



## **The Labour Market in Japan and Its Demographic Problems**

**Koji Sakuma**

[sakuma@tachibana-u.ac.jp](mailto:sakuma@tachibana-u.ac.jp)

**Professor, Kyoto Tachibana University**

**Visiting Research Fellow, Institute for International Monetary Affairs (IIMA)**

### **Foreword**

Economies of many advanced countries as well as some developing countries are suffering from a shrinkage in the working age population. Japan is a front runner of this trend and has already experienced this demographic problem of shrinking labour force for two decades.

This report will, firstly, introduce a recent new economic policy in Japan, “Work-style reform.” Secondly, it will provide with an analysis on how Japan has survived the problem in the past.

### **1. “Work-style reform” ~Today’s hottest policy issue in Japan**

#### **(1) What is Work-style reform?**

Prime Minister Shinzo Abe set up in 2016 an office for promoting “Work-style Reform” in the cabinet. It is a package of policy reforms which aims to make Japan’s labour market flexible and fair so that unutilized domestic human resources can be utilized as an actual work force to mitigate a decline in the working age population.

The reform package is composed of three legal developments. The first is to set a legal cap on hours of overtime work. Maximum hours of overtime are set at 720 hours per year and 100 hours per month, so that more women and elders can join to work under worker-friendly environment. The second is an introduction of rules aiming at establishing the principle of “equal work, equal pay”, so that non-regular workers will be motivated to raise their productivity. The third is a new salary system based on worker’s performance rather than based on hours spent in work place, so that highly professional workers can exert their

expertise without time limit. The relevant bills passed the Diet on June 29th, 2018.

## (2) Will this reform work?

No doubt we need to increase the number of workers and need to raise productivity per worker, but it will take several years before we can make an appropriate evaluation of this policy. Surely there seems to be a consensus that we should try this reform. So far there are no major alternative suggestions from opposition parties. Both employers and employees are supporting the whole idea although they have some minor objections in detail. There is no strong objection, either in mass media or public opinions. In short, few knows what the reform can actually make in the labour market, but many think we should try it.

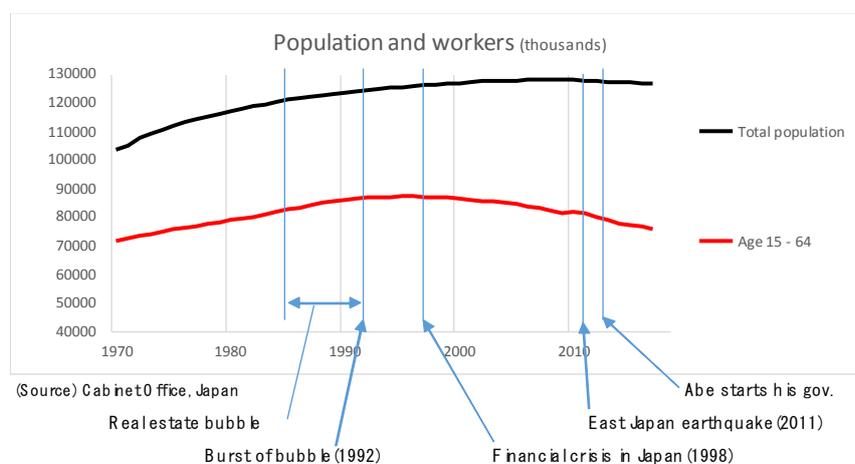
## 2. Twenty years passed since the peak of working age population

While we should wait to see the effect of “the Work-style reform”, we already have had an actual experience of a decline in the working age population for the past two decades. How has the Japanese economy worked and kept growing at least in real terms, despite an unfavorable environment in the labour market?

