

Japanese Economy: Issues for the Coming Decade

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Japan's Economy over the Last Decade? Not Really All That Bad

As suggested by *The Economist* in the November 19, 2011 article, "Whose Lost Decade? Japan's economy works better than pessimists think—at least for the elderly," the performance of the Japanese economy over the last ten years (2001–2010) was really no worse than that of other major developed countries. Looking at trends over recent five-year periods (*Table 1*), Japan, with roughly zero population growth, has indeed trailed Europe and the US in terms of its real GDP growth rate. But Japan's per capita real GDP growth rate, an indicator of prosperity per person, exceeded that of developed European nations such as Germany, France, and Italy for the 2001–2005 period and was second only to Germany for 2006–2010. Unemployment in Japan has also remained low (*Table 2*).

Sense of Stagnation Driven Primarily by Prolonged Deflation

Despite this performance, as *The Economist* notes, Japan is beset by a sense of economic stagnation that grows with each passing year. The primary cause is a prolonged period of deflation. As shown

TABLE 1
Real GDP growth rate & population aging

	Real GDP growth rate						Median age of the population	Old age dependency ratio	Average annual rate of population change
				per capita					
	1996-00	2001-05	2006-10	1996-00	2001-05	2006-10			
Japan	0.8	1.2	0.3	0.6	1.1	0.2	44.7	38.0	0.0
Germany	1.9	0.6	1.3	1.7	0.5	1.5	44.3	33.0	-0.1
Italy	1.9	1.0	-0.2	1.9	0.4	-0.8	43.2	34.0	0.6
France	2.7	1.6	0.7	2.3	0.9	0.1	39.9	29.0	0.6
UK	3.7	2.9	0.5	3.4	2.4	-0.2	39.8	28.0	0.6
US	4.3	2.4	0.7	3.1	1.4	-0.2	36.9	22.0	0.9

Sources: (Japan) Japan Cabinet Office; (US) BEA; (EU) Eurostat; UN

TABLE 2
Nominal GDP growth rate & unemployment rate

	Nominal GDP growth rate			Unemployment rate			
	1996-00	2001-05	2006-10	1995	2000	2005	2010
Japan	0.3	-0.2	-0.9	3.2	4.7	4.4	5.1
Germany	2.1	1.7	2.2	8.2	8.0	11.3	7.1
Italy	4.7	3.7	1.6	11.2	10.1	7.7	8.4
France	3.8	3.6	2.4	11.0	9.0	9.3	9.8
UK	5.9	5.1	3.1	8.5	5.4	4.8	7.8
US	6.1	4.9	2.8	5.6	4.0	5.1	9.6

Sources: (Japan) Japan Cabinet Office, Ministry of Internal Affairs and Communications; (US) BEA, BLS; (EU) Eurostat

in *Table 2*, The US and the major developed nations of Europe have left Japan far behind in terms of nominal GDP growth rate; for the two five-year periods between 2001 and 2010, only Japan experienced negative growth.

The prolonged period of deflation is having a negative impact on Japan's financial situation. Japan's outstanding government debt ballooned from 1.4 times nominal GDP in 2001 to 2 times nominal GDP in 2010. This is even higher than PIIGS countries like Greece (1.5 times) and Italy (1.3) that are now in the midst of crisis. Tax and social insurance revenues are linked to nominal GDP rather than real GDP; any decrease in nominal GDP, therefore, means there will be an increase in outstanding government debt and a negative impact on the fiscal balance even if government expenditures remain stable.

Deflation & Low Growth not Being Driven by Declining Birthrate or Aging Population

The sense of stagnation is also reinforced by the spread of the mistaken notion that the prolonged deflation and economic slump that the country has experienced since the collapse of the economic bubble is caused mainly by Japan's declining birthrate and aging population.

Support Job Change for Older People Instead of Continued Employment

Japan is certainly an aging population “superpower,” leading the world in such indices as the median age of the population and the old age dependency ratio (the ratio of the population aged 65 years or over to the population aged 20-64) according to the 2010 revision of the United Nations’ *World Population Prospects*. Germany, however, also an aging population powerhouse that ranks second to Japan for median age of the population and third for old age dependency ratio, enjoyed an economic growth rate for the 2006–2010 period that exceeded that of other major developed Western countries (*Table 1*) and trailed only slightly behind France for nominal GDP growth rate (*Table 2*). Furthermore, the population of Germany declined at an average annual rate of -0.1% during this period, not materially different from Japan, whose population remained stable (*Table 1*).

