



ADB Working Paper Series

**Three Arrows of “Abenomics” and the
Structural Reform of Japan:
Inflation Targeting Policy of the Central Bank,
Fiscal Consolidation, and Growth Strategy**

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Abstract

“Abenomics” refers to the economic policies advocated by Prime Minister Shinzo Abe who became prime minister of Japan for a second time when his party, the Liberal Democratic Party, won an overwhelming majority at the general election in December 2012. Abenomics has “three arrows”: (i) aggressive monetary policy, (ii) fiscal consolidation, and (iii) growth strategy. The Japanese economy faces an aging population and expanding social welfare expenses. No other country has experienced Japan’s rapid growth of retired people. In this paper we will explain these three aspects of Abenomics and the current state of the Japanese economy, and examine what further remedies may be required if Japan is to recover from its long-term deflation. We look at such proposals as hometown investment trust funds and postponing of the retirement age through the introduction of a flexible wage rate system.

JEL Classification: E52, E62, G21

Contents

1.	Introduction	3
2.	The Flow of Funds in Japan	3
2.1	Diversification of Households' Asset Allocation.....	3
2.2	Required Reforms with Respect to the Aging Population.....	5
2.3	Allocation of Financial Assets of Pension Funds and Insurance Companies ..	6
2.4	Necessity for Review of Asset Management Fees.....	8
3.	Aggressive Monetary Policy and Fiscal Consolidation in Abenomics	8
3.1	Aggressive Monetary Policy	8
3.2	Fiscal Consolidation	10
4.	Growth Strategy	12
4.1	Growth Strategies of the Current Japanese Government	12
4.2	Home Town Investment Trust Funds: A Genuine Way to Foster Economic Growth	13
5.	Conclusion	18
	References	19

1. INTRODUCTION

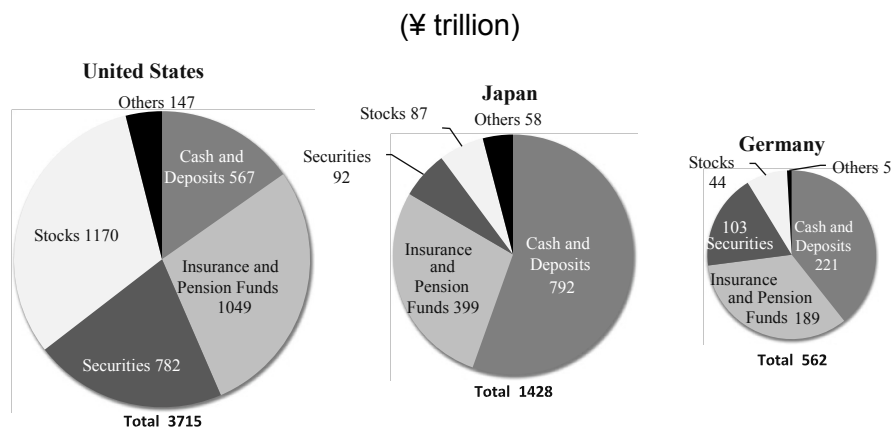
In the early 1990s, Japan’s real estate and stock market bubble burst and the economy went into a tailspin. Since then, Japan has suffered from sluggish economic growth. Two decades later, the collapse of Lehman Brothers in September 2008 and the global financial crisis threatened the entire world economy. In March 2011, a catastrophic earthquake and tsunami struck northeastern Japan. Japan’s government budget deficit-to-GDP ratio breached 200% in 2010, mainly because of the high share of pension fund payments in government spending, and the efficiency and effectiveness of public investment was called into question. The Japanese economy required a stimulus to escape from this pattern of long-term sluggish growth. In December 2012, the Liberal Democratic Party won a general election, making Shinzo Abe prime minister of Japan, a post that he had held in 2007. “Abenomics” refers to the economic policies advocated by the prime minister after the election, which were designed to revive the sluggish economy with “three arrows”: (i) fiscal consolidation, (ii) more aggressive monetary easing by the Bank of Japan, and (iii) structural reforms to boost Japan’s competitiveness and economic growth. By the end of February 2013 these measures had resulted in a 22% rise in the Tokyo Stock Price Index (Topix) since the election win. The Bank of Japan settled on an inflation target of 2%. In this paper we will explain the three arrows of Abenomics and the current state of the Japanese economy. We will also propose some further remedies that may be required for Japan to recover from its long-term deflation, such as hometown investment trust funds and postponing the retirement age by introducing a flexible wage rate system.