### (1) Overview of the demographic developments

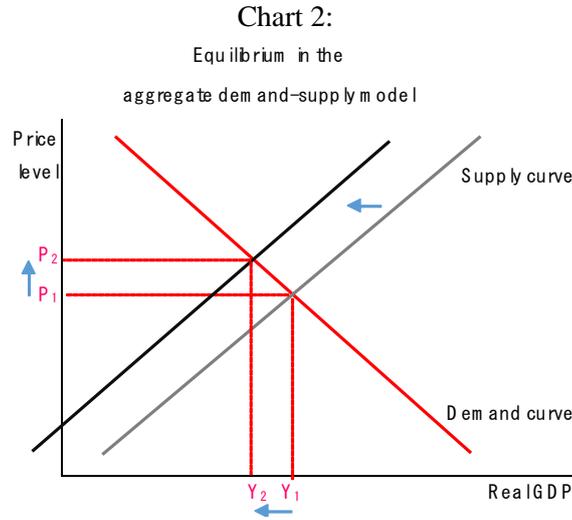
The working age population peaked out in 1996. It was four years after the burst of the bubble in the real estate market and two years before the Japanese financial crisis in which a major securities company and a few banks went bankrupt. Japan has been in deflation since then and we have not completely overcome it despite a quantitative and qualitative monetary easing by the Bank of Japan (Chart 1).

Chart 1:



A textbook of Economics explains that a decline of the working age population means a decrease of labour supply, which results in a shift of supply curve to the left so that the output

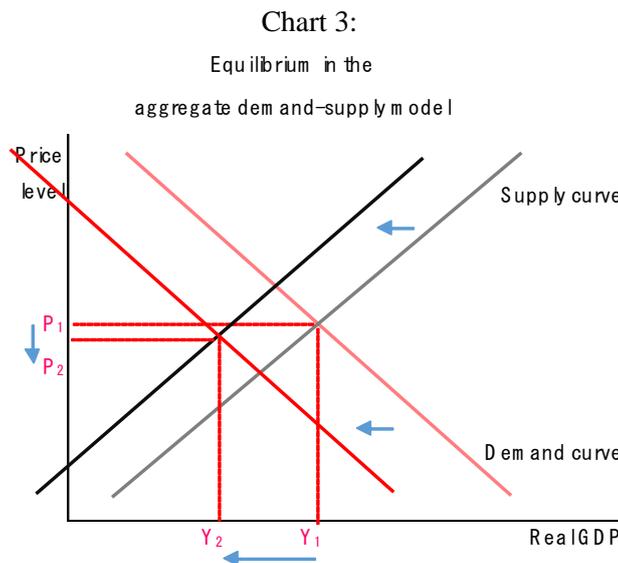
falls and prices rise (See  $Y_1 \rightarrow Y_2$  and  $P_1 \rightarrow P_2$  in Chart 2).



However, the reality in Japan since the middle of 1990s did not follow the theory. Japan may have followed the theory, if the fall of labour force had been regarded as a temporary phenomenon such as war. The decline of labour force, however, came from a fall of natural birth rate and the Japanese people saw it as a leading indicator of diminishing of the whole population in the future.

Consumers and corporates became conservative in spending as they expected a shrinkage of aggregate demand in the long run. Considering this effect, not only the supply curve but the demand curve in the previous chart were expected to shift to the left (Chart 3). The negative change of consumer and business minds was rather big because it was accompanied with deleverages after the end of a real estate boom.

The result in a macroeconomic balance was expected to be a sharp decrease of output and slight downward-pressure on prices in theory (See  $Y_1 \rightarrow Y_2$  and  $P_1 \rightarrow P_2$  in Chart 3).



