the proliferation of fallacious secular economic arguments in Japan lies the deterioration of contemporary economics, which is inherently flawed as a social science. Like Marxian economics, non-Marxian economics cannot analyze and conceive of the real economy and society, making theoretical consideration of historical reality impossible.

In contemporary economics, where normative analysis dominates, there is a repetition of meaningless tautological assertions, not only in model analysis but also in theoretical analysis. They are all based on the elementary fallacy of confusing norms with reality.

Let us cite a few typical examples.

Confusion between Definition and Causality

Among politicians and economists in Japan, an argument exists that consumption should be stimulated even by eliminating the consumption tax (VAT) since consumption expansion boosts GDP. Some academics and politicians are so vocal that they claim that "anyone who cannot understand such a simple relationship is a fool."

The argument that consumption expands GDP is based on the definitional formula that gross domestic product (GDP) equals gross domestic expenditure (GDE). This formula expresses a macro bookkeeping (macroeconomic accounting) balance and is based on the recognition of the fact that production and expenditures are equal ex-post (ex-post consistency relationship). It expresses an ex-post book balance and does not tell us under what economic and social conditions each expenditure factor increases or decreases. The bookkeeping balance represents a definitional relationship and has no further meaning. Therefore, it is nothing more than tautology to claim that if consumption spending increases, then GDP will increase according to a definitional equation, without clarifying the socioeconomic conditions under which sustained consumption will increase.

The mistake in this argument lies in the fact that the definitional equation is read as a causal equation. Without analyzing "under what socioeconomic conditions would consumption increase sustainably," this argument is nothing more than a meaningless tautological assertion. Calling for consumption tax cuts or abolition based on an erroneous argument is not justified as a proper policy. The Japanese *Abenomics* policy during the Prime Minister administration was based on this kind of simple assertion and still has been maintained even after Abe's resignation. The most radical political party "Reiwa" demands the abolition of VAT, and the Communist Party also advocates a

consumption tax cut, rushing into populism to compete with the radical Reiwa. Both sides' arguments are populist based on misunderstanding.

Confusion between Bookkeeping Balance and Real Equilibrium

This kind of tautological argument is not limited to the GDP debate. At the root of this fallacy is the self-contradiction of economics, which does not (or cannot) clearly distinguish between bookkeeping balance and real economic equilibrium. Bookkeeping balance is the recording of credit-debt relationships on the accounting books, which expresses ex-post consistent relationships (hypothetical equilibrium state). Many economists discuss this ex-post and ex-ante equilibrium without making a clear distinction between the two. A bookkeeping balance based on double-entry bookkeeping is an accounting rule (definition), a rule for recording the results of economic transactions or economic activities. It is simply that someone's debt is recorded on the books as someone's credit. This does not indicate that real transactions or economic activities are in a harmonious state of non-contradiction. Only by analyzing each transaction can one determine what the actual economic activity is like. The booking balances do not mean that the actual economic activities are in harmony. It just means that whether there is a problem with the actual transactions or not, the booking of credits and debts are recorded so that the income and expenditures are equal between economic actors.

Recently, T. Yamamoto, the leader of the "Reiwa", has been arguing that government bond is a debt of the government but also a claim of the people, and therefore, there is nothing wrong with issuing government bonds, even in a huge amount. This argument has been put forward for quite some time as a defense of Abenomics and has been used to defend the massive issuance of government bonds by advocating that "the accumulated debt problem does not exist." Now that Abenomics has collapsed in fact, the radical party leader Yamamoto has finally caught up with this argument. However, this argument is also a tautology that confuses formal accounting rules with reality, and the root of its fallacy lies in confusing bookkeeping balance (ex-post consistency) with the equilibrium of reality.

Government bonds are recorded as liabilities of the issuer and assets of the holder. The fact that double-entry bookkeeping is used does not lead to the conclusion that the issuance of large amounts of BOFs is not a problem. The fact that credits and debts are properly recorded and the impact of debt accumulation on the national economy are completely different issues.

Government bonds are mortgage-backed securities secured by future tax revenues. Therefore, these mortgage-backed securities will not be redeemed unless future tax

revenues increase substantially. Similarly, the argument that "there is no problem as long as there is enough national savings to cover the accumulated debt" is also incorrect. This is another argument that defends the huge accumulation of government debt. If the government debt repayment is not fulfilled, the household savings will eventually disappear. This means that the household savings are simply taking the form of collateral of the government debt that has no chance of redemption. Historically, hyperinflation has resulted in the cancellation of the government debt and the cancellation of the people's claims. Who is happy with it?

Confusion between corporate accounting and national accounting

A populist economist, Takuro Morinaga's argument that "Japan has no budget deficit" and criticizes the Ministry of Finance for spending restraint measures to improve the fiscal balance as "religious-fiscal fundamentalism."

One of his arguments is that the government's debt and the Bank of Japan's claims on government bonds cancel each other out (Stiglitz's fallacy). Another argument is that, according to IMF research, Japan's balance sheet shows a net asset value of 500 trillion yen, so there is no fiscal problem in Japan. In Japan, which has such a healthy financial situation, the Ministry of Finance, which aims for balanced finances, is criticized as being “financial balance fundamentalists”.

I pointed out that the errors in Stiglitz's paper were due to elementary errors. On the other hand, I pointed out that the IMF's study did not indicate the sources of the numerical data or the calculation methods, so it could not be the subject of a rigorous discussion. The report of the IMF notes that the discussion surrounding “a country's BS” cannot be applied to the current debt problems that governments face.

Looking at this from another angle, it teaches us that the situation of a liquidating company selling off its assets cannot be applied to the processing of a national debt. It teaches us that the assets and liabilities of a government cannot simply be consolidated or mutually offset. Even historically, during periods of government debt crises and hyperinflation, national assets have not been sold off to cover budget deficits.