This paper is structured as follows: in the second section we review the flow of funds in Japan, in the third the aggressive monetary policies and fiscal consolidation being pursued under Abenomics, in the fourth Japan’s growth strategy, and in the fifth section we present some concluding remarks.

2. THE FLOW OF FUNDS IN JAPAN

2.1 Diversification of Households’ Asset Allocation

Figure 1: Financial Asset Allocations of the United States, Japan, and Germany



Source: Yoshino (2013).

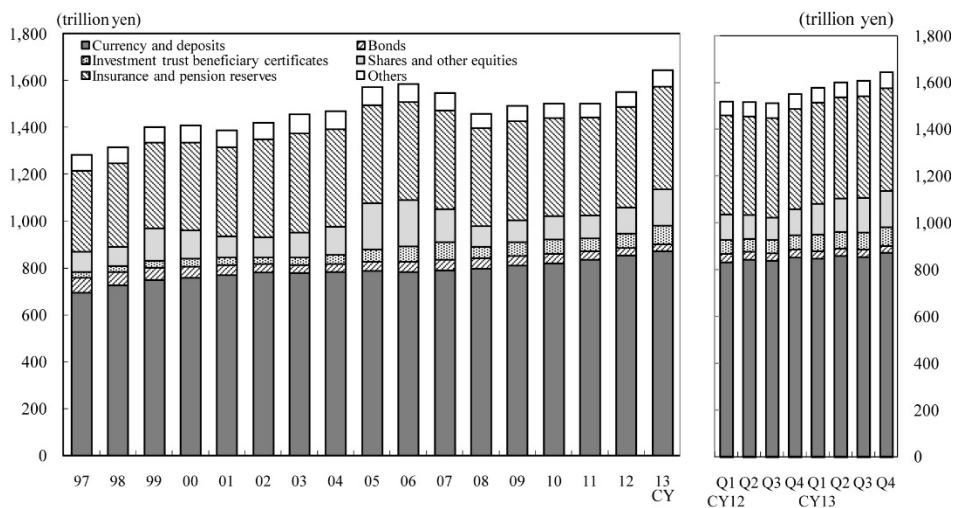
Figure 1 shows how individuals in the United States (US), Japan, and Germany distribute their financial assets, with the size of each pie chart representing the total amount of personal

financial assets. Personal financial assets in the US amount to ¥3,715 trillion, over two times the amount for Japan. In the US, cash and savings comprise around 15% of total financial assets. More than half of these deposits or loans have been securitized and many of them have been sold to other countries. That is why the cumulative debt of the US is much smaller than that of Japan. In Japan, cash and savings make up the majority of total assets (55%), followed by pension funds and insurance. The number of marketable securities and shares is extremely small, and if this falls further the problem will arise of who will provide money for corporations, environmental projects, and so on, in regions with possibilities for growth but which carry risk. If not handled properly, opportunities for growth could be overlooked, with the flow of funds through Japan's financial institutions going only to safe borrowers.

In contrast, individuals in the US and UK are much less risk averse. In the US, over half the number of assets are held in shares and marketable securities. In these countries, it appears that private individuals are motivated to take risks in the hope of high returns.

In this regard, Germany used to resemble Japan. However, with the emergence of investment trusts and the profitable sell-off of shares for privatization, there has been a shift to shares and investments (Yoshino and Mizoguchi 2013). In the case of privatizations in Japan, such as Nippon Telegraph and Telephone Corporation and Japan Tobacco, shares were sold, but their prices fell. Ultimately, individuals were not able to channel their investments into equities (Yoshino 2013).

