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# Japan's Economy: Monthly Outlook (Jan 2018)

## No wage increase without restructuring / “Race to the bottom” hinders virtuous circle based on domestic growth

Economic Research Dept.  
**Shunsuke Kobayashi**

### Summary

- There are three factors which have historically led to wage deflation in Japan. These are: (1) Intensification of international competition, (2) Existence of potential slack, and (3) Stagnant labor productivity. As for factor (1), although certain preconditions must be met, including maintaining the current exchange rate and continuation of wage increases in China, Japan is now nearing the point where it may be able to overcome this issue. The same is true for factor (2). We are now beginning to see signs that a resolution may not be far. These include the unemployment rate nearing the same level as the natural rate of unemployment, and improvements in quality of employment such as the trend toward hiring regular employees. Achieving sustainable wage increases in the future depends on improvements in productivity.
- Arguments surrounding the question of what works best in improving productivity are complicated. Labor productivity is determined by two factors: the capital accumulation and total factor productivity. The pace of capital accumulation depends on the rate of increase in total factor productivity. Therefore, it follows that the essential element is the improvement of total factor productivity, requiring education and training, as well as progress in employment mobility. Efforts toward the first factor mentioned above are underway, but there is little notable progress occurring on the second factor. From the long-term viewpoint, this problem could hinder the achievement of sustainable wage increases.
- It must be admitted that there is a global trend that is hindering the increase of wages, but which Japan cannot handle on its own. One example is the “race to the bottom”, the result of which is the continuous decline in labor’s share. In parallel with progress in globalization, many governments, mostly in the advanced nations, have continued to carry out a kind of mercantilist competition, keeping personnel expenses under control by cutting exchange rates, and then keeping the cost of capital down by cutting corporate taxes and taxes on capital investment. At the same time, value-added tax (or consumption tax) is raised. In exchange for improving corporate earnings, this policy causes a loss in real income for households. Eventually this could lead to the deterioration of the labor environment and social programs, or what is known as the “race to the bottom”. It is hoped that there will be international cooperation in the future to discuss this issue so that a rebalance of policies can take place.

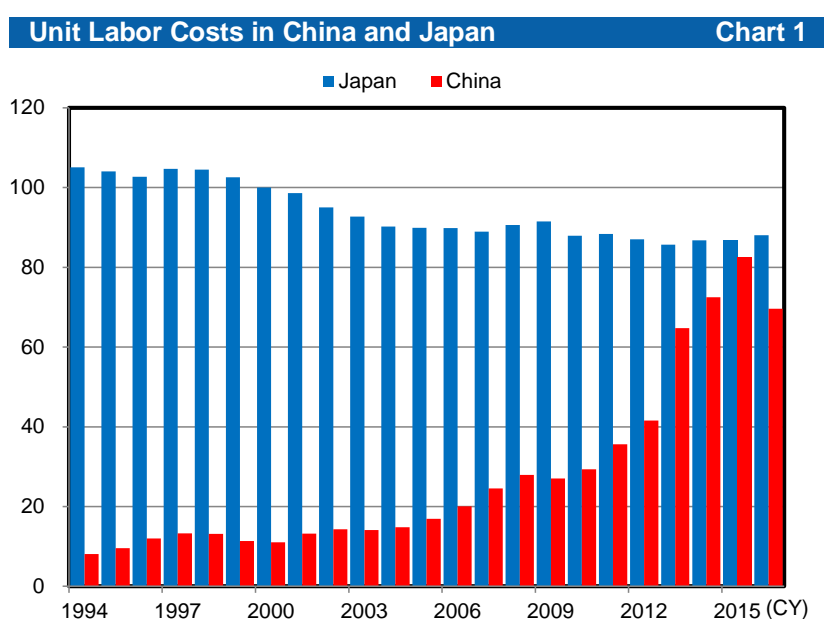
## 1. No Wage Increase without Restructuring

Japan's wage and labor market is drawing increasing attention both in Japan and overseas with the Japanese government's linkage of a corporate tax cut with wage hikes and annual spring labor offensive in FY2018. Arguments regarding wages in Japan have historically tended to be divided between the optimists and the pessimists. The optimists predict that wages will rise due to factors such as economic expansion and the decline in the working population associated with the growing gap between supply and demand of labor (a declining unemployment rate). Meanwhile, the pessimists point to the existence of hidden unemployment and rising international competition, as well as the slowdown in the pace of improvements in Japan's low productivity (in other words, mainly deflationary factors). During the past five years the claims of the pessimists have probably been closer to being correct. However, the assertions of the optimists have been gaining strength of late. Will the growth rate in wages finally pick up speed this time around?

