## The First Revolution in 400 Years

### -What is Structural Reform in the New Economy?

By Take Kikuo

#### 1. Introduction

I am grateful for this opportunity to express my opinions about the steps the national government should take in response to the IT (Information Technology) revolution and the changes taking place in the New Economy that are sweeping across the globe. While the facts presented here have been carefully researched, the

opinions and views presented are mine and mine alone, and do not represent the views of any government or other related organization.

As suggested by the title of this paper, "The First Revolution in 400 Years," I want to familiarize readers with the historical reality in Japan prior to the establishment of the Edo (shogunate) Bakufu (1605-1867), the precursor to our modern national government, by looking at the drastic structural reforms that were carried out 400 years ago and the events leading up to them. I will then juxtapose that

view against the recent socioeconomic changes that have occurred to bring about the present IT revolution, so that I can help readers (especially those overseas) to expand their knowledge of medieval Japan and contribute to the dialogue regarding the changes being faced in Japan today.

I would like to define some terms that I will use in discussing socioeconomic systems. First, I believe that all scientific and technological development must be understood to have an influence on the society in which it was developed, but that the field of science and technology itself must not be dis-

cussed as an independent entity that in and of itself has an active influence on society. The agents of change are the people grouped together to form a society. The inconsistencies are obvious in the argument often suggested in the fields of biotechnology and the environmental sciences that mere conglomerations of metal, chemical reactions, and electrical forces can possess independent volition.



Oda Nobunaga, one of the most famous reformers in Japanese history

Second, when I use the term "globalization," I am not referring to the phenomenon that immediately comes to mind today, but to a historical reality that humans have inevitably and repeatedly experienced over the course of time. The term globalization will never be used here in the sense of a phenomenon experienced by humans for the first time as a result of the IT revolution.

If you will oblige me these definitions, I would very much enjoy hearing your honest and straightforward feedback on the arguments I will present below.

#### 2. Destroying the Old Social Order, Social Structure Reform

In 1582, Oda Nobunaga (1534-1582), who promoted social reform in Japan as its de facto ruler, was viciously attacked by his vassal Akechi Mitsuhide (1528-1582), and both he and his eldest son and heir, Oda Nobutada, lost their lives and their political power at Honnoji temple in

Kyoto. Oda Nobunaga has a reputation as the most famous and most eccentric reformer in Japanese history. He was born as the heir of a minor feudal lord in the province of Owari during the Warring States period (1467-1590), a time when Japan had become divided into many separate territories due to the weakened power of the central government (the Ashikaga Bakufu). When he became the head of his family following his father's death, he and his small army attacked and routed Imagawa Yoshimoto, a major feudal lord over the territory adjacent to

his, in Okehazama and thus rose to prominence in the Japanese military world. He turned the peasant-warriors of the old military system into a specialized warrior corps, and under the slogan "Tenka Fubu (unify Japan by military force)," gained total control over Kyoto and its surroundings, the center of the Japanese power structure at the time. Using guns, a new weapon from overseas that was a major technological innovation for Japan, he won many battles in his pursuit of national unification.

As a reformer, Nobunaga rejected the old political system. He worked to

bring about the downfall of the Ashikaga Bakufu and its powerful influence, and aimed to build a new social order based on his own ideas. He also waged a battle against the Hieizan sect of Buddhism, which had come to hold a powerful position in the political world of Kvoto, and the Ikko sect of Buddhism (Ishivama Honganii), which had spread among the common people. While he promoted the separation of politics and religion in Japanese society, he also protected Christianity which, having been brought to Japan during the age of the great voyages from Spain and Portugal, was a manifestation of globalization in that age. In terms of economics, he exempted the area under his control from taxes levied by the local authorities, and made temples and shrine domains that had been granted special taxation rights by the government subject to taxes. He expanded the free market economy. After antagonizing many members of the ruling classes, he actively looked for talented personnel from the lower classes and appointed them as policymakers. In the international arena, Nobunaga had a strong interest in foreign civilizations and in seeing the Japanese advance overseas.

