# How Does Economics Deal with Income Inequality?

By Naoyuki HARAOKA

Since the global financial crisis in 2008, people's attention has been drawn to the social impact of the crisis. An economic crisis triggered by a financial crisis allegedly causes an increasing gap between the rich and the poor. A recession usually results in increasing unemployment and thus a drastic decline in poor households' income through a significant decrease in their working hours, eventually causing an increase in income inequality.

Though it is difficult to prove whether the economic crisis has actually increased income inequality or not from the data available, we can see the data on income inequality in OECD data sources.

Figures measuring income inequality are based on data on disposable household income – or take-home income after deduction of direct taxes and payment of social security contributions. The commonly used main indicator of income distribution is the Gini coefficient. Values of the Gini coefficient range between 0 in the case of "perfect equality" (each person gets the same income) and 1 in the case of "perfect inequality" (all income goes to a single person).

## Koizumi Reforms Reduce Income Inequality

According to *OECD Social Indicators,* income inequality varies considerably across the OECD countries *(Chart 1)*.

In the mid-2000s, the Gini coefficient of income inequality was lowest in Denmark and Sweden and highest in Mexico and Turkey. An inter-decile income ratio, defined as the ratio between the upper limit of the 9th decile and that of the 1st decile, is also used in *Chart 1*. This ratio also shows us large disparities, with the top decile of income distribution data less than three times higher than the bottom decile in Denmark, Sweden and Norway but more than eight times higher in Mexico.

In the case of Japan, the Gini coefficient is slightly higher than that of the OECD 30, and the income top decile is a little more than 4.5 times higher than the bottom decile, which is also a little larger than the OECD average.

As in *Chart 2*, showing point changes in the Gini coefficient over three different time periods, income inequality generally rose from the mid-1980s to the mid-2000s. Over the entire period, inequality rose in 19 out of 24 countries where data are available. Rising inequality is strongest in Finland, New Zealand and Portugal. Declines have occurred in France, Greece, Turkey, Ireland and Spain.

Income inequality rose during the period from the late 1980s to the mid-1990s in many countries, including Japan; thereafter the pattern was more diverse. It is to be noted that in the case of Japan, income inequality even slightly declined during the period from the mid-1990s to the mid-2000s. It has often been pointed out that the so-called economic structural reforms undertaken during that period by the administration of Prime Minister Junichiro Koizumi provoked an increase in income inequality by encouraging market competition and thus producing winners and losers, but the statistics show the opposite.

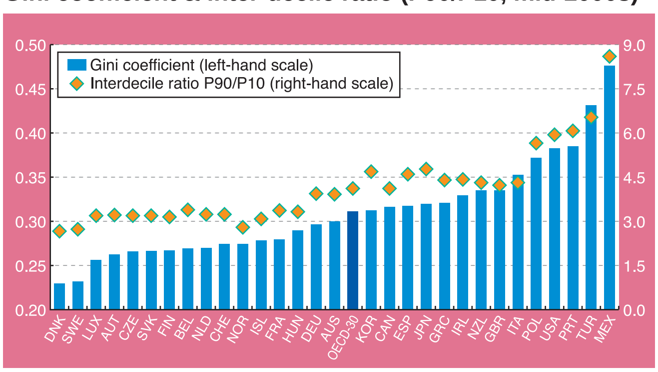
## Market Competition Brings Greater Equality

Neoclassical economics highly values market competition to achieve the best resource allocation and thus the best economic performance. What is the logic behind this thinking?

CHART 1

**Income inequality varies considerably across OECD countries**

**Gini coefficient & inter-decile ratio (P90/P10, mid-2000s)**



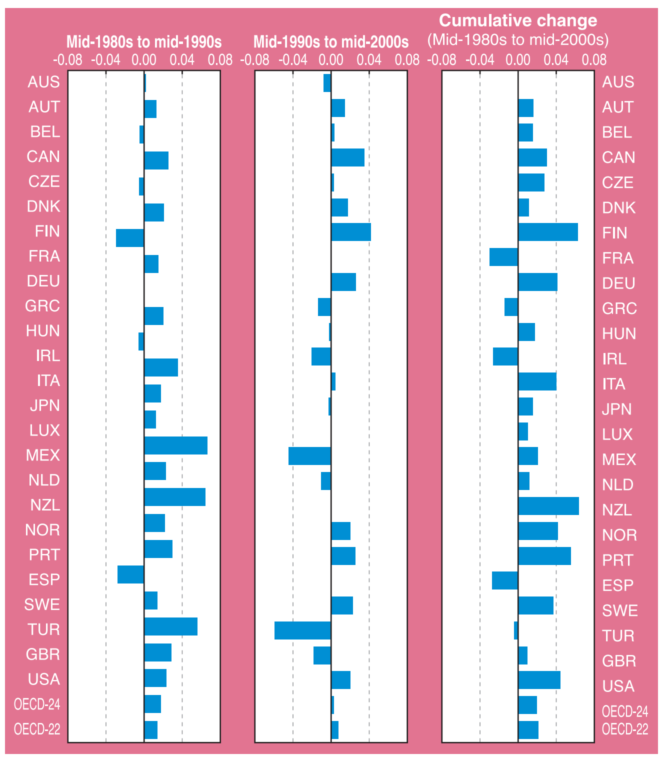

*Note: Countries are ranked, from left to right, in increasing order in the Gini coefficient. Data refer to the mid-2000s for all countries. The income concept used is that of disposable household income in cash, adjusted for household size with an elasticity of 0.5.*

*Source: OECD Income Distribution questionnaire*

CHART 2

**Income inequality generally on rise**

**Percentage point changes in Gini coefficient**




*Note: In the first panel, data refer to changes from around 1990 to the mid-1990s for the Czech Republic, Hungary and Portugal and to the western Lander of Germany (no data are available for Australia, Poland and Swizerland). In the second panel, data refer to changes from the mid-1990s to around 2000 for Austria, the Czech Republic, Belgium, Ireland and Spain (where 2005 data,based on EU-SILC, are not deemed to be comparable with those for earlier years). OECD-24 refers to the simple average of OECD countries with data spanning the entire period (all countries shown above except Australia): OECD-22 excludes Mexico and Turkey.*

*Source: OECD Income Distribution questionnaire*

Market competition, if perfect, motivates people and firms to fully exploit their potential capacity and try hard to achieve the best outcome since the competition will not allow them to be indolent. Firms have to be highly innovative and are pressed to lower their product prices; thus consumers will be able to maximize their benefits.