### *Three conditions which must be met to overcome wage deflation: Getting out from under deflationary pressures caused by international competition depends on exchange rate*

First, let's take a look at the historical trends regarding this issue. There are three factors which have historically led to wage deflation in Japan. These are: (1) Intensification of international competition, (2) Existence of potential slack due to Japan's not having achieved full employment, and (3) Stagnant labor productivity. In addition to these three factors there is also the issue of decline in the expected inflation rate, but since this is not a problem unique to the labor market, it will not be discussed here. Instead, we will discuss the issue of the decline in real wages in a later section. In this section we will consider whether the preconditions have been met for overcoming wage deflation with a focus on these three factors.

As for factor (1) Intensification of international competition, this has not yet been clearly overcome, but it is losing the strength of its downward pressure on wage increases. Chart 1 is a comparison of unit labor costs in China and Japan. Unit labor cost is an index which is obtained by dividing total compensation of employees by gross domestic product. Or to put it in simpler terms, we are comparing the wage costs in the two countries required to manufacture, say, one TV, or one automobile. It goes without saying that the lower the unit labor cost in a particular country, the more international competitiveness it has.



Source: IMF; compiled by DIR.

Note: The index sets 100 at the year 2000, Japan ULC (yen based).

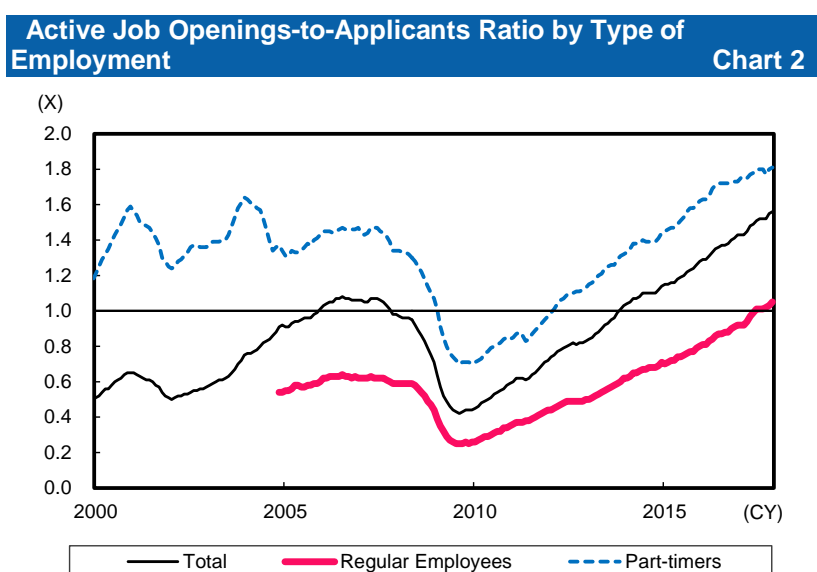
Chart 1 indicates that the difference in international competitiveness between Japan and China from the 1990s to the early 2000s is quite obvious. The chart also clearly illustrates the changes that occurred in the two nation's economies during that period, when China broke into the global market and intensified its efforts in international trade and competition at the international level became more intense in Asia. During this same period, deflationary pressures on Japan's economy, already suffering from post-bubble conditions, saw a severe increase. However, in more recent years, the gap in international competitiveness has been shrinking. It goes without saying that during this same period, wages in Japan declined in comparison to productivity, while wages in China rose at a furious pace. In recent years this effect has become all the more pronounced due to yen depreciation.

As a result of changing economic conditions, the gap in international competitiveness between Japan and China all but disappeared by the year 2015. The gap grew again somewhat in 2016 as a result of yuan depreciation and yen appreciation, but then in 2017 the exchange rate saw a gradual appreciation of the yuan against a weaker yen. At this time there is a very good chance that a gap in international competitiveness between the two countries could be gradually narrowing. Considering these conditions, as long as the current exchange rate can be upheld and wages continue to rise in China, Japan should be able to shake off the first deflationary factor mentioned in this report.

### ***Dealing with potential slack is still at the halfway mark, but progress is being made***

Next we look at factor (2) potential slack. The term "potential slack" comprises three concepts. First there is the problem of underemployment, in which the current unemployment rate has not yet reached the level of the natural rate of unemployment. Then there is the existence of people who are not unemployed but are working under unfair or unreasonable conditions. Finally, there is the existence of non-workers who have given up on employment, and hence fall outside the classifications of unemployed and employed.

Now, before going on, let us take a look at how the natural rate of unemployment is estimated. The point where wage deflation and inflation diverge is the level of the unemployment rate. This is also known as NAIRU – the Non-Accelerating Inflation Rate of Unemployment. In pursuing the arguments from this point of view, estimates based on the last twenty years or so of performance values are meaningless. In fact, we have not identified any instances of wage increases over the past twenty years. In other words, the level of unemployment rate for that period has continually exceeded that of NAIRU. It is only when we get to the first half of the 1990s that we find wage increases in Japan. The unemployment rate at that time was at around the middle of the 2% level. Of course, it is possible that frictional unemployment has declined in comparison to those times due to changes in social structure. And neither are we able to say for certain that this is the correct level. That said, with NAIRU at around the middle of the 2% level, if the unemployment rate continues to decline at its current speed, there is a certain truth to the argument that wage increases will occur in the not too distant future.