What is instructive here is the sale of state assets, such as the privatization of coupons, which occurred at the end of the 20th century, a time when the collapse of socialist systems was still fresh in people's minds. This latest example is interesting as a question of how state assets are valued in an economic crisis.

As mentioned in the previous chapters, the coupon privatizations resulted in failure in all countries. As a result of arbitrary and low-value assessments of various corporate assets being carried out in the absence of the socioeconomic conditions necessary for

market evaluation, huge amounts of national assets were plundered. In times of socioeconomic emergency when national assets must be sold, value assessments that would not be considered in normal times become rampant. What was commonly observed in the transition to a new system was that the progression of inflation or hyperinflation greatly devalued the savings of the people, while on the other hand, some people who owned real estate assets were able to amass huge fortunes.

In any case, the accounting practices of private companies cannot be applied to the processing of the debts and credits of the government (central bank). When the processing of public assets becomes an issue, the socioeconomic situation is already in disarray, and the market's evaluation of value becomes extremely volatile. Therefore, the concept of a country's balance sheet remains to be only a theoretical discussion. The analogy that treats the processing of public assets as like the buying and selling of corporate assets in a normal market is a mistake.

Misunderstanding Relationship between Government and Central Bank

The source of Stiglitz's fallacy lies in the argument that “the central bank are subsidiary of the government”, which Shinzo Abe has been trumpeting as if it were his own idea. There are many examples of hyperinflation occurring because governments treat central banks as subsidiaries for issuing banknotes. The most recent example is the hyperinflation in Serbia during the Yugoslavian Civil War.

If the central bank provides the government with a large loan without collateral, it will immediately lead to hyperinflation. If the BOJ were given the power to issue paper money, as Abe suggested, “since 10 000 yen notes can be printed for 20 yen”, the Japanese economy would be in serious trouble. Of course, Abe lacked the intellectual ability to handle complex logic and could only be a stuttering agitator. Still, if his single-celled thinking had been realized as it was, the Japanese economy would have been on the brink of collapse.

Fortunately, in modern Japan, the BOJ still holds government bonds as collateral, and we are not in a situation where hyperinflation could be triggered immediately. However, if this collateral were to be abandoned, the BOJ would fall into insolvency and be unable to fulfill its function as a central bank. As a result, not only would Japanese government bonds collapse, but the yen would collapse, and the stock market and commodity markets would fall into chaos. This is the reality of the arguments between the government and the BOJ about offsetting government bond claims and debts, and the claims that there is no problem with the government's accumulated debt. There is such a huge gap between the mental gymnastics of populist economists and the reality of the situation. I can't help

but be surprised at the ease with which they can't even imagine this situation.

Stiglitz's argument for halving the national debt is nothing more than the BOJ's argument for writing off the government's debt. The fact that the general government account and the BOJ account should not be integrated is an ABC of national economic accounting. It is not surprising that a Nobel Prize-winning scholar makes such a basic mistake. In both Japan and the United States, there are very few universities that teach national income accounting systems and theory in their economics departments. This is why they can make elementary mistakes with impunity and never have their mistakes pointed out to them.

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Closing Remarks

Prospects for a Contracting Economy and Society

Contracting Economy and Society

The "lost 30 years" (30 years since the collapse of the bubble economy in the early 1990s, a term widely used in Japan), were seen as a period of "failed economic policies", and Abenomics represented a radical shift in those policies, a nostalgic illusion of a high-growth economic era stuck in the old "economic growth is everything" mentality. The major flaw in this approach is that it fails to consider the historical structural changes in the Japanese economy and society. It is dominated by the idea that the economy and society will continue to grow unchanged as if it really will grow forever. In Japan, where the historical period of depopulation has already begun, economic policy stuck in this old way of thinking can only lead to a temporary economic recovery. But it will damage the sustainable foundations of the economy and society. Repeatedly applying short-term stimulus measures will undermine the foundations of the economy and society in the same way that over-prescribing cancer chemotherapy to patients is unduly prescriptive.

Since 2004, more than a decade after the collapse of the bubble economy, Japan's economy and society have entered a period of absolute depopulation (of the working population). Blind faith in GDP has created the illusion of perpetual economic growth.

GDP is a very abstract quantitative concept. It is merely an abstract aggregate of the value added (exchange value) produced by workers caught in a network of social division of labor. Without knowing the definition of GDP, politicians and the public are under the illusion that an increase in this abstract number will increase the economic welfare of society. Confidence and belief in GDP are also deeply rooted among economists. Even influential economists in academia[105] claim that even if the working population halves in the future, GDP will not fall if

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[105] See, for example, Yoshikawa (2016). According to Hiroshi Yoshikawa, we should not consider population (labor force) decline as a reason for pessimism, because GDP growth is not driven by an increase in the working-age population, but by an increase in labor productivity through innovation. However, an economy and society in which the working-age population halves will generate other kinds of social problems that cannot be solved by innovation.

Moreover, in the report of the Treasury's Study Group on Population Decline and Economic Growth (Treasury Policy Research Institute) (2020), David Atkins states that "If Japan's nominal GDP of 550 trillion yen is divided by the number of people of working age in 2015 (76,818,000), the labor productivity per working age person is 7,238,000 yen. If the same nominal GDP of 550 trillion yen is divided by the working age population of 44 183 000 expected in

labor productivity doubles. This is purely an arithmetical calculation, not a social science analysis. Many economists also think as if GDP represents all economic wealth. Misled by the highly debatable claims of economists, politicians and the uninformed identify GDP growth with wealth growth and support policies that "plan to increase GDP by increasing consumption." This is a false idea dominated by illusion.