In light of the reforms that occurred in Japan more than 400 years ago, I would also like to discuss the globalization that Japan has repeatedly experienced, and the current state of the information technology revolution. According to surveys of private companies, the number of Japanese Internet users was 19.37 million at the end of February 2000, and the Internet was accessed by 24.6% of Japanese households. Estimates suggest that the number of users will hit the 20-million mark this year. The electronic-commerce market is experiencing explosive growth, and a study conducted by the Ministry of International Trade and Industry indicates that the e-commerce market, which was valued at no more than ¥9 trillion in 1998, is expected to grow to a scale of ¥71 trillion ven by 2003. Today, the Internet is used for all kinds of socioeconomic activities, and has become an indispensable tool for business activities, consumption, information gathering, and communication. Not a day goes by when there isn't some kind of news about the Internet either in the talk around town or in the newspaper, and new business models for online shopping, trading, auctions, and matching are emerging. The IT revolution is reducing distribution and management costs for businesses, and is changing conventional bottom-up and top-down styles of corporate management.

In many areas of social activity including education, government, medical care, entertainment, and disaster prevention, the IT revolution has the potential to drastically change the way that the welfare of individual citizens is handled, and the way people live their lives. One of the most prominent characteristics of this IT revolution is the weakening of national borders, or globalization, that it produces. PCs can instantly access servers worldwide, making it possible for people in their own homes or offices to receive information in quantities and at speeds that were unthinkable when using conventional information technologies.

On the other hand, the IT revolution is also generating problems that could not have been imagined before. Many analysts are concerned about such problems as increased trading risks (consumer protection, individual privacy protection etc.) due to the accelerated speed of trade and the expansion of traded goods, and gaps arising as a result of differences in language, business practices, and culture due to the diminishing role of national borders. Many solutions to these problems have also been proposed, but this paper will focus instead on the changes to the social structure that the IT revolution is producing, and what our leaders need to do in response to these changes.

The spheres of influence held by governments under the conventional social system are overlapping due to the diminishing role of national borders, and no particular country can claim authority over the legal system, competition policies, and tax policies in the New Economy. Competition to take

the initiative in establishing institutions is growing more fierce. To keep up with the pace of the IT revolution, governments and businesses are being compelled to centralize their internal decision-making processes and to adopt mechanisms for making split-second decisions. Consequently, the conflicts over government leadership authority between those who can and those who cannot keep up with this revolution are intensifying. As we saw at the WTO meeting in Seattle in late 1999, this conflict is going to be accelerated by the use of information technology and the participation in government of citizens who were the beneficiaries of conventional indirect management.

Let's look once again at history. Since the central government system, which was basically a federation of independent groups of armed peasants. could not keep up with the stimulated economic activity that had been brought about by improved agricultural productivity and excess commodity trading, the social chaos and reunification process that Japan experienced from the 13th century to the late 14th century resulted in local powers establishing their own authority over their own domains. This may be a universal experience, but the very process by which the central government collapsed and the autonomous local leaders rose to power contained within it the mechanism for reunification: the motivation to pursue reunification and people willing to implement these changes.

Many regional power holders in Japan aimed to achieve national reunification, but Oda Nobunaga, who pursued the most drastic reforms, initiated the reunification process by destroying the old social system. He actively introduced the concept of increasing national wealth through free commercial trade in an economic structure centered around traditional agricultural production. He partially destroyed the old class system by demolishing the old social order, and created a society where people with power and ambition to improve their position could participate. Through a process of imitating and improving technological innova-

tions from overseas, industrial (weapons) manufacturing capabilities were dramatically improved. The active introduction of globalization caused a flurry of activity among the intellectual class, which resulted in the development of numerous international relationships, including relationships with the nations of Western Europe and Asia, that went beyond the international relationships that had been developed with nearby nations, especially China. By introducing these kinds of structural reforms, Japan became the world's largest producer of guns, and headed into the reunification process as a military and economic nation on a par

with other world powers in terms of fortress construction technologies.