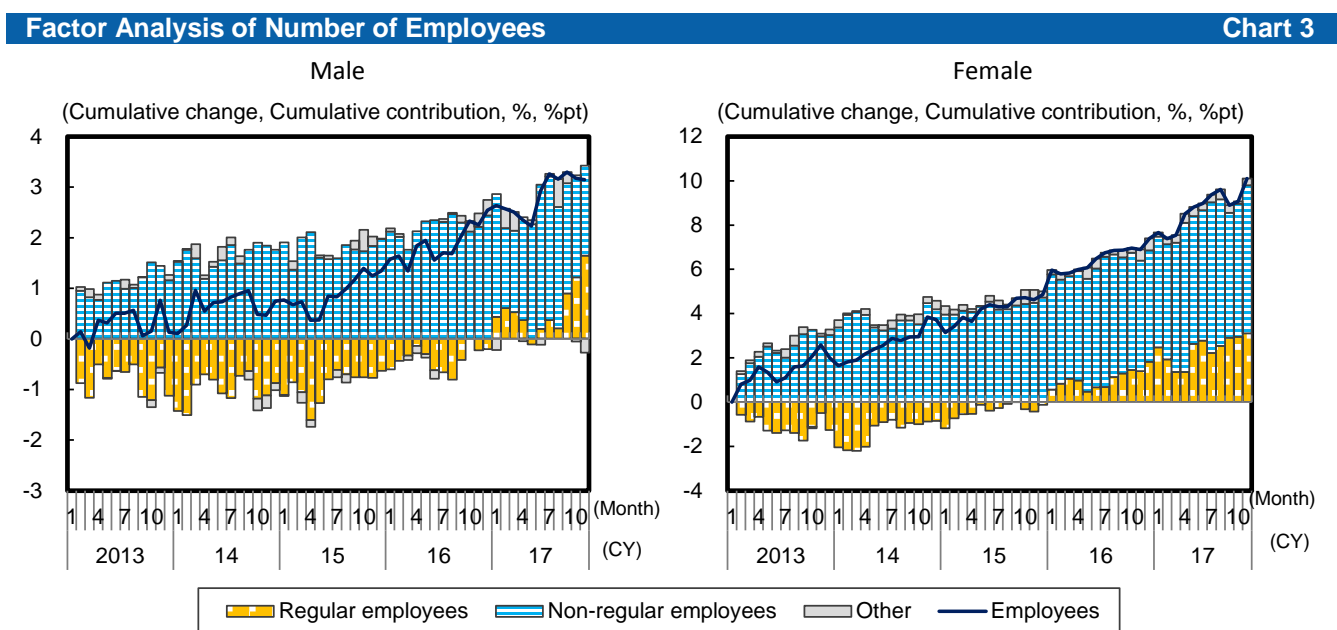
Source: Ministry of Health, Labour and Welfare; compiled by DIR.  
Note: Figures are seasonally adjusted.

Furthermore, we should not ignore the fact that Japan has seen improvements in the quality of employment. As is indicated in Chart 2, even if we look only at the data for regular employees, the active job openings-to-applicants ratio has exceeded the 1x level and has continued to grow for the first time since this statistic was first made public. This phenomenon is symbolic in that it shows how Japan’s chronic labor shortage has reached the next stage in seriousness.

Let’s now take a look at the whole sequence of events. Over the past several years, Japan’s economy has achieved growth exceeding that of its potential growth rate. At the same time, corporate earnings have also expanded, recording historic highs. But growth in the hourly wages of regular employees has been slow. On the other hand, improvements were seen in the working conditions of part-timers, both in the area of hourly wages and the number of employees. This reflects the cautious stance of corporations in regard to the hiring of regular employees. The reason for this stance is Japan’s unique employment system which has strict restrictions on the dismissal of workers. Moreover, hourly wages of part-timers have been historically lower than that of regular employees.

But the tide has begun to turn. As is indicated in Chart 3, growth in the number of non-regular employees stopped around the year 2016, while growth in the number of regular employees began to pick up. One of the developments behind this is the fact that the hourly wages of non-regular workers are no longer as cheap as they used to be. Another even more important reason is that Japan has now entered the era of truly serious labor shortages. Over the last five years, Japan’s working-age population has declined by approximately four million. Even so, the labor force population has continued to grow. The reason for this is that the labor force participation rates for women and the elderly are growing rapidly.