Indeed, under the Cobb-Douglas production function, a declining birthrate and aging population does not necessarily have a negative influence on the per capita real GDP (Y/P) growth rate, representing prosperity per person, as described in the formula below:

$$\frac{Y}{P} = A \left(\frac{K}{L} \right)^\alpha \times \frac{L}{P}$$

$$\Delta \ln \left(\frac{Y}{P} \right) = \Delta \ln A + \alpha \Delta \ln \left(\frac{K}{L} \right) + \Delta \ln \left(\frac{L}{P} \right)$$

In recent years the population (P) of Japan has remained stable while the aging population has already led to a decline in labor input (L) since the late 1990s, and therefore a decline in the ratio of labor input to population (L/P). Taking this point in isolation, population decline caused by a declining birthrate and an aging population should depress the per capita real GDP growth rate. On the other hand, when factoring in the growth rate of total factor productivity (A) and capital input (K), a decline in labor input increases the capital-labor ratio, propping up the per capita real GDP growth rate. In this way, the influence of the declining birthrate and aging population on the per capita real GDP growth rate is not uniform.

Also, the declining birthrate and aging population do not necessarily lead to deflation. Some intellectuals insist that population decline leads inevitably to a slump in domestic demand that aggravates the current situation of oversupply and worsens deflation, forgetting that a decline in population and labor input also constrains the growth of supply capacity.

Because the period when Japan’s declining birthrate and aging population became tangible coincided with the period of stagnation following the collapse of the economic bubble, the pessimistic notion that a declining birthrate and an aging population made an economic downturn inevitable came to be taken for granted. But economic stagnation is not preordained.

As can be seen from the observations above, Japan’s task in looking ahead to the next decade is to bring an end to deflation, the primary driver of the current sense of stagnation. Below I would like to look at other issues that, in light of the production function described above, can raise the prosperity per person.

Let us look first at recent trends in the ratio of labor input to population (L/P). To remove the influence of business cycle fluctuations, L is the labor force in this paper. Although steadily falling since a peak of 53.8% in 1997, the rate of decline in the ratio of labor input to population has contracted from 1.3 points for the 2001–2005 period to 0.6 points for the 2006–2010 period. During this same period, the old age dependency ratio has risen from 27.6% in 2000 to 32.5% in 2005 to 38.3% in 2010, suggesting that, if anything, the aging of the population accelerated during the 2006–2010 period.

That the rate of decline in the ratio of labor input to population shrank despite the acceleration in the aging of the population is due to an increased labor force participation rate for certain sex and age categories. The labor force participation rate for males in their 60s rose markedly for the 2006–2010 period, particularly among those aged 60–64 (*Table 3*). A major influence was the requirement, a result of revisions to the Law Concerning Stabilization of Employment of Older Persons, that the retirement age for men be raised to 65 beginning on April 1, 2006 to accommodate the increase in the age at which pension benefits start, and for the adoption of systems for continued employment.

In contrast, the labor force participation rate for young people aged 15 to 24 is on the decline. This is partly due to the popularization of higher education as more and more people advance to university and graduate school, but given the sharp rise in unemployment among those aged 20–24, the protracted job shortage also seems to be casting a long shadow (*Table 4*). Furthermore, the rate of irregular employment is rising among young people who do manage to find jobs. This situation regarding employment for young people may have a negative impact on medium- and long-term economic growth; periods of extended unemployment at an age when people should be undergoing various kinds of training as part of the workforce inhibit the accumulation of human capital and have a negative influence on total factor productivity.

Today the government is considering requiring the rehiring of all workers up to the age of 65 who wish to continue to work. The existing system does not require continued employment for all those who want it, but the new rules would.

I oppose this policy, but not out of concern that it would take even more jobs away from the young. Rather, I believe the government should provide re-employment support that encourages people to apply their talents at new workplaces after retirement at age 60. In order to increase total factor productivity, it is important that the breakdown of the labor force adjusts to accommodate changes in industrial structure. Increasing the number of older people who utilize their accumulated human capital in different industries after retirement is sure to lead to improved total factor productivity. This would also result in providing young people with the opportunity to accumulate human capital of their own.

TABLE 3

Labor force participation rate by age group

Male	Total	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70+
2000CY	76.4	18.4	72.7	95.8	97.7	97.8	97.7	97.3	96.7	94.2	72.6	51.1	24.3
2005CY	73.3	16.2	68.6	93.6	96.4	97.0	97.0	96.7	95.7	93.6	70.3	46.7	21.1
2010CY	71.6	14.5	67.1	94.2	96.2	96.7	96.8	97.0	95.8	92.8	76.0	48.9	19.6
Female	Total	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70+
2000CY	49.3	16.6	72.7	69.9	57.1	61.4	69.3	71.8	68.2	58.7	39.5	25.4	9.8
2005CY	48.4	16.5	69.8	74.9	62.7	63.0	71.0	73.9	68.8	60.0	40.1	24.0	8.7
2010CY	48.5	15.9	69.4	77.1	67.8	66.2	71.6	75.8	72.8	63.3	45.7	27.4	8.4