Figure 2: Financial Assets Held by Households in Japan



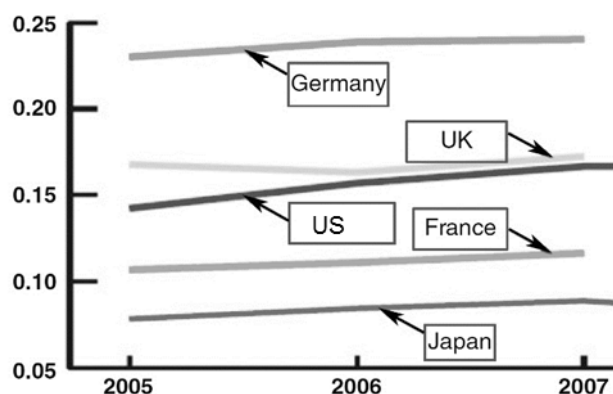
CY = calendar year.

Source: Bank of Japan.

Figure 2 shows the allocation of financial assets held by households in Japan. Judging from this figure, one consequence of Abenomics has been to diversify households' asset allocations from an overconcentration of deposits to much wider asset holdings. The government has introduced a new investment savings account for savings accounts, Nippon Individual Saving Account (NISA), which it hopes will widen the share of stocks and bonds in households' financial assets. The second largest share of Japanese households' assets is for insurance. In Japan, insurance is regarded as an instrument for long-term savings. Deposits are usually for short-term, but insurance is for 10, 20, or 30 years. Many Japanese people prefer to keep their financial assets as deposits and insurance.

Figure 3: Revenue Share of Financial Assets in Germany, the United Kingdom, the United States, France, and Japan

(income from interest and dividends divided by income)



UK = United Kingdom, US = United States.

Source: Yoshino (2013).

Figure 3 shows comparisons of income from interest and dividends divided by income, by country. Germany has the highest share, Japan the lowest. France and Germany were major supporters of the creation of the euro, making it simple for Germany to invest in the 18 countries in the eurozone, whenever Germany feels this will be profitable. That is why German dividends and interest payments are very high. Japan's low rate of return is due to (i) 20 years of slow growth, and (ii) the high value of the Japanese yen, which means that Japanese investments overseas have a low rate in terms of yen.

2.2 Required Reforms with Respect to the Aging Population

Table 1: Financial Assets of Japanese People by Age
(¥10,000)

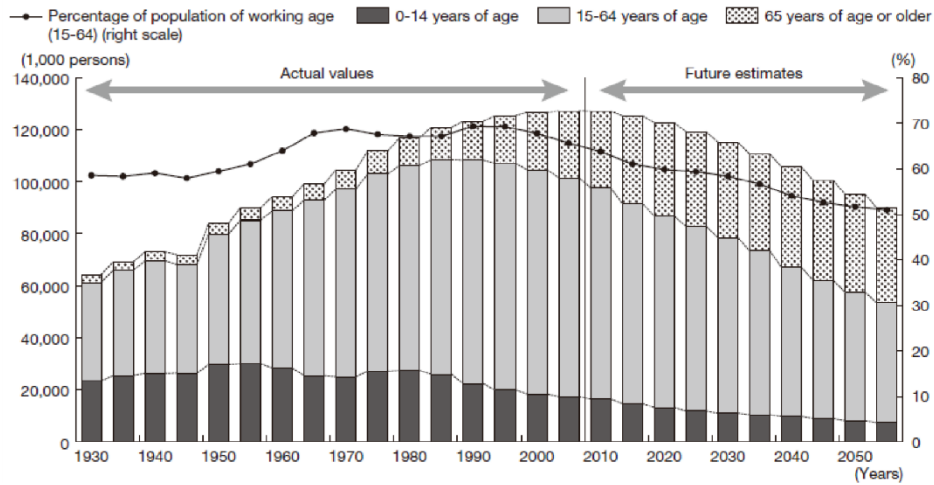
Age	Deposits	Insurance	Securities	Others	Total
Average	635	303	179	52	1169
20 years	266	26	40	10	342
30 years	298	122	77	40	537
40 years	355	241	85	62	743
50 years	533	344	126	65	1068
60 years	811	409	276	43	1539
70 years	1035	333	287	52	1707

Source: Bank of Japan.

As Table 1 shows, older people have the most assets in Japan, and young people have the fewest. Older people prefer to hold deposits, insurance, and government bonds, which are perceived as safe assets, rather than assets they regard as risky. This is another reason why

the share of cash and savings in Japanese households' financial assets is the largest and why this share is more than in many other countries (Figure 1).

