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# Role of Institutions in Achieving Optimal Resource Allocation

By Naoyuki HARAOKA

**Agriculture is a very important sector in any country in the sense that food security is dependent on it and it also plays a key role in preserving beautiful nature and landscapes and eventually a highly qualified environment in terms of global climate change.**

**Agriculture thus deserves special and differential treatment in a trade regime which in principle obliges nations to observe the rules of free trade. Protectionist policies in this sector are in part justified in accordance with the above-mentioned logic.**

**However, these protectionist measures must be assessed in terms of efficiency and equity, which are the crucial elements of economics.**

Economics is sometimes considered the “dismal science” and thus it is extremely difficult for economists to convince people of the utility of an economic policy. People who do not find any charm in economics believe that it is a subject only for pursuing economic efficiency and that in this world of human beings, economic efficiency should not to be considered the first priority. The first priority to be pursued for a human being is happiness. Such people sometimes say that human happiness is not to be measured by materialistic success, which would be most likely achieved through optimal resource allocation in the market, according to an economist.

What is optimal resource allocation? In the anti-economics people's view, this is no more than economic efficiency, which is to be realized in a perfect competition where price mechanism in the market fully functions. Firms produce at the cheapest cost and compete with each other and their competition results in bearing zero profit, making price equal production cost. In other words, firms are engaged in production of goods by full utilization of their capacity and providing the goods for consumers to the quantity that would not bear any profit. The consumers can enjoy buying the goods at the cheapest price. In this situation, we have no waste of resources for production. This is called Pareto Optimum and optimal resource allocation is achieved. This is certainly a concept of economic efficiency and does not explain anything about whether people engaged in both sides of production and consumption are truly happy or not.

However, if we can apply this to a wage determination process, the story is somewhat different. An employee does his or her best by fully utilizing his or her working competence and providing the employer with the best possible quality of work, since they have to do so due to the serious competition among workers. Assuming that an employer has perfect information on each employee's competence, he/she will pay a wage to the employee which should be a reward that perfectly meets his or her competence or efforts.

That would make an employee feel very happy, since his or her capacity or efforts for work are recognized correctly by the employer. The employee works hard to the maximum extent where an employer or firm's production is maximized and the wage is paid to the extent corresponding to the human resources utilized by an employee, thus optimal resource allocation is realized. However, I believe, in this case, his or her happiness is maximized as well, since a human being is happiest when his or her efforts are recognized correctly by others. If an employer misjudges an employee's competence or efforts and pays an inappropriate wage, in other words, pays less for the more

competent or hard-working people and pays more for less competent or less hard-working people, this would lead to not only a waste of resources but also to frustration on the part of the employees.

In this regard, I think economics can handle not only the issue of economic efficiency but also human happiness or fairness of income distribution.

In the example mentioned above, I mentioned an assumption of perfect information on each employee's competence or working efforts. This assumption should be considered a crucial one in achieving the optimal resources allocation by function of price, in other words, market mechanism. If we cannot assume this, there is no guarantee assuring us to achieve the optimal resources allocation. This is what we call the question of asymmetry of information. In this case, while each employee has perfect information on how hard he or she works and his or her competency, an employer may not necessarily have perfect information on this matter. For example, in many cases of employing non-permanent workers, an employer is not given a sufficient information on their competence and also in many cases fails to acknowledge how hard they work, because they work for only a limited time or their working performance is not properly considered. In this case, we will see distortion between the ideal case of optimal resource allocation and the reality. Economics, in short, is a study on how these distortions come into being, not only due to information asymmetry but also because of other factors such as tariffs, quotas, and other protectionist policies.

In the case of information asymmetry, contemporary economics stresses the crucial role of institutions or rules in achieving an optimal resource allocation under the existing information asymmetry. Any economic entity could have an incentive to cheat others under information asymmetry. In the example of the above-mentioned relationship between a non-permanent employee and an employer, an employee has an incentive to cheat his/her employer by claiming that he or she worked harder than he or she actually did or that they are more competent than they actually are. An employer, thinking about the possibility of being cheated, would be sceptical about what an employee is claiming. And thus, mutual confidence would be eroded. In this situation, a convincing institution could encourage confidence-building among the entities in the economy, in this case an employee and an employer. For example, if they agree to have a contract between them with a specific job description and a specific format to evaluate an employee's competence, this rule or institution could reduce the possibility of cheating, and wage determination in the contract would be based upon mutual confidence. This is how we can achieve better

CHART 1

## Numbers of commercial banks in Japan in the long term

resource allocation even under the existing information asymmetry.

Institutions are created in accordance with an economic rationale such as confidence-building among the players in the game of business and economy, as we have seen. They also impact upon economic performance. There is a great deal of evidence proving this in our economic history.

Douglass North, winner of the Nobel Prize in Economics in 1993, whose academic achievement is in the analysis of economic history, explained why drastic economic development was promoted in modern Western nations by using a theory of institution. He proved that invention of an institution of national protection of private ownership in modern Eastern countries enhanced people's incentive to be actively engaged in business and economic activities in the form of market transactions.