Source: Ministry of Internal Affairs and Communications

TABLE 4

Unemployment rate by age group

Male	Total	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70+
2000CY	4.9	14.1	9.6	5.8	4.2	3.0	2.9	3.2	3.8	4.5	10.4	4.7	1.4
2005CY	4.6	10.9	9.7	6.4	4.2	3.7	3.3	2.9	3.3	4.3	6.2	3.7	1.3
2010CY	5.4	11.1	10.3	7.8	5.4	4.4	4.0	4.1	4.1	5.0	7.1	4.7	1.8
Female	Total	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70+
2000CY	4.5	9.8	7.5	6.7	6.0	4.1	3.3	3.1	3.1	3.1	4.5	1.1	na
2005CY	4.2	9.4	6.9	6.1	6.3	4.7	3.5	2.8	2.9	2.6	2.8	1.1	na
2010CY	4.6	8.5	7.9	6.1	5.4	5.4	4.6	4.0	3.2	3.2	3.5	1.7	1.0

Source: Ministry of Internal Affairs and Communications

As described above, in recent years the decline in the ratio of labor input to population (L/P) has been held in check by promoting employment for older people. In order to increase medium- and long-term growth going forward, however, there is a need for measures that emphasize work for young people and for a change of approach in promoting work for older people.

Room to Accelerate Growth through Infusion of New Blood

Next, I would like to turn to the capital-labor ratio (K/L), which has the potential to prop up the per capita real GDP growth rate. Annual corporate capital investment, the key to capital input (K), has been stagnant in recent years.

One reason often given for this stagnation in capital investment is that the shrinking population that results from a declining birthrate and aging population precludes any hope of expansion in domestic demand. Although this certainly cannot be discounted as a factor, capital investment can be used to replace old, inefficient equipment and facilities to increase total factor productivity and energy-efficiency. It is often noted that the recent slump in capital investment has led to an aging of equipment and facilities that reduces total factor productivity.

One of the causes of stagnation in capital investment, despite the means being available, is the deflation that has continued since the late 1990s. In a period of deflation, it makes more sense to defer capital investment and hold on to cash. For this reason, too, there is a pressing need to put an end to deflation. Another important element in increasing total factor productivity is for both labor and capital to smoothly transition to growth areas.

The center for expanding domestic demand in Japan, however, is the highly regulated field of nursing and healthcare, and the country faces a dilemma insofar as this expansion of demand is directly connected to the financial problems described below. One

way out of the current situation may be the Japanese-style integrated healthcare networks (IHN) advocated by Yukihiro Matsuyama, research director of the Canon Institute for Global Studies. Already promoted in Europe and the US, IHNs are non-profit networks that seek to seamlessly and efficiently provide local residents with the healthcare they need through the vertical integration of healthcare business entities responsible for a variety of different functions such as acute care, rehabilitation, outpatient services, testing, and home care. Vertical integration encourages information-sharing, and the active IT investment that results can also contribute to the discovery of new medicines and medical technologies. Matsuyama argues that Japan-style IHNs should be promoted through consolidation of regional public healthcare institutions. He suggests that this would not only strengthen the system for providing healthcare but also contribute to its financial health by eliminating waste such as duplicate investment in equipment.

Improving the environment for investment through deregulation is also important. For example, in the wake of the nuclear power plant accident there is growing demand for the development of new energy sources, making this an area ripe for new investment that could be encouraged by rebuilding the infrastructure to separate electrical power production from power distribution and transmission. In addition, increasing trade openness (the ratio of trade to GDP) through trade liberalization would also probably be an effective way to ride the growth of the world economy.