Is this logic to be applied to the labor market?

Yes. For example, assuming that the wage is lower than a level matching the worker's productivity, there will be a surplus between the wage and the productivity, and then firms will compete with each other to acquire workers with higher productivity and get the surplus. In order to win intense competition among firms as mentioned above, they will not hesitate to pay higher wages for workers with higher productivity. Thus, wages will rise and eventually reach the equivalent of a matching productivity level and the surplus will be gone. Therefore, at the ultimate equilibrium, wages will be equal among workers with the same productivity or competence.

In contrast, if the wage exceeds a level matching the worker's productivity, employers will restrict the number of employees in order to minimize the employment cost, thus creating a number of unemployed people. These unemployed people will propose to employers that they work for a cheaper wage. The employers will naturally seek cheaper labor in order to maximize their profits in the serious competition climate. Therefore, the competition among workers to seek jobs in this case will pressure them to accept a lower wage until the point where wages are equal among the workers with the same productivity or competence.

Both approaches will bring us the same outcome as mentioned above. This means market competition will bring us more equal income distribution among workers, which contradicts what is believed today by many intellectuals, who accuse market competition of being the culprit behind economic misery after the financial crisis. In particular, according to them, an income gap is caused between winners and losers and then social inequality will increase as a result of the hard market competition brought about by a naive conviction in the enormous benefits of a liberalized economy that dominated the world until the financial crisis and that also allegedly allowed the US banking sector to engage in the subprime loan business.

## Lack of Competition Causes Inequality

We need to reexamine this proposition carefully in the light of economics. Economists conclude that competition will bring us more equal income distribution. In that case, according to economists, under what circumstances would significant income inequality emerge?

One explanation is that, in the case of industries protected by regulations, firms would not have to seek employees with high productivity, and so they would keep inefficient workers at relatively expensive wages, which could create income inequality when these industries were exposed to more competition.

Secondly, if there are any discriminatory employment practices among workers in relation to sex, age, etc. rather than competence, that would be a source of income inequality among the workers with the same competence.

Namely, according to economists, what produces income inequality is not market competition, but the lack of competition created by regulation or social customs, etc. This could well explain the statistics above. The Koizumi administration's economic structural reforms highlighted the importance of market competition in reactivating Japan's economy and business, proposed and implemented a wide range of deregulation, and encouraged competition in various sectors. That could be behind the small decline in income inequality from the mid-1990s to the mid-2000s, compared with the period from the mid-1980s to mid-1990s when income inequality in Japan increased.

Koizumi's policies originally were intended to encourage business innovation through competition. However, they were also instrumental in preventing the Japanese economy from becoming a more unequal society.

## Give Workers Equal Chance for Better Skills

Another interesting observation from economics on the question of income inequality concerns the relationship between employers and employees. Employers are generally not perfectly endowed with information on each employee's competence. This "imperfect information" will occasionally be a source of income inequality among workers in the same company. Employees may overvalue or undervalue each worker's productivity. Some workers could get a higher wage than a level matching their productivity while others could receive a lower wage than their competence warrants.

While some people work seriously, even during holidays at home, some pass the time chatting with each other even when in their offices, and yet they get paid similar wages. This is an example of the so-called "moral hazard," meaning that, on the side of employees, they have an incentive to cheat management that is not well informed and to try to earn wages higher than their own productivity would allow. This should be considered another kind of unfair income inequality.

Management should do its best to collect as much information as possible on each worker's competence and willingness to work and reflect these factors in their wages. A lack of good corporate governance creates income inequality. It is recommended to fix the details of an employment contract to include the expected competence for each job so that management can objectively assess each worker's performance and properly reflect it in the worker's wage. Such a contract will also increase the transparency of the process of wage determination.

Finally, even though income inequality does not exist among workers with equal competence, an income gap will naturally exist between more competent workers and less competent ones. Does the difference in competence justify the income difference?

Yes, but all workers should be given an equal opportunity to learn about the skills and know-how of jobs and acquire high competence by training or education both within and outside their companies. Workers will not forgive any discriminatory treatment depending upon job status (e.g., part-time or full-time), whether physically handicapped or not, etc.

## Social Fairness & Income Equality

The worldwide economic crisis has made us reconsider the merits and demerits of capitalism all over the world. The common denominator of these views on the capitalist economy seems to be focusing on the income inequality that has allegedly been increasing since the crisis. Certainly, it is evident that rising unemployment during a recession will raise income inequality between the employed and the unemployed. However, some critics are saying that, assuming the contemporary capitalism is characterized as market competition, we should regulate market competition to alleviate the income inequality possibly provoked by the creation of winners and losers in the competition in order to achieve social fairness in the post-economic crisis era. And social fairness, in most cases, is well represented by income equality.

However, it would be useful for those criticizing the market economy and competition to pay attention once more to what neoclassical economists are saying about income inequality, as mentioned above.

Economics enables a study on the realities of income inequality among people with the same competence and willingness to work, and on the reasons why this inequality occurs. JS

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