Prof. Tetsuji Okazaki, professor of economic history of Japan at the University of Tokyo, discovered a couple of very interesting relationships between a created institution and specific economic performance at the beginning of the 20th century, both of which played a critical role in bringing Japan into World War II.

The first is the relationship between the structure of the banking sector, the control of large manufacturing business over small banks, and the banks' performance in the 1920s.

The institutional nature of Japanese banks during this period had a market-based structure. In other words, as *Chart 1* shows, there were more than 2,000 small banks that were in market competition and these small banks were subject to the governance of large manufacturing corporations, a significant difference from our contemporary Japanese banking sector. *Table 1* shows us that many executives of banks then were simultaneously working as executives of large corporations controlling banks.

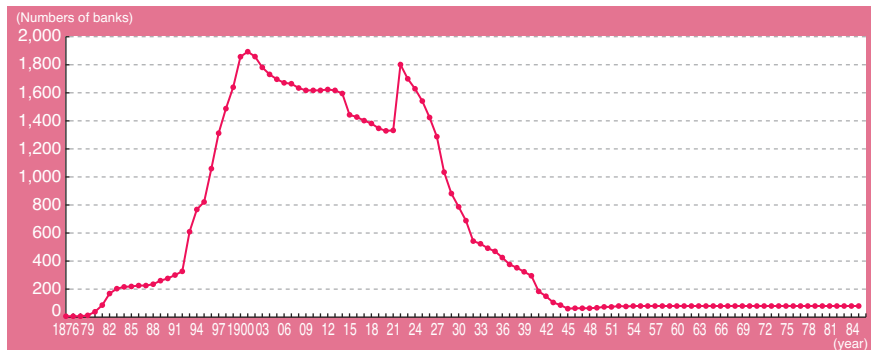
This institution gave those executives an incentive to neglect the obligation to reimburse borrowed money, with the banks under large corporations' governance and thus lowered the banking sector's profitability.

This led us to a serious financial crisis and destabilized the economy and eventually politics as well.

The second relationship is that between the change in political institutions at the beginning of the 20th century and the fiscal discipline of the Japanese government then.

The Japanese Constitution before World War II provided fragmentation of the governmental bodies and military forces, and all the fragmented independent governmental bodies tended to require an increase of budget allocation. However, until the end of the 19th century, there was a Council of Political Advisors that functioned very well and it was highly instrumental in checking any significant increase in the budget expenditure. The Council consisted of a few powerful political leaders who led the Meiji Restoration, the Japanese citizen revolution of 1868, and founded a new government then. Since they were so powerful and admired by all for their contribution to the creation of a modernized Japan, they were very successful in integrating the governance of fragmented bodies.

However, after their deaths at the beginning of the 20th century, the Council no longer worked well, and then a government with a fragmented structure failed to take strong leadership, and so the checking function for budget expenditure was lost. This led in particular to uncontrolled requests for budget expenditure increases



Source: Goto (1970), Ministry of Finance, Japan

TABLE 1

### Director interlocking in the prewar Japanese banking industry (1926)

Posts in corporations	Number of banks with interlocking directors	Percentage in total
<b>Total</b>	836	83.0
Chair/President	407	40.4
Executive directors	157	15.6
Directors	753	74.8
Auditors	637	63.3

Source: Compiled from "Measuring the Extent and Implications of Director Interlocking in the Prewar Japanese Banking Industry," *The Journal of Economic History*

on the part of military forces, which eventually resulted in war.

Economics could be a fairly charming subject if you took an institutional element into an economic analysis, because it could better explain the real world. In the case of the above-mentioned Douglass North finding, conventional neoclassical economists depending on only the analytical tools on the market function would try to explain the fabulous economic progress observed among the Western countries' modernization process by only a concept of shifting production function or changing parameters of the production function, namely only by the rising level of productivity. However, this neoclassical model is not only unsuccessful in explaining reality well, but also fails to gain reputation as a learning among the people. By adding an element of institutional analysis, economics could acquire a large collection of factual subjects in our human history and combining historians' efforts with economists' analysis would provide extremely enriching lessons from our history for our contemporaries, just as in the examples I introduced above.

Through an institutional analysis, we could combine economics with study on laws as well. Thus, economics could have a highly interdisciplinary nature and its enriched contents would stop economics being called a dismal science.

Lastly, it is to be noted that a monumental achievement of institutional economics was made by a distinguished Japanese economist, Masahiko Aoki, professor emeritus at Stanford University, in his world-renowned book, *Toward a Comparative Institutional Analysis*, in 2001.

Looking at the history of Japan, we find many good examples showing us a close relationship between an institution and the economy in a certain period. The honor to create a significant advancement of economics taking institutions into consideration should be awarded not only to distinguished economists but also to the history of Japan. **J.S**

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