If the surplus rural population changes its position and is freed to enter a different social division of labor, GDP will grow at a high and sustainable rate. However, this period of high growth will not last forever. Eventually, labor force growth will come to an end and the working-age population will enter a period of decline. As the working-age population declines, GDP will also decline. Defenders of Abenomics argue that a sign of its success is that the number of workers has expanded even during the period of labor population decline. However, the increase of about 5 million in the working population during the Abenomics policy period (2012-2019) was due to an increase in the number of women in the workforce (2.04 million) and an increase in the number of older people (men and women) over 65 (2.96 million). There has been an increase in the number of housewives working part-time and an increase in the number of people extending their retirement age or retiring part-time in different types of part-time work. All this has created a contradictory phenomenon: an expansion of the working population at a time when the labor force has been shrinking. If we consider that there has been an increase of 5 million in the number of people who cannot live on their husband's salary or their pension alone, we have to say that this is more evidence of the failure of Abenomics than its success.

Apart from a few exceptional countries in the so-called developed world, all countries will experience a drastic population decline towards the end of the century. The decline will not be small: they will suffer huge population declines of 50 or even 60%, instead of the 10% or 20% that they had been experiencing. The world population grew with the transition from feudal to modern societies and has continued to grow for 150-200 years. However, we are now entering a period in history in which the population of developed societies is regressing to the levels of 200 years ago. The coming population decline will not be sudden but will take 60-70 years. This may seem like a long time, but it is still a very short historical period. A baby born in 2025 will be 75 years old in 2100. That is only a generation or two. By then, the total population of Japanese society will have fallen to 30-40% of what it is now. The population will shrink by 70-80 million in absolute terms. Recent fertility trends have shifted towards lower estimates.

Shrinkage and change will force people to adapt to major socio-economic changes. What will

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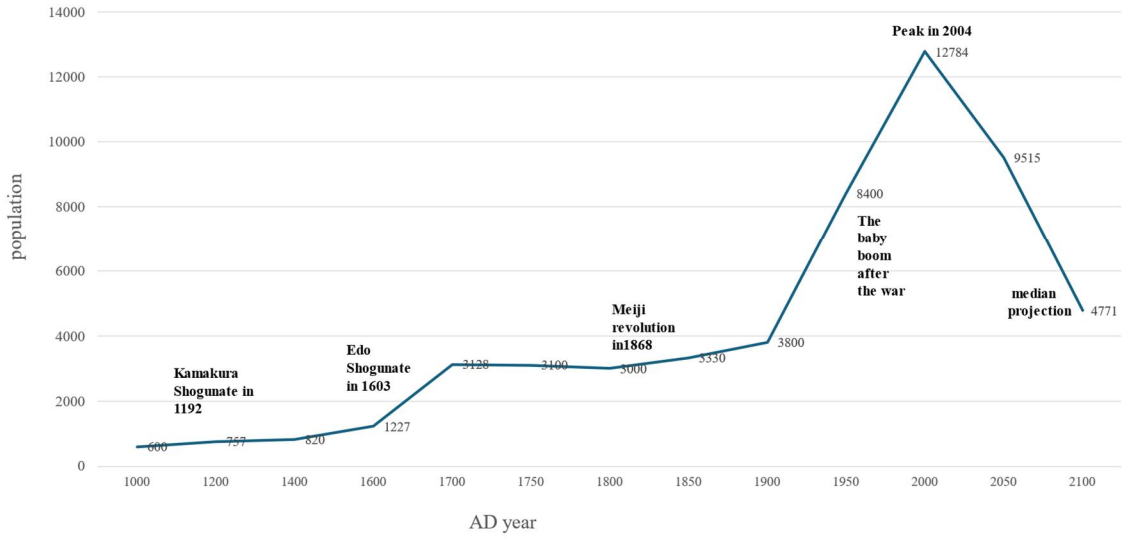
2060, the labor productivity is 12 584 000 yen. So, even if the population falls by 32 635 000, if labor productivity increases by a factor of 1.7, it is still possible to maintain a GDP of 550 trillion yen." (Chapter 4).

happen in an economy and society where the population shrinks by less than half? As with the occurrence of major earthquakes, we should discuss the processes and consequences of economic and social shrinkage[106] with greater wisdom.

Historical Trends in Demographic Change in Japan



Note: In 2100, the high estimate is 64 million people, and the low estimate is 37.7 million people. The current trend shows that the present estimate is approaching a low number.

Source: 2011 Long-term estimates of the Commission of the Ministry of Land, Infrastructure, Transport and Tourism in Japan.

The COVID-19 Epidemic Has Changed Social Awareness

In a shrinking economic society, the values of a consumerist society need to change. The development of a capitalist economy has created an economic society focused on mass consumption, flooding it with unnecessary goods and services. However, an economic society of shrinking size cannot sustain the 'barren flower', i.e. the unproductive part of consumer society created by the capitalist economy. The wide range of shops offering the 'barren flower', or surplus, disappears one after another, and the number of businesses that usefully support the social infrastructure is drastically reduced. Domestic demand and labor will plummet, making it

[106] Motegi Shigeki, general secretary of the LDP, mentioned "lifting the ban on car-sharing and side-stops" as a policy he would like to try as prime minister. These are very poor policy promises compared to the gravity of the historical challenges facing Japanese society.

unnecessary and impossible to produce millions of cars, for example. All manufacturing and distribution sectors, without exception, will experience drastic contractions. Current consumer lifestyles, centered on personal consumption, will also have to change. There will be a shift away from individual consumption towards greater collective consumption.