Figure 4: Population Structure of Japan



Source: Yoshino (2013).

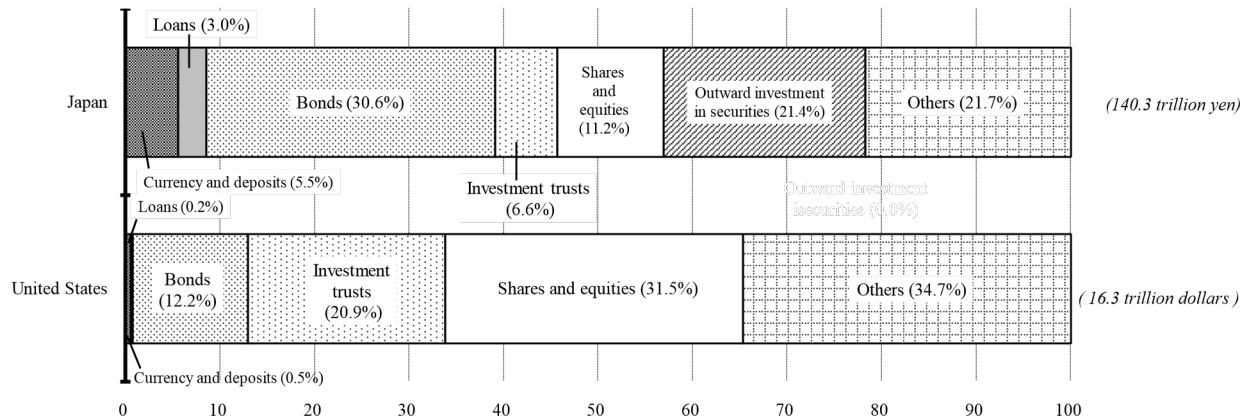
It is clear from Figure 4 that the working population, represented by the middle portion of each column, is diminishing drastically, and the elderly population, the top portion, is growing very rapidly. Elderly people have accumulated a huge amount of financial assets, compared to those held by the working population and most of these assets are held on deposit. One reason for this huge amount is that people who are now old worked when the Japanese economy was growing and booming. Their children have already graduated from university, so their education costs are zero and their housing expenditures are lower than those of the younger generation, whose income growth is very low yet have high expenditure for children and housing. As a result, the savings of younger people are low. Our first policy proposal therefore is to postpone the retirement age in order to increase the working age section of each column at the expense of the top portion. Our second is that wage rates should be based on productivity rather than seniority.

2.3 Allocation of Financial Assets of Pension Funds and Insurance Companies

Figure 5 shows the financial assets held by pension funds in Japan and the US. Unlike in the US, in Japan pension funds and insurance companies mainly invest in government bonds, and are very cautious about investing in stocks. There are several reasons for this. First, many investors rotate every 2 or 3 years and are not interested in long-term maximization. Second, Japanese pension funds are pay-as-you-go style and pension contributors cannot control how their funds should be invested. They let the fund managers how to allocate their funds to various financial products. By contrast, most US pensions are 401(k)-style and pension contributors decide what percentage can be invested in risky and safe assets, which means self-responsibility for pension management. In this case, with the contributor deciding the proportion of pension funds to be allocated to risky assets and the proportion to safe assets, the asset management company's job is very easy. If all the funds are aggregated, $x\%$ will be invested in risky assets and $1-x\%$ will be allocated to safe assets. In Japan, there is complete reliance on asset managers' decisions. There is no self-responsibility with regard to pension funds and

insurance companies. Hence, asset managers want to invest into government bonds, which are the safest assets.

Figure 5: Financial Assets Held by Pension Funds in Japan and the United States
 (% ratio of total financial assets)



Note: "Others" is the remainder after deducting currency and deposits, loans, bonds, investment trusts, shares and equities, and outward investment in securities (Japan only) from total financial assets. United States flow of funds data include both outward and domestic investment in securities.

Source: Bank of Japan.