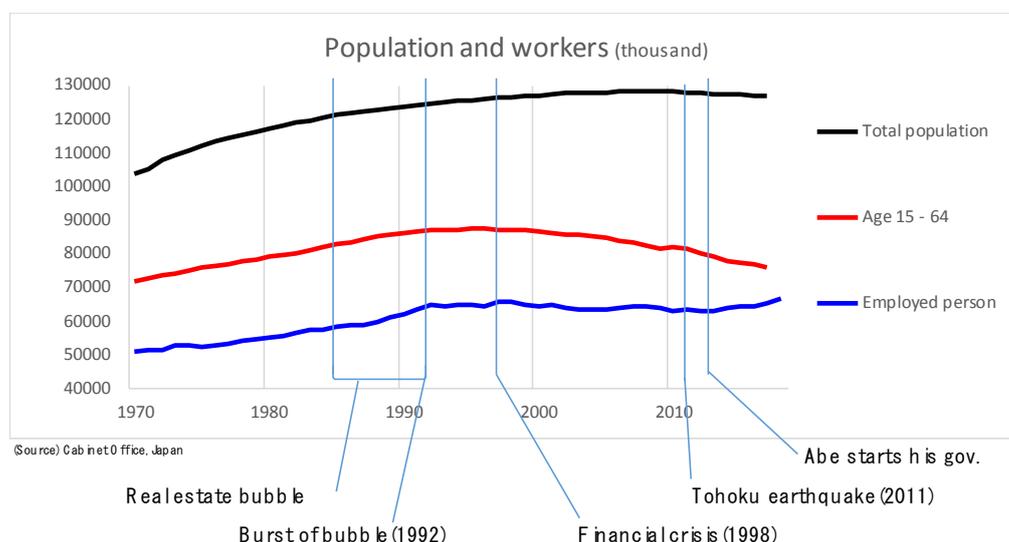
This picture, however, does not seem to be correct, either, because we did not actually experience such a sharp fall of real GDP. In addition, the downward pressure on prices was not slight but rather strong and sustained.

(See below 2-(2) on page 4 for details)

**(2) Employed persons were increasing**

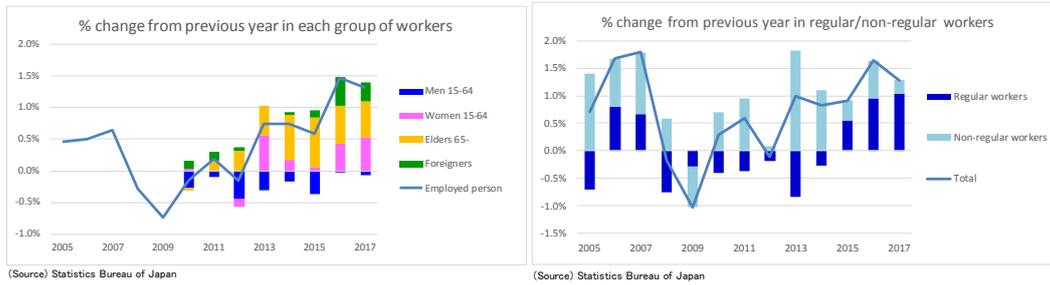
Now, let's have a close look at what actually happened in the Japanese labour market. The following chart (Chart 4) is the same as the first one (Chart 1) of this report but with one additional data, the number of the employed persons. After the peaking of the working age population in 1996, the number of the employed persons has not decreased as much as that of the working age population. It is even increasing in recent years.

Chart 4:



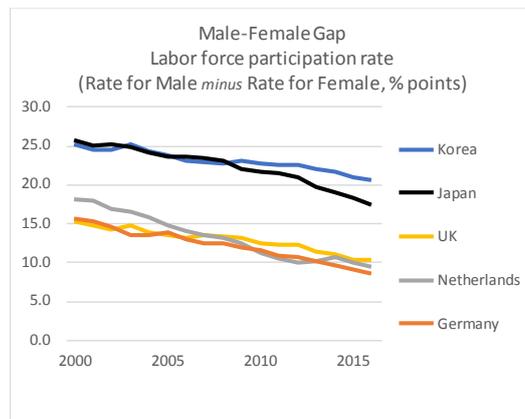
Categories of workers that have contributed to the increase of the actual labour force are females and elders from 2000 to 2015 and additionally foreign workers since 2015 (Chart 5). In terms of regular or non-regular workers, non-regular workers contributed to the increase of employment from 2000 to 2014 and regular workers started to join the contribution increasingly since 2015 (Chart 6).

Chart 5 & 6:



We have long been discussing how to change the male-dominant culture of the Japanese labour market and how to increase female workers. Without having a big fanfare, however, this change is happening. Increasing trend of female workers relative to male workers has been globally observed but it is happening more extensively in Japan (Chart 7).

