

“no-lifting policy” implemented by the Australian Nursing Association,³ care workers were prohibited from lifting non-care workers and they became legally required to use a mobility crane robot. In fact, according to the Victorian Nurses Back Injury Prevention Project by the Ministry of Health, Labour and Welfare in Victoria, the no-lifting program has reduced the number of back injuries by 48 percent, reduced financial loss due to injuries by 74 percent, and reduced costs to deal with worker complaints by 54 percent. According to estimates by the Association for Technical Aids (2012), within the annual funding of approximately 930 million yen relating to care for the elderly in Victoria, Australia, the funds to purchase equipment, such as lifting equipment, actually constitutes more than 20 percent, at 200 million yen. If this development of improving the working environments of care workers spreads, it is extremely likely that it will spread to some long-term care facilities in Japan too, and the use of robots to assist care workers will take a dramatic leap forward on a global scale.

2. Source of industrial promotion

There is a need for financial support from the government for an industrial policy to ensure the sustainability of the CMM. In the previous section, an overview is provided of the mechanism for industrial promotion. In addition, it is essential to support industrial promotion, such as with subsidies and regulatory reform, to industrialize the responses to the care needs that have been ascertained. In the field of long-term care, in which demand is expected to increase rapidly in the context of declining birthrates and aging populations in advanced countries, Japan is the only country that is trying to find a path to promote industry in order to raise productivity. Indeed, among these countries, some, such as the United States, Germany, Switzerland, and South Korea, have competitive advantages in such fields as robots and mobility. To grow long-term care-related industries, urgent tasks are to utilize the experience of care workers to support research and development and field trials, and to promote the use of welfare equipment and robots, as well as to improve industrial productivity, and therefore, huge investment to achieve competitive advantage in the market is required to complete these tasks prior to the rivals.

However, although in general the shared recognition is that long-term care is an industrial growth field, cautious discussions have continued on financial support by governments; in other words, government financing is a problem.

Japanese government bonds had an outstanding balance of around 883 trillion yen, according to preliminary figures at the end of March 2015, which is close to 200 percent of GDP (Bank of Japan, 2015). Based on this, the Japanese government is in a state of financial crisis. Therefore, it is argued that as social security-related expenses are set to continue to increase, it will be difficult to increase public spending further in order to grow the long-term care-related industries. Indeed, at first glance this argument seems reasonable and valid.

However, in the first place, it is logically impossible for a such a country as Japan to default; Japan issues government bonds denominated in its own

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currency and has currency issuance rights in currencies other than its own, such as for the Eurozone, while the risk of the deterioration of government finances is limited to rising prices (inflation). Stiglitz (2012: 4) said the idea that [t]he state budget resembles the family budget is nothing more than a myth, explaining this as follows. During a recession when unemployment is high, if the state increases spending and supports the creation of demand, production expands and jobs are created. As a result, the amount of GDP increase will be several times the government expenditure amount, and tax revenues will increase. Thus, it is not necessary to worry about a government financial deficit.

In addition, currently, Japan is in a uniquely ideal environment for increasing public investment through issuing government bonds, as regardless of monetary policy, prices are barely rising (there is practically no inflation). First, there have been no price rises despite Japan's adoption of an ultra-low interest rate close to zero for many years, and in this interest rate climate, prices should rise, as, inherently, the purpose of companies is to maximize profits, and thus, they borrow funds for investment en masse. Next, particularly after the round of large-scale monetary easing in 2013, the Bank of Japan has targeted an inflation rate of around 2 percent, and even though the money stock has increased considerably, a rise in prices has barely been seen. An increase in the money stock damages the scarcity of money, and therefore, fundamentally, both companies and households should stop saving and undertake purchasing and investment. Despite this, prices have hardly risen at all. Moreover, recently, the government has been accumulating a balance of government bonds of up to around 200 percent of GDP; despite this, and contrary to fears about rising interest rates expressed by many economists and analysts, interest rates (yield) on government bonds have continued to fall, and have not risen even once (Figure 9.5).

monetary base



Figure 9.5 Interest rates of Japanese government bonds (10 years)

Source: Japan Bond Trading (2017)

The backdrop to this environment is economic deflation, which is different to inflation on which existing economics is premised. This phenomenon rarely occurs, happening “only once every few decades” (Koo, 2009), and characteristically it appears after the collapse of a bubble economy. In other words, today, companies and households that took on large amounts of debt due to investment from borrowing during the bubble period are “once bitten, twice shy” and have become excessively fearful about borrowing. Of course, if we consider each household and company from a micro viewpoint, the choice of not to borrow is not necessarily a bad one. There is also the idea that it is better not to borrow at all. However, if this were taken to the extreme and implemented collectively by many economic agents, the damage caused to the economy as a whole would be immeasurable. It would be, so to speak, a fallacy of composition. Even if the government were to implement policy to lower the interest rate, the “once bitten” households and companies still would not borrow, and even if the money stock were to increase, it would have practically no effect. Instead of borrowing, households and companies would rush to accumulate savings, and the banks’ negative spread (for banks, deposits become liabilities with payment interest rates) increases unilaterally. For the banks, although they have an abundance of funds, there are no borrowers for them to lend to, and inevitably, they choose to purchase government bonds. As this happens all at once, the yield on government bonds steadily declines. This deflationary mechanism has been explained as “debt deflation” by Fisher (1933) up to the point of the fallacy of composition, and as “balance sheet recession” for the mechanism as a whole, including after that point, by Koo (2009, 2014).

monetary base

Thus, is it possible that the yields on government bonds and treasury bills will rise in the future? The answer is of course “yes,” but even if they do so, it would not seem to be that much of a problem. Due to deflation in the economy, the yield on government bonds declines even when large amounts of funds are being accumulated. About 95 percent of the holders of Japanese government bonds and treasury bills are domestic institutions and individuals, but the current situation is that they are unavoidably purchasing Japanese government bonds, as they are not lending funds for purposes other than this. If the Japanese economy escapes from the deflationary spiral (i.e., if demand recovers and lenders of funds to the private sector increase) the institutions and individuals that previously purchased government bonds might refrain from doing so, and instead lend funds to the private sector, which offers higher yields. In this case, the yield on government bonds will definitely rise. However, at the same time, government tax revenues will rise from the recovery in private-sector demand, and thus, the rate at which the government relies on the issuance of new government bonds will already have decreased considerably.

In response to the opinion that is strongly opposed to fiscal stimulus measures through the new issue of government bonds, in the final analysis, we observe that in recent years, government finances have become substantially fiscally sound. Figures 9.6 and 9.7 show the breakdowns of the holders of government bonds in 2011 and 2016, respectively. As these tables show, although the outstanding