On the other hand, there will continue to be a shortage of labor in society, and it will be difficult to maintain the basic functions of local communities without the participation of older people in social activities. Towards the end of the 21st century, Japan's economy and society will enter a period of historic transformation, "a transformation of the social system without revolution."

The development of a capitalist economy has produced a huge amount of surplus and non-essential goods and services, increasing the number of so-called "non-essential workers", which people have come to see as a sign of economic and social development. The economic development of capitalism has obscured the existence of 'things essential for the survival of society' and led to a proliferation of unnecessary accumulation of goods and dispensable services. The COVID-19 pandemic, however, created in people's minds the notion of goods and services that are "necessary and urgently needed". The spread of the epidemic, which threatened the very survival of society, led people to rethink their lifestyles and consumption habits.

The COVID-19 epidemic has made it difficult for businesses to operate, especially bars, nightclubs, pachinko parlors and other entertainment venues, and it was natural to argue that the protection of hospitals and various social care facilities should take precedence over state support for such businesses. Arguing about discrimination against madams and hostesses working in bars and nightclubs is pointless in a social emergency. It is only natural that, when public funds are allocated, preference should be given to those working to maintain and develop functions and services that are essential to the maintenance of social life.

The debate on indispensable workers is close to the "productive labor - unproductive labor" debate raised by classical economics and discussed by K. Marx. At times when the very existence of society is at stake, people naturally distinguish between indispensable and more easily dispensable workers. Of course, the richness of social life is experienced through the consumption of goods and services that are not essential but that provide a sense of comfort in life. However, at times when the very existence of society is at stake, a consciousness emerges that emphasizes the importance of work in maintaining the basic functions of social life.

As we approach the end of the 21st century, the process of socio-economic contraction will force people to change their attitudes, and the sense of social crisis experienced during COVID-19 will become increasingly evident. Economic and social shrinkage is a decades-long process. Whether we like it or not, people will be forced to change their values about social life and personal consumption. Society's values are already changing. The change has already begun with

the decline of cities and the increase in the number of empty houses. Gradually, public infrastructure (bridges, tunnels, roads, living infrastructure, etc.) will also become increasingly difficult to maintain. In response to this historic structural change, a choice must be made between short-term economic recovery measures and the development of long-term socio-economic policies, with a close eye on the future of society at the end of the century.

Liberation from Blind Faith in GDP - Transformation of Social Values

Although contemporary economics does not have a labor theory of value, it is worth taking a look at the labor theory of classical economics at the intersection of historical social change.

In developing his theory of labor value, K. Marx distinguishes between the use-value (Gebrauchswert) and the exchange-value (Tauschwert) of goods. In the early days of commodity production, exchange was an extension of barter, and the main criterion of exchange was the use value of the commodity.

In a market economy, however, where the traces of barter have disappeared, use-value exists only as a precondition and the acquisition of exchange-value becomes the objective of transactions. It is through the production of goods and transactions that money was born, and money, embodying universal exchange value, became central to the market economy. With the emergence of money, exchange value supersedes use value, and the most abstract and symbolic form of exchange value becomes the dominant economic force.

Once wealth was measured in terms of exchange value and expressed in terms of the quantity of money, the use-value fell outside the scope of economic analysis. After the Second World War, the United Nations took the initiative to build up methods and systems to aggregate the exchange value of commodity production to compare and weigh the magnitude of wealth of different countries. This method evolved from national income accounting to the development of national economic accounting systems. One of the final aggregate measures of value that has followed this historical process is GDP, which aggregates the exchange value of goods without use value.

Many non-Marxian economists consider Marx's theory of value (the dual nature of commodities) idealistic, but this is due to a complete lack of understanding. The following passage by Professor Hiroshi Yoshikawa, for example, illustrates the confusion of economists who do not understand Marx's theory of value. Yoshikawa was asked by a physicist, "What does it mean that GDP increases while energy remains constant no matter what people do?" Professor Yoshikawa's answer is extremely strange. He says: "The original price is a subjective score that people give to goods and services. In that sense, the economy is truly human-centered."[107] So he

[107] Yoshikawa (2016) 148-149.

gave a rather Zen-like answer to the question.

This cannot be an explanation. Economists who have no theory of value can only give such vague answers. We should be able to explain the two aspects of value to physicists, but Professor Yoshikawa is incapable of doing so. As Marx pointed out, the physical process of production is a process of "metabolism (Stoffwechsel)", and it is a world in which the physical law of conservation of energy prevails. In contrast, exchange value is a social valuation determined by non-material social relations and thus does not follow the laws of physics. It is impossible to reach such a conclusion without understanding the duality of goods.

The starting point for the stumbling block of non-Marxian economists is the elimination of the philosophical judgment that things have two (or more) sides. Because they have eliminated sociological thinking, they are unable to understand the multifaceted of things. For example, that man is a physical organism but also a social being, valued in different ways in social relations. As a physical organism, the person exists according to physical laws, independently of social evaluation. On the other hand, social evaluation can be high or low, but it is independent of physical laws. Social evaluation is determined by people's social relationships and is not a function of physical laws. Therefore, an understanding of the duality (diversity) of physical-biological existence and social existence is essential to understanding human society. Non-Marxian economics, however, excludes this thinking and thus fails to answer the physicists' questions correctly.