Chart 7:

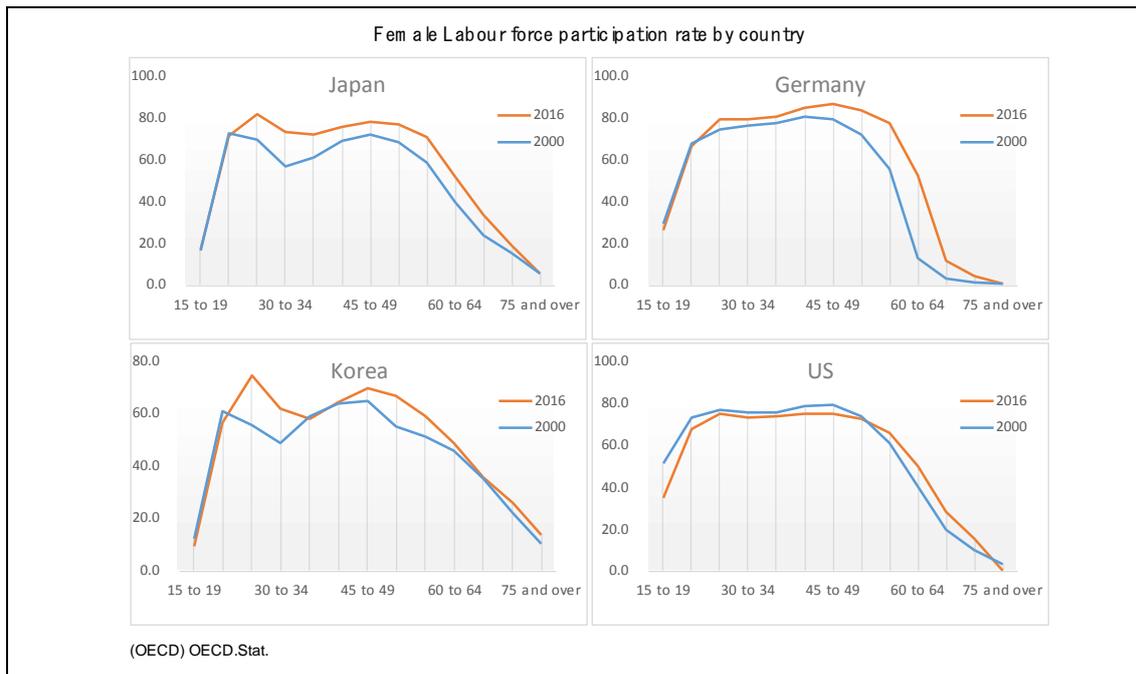


(OECD) OECD.Stat. based on a common definition

Also, elder workers are increasingly seen in various work places such as supermarkets, construction sites, transportation and so on.

**Box : M-shape curve**

A chart which shows a distribution of the ratio of female labour participation by age is called “M-shape curve” in Japan because of its shape that resembles the letter “M”. Labour participation ratio usually takes a reverse U-shape curve in case of male workers in Japan and in case of both men and women in many Western countries. It takes, however, an M-shape for the Japanese women (as well as for the Korean women) because they are expected to leave working place once they get married to take care of house works and childcare. This leave continues until they almost complete their parental care for children. The Japanese government has long been promoting equal opportunities for female jobs and seeking to change the shape of M to a reverse U. Comparing the data for 2000 with that for 2016, the Japanese society seems to be changing as it is wanted to be.



Growing participation of female and elder workers has been accompanied by an increase of non-regular workers.

Although the Japanese society has become much freer from an old Confucian tradition, there are still difficulties practically for housewives to go out for full time work. On the other hand, not a few households face with a difficulty in income growth because of a deflationary pressure on the husbands' salaries.

Under such a circumstance, it is more convenient for women to work in non-regular status, which enables them to work in a flexible time-frame. Some may want to work only a few days per week, others may want to work every day but only from 10:00 to 16:00 so that they can send their children off to and pick them up at nursery. They voluntarily become non-regular workers because of such a convenience for their life style.

As for elders, more and more people find it necessary to continue to work after their retirement, customarily at 60 years old, because of growing uncertainty about the social safety net of Japan.