However, it will be difficult to expect more rapid growth of this sort for labor force participation rates in the future. The M-curve in women’s labor force participation rate looks more like what you might see in the US as the result of growth over the past several years. This also suggests that there is not much room left to grow for women’s labor force participation. Meanwhile, corporations which cannot increase the head count will instead have to increase hours worked per employee as a means of dealing with the labor shortage. It is here where newer issues arise, such as the problem of the 1.3 million yen cap. Corporations which have been unable to find the part-timers they need have instead begun, though reluctantly, to increase the number of regular employees. This is why the active job openings-to-applicants ratio for part-timers has reached an unprecedented level. The result of this situation can be seen in the active job openings-to-applicants ratio for regular employees discussed above, which has now exceeded 1x, and is continuing to grow.



Source: Ministry of Internal Affairs and Communications; compiled by DIR.  
 Note: Seasonable adjustment by DIR.

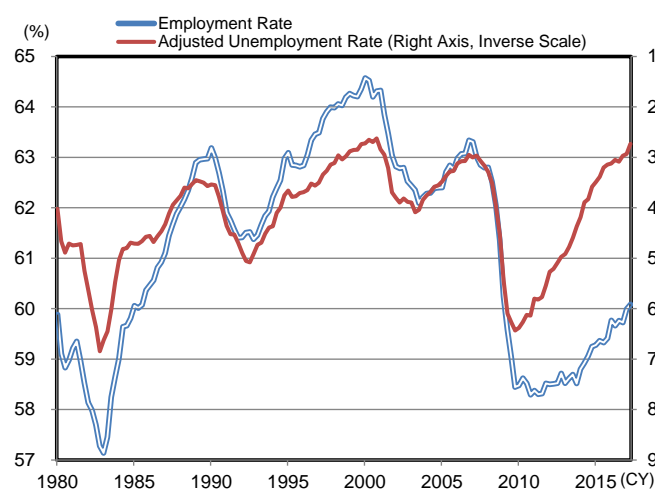
This of course does not mean that there are no issues. One concern is the problem of the growing non-working population. In recent years, one of the issues being discussed in the US as if it were a mystery is the fact that although the unemployment rate is at a historic low, growth in wages does not accelerate. As is indicated in Chart 4, while the unemployment rate (number of unemployed ÷ population over age 16) is indeed at a historic low in the US, the employment rate (number of persons employed ÷ population over age 16) is also at a historic low. What lies between the adjusted unemployment rate, which indicates the extremely tight labor market, and the employment rate, which shows that there may still be some slack in the labor market, is the problem of the growing non-working population.

Let us first confirm the definitions of these terms. The population over age 16 is divided between the employed population and the jobless population, while the jobless population is divided between the non-working population and the unemployed population. In other words, both the adjusted unemployment rate and the employment rate are at historic lows, which means that the ratio of the population over age 16 accounted for by non-working population is at a historic high. This tendency toward a growing non-working population is a phenomenon which developed after the global financial crisis of 2008. In other words, people who did not obtain work during the period immediately after the financial crisis when finding work was extremely difficult became a part of the non-working population, and have been on standby outside the labor market. These people would enter the labor market as short-term workers and then leave when there was no more work, and the result of repeating this process many times over is that the supply and demand for labor in the labor-intensive industries may not be as tight as is suggested by the unemployment rate. The result is that wages develop a tendency toward disinflation.

Japan is no exception. Long before the US experienced the same problem, Japan had its own “employment ice age” in 1997 during which time large numbers of people joined the ranks of the non-working population. The US is merely experiencing the same tragedy that Japan did earlier (Chart 5). Over the past five years the “alligator gap” between the employment rate and the adjusted unemployment rate has of course been shrinking, but nonetheless it remains large. We advise keeping a close eye on this phenomenon, as it is quite possible that the non-working population has a role in suppressing wage inflation in the form of potential slack.

#### US Labor Environment

Chart 4

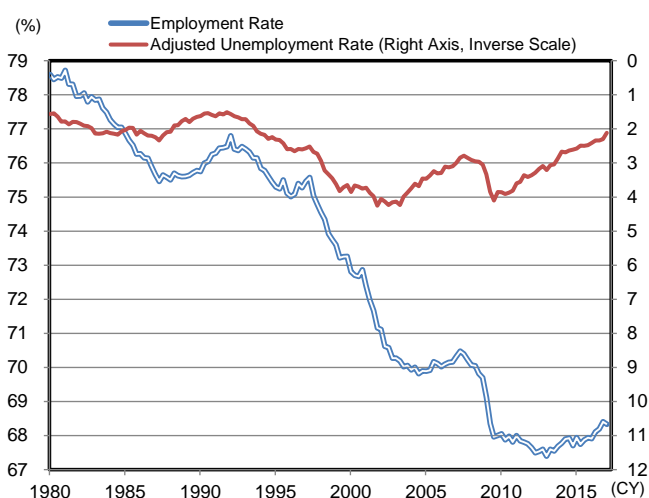


Source: OECD; compiled by DIR.