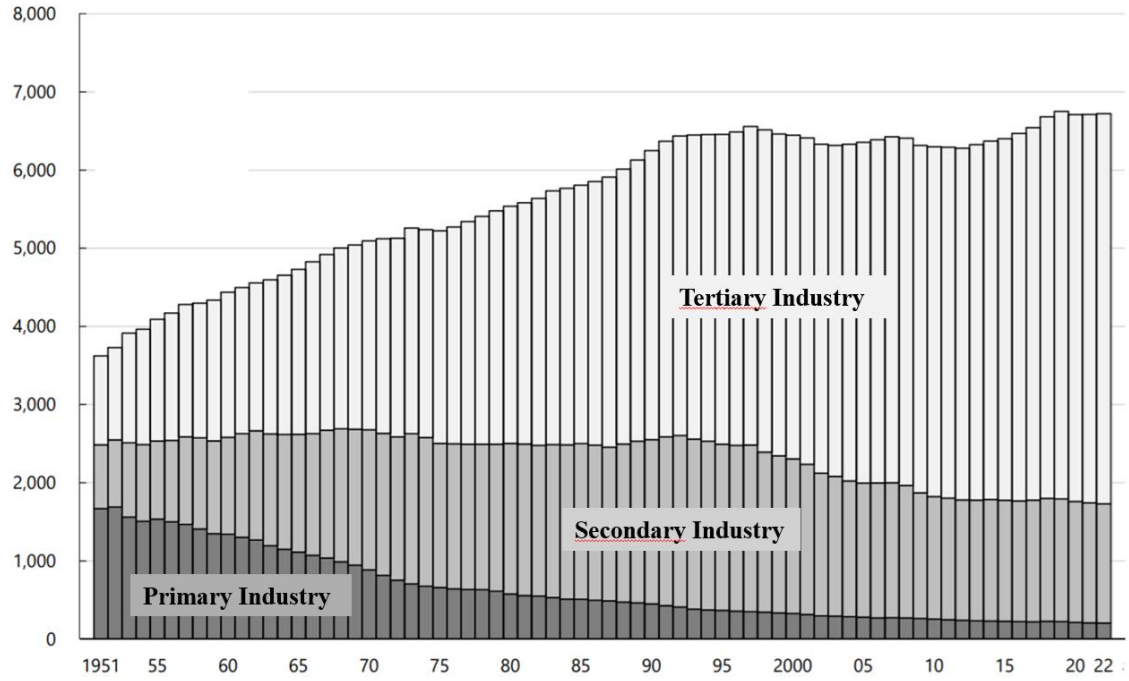
Of course, use-value is very important in real life. In everyday consumption, use-value determines our purchases and consumption of goods, but in wealth accumulation only exchange-value is important. Exchange value and use value integrated in barter transactions have acquired a different socio-economic role with the development of commodity production (market economy). In poor consumer societies, the use value of goods has become the focus of the commodity flow, while in rich societies the aim will be to convert and increase the surplus capacity of consumption into exchange value. This is the path of progress from "universal exchange value (money)" to "multiplication of exchange value (capital)."

The concept of GDP does not include the use value as "necessary and urgent". In the abstract, it only aggregates the quantity (exchange value) produced by labor, while truncating the different qualities (use value) of labor. It is an illusion to regard GDP as an absolute value and to believe that an increase in GDP enriches society. Many commentators are not familiar with the definition of GDP and regard the illusory value of GDP as if it were the only measure of economic well-being. This is a worship of GDP based on partial knowledge.

Economic and social shrinkage will force people to rethink their lifestyles and consumption habits, just as it did during the COVID-19 epidemic. The growing trend to economize on non-essential goods and services will change the structure of the workforce. This is not an abstract

pursuit of exchange value, but a shift in social value based on the use value of goods and services. Instead of a pursuit of abstract exchange value, there is a shift in value based on the perception of the utility of social work. Only in this way can there be a shift away from blind faith in GDP towards a new conception of social value. Accordingly, GDP must be replaced by new indicators for measuring economic and social well-being.

Change in Number of Employees by Industrial Sectors (10 thousand people)



Notes: 2.9% of the workforce is employed in the primary industry, 22.8% in the secondary industry and 74.22% in the tertiary industry (April 2024).

Source: The Japan Institute for Labor Policy and Education

Taking Account of "Essential Work"

When discussing a shrinking economy and society, it is necessary to consider the theory of "productive labor", which was the subject of classical economics. Marx's theory of productive labor is multi-layered and specifies different conditions/provisions at different stages of its logic (the development of commodity production). The first elementary definition concerns the labor process of producing material goods. For Marx, production is first and foremost the mass transformation of matter (Stoffwechsel). On this basis, he defined the work of producing material goods as productive labor and the work of providing non-material goods as nonproductive labor. For a long time, the former socialist countries maintained the distinction between the two types

of work, which resulted in the maintenance of a national income calculation different from that of the Western countries.

However, with the development of capitalist economies, so-called non-material production (the service sector) expanded, and tertiary industry occupied a large part of the national economy in developed countries. As a result, it has become difficult to capture the development of the national economy by the theory of 'material productive labor', which is limited to physical production (in the current Japanese economy, so-called tertiary industry employs nearly three quarters of the total workforce). As a result of this development of the capitalist economy, GDP in current national accounts consists of the value added by workers involved in the production and sale of goods and services (the social division of labor), including the service industry. Marx refers to this type of supply as "labor embraced by capital." In other words, in the Marxian sense, the current concept of GDP includes the totality of "labor formally subsumed by capital" (die formelle Subsumtion der Arbeit unter das Kapital).

I do not claim that tertiary industry is an "unnecessary and non-urgent" type of enterprise. Service industries, which belong to the tertiary industry, include enterprises that are indispensable for the functioning of society. Similarly, primary and secondary industries also include the production of non-essential and non-urgent goods. However, among those classified as tertiary industries, there are many more of a 'non-urgent' nature. In a shrinking society, we can expect a significant shift in employment from tertiary to primary or secondary industry.