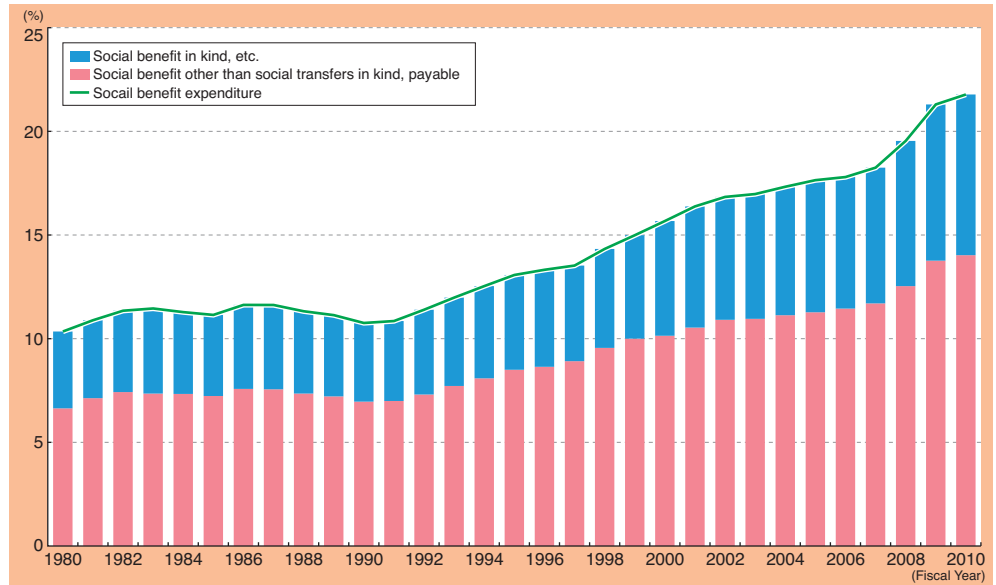
Re-think Content of Comprehensive Reform of Social Security & Tax

One of the reasons the declining birthrate and aging population are thought to inhibit economic growth is the idea that a growing social security burden centered on working households will weigh down economic activity.

CHART

Social benefit Expenditure as percentage of GDP

In fact, growth in social benefit expenditure for the 2001–2010 period was just under 3% annually (*Chart*). Both social benefits in kind, which include healthcare and nursing services, and social benefits other than social transfers in kind, which include pensions and social aid, grew at roughly the same rate. Because nominal GDP fell during this period, tax and social insurance revenues were stagnant. The administration of Jun'ichiro Koizumi worked to reduce public investment but any gains were drowned out by growth in social benefit expenditure, preventing a reduction in the fiscal deficit. This is one of the reasons the government now seeks to raise the consumption tax rate.



Source: Japan Cabinet Office, National Accounts for 2009 & 2010

Because an aging population leads to an increase in the population of pensioners and those susceptible to illness, an increase in social benefit expenditure is in some measure unavoidable. Nevertheless, recent policy failures in Japan have only increased the social security burden. The December 2011 draft plan for Comprehensive Reform of Social Security and Tax also has a number of problems.

For example, until now cuts to pension distributions in accordance with falling prices have been inadequately implemented. According to preliminary calculations by the Ministry of Health, Labour, and Welfare, the pension level for fiscal 2011 was 2.5% higher than it should have been; cumulative overpayments are said to reach 7 trillion yen. The draft plan for integrated tax and social security reform incorporates a reduction to the rightful level, but it will take three years and there is no provision to demand the return of excess distributions.

In the healthcare arena, too, reforms that would be painful for older people have been postponed. Proposals that were shelved in the draft reforms include a flat 100-yen surcharge per outpatient visit to prevent needless consultations and raising the out-of-pocket charge for those aged 70–74 to from the 10% where it has remained to the 20% that is on the books. The financial deterioration that results from such postponements will be passed on to the working generation.

Meanwhile, the draft Comprehensive Reform of Social Security and Tax incorporates additional pension benefits for low-income earners. This is highly problematic from the perspective of fairness given retention of the disparities inherent in the *kyuoyon* (9-6-4) problem, whereby taxes are paid based on an assessment equal to 90% of income for salaried workers, 60% of income for the self-employed, and 40% for agricultural, forestry and fisheries income. Consideration for low-income earners is also a factor in the effort to raise the consumption tax rate to cover increased social benefit expenditures, but this, too, suffers from similar problems. Adoption of a system of taxpayer identification numbers should come first.

Are Older People Really Obstinate?

The article from *The Economist* cited in the beginning claims, “In short, Japan’s economy works better for those middle-aged and older than it does for the young.” The points raised in this paper differ from those in that article but many aspects of its argument are valid. Newspapers in Japan report that postponement of the draft Comprehensive Reform of Social Security and Tax was due to the “objections of Democratic Party Diet members with strong concerns about older people.”

But are the politicians actually conveying the facts to the older people concerned? For example, how many older people fully understand that deflation has increased the real value of their pension amounts, or that their health insurance is financed almost entirely through support from the working generation? Isn’t the government blaming older people as obstinate while fleeing from its responsibility to persuade or decide? As of 2010 those aged 65 or over already make up more than 20% of the population; by 2020 they will reach nearly 30%. The time has come to ask not only for inter-generational support by the working generation but also for intra-generational support by the elderly. The politicians must not run forever.

When it comes to growth strategy, one often hears that the government should nurture new industries. As discussed in this paper, however, the important thing is to improve the environment for growth. I believe that providing space for creativity and innovation through deregulation and structural reforms, without placing an excessive burden on the working generation and its core of young people, will lead to bullish growth over the next decade and a healthier economy for Japan. **JS**

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