Note: Adjusted unemployment rate = Number of unemployed ÷ population over age 16.

#### Japan's Labor Environment

Chart 5



Source: OECD; compiled by DIR.

Note: Adjusted unemployment rate = Number of unemployed ÷ population over age 16.

### *Arguments surrounding the question of productivity get complicated, and wrong choices regarding cure are made*

So we have deflation caused by international competition and deflation whose source is potential slack, each one showing signs of coming to an end in the not too distant future. The pet theory seems to be that improvement of productivity is the key to predicting sustainable growth in wages. Understanding productivity in this way is not in itself wrong, but things quickly get complicated when we begin discussing what the best cure might be for the problem. “Productivity” can be a fuzzy word, and there are two sides to productivity which many people get mixed up.

The definition of labor productivity is the value obtained when you divide overall output by overall labor input. Labor productivity is determined by two factors: the capital accumulation and total factor productivity. In Japan, the pace of improvement in labor productivity has slowed, and this has been caused by slowdowns in the improvement of both of these factors – capital accumulation and total factor productivity. When we compare Japan with other advanced nations, it is the capital accumulation which compares least favorably. There is little room for disagreement on the facts discussed up to this point (Chart 6).

**Factor Analysis of Potential Growth Rates in the US, Japan, and EU**  
Chart 6

		Potential Growth Rate	Labor Contribution	Capital Contribution	TFP Contribution
Japan	1986-1990	4.1	0.3	2.0	1.8
	1991-1995	2.7	0.0	1.5	1.2
	1996-2000	1.2	-0.2	0.8	0.6
	2001-2005	0.6	-0.3	0.3	0.6
	2006-2012	0.4	-0.3	0.0	0.8
US	1986-1990	2.7	0.9	0.9	0.9
	1991-1995	2.8	0.8	0.8	1.3
	1996-2000	3.7	0.9	1.1	1.7
	2001-2005	2.9	0.6	0.9	1.5
	2006-2011	1.9	0.4	0.5	1.1
Germany	1986-1990				
	1991-1995	2.9	0.5	0.9	1.5
	1996-2000	2.2	0.1	0.7	1.3
	2001-2005	1.4	0.1	0.4	0.9
	2006-2011	1.1	0.2	0.4	0.5

Source: METI 2016 White Paper on International Economy and Trade.

Arguments surrounding the question of what works best in improving productivity are complicated, and it seems that many mistakes are made in selecting a cure. One of the most common assumptions is that to improve labor productivity capital investment should be increased. The reason this assumption is wrong is because the pace of capital accumulation depends on the growth rate of total factor productivity. It is a dependent variable that is uniquely determined. So in other words, it would be meaningless to increase capital investment independently of everything else. Of course, there can be some value in this. During the financial crisis the normally necessary capital investment and research & development were not being carried out, and this becomes a kind of hysteresis. In cases like this some leverage provided by public policy can be helpful. However, it is also important to remove factors which can hinder innovation. But this is something that is usually carried out once the credit crunch eases up. During normal times such as this, it should be self-evident that it is not an option to take in an accommodative financial environment.

Now moving more deeply into our arguments, the first thing is that cutting corporate taxes has a basically neutral effect on capex. When corporations carry out capex, first they examine whether there will be any profit from carrying out such an investment. The question of what tax rate they may be



paying after having gained profits on said investment does not figure in this calculation (though this may not be the case if said investment involves a high level of uncertainty). On the other hand, cutting taxes on capital investment so that the cost of capital goods declines in relative terms does have the effect of increasing the level at which investment takes place. However, this effect is cancelled out by the decline in labor's share, and does not lead to the increase of wages.

In conclusion, it is total factor productivity which is most necessary to achieve sustainable growth in wages. Total factor productivity is purely the improvement of work skills, and is not associated with capex contribution. Considering this as the goal, there are two policy measures which are required. First is education in the broadest sense. This is not something achieved by a certain number of years of formal education or by lengthening the years of a person's education. What is important here is improving the quality of education (rethinking the curriculum) and refreshing knowledge which has become stale. Implementing corporate training and good quality on-the-job-training are also important here. In this sense, there is one policy being promoted by the current administration which is taking the right direction – that is recurrent education (also known as lifelong learning).