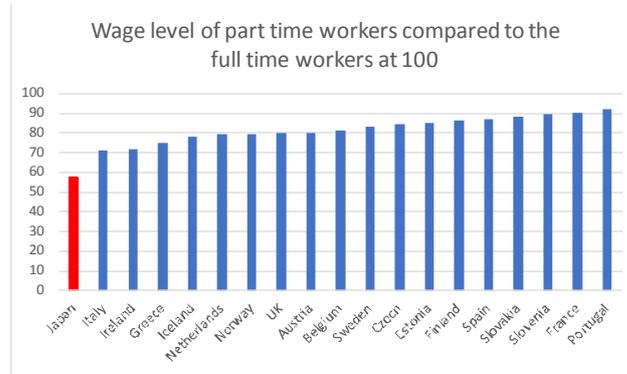
Women and elders are often hired as a non-regular worker. The increase of non-regular workers is a global trend, but it is observed more markedly in Japan since 2000s because of such reasons mentioned above.

### (3) Deflationary pressure

And here is a cause of deflation. It is commonly observed in many countries that non-regular workers are paid less than regular workers, but the gap between them is far wider

in Japan (Chart 8).

Chart 8:

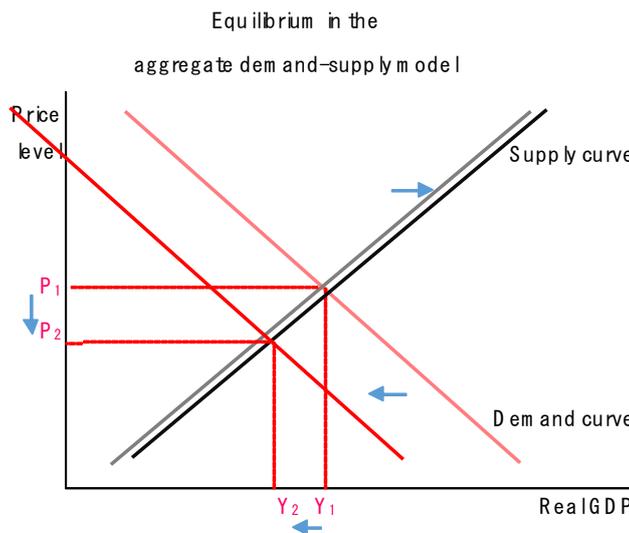


(Source) Eurostat, Japanese national statistics, OECD

The labour supply has been maintained or even increased in recent years in Japan but the proportion of workforce has changed: more non-regulars and less regulars. As the wage gap between the two is big in Japan, this proportionate change has given rise to a deflationary pressure in the whole labour market.

Coming back to the diagram of a macro-economic demand-supply (Chart 3), what happened in the Japanese economy was not a sharp decrease of output. The Supply curve, on the contrary to the previous hypothesis, in fact shifted slightly to the right thanks to the increased participation of women, the elders and foreign workers in the labour market (Chart 9). Supported by such an increase of work force, the output fell only slightly. Meanwhile, a downward pressure on wages was large (See  $Y_1 \rightarrow Y_2$  and  $P_1 \rightarrow P_2$  in Chart 9).

Chart 9:



In short, a decade between 2005 and 2015 was a phase where Japan raised the number of work force by mobilizing unutilized population of women and the aged. Many of them were

hired as non-regulars. Their wages were low, which prevented a rise of wage-inflation despite a large scale expansionary monetary policy.

#### (4) The latest development of the labour market

Now we are finally having an increase of regular workers. Some are shifting to regular status from involuntary non-regular status. Others are able to apply for a regular position because the working conditions of regulars have become more flexible.

There is no single cause which made these changes possible. There are some changes in regulation and in labour market customs. These changes are often receiving strong public supports which demand for a fair and stable labour market. Japan is seriously trying to change an old undesirable habit in the labour market, where many people believed that the longer you work for the same company, the more premium you will have in the evaluation of your value as a worker.

### 3. Can Japan provide the economy with enough workers in the future?

#### (1) Prospect of the labour market in 2025

To be sure, the Japanese labour market is moving in the right direction both in regulatory framework and business customs. Positive changes are happening, but the question is whether or not such changes are rapid enough to supply needed work force in the future.

The year 2025 is often referred to as a crucial year for the sustainability of the Japanese society. Most of the baby boomers will become 75 years old or above in 2025. How to finance the cost for their social and medical cares is a serious problem. However, what is more worried in a broader sense is if we have enough workers in all industries to sustain a society. It is estimated that there will be a shortage of six million workers or 10% of necessary work force in 2025 if relevant numbers and ratios in the labour market should remain at the current levels.