# 3. Reconstructing the Social Order, Solidifying the Socioeconomic System

After Nobunaga's death at the hands of his vassal at Honnoji temple, his political power was handed down to his vassal Toyotomi Hidevoshi (1536-1598). Hidevoshi worked his way up from the peasant class, earning several promotions under Nobunaga's authority. When he heard the news of Nobunaga's assassination, he was a commander of a local region. Later, he

annihilated Akechi Mitsuhide who had murdered Nobunaga, and established nationwide control with the support of his fellow feudal lords. Hideyoshi established a system of measuring agricultural land and collecting taxes on a nationwide scale, disarmed the peasants, and invaded the Korean Peninsula, but since his accomplishments were basically legacies of Nobunaga's rule, I will refrain from presenting further details here.

Hideyoshi's rule only lasted two generations (actually only one generation), and he was succeeded by Tokugawa Ieyasu (1542-1616). Ieyasu was the son

of a small feudal lord in the Mikawa region (now the eastern part of Aichi Prefecture), adjacent to Nobunaga's domain of Owari (now the western part of Aichi Prefecture). When he was young, Ievasu faced the problems of ruling a domain that was located between the domains of two major feudal lords, but backed by his alliance and lord-vassal relationship with Nobunaga and Hidevoshi, Ievasu seized power as a leading feudal lord and as a general under Hidevoshi's rule. After Hidevoshi's death, Ievasu took political power through a coup d'etat, and opened the door for the 260vear rule of the Edo Bakufu.



Tokugawa leyasu, who took a very conservative political stance

Ieyasu's political methods were very conservative and carefully devised. He rejected the free market economy and outward-looking approach Nobunaga and Hideyoshi, and established a socioeconomic system based on traditional agricultural production. He abolished the spread of Christianity, overseas travel, and free trade, and opened the country's doors only to Holland and China. The return to an agricultural economy eliminated the dynamic economic growth that had been made possible by the free economy, as well as the dangers of speculation and gambling that accompanied

commercial transactions and trading. There was a shift from a system of high-growth that emerged as a result of mandated land redistribution to large landholders in reward for good conduct during the wars, to a system of stable growth which achieved growth only from the qualitative and quantitative development of agricultural land. This move achieved social stability. Strictly solidifying the social class structure eliminated the problem of people who had ambitions of rising high enough to create competition. In addition, Jevasu established a strict system of central and local power called the "Bakuhan" system, and solidified the labor power

of this closed society in the local areas. To digress for just a moment, Japanese society at that time is said to have been a highly recycling-conscious system that recycled products.

To the extent that this self-sustaining society, which was closed to commerce and based on agricultural production, in order to be able to take shelter from global competition, maintained agricultural production volumes capable of sustaining its population, thoroughly devised social policies for maintenance of the status quo, continued to develop policies that repudiated

competition, and had moderate population growth, it was able to maintain social stability. As a result, Tokyo (Edo) at the end of the 15th century had a population of one million, had a thriving handicraft industry that had developed against the backdrop of nationwide agricultural production, and had become one of the world's leading cities. However, 100 years after these economic policies had been introduced, they could not keep up with the fundamental changes that had taken place in the economy, such as extravagant consumption among the ruling class, the diversification of consumption behavior among the merchant class, and the increasingly active distribution of excess food. Consequently the Bakufu's financial system was showing signs of decay. Politicians later tried to implement various economic reforms, but Bakufu economic policies prior to the Meiji Restoration (1867) that abolished the Bakufu structure could not but follow a path toward the demise of the country's moderately stable economic system.