### ***Painless reforms will not lead to growth, or to wage increases***

In addition to education, there is one more factor that improves total factor productivity. That is the optimal placement of personnel. Education raises the threshold of the individual's competence, and optimal placement of personnel raises the corporation's utilization rate. Putting the two of these together provides a basis for productivity. The optimal placement of personnel also takes advantage of individual abilities, which are encouraged when an individual is sent to a post with which they are compatible. This also assumes that highly competent workers who are specialized in a particular field will be properly matched with their specialty, which also often means a high growth area. At the same time, total factor productivity is improved by reassigning workers to different fields in those cases where their current workplace is not taking advantage of their true value. In either case, mobility of employment is an important factor in realizing total factor productivity, and concretely speaking, the best "cure" to create this environment is the easing of employment regulations. But these developments are progressing too slowly in Japan. From the long-term point of view, the failure to implement these factors may possibly hinder the realization of sustainable wage increases.

There is, in fact, one particular phenomenon which has been observed to be responsible for the suppression of wage increases. That is the preservation of dismissal regulations by Japanese corporations. This is illustrated in simple terms by Chart 7 and Chart 8. As was explained earlier, Japan's labor shortage has reached the next stage in seriousness. Employment of regular workers has increased, causing the active job openings-to-applicants ratio for regular employees to exceed 1x. But even though starting salaries for new college graduates has increased, overall wages have not gone up. One of the major causes of this situation is that promotions and raises for middle senior male regular employees are being delayed. As was mentioned earlier in this section, the wages of new college graduates hired on as non-regular employees have been increased. There is also a larger number of non-regular employees whose status has been switched to that of regular employees. These two factors bring pressure on corporate earnings. In response to these developments, corporations tend even more so than in the past to keep down total labor costs by using methods such as flattening the wage curve and implementing restrictions on overtime under the name of workstyle reform.

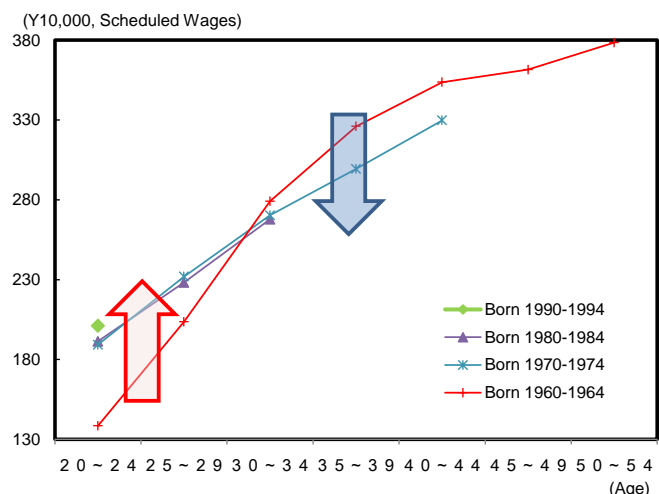
However, the purpose of this chapter is not to argue that Japanese companies are secretly finding ways of violating labor regulations. As was pointed out above, middle senior regular employees find themselves right at the center of corporate controls on raising salaries. But at the same time, this age group also tends to have low productivity, meaning that their wages do not match their level of contribution to corporate earnings. So in this case perhaps there is a need for cost cutting. But the problem is that this kind of employee is protected by Japan's tough restrictions on employee dismissal, as well as the lifetime employment system itself, and seniority-based wages. This gives employees no

incentive to improve their skills. In conclusion, implementing wage increases requires both education and a relaxation of employee dismissal restrictions – or in other words, the carrot and the stick.

Understandably, there is criticism pointing out that the loosening of restrictions on employee dismissal favors corporations over workers, and that for the average household, this type of policy would merely mean speeding up the process of wage deflation even more. In considering this point, there are two parts to the argument. First there is total production of society as a whole, and then there is the question of distribution. (Note: Household income here is defined as the product of the two factors.) Let's say, hypothetically, that there is an old man hanging around at the office who has an annual income of 10 million yen even though he doesn't really do any work (in other words, he doesn't contribute at all to the company's earnings as a whole). After he is dismissed, he is re-employed and given the job of making copies. His annual income drops to 1 million yen. In this case, total production of society as a whole increases by 1 million yen – splendid growth strategy.