Although the theme of 'essential labor' highlighted in the COVID-19 epidemic differs from the debate in classical economics, it contains arguments like those of the theory of productive labor. If 'productive work' is defined as work that produces essential goods and services that support society, then this debate becomes an important issue in a shrinking economy and society.

The Economics of Contraction

If the mainstream of economics was the "economics of growth" in the 20th century, the mainstream of economics in the 21st and 22nd centuries will be replaced by the "economics of contraction".

Does contraction (shrinkage) mean failure or decline? It is not that simple. For example, if an obese person loses weight, it does not cause his death. On the contrary, curbing obesity to regain a healthy body is rather the beginning of a new opportunity, a return to a healthy life. It is a kind of contraction/shrinkage balance.

Achieving a contracting (shrinkage) balance requires conscious control by public institutions. With the development of capitalism and the disappearance of the socialist state, the very idea of economic planning began to disappear. However, as times change and the concept of shrinkage equilibrium becomes more prominent, achieving a healthy shrinkage equilibrium will require

conscious planning and control by government and local authorities. In addition, as the size of society and the distance between people will be smaller and nearer, the distance between public institutions and individuals will be smaller. This will increase the opportunities for residents to be actively involved in the governance of their local communities. Empty houses would be removed, and the resulting vast new spaces could be used to create new living environments. This could also create new, favorable conditions for raising children.

In this light, 'contracting balance' offers an opportunity to rebuild an economy and society suffering from the disease of 'obesity'. There is no need to be pessimistic about the contractionary process if we believe that human society in the 21st century will not fail or disappear but will enter a historical era in which 'obesity' is properly addressed, and a healthy society is built. We should expect that under new historical social conditions, humanity will once again build a new society in human history. This will require a change in social values and wise social leaders.

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Afterword

Forty-six years have passed since I first set foot on Hungarian soil in December 1978, and thirty-six years have passed since I was posted to the Japanese embassy in August 1988. You can make your living anywhere in this world. The Hungary I met by chance has become a place forever. Coincidences pile up and are spun into threads of inevitability.

For me, the years 1968, 1978 and 1988 have a special significance. In 1968, as a third-year undergraduate student, I traveled to Bulgaria, Romania, Ukraine and Russia (the Soviet Union) as an English interpreter. I had no knowledge or interest in the Soviet Union or Eastern Europe at that time. Airfares were very expensive; therefore, I was thrilled to be able to travel abroad.

I took a ship from Niigata to Nakhodka, then a train to Khabarovsk, and then a plane to Sofia via Moscow. The journey took more than two days. My first job in Sofia was to accompany the soprano singer Echiko Narita and attend a sound check with a local pianist. Looking back on it now, it was a truly strange experience. After the event in Sofia, we drove through Romania in a convoy of several buses, visited the city of Braşov, and then crossed the border to take a train to Kharkiv. After visiting a farming village in the steppe region of Ukraine, we took the train again and passed through Moscow before arriving in Leningrad (St. Petersburg). After visiting the Summer Palace and other places, we headed for Moscow. Our accommodation in Moscow was the recently opened Hotel Russia, which is located near the Kremlin. The return journey was the reverse of the outward journey. I flew to Khabarovsk, then took a train for over 10 hours, changed to a ship in Nakhodka, and arrived in Niigata. For some reason, when I was forced to spend a night off the coast of Niigata, I heard the news on the radio about the Soviet invasion of Prague. This was at the end of August 1968.

I never imagined that 10 years later I would be coming to Eastern Europe again. I wasn't particularly interested in Hungary, or in the world of Central and Eastern Europe. The research and educational environment at the university I was assigned to was terrible, and I thought that if I could escape from the hustle and bustle, it didn't matter where I went. I just wanted to get away from Japan. I remember arriving at the deserted Ferihegy Airport with 50kg of Japanese and English books, and hardly any other tourists in the airport. I was surprised that such a large warehouse-like building could be the airport for the capital city. It was the off-season in winter, but there were no people at the airport, even though I had arrived from London. The road leading from the airport to the city center has not changed since then. Looking at the scene of the row of run-down single-story houses, my honest impression was that I had come to a terribly rural country. Winter in Europe was as dark as the winters in my home region of Hokuriku in Japan.

I had no knowledge of Hungary or the Hungarian language. I had planned to read Japanese and English books. However, the Hungarian host organization assigned me a private Hungarian language teacher and made me study the language. It is difficult to learn a foreign language after the age of 30. Nevertheless, I thought that I had come to Hungary, so I decided to learn Hungarian by translating technical papers. I studied Hungarian not by listening, but by translating documents. As a study work, I translated Magyar árpolitika (Hungarian Price Policy, published in 1980) by Béla Csikós-Nagy (President of the Price Agency). The translation was published it in Japan in 1981. After returning to Japan, I began introducing Kornai's theory, as detailed in Chapter 2.

In 1987-88, the situation in Central and Eastern Europe began to change. Being told that there were signs of political change in Hungary, and the Ministry of Foreign Affairs' Eastern Europe Division was considering sending a specialist researcher to the region. The Japanese Embassy in Hungary had never received a specialist researcher before, so this would be the first time. It was an offer I couldn't refuse, but the problem was how to get permission for the faculty meeting.

I had been teaching at Hosei University for three years when I went to Hungary in 1978, so there were some dissenting opinions among faculty members. They thought it was outrageous to send someone who had only recently started working there to study abroad. At the time, the dean of the faculty arranged for me to be sent abroad on a paid research leave. When I paid for my housing with a scholarship from the Hungarian government at the time, I only had around 4,000 Ft (about $200 at the time) left in my pocket, so I couldn't live without a salary from the university.