Tokugawa Ieyasu's political methods do offer one hint for the IT revolution we are now facing and the major changes in the social structure that it is causing. It suggests that we should assess the advantages and disadvantages of today's rapidly advancing globalization and instead of wholly subjecting domestic industries to the unbridled competition of the international arena, should instead secure employment opportunities while protecting our domestic industries, and use domestically led demand to get our economy back on track. If we concentrate resources in agriculture, energy, and the science and technology industries fundamental to our economy, develop an environmentally responsible recycling-oriented economy, and form a social consensus in favor of a conservative and stable economic approach that "may not facilitate success, but will not lead to failure," our society may miss the wave of international reform, but will be able to avoid the rapid survival-of-the-fittest selection process and the unemployment it causes. Naturally there is no need to continue this basic policy for more than 200 years, as the Edo Bakufu did. We could revert back to a liberal path once domestic demand and employment rebound and the restructuring of our domestic industries is complete.

Nonetheless, in some ways it is meaningless to compare Japan in the Edo period with Japan today. It goes without saying that Japan today has experienced overwhelming expansion and increased importance in terms of its population, economic scale, and international role as compared with ancient Japan. Total trade between the

U.S. and Japan reached ¥24 trillion in 1998. The importance of the Japanese market, the Japanese currency, and Japanese advanced technologies in the global economy is the defining essence of Japan's role in the information-oriented social economy. Looking back on the close socioeconomic relationship between Japan and Asia, we may find that the impact that Japan's isolation had on the Asian economies is an important factor in considering the relationship between Japan and Asia in today's information economy.

U.S. Secretary of the Treasury Lawrence Summers calls the New Economy an "avalanche economy based on the production and application of knowledge." When I heard that there were discussions of support for fiscal regulations, personnel assistance, market expansion, and the production, distribution and application of knowledge, I was reminded of efforts taken to obtain land and improve agricultural productivity during America's frontier era. When the global economic system undergoes structural change, for example, Britain's adoption of mercantilist economic policies during the industrial revolution, or the world market and resource reallocation schemes developed by Japan and Germany in the early 20th century when we entered the petroleum age, global social reforms inevitably bring about increased competition for new resources and market allocation and acquisition. This suggests that today's New Economy will bring about fierce competition aimed at the Asian markets where high growth and new resources, such as new frequency bands for broadcasting, intellectual property, and customer information, are expected.

The processes of structural reform that have been experienced by Japan in the past can be described by two models. In the first model, domestic structural reforms are promoted to keep up with the changing times, the individual desire for competition is stimulated, and society greedily advances into the international market through technology transfers. In the second model, we intentionally delay the speed of reform,

construct a stable economy and society, keep individuals within a conservative public peace, and offer cooperation within closed international relationships. Which of these would better describe our position in the era of the IT revolution and the New Economy? Which should we select? Japan is now standing at a very important crossroads.

#### 4. Conclusion

The original intent of this paper was to introduce information technology policies in Japan, but since I determined that it would be more convenient to refer the reader to the topic on the following web sites, I have digressed. Information on the IT policies of the national government and the Ministry of International Trade and Industry may be found at the following web sites: Japanese Government: www.kantei.go.jp/foreign/index-e.html, MITI: www.miti.go.jp/index-e.html, Ministry of Posts and Telecommunications: www.mpt.go.jp/eng/

Now that the 21st century is upon us, what kinds of solutions will the IT revolution provide for the energy and environmental crises that are likely to befall our planet in the near future? Also, what impact will the intensification of global communication have on the maintenance of global and regional security? From the perspective of human history, what impact will the Internet, the first network connecting all the peoples of the world, have on our ingrained "social" instincts? What will become of people who cannot respond autonomously or heteronomously to these changes? The issues raised by the IT revolution are endless. We can surely expect to encounter all kinds of problems that come hidden with recent economic innovations and that will shake the very foundations of human society.

Take Kikuo belongs to the e-ASIA Promotion Team, Machinery and Information Industry Bureau, Ministry of International Trade and Industry.