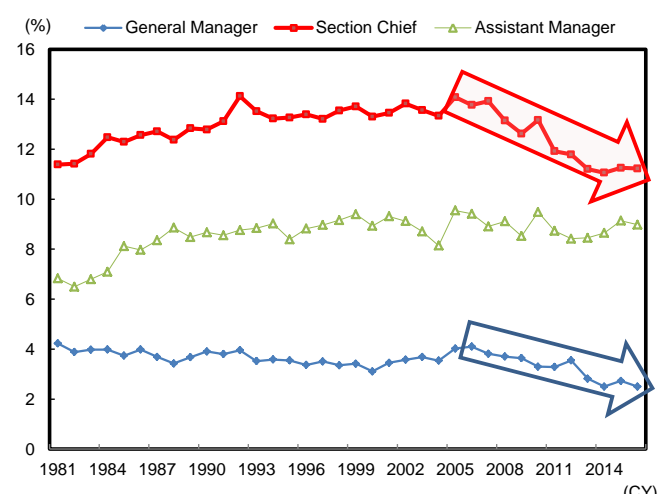
The problem here is the issue of distribution. The 10 million yen in cost which the company has saved by dismissing a redundant employee is not redistributed. This gives the company an increase of 10 million yen in profits. Meanwhile, the household income of the employee who was laid off decreases by 9 million yen. In order for a virtuous circle based on domestic growth to occur with the help of sustainable growth in wages, the company should actually redistribute 9 million yen or more out of the 10 million yen in cost it saved to its workers. At least it should reward its more productive employees. In other words, some kind of measure is needed here to promote distribution. It should be self-evident that the distribution policy described here comes as a set with improvement of total domestic production improved by loosening restrictions on employee dismissal. The two come together, and it would be meaningless to implement only one of these policies.

**Wage Curve by Birth Year and Age Group**  
Chart 7



Source: Ministry of Health, Labour and Welfare; compiled by DIR.

**Proportion of Workers in their 40s in Managerial Positions**  
Chart 8



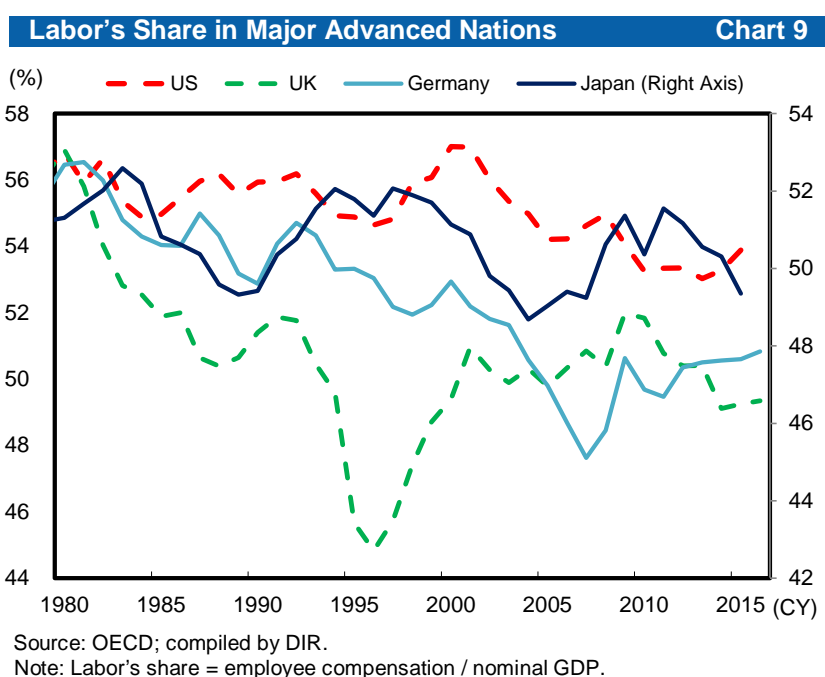
Source: Ministry of Health, Labour and Welfare; compiled by DIR.



## 2. “Race to the bottom” Hinders Virtuous Circle Based on Domestic Growth

In the first section of this report we discussed factors which hinder wage increases, focusing on problems that Japan can improve based on its own independent efforts. However, there are some global trends which Japan alone cannot do much about. A major example is what is known as “the race to the bottom”. The result of this trend is the continued decline in labor’s share.

As is indicated in Chart 9, over the past twenty years a continued decline in labor’s share has occurred in the major advanced nations. Behind this situation lies a variety of developments, including some classic ones, such as the relative decline in capital costs centering on information and communication technology, and increasing competition in the labor market associated with globalization. In addition, academic papers searching for the cause of the problem in the recent rise of superstar corporations such as Google and Facebook have also attracted attention. Another problem sometimes pointed to, which is unique to Japan, is the decline in influence suffered by workers unions.