It had only been eight years since I returned to Japan from Hungary. There was a feeling that my colleagues would not approve of another study abroad in such a short period of time. Fortunately, the campus of our faculty was moving to the Tama area on the outskirts of Tokyo with very difficulties, and there was support for me saying, "You worked hard as an assistant to the Dean for accomplishing the campus movement, so it should be okay." Thus, I was able to get the faculty meeting to approve my application, but to persuade the faculty members, I was proposed to be on leave (without pay). The dean thought there would be no complaints from colleagues if I was unpaid. For me too, I thought that being unpaid would make it easier to change jobs without any problems if it might happen. However, the allowances for working overseas at the Ministry of Foreign Affairs were low, and the two years I spent as a specialist researcher were quite financially difficult. Even so, I went to the opera house two or three times a week. At the time, the price of a ticket was only a few hundred yen.

When I first arrived at the embassy, I felt that the ambassador did not like the specialist researcher sent from the ministry. When I went to greet him in the embassy hallway, he ignored me. He thought certainly that "I never ask for a specialist researcher to come here. The ministry

sent you on its own. Graduate students would be welcome for me, but university professor is not." The ambassador wanted a servant for him. Thus, I was assigned to a shared room at the consulate office next to the entrance. Although I couldn't meet the ambassador's demands, I can be proud of the fact that I sent valuable reports to the Ministry one after another.

After the ambassador left, I was valued by the new ambassador and minister. In 1988-1989, the upheaval of the regime changes in Central and Eastern Europe began, and in 1989-1990, there was a rush of visitors from Japan. I also accepted the job of accompanying them and acquainted with managing directors of Nomura Securities. Through personal relationship, I requested that the Nomura Research Institute become a fund member of the Blue-Ribbon Commission (initiated by Indiana University professor Paul Marer), an international economic policy proposal group that supported the government established by the first free election after the regime change. George Soros also supported this project, and he attended several meetings.

My short reports on social changes during this period became a series of articles in the monthly magazine "Keizai Hyoron (Economic Review)", and these were compiled into a book, *A History of Hungarian Reform* (in Japanese published by Nippon Hyoronsha, 1990). This book was published in Japan while I was still in duty in Hungary. After experiencing the upheavals of Central and Eastern Europe, I began to think that the meaning of my life from now on would be to place myself amid this historical process of change, rather than returning to Japan and becoming involved in university administration.

While accompanying Mr. Koichi Minaguchi, President of Nomura Research Institute, who was attending the Blue-Ribbon Commission meeting in Budapest, I enquired about the possibility of my participating in the Nomura Investment Bank to be established in Hungary. After receiving Mr. Minaguchi's informal consent, I paved a way to be able to commit to Hungary even after the expiring my duty as specialist researchers.

At the beginning of September 1990, when my contract with the Ministry of Foreign Affairs had ended, I returned to the university. I had to go through the formalities of resigning. The faculty members thought that if I returned to the university, they would be able to make me do some troublesome jobs, such as the director of student affairs at the new campus, which had just completed its relocation. They had been waiting for me, ready to pounce, because I had been away from university work for two years. That's why I couldn't bring myself to tell my colleagues about my resignation.

Eventually, my resignation was put to a vote at a faculty meeting. Opinions were expressed such as "It doesn't make sense to quit the university and go to a private company" and "It's outrageous to leave the university for two years and then resign as soon as I return from abroad". I left the room during the discussion, but according to my colleagues, the professor of labor law said, "If a resignation request is once submitted, it will be automatically approved after two weeks,

so there is no point in discussing whether or not to approve the resignation," and the discussion ended there. During the two years I was away from university, I was not paid, so I was not branded a 'salary thief'. In this way, I returned to Hungary in March 1991. Ever since then, I have remained firmly planted in Hungary.

The biggest event during my time at the embassy was the "Dialogue Meeting with Students" (January 1990) held to coincide with the visit to Hungary of Prime Minister Kaifu. The visit to Hungary by Prime Minister Kaifu had been decided before the fall of the Berlin Wall, and Hungary was scheduled to be the main country to be visited. However, in November 1989, just before his departure, the Berlin Wall fell, and the main event suddenly became the speech in Berlin, and the subsequent visit to Budapest was downgraded. So, we were forced to come up with a special event to be held at the embassy. This became the "Dialogue Meeting with Students of the Karl Marx University of Economics (now Corvinus University) ". This was inspired by the visit of President George H. W. Bush to Hungary in July 1989 on his way to the G7 Summit of the Arch, where he gave a speech in the main hall of the Corvinus University of Economics. The following May, in 1990, Prince Charles held a dialogue with students in the main hall next to the statue of Karl Marx. I remember being impressed by the depth of the British royal family's generosity. If the Japanese prime minister or a member of the imperial family were to give a speech next to the statue of Marx, not only would the Japanese media make a big fuss about it, but right-wing protest vehicles would probably try to force their way into the Ministry of Foreign Affairs. As you would expect, the royal families of Europe have a lot of spiritual breadth and tolerance. Around this time, Sony chairman Akio Morita also visited Hungary and gave a lecture at the University of Economics. I oversaw this set-up too.

In this way, the dialogue meeting with the students became the main event of Prime Minister Kaifu's visit to Hungary. As I had mediated the conclusion of an agreement on the exchange of teachers between the University of Economics and Hosei University in 1982, I oversaw this dialogue project on my own.

Even though it was called as a dialogue meeting, Japanese politicians avoid improvised responses. With a general election coming up after his overseas trip, he could not afford to make a mistake in front of the media (in fact, a whole convoy of 50 Mercedes Benz cars and one bus was needed to transport the Japanese Prime Minister's entourage and Japanese media). As expected, the Prime Minister's office sent a message asking us to collect questions in advance. There was no way we could collect questions before the dialogue meeting, so I prepared seven questions. Then I received instructions to prepare answers. I also prepared the answers myself. The problem was how to organize the seven questions to the "shills (fake students)".