If things change as we wish, the labour participation ratio of women might possibly rise from the current 68% to around 75%, the current level in the European countries. That means an increase of 2.8 million workers.

The labour participation ratio of elders from 65 to 74 years old could probably rise to a higher level than the current 45%, given the increasing encouragement or enforcement for them to keep working after 65. Let's assume the ratio might rise by 10% points. That means an increase of 1.7 million workers.

Then, let's hope that a productivity growth could be an equivalent of 1 million workers. There may be a replacement of office workers with AI or a replacement of human nurses with robot nurses.

Even with such wishful thinking, we are still in a labour shortage of 0.5 million. What

option is left to fill the gap?

## (2) Foreign workers

The “Work-style reform” is one of the landmarks in the history of labour policies in Japan, but it does not cover the issue of foreign workers.

Instead of including it in a main policy framework, the government is deliberately putting relevant regulatory changes aside. If the liberalization of foreign workers had been a part of the “Work-style reform”, policy debates would have been far more complicated and it would not have been enacted smoothly.

Foreign workers are not purely a matter of economy but also a matter of national security and national identity. Observing experiences of other countries, it seems to be very difficult to selectively invite highly skilled workers only, and to ask them to come to Japan without accompanied by their family and go back home when the Japanese economy is in a recession.

While it might be better for these questions to be answered before any important national decisions are made, we cannot spend many years for such a discussion. Shortage of workforce, regardless of skilled or unskilled, is getting serious year by year. Neighboring countries in East Asia such as Korea, Taiwan and China are also facing with the same problem and there will be serious competitions in inviting foreign workers among the nations with labour shortage.

In considering such a whole circumstance, a quick decision on liberalizing the inflow of foreign workers would be inevitable.

## (3) Outline of the new policy

The target of the reform policy is an increase of 0.5 million workers by 2025. Industries which are expected to absorb such workers are, according to the government, construction sector by 300 thousand in the whole period, agricultural sector by 20 to 80 thousand in the whole period, hotel and nursing care sectors by 10 thousand per year, etc.

In terms of regulatory framework, these increases will be realized by lowering the requirement of the Japanese language proficiency for those who want to work in Japan and by enabling technical trainees to continue to work after the maturity of five year in case certain conditions are fulfilled. It is going to be a big decision for Japan to open its doors to the unskilled workers from abroad.

## Conclusion

Japan has maintained labour supply so far so well despite the decline in the working age population. It prevented the Japanese economy from shrinking albeit at a cost of deflationary pressure. 2018 will be a memorable year for Japan’s labour market policy because of the

Work-style reform that will hopefully create more efficient use of domestic human resources and because of deregulation on foreign workers that will open doors of the Japanese economy to foreign workers.

Shortage of workers is an obvious problem to be addressed urgently. Both policy decisions on Work-style reform and foreign workers are in a right direction. However, it is still uncertain if all such correct changes would provide the Japanese economy with enough workers in time of need.

This report is intended only for information purposes and shall not be construed as solicitation to take any action such as purchasing/selling/investing financial market products. In taking any action, each reader is requested to act on the basis of his or her own judgment. This report is based on information believed to be reliable, but we do not guarantee its accuracy. The contents of the report may be revised without advance notice. Also, this report is a literary work protected by the copyright act. No part of this report may be reproduced in any form without express statement of its source.

Copyright 2018 Institute for International Monetary Affairs (公益財団法人 国際通貨研究所)

All rights reserved. Except for brief quotations embodied in articles and reviews, no part of this publication may be reproduced in any form or by any means, including photocopy, without permission from the Institute for International Monetary Affairs.

Address: 3-2, Nihombashi Hongokucho 1-chome, Chuo-ku, Tokyo 103-0021, Japan

Telephone: 81-3-3245-6934, Facsimile: 81-3-3231-5422

〒103-0021 東京都中央区日本橋本石町 1-3-2

電話 : 03-3245-6934 (代) ファックス : 03-3231-5422

e-mail: [admin@iima.or.jp](mailto:admin@iima.or.jp)

URL: <https://www.iima.or.jp>