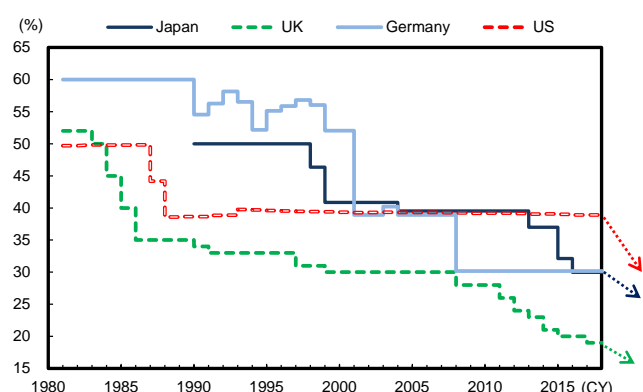
In conclusion, the major factor which has triggered all of this is “the race to the bottom”. This phenomenon has occurred in parallel with progress in globalization. The first step in the process is that corporations seek out more favorable production locations and move their facilities there. This alone puts workers in advanced nations into direct competition with workers in the emerging nations, and in this way are deprived of vested rights. In addition, governments of various countries which prefer mercantilist economic policies implement measures to attract corporations to invest their countries. One example of this type of policy is cutting the exchange rate (known as a beggar-thy-neighbor policy) so that foreign corporations are able to keep personnel expenses under control. Other policies meant to keep down the cost of capital are cutting corporate taxes and taxes on capital investment (Chart 10). These countries prefer to use a value-added tax (or consumption tax) for their revenue source (Chart 11). A high value-added tax is advantageous from the viewpoint of trade.

All of these policies improve corporate income, while households lose real income in exchange. However, other than the option of turning its back on globalization, one country alone does not have the power to break free of the competition. By cutting corporate taxes, the US has merely upped the competition a notch. The same goes for the UK, which has decided on cutting the corporate tax so as to ease the influence of the hollowing out effect associated with Brexit. And Japan also increases

international competition with Abe’s “3-piece set” of measures, which include yen depreciation, cutting the corporate tax, and increasing the consumption tax.

What lies await at the end of this kind of international mercantilist completion is the deterioration of the labor environment and social security programs, which would likely be whittled down to the lowest level. This is why the phenomenon is called “the race to the bottom”. In fact, the first time this term was used was during the interwar period in the 1930s, which was also an era in which internationalization was progressing. The result of the tendency at that time first led to the development of competing economic blocks spurred by the Great Depression, and ultimately to World War II. Looking at a very similar scenario more than eighty years later, it is hoped that there will be international cooperation to discuss this issue so that a repetition of history can be avoided.

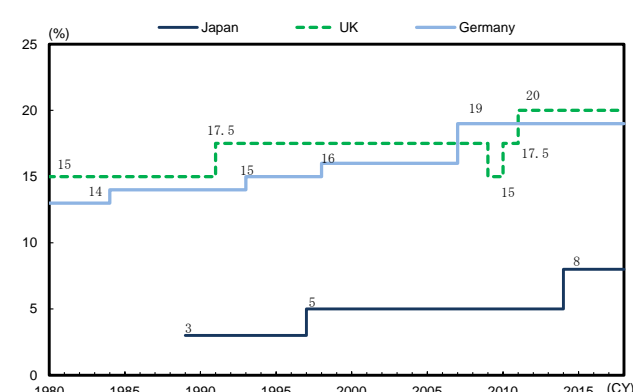
**Effective Corporate Tax Rates in Major Advanced Nations**  
Chart 10



Source: OECD; compiled by DIR.

- Notes: 1) Values from before 1999 are included as reference. Values from sub-central and central governments are combined. Effective tax rates take into consideration inclusion of regional taxes in deductible expenses.  
2) Germany’s regional tax includes regional trade tax and surcharges.  
3) US regional tax is weighted average tax rate of state taxes from 50 states and District of Columbia.

**Value-Added Tax Rates in Major Advanced Nations**  
Chart 11



Source: Ministry of Finance; compiled by DIR.

Note: US Govt. based value-added tax rate is extremely low, so it was split between the others.

**Economic Indicators and Interest Rates** Chart 12

Indicator	2017		2018				FY16	FY17	FY18	FY19
	Jul-Sep	Oct-Dec	Jan-Mar	Apl-Jun	Jul-Sep	Oct-Dec				
	Actual	DIR estimates					Actual	DIR estimates		
<b>Real GDP</b>										
Q/q %, annualized	2.5	0.9	0.9	0.9	0.9	1.1				
Y/y %	2.1	1.9	1.7	1.3	0.9	1.0	1.2	1.8	1.1	0.6
<b>Current account balance</b>										
SAAR (Y tril)	24.5	25.4	25.9	26.1	26.1	26.3	20.4	24.0	26.5	27.9
<b>Unemployment rate (%)</b>	2.8	2.8	2.8	2.7	2.7	2.7	3.0	2.8	2.7	2.6
<b>CPI (excl. fresh foods; 2015 prices; y/y %)</b>	0.6	0.9	0.9	0.9	0.9	0.7	-0.2	0.7	0.8	1.1
<b>10-year JGB yield</b>										
(period average; %)	0.05	0.05	0.05	0.05	0.05	0.05	-0.05	0.05	0.05	0.05

Source: Compiled by DIR.

Note: Estimates taken from DIR’s *Japan’s Economic Outlook No. 195 Update (Summary)*