On the morning of the dialogue meeting, I called the student coordinator to my friend Ernő

Zalai (then Vice-Rector) office and gave him the seven strips of paper with the questions on them. I instructed him to make sure the questions were in the right order. This was important because the answers were bound in the order of the questions.

On the previous day, I had Japanese and Hungarian interpreters enter the simultaneous interpretation booth and rehearse the simultaneous interpretation. I arranged for the Japanese questions to be translated into Hungarian and for the answers of Prime Minister Kaifu to be translated into Hungarian, with each task being divided up between the two interpreters. The Ministry of Foreign Affairs was opposed to the simultaneous interpretation method and suggested consecutive interpretation, which would allow more time. I insisted that if the questions and answers had already been decided, we should adopt the more visually appealing simultaneous interpretation format. Thus, our argument was accepted.

Zalai oversaw moderating the dialogue meeting, and I was watching the proceedings from the wings of the stage. Everything went according to plan, and the head of the delegation, Hisashi Owada (then Foreign Ministry Deputy Minister, father of the Empress Masako), looked relieved that the event had ended successfully, saying, "It was a great success." At the study session on the morning of the dialogue meeting, Prime Minister Kaifu asked the head of the delegation, Mr. Owada, why the University of Economics had been chosen. Mr. Owada replied, "Because the university have an exchange agreement with Hosei University," and I remember him adding, "Hosei university is left leaning." I didn't say anything because there was no point in me saying that I had mediated and concluded the agreement.

After leaving university, I became estranged from my colleagues at the University of Economics. Nevertheless, I continued to interact with Zalai until shortly before his death (see the memorial article for Zalai at https://www.morita-from-hungary.com/j-01/01-01/01-01_0 8.pdf). Around 2013-14, he was diagnosed with liver cancer, and a meeting was arranged for him to discuss the matter with András Szász, the developer of the tumor thermotherapy device. We went to concerts and the opera together, and we visited each other's homes in turn, but we never had any professional discussions. Zalai remained within the field of mathematical economics and rarely discussed real economic policy issues. The old regime's economic elite course was to graduate from the Department of National Economic Planning, then work at the Planning Agency or its affiliated research institute and eventually become the president of the Planning Agency or the Minister of Economy. Miklós Németh is also from this department, who was pushed up to become prime minister during the regime change and became famous overnight for opening the border with Austria. Németh had political ambitions, but Zalai had no worldly ambitions. That's why we got along well.

Zala passed away in 2021, but he is still remembered as a brilliant student at the Corvinus. In

Hungarian mathematical economics, he belongs to the Neumann-Leontief-Brody school. This is a different line from the Kornai group. Zala was critical of Kornai.

Zalai's inaugural address as an associate member of the Hungarian Academy of Sciences was entitled "The Place of Neumann in Economic History" and was a detailed analysis of Neumann's contributions to economics. This paper, which I translated, was published in the Japanese magazine "Economic Seminar" (Nippon Hyoronsha) in four parts (October, November and December 2003, and January 2004. https://www.morita-from-hungary.com/j-01/01-01/01-01_08.pdf). The first chapter of this book was inspired by this paper by Zalai and is also my response to him. I wanted to show it to him while he was still alive and get his opinion.

In the sense that it summarizes my life in Hungary, this book is my personal memoir. As it contains content related to personal relationships, I had originally planned to distribute it only to close friends. This is the reason why I decided to publish it in Hungary.

The original plan was to first publish the Hungarian version and give it to my Hungarian friends. However, due to the publisher's circumstances, the book will not be ready until next year, so I decided to publish the Japanese version first. The layout and binding of the Japanese version was not done by Balassi Publisher, but by Ms. Mina Kadowaki of Inner Design, a graphic design company in Hungary that can do Japanese editing and layout. Thus, we can publish it immediately. The Hungarian edition is scheduled to be published in February 2025.

If I make one point clear in advance, the political section of Chapter 5 of this book will be omitted from the Hungarian edition. The Orban administration is highly sensitive to criticism of the government and Fidesz, and it exerts pressure on various media outlets through means such as subsidies and advertising. To avoid being harassed into stopping the subsidy for publishing cultural books, I decided to take this measure.

The cover design was based on a work by János Kass, who has designed the covers of my books to date. I asked János's daughter, Eszter, to send me a photo of the work I had specified, and based on that, Ms. Kadowaki came up with the cover design. My request was that it should express the two faces of illusion and reality.

Finally, I would like to add a few words about the chapters in this book.

The original manuscripts for Chapters I and VII were a single paper that I contributed to the "Professor Shuichi Ikemoto Retirement Commemorative Issue" of the Nihon University College of Economics journal "Keizai Shūshi" (Vol. 93, No. 2, September 2023). I divided this into two separate chapters and made revisions and additions when dividing it up.

Chapter V is a revised and supplemented version of "The Ukraine War and Hungary," which was published in the November/December 2023 issue of Sekai Keizai Hyoron (World Economic Review, published by the Institute for International Trade and Investment). It adds an analysis of

the political developments that have taken place since the paper was written.

Chapter III is a film review that was uploaded to ResearchGate, a social media platform for researchers, and received many readers. An expanded version of this is included in this book.

Chapters II, IV and VI are newly written. The arguments developed in Chapters II and IV are not different from the author's previous arguments, but I tried to make the arguments clear. Chapter VI is somewhat different, but it is also the core of this book's theme. It is a summary of what I have felt and thought about daily.

Budapest, February 2025

Tsuneo Morita