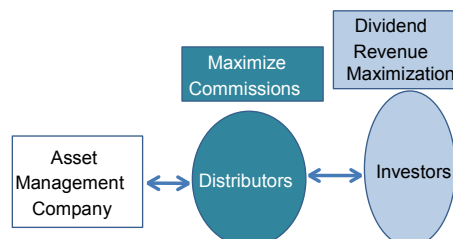
On the households' liability side, housing loans have the largest share, followed by auto loans; combined they represent about 80% of total household liabilities. The number of households in default began to diminish around 2007, the year a new money lending law came into effect. In essence, this law restricted the total amount of borrowing of each household to less than one-third of their annual income.

About 20 years ago, the Japanese microcredit interest rate was over 100%, about 10 years ago it was reduced to 29%, and since 2008 the government has reduced it to 20%. It has become difficult to be an authorized moneylender in Japan. Moneylenders now require a minimum amount of capital, and have to pass an examination. Consumer complaints about microcredits are now gathered by the Financial Services Agency (FSA). These rules and reforms were launched before Prime Minister Abe's term, but he has promoted them.

2.4 Necessity for Review of Asset Management Fees

Sales commissions of asset management companies need to be reviewed. The discussion here will refer to sales commissions for financial instruments.

Figure 6: Sales of Financial Products



Source: Yoshino (2013).

In Figure 6, households (“investors” in the figure) want to maximize their rates of return through dividends or interest payments. However, in the middle, distributors, such as banks or securities companies who sell financial products to individual investors, are looking for trust fees and commissions rather than rates of return. In many countries, including Japan, trust fees and commissions are based on principles and dividends. So even if the dividends are negative, distributors always receive commissions and fees. That is one reason why Japanese investors have tended to lose money in recent years. In order to change this system, distributors’ fees and commissions need to be based only on dividends so that investors and distributors are driven by the same maximization goals. Japan needs to change its fees and commissions structure so that banks and securities companies will share objectives with individual investors.

3. AGGRESSIVE MONETARY POLICY AND FISCAL CONSOLIDATION IN ABENOMICS

Generally, Abenomics has three arrows: (i) an aggressive monetary policy, (ii) fiscal consolidation, and (iii) a growth strategy.

3.1 Aggressive Monetary Policy

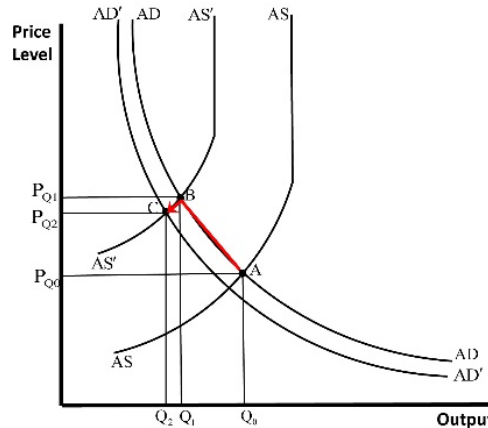
The government and the Bank of Japan (BOJ) delivered a joint statement on overcoming deflation and achieving sustainable economic growth on 22 January 2013. The BOJ set the price stability target at 2% (year-on-year rate of change in the consumer price index). The government expects the BOJ to implement aggressive monetary easing to achieve this target as soon as possible. The BOJ is buying long-term government bonds and increasing the monetary base, in contrast to previous attempts at an expansionary monetary policy which mainly focused on buying short-term government bonds.¹ Although prices started to rise after the BOJ

¹ On 4 April 2013, the BOJ announced that based on a decision by the Monetary Policy Meeting, it would purchase Japanese government bonds, effective 5 April 2013. This decision was taken at the first Monetary Policy Meeting after Haruhiko Kuroda had taken up his post as the new governor of the BOJ. Approximately ¥7.5 trillion per month of Japanese government bonds (2-year bonds, 5-year bonds, 10-year bonds, 20-year bonds, 30-year bonds, 40-year bonds, floating-rate bonds, and inflation-indexed bonds) would be purchased.

implemented monetary easing,² a major reason for this was higher energy prices,³ and at the time of writing the 2% target has not been achieved.

A simple aggregate supply and demand model will clarify the analysis of how higher energy prices created inflation in Japan.

Figure 7: How Higher Energy Prices Created Inflation in Japan?



AD = aggregate demand, AS = aggregate supply.

Note: We are assuming that there is technological progress that is why the output level in full employment also increased.

Source: Yoshino and Taghizadeh-Hesary (forthcoming-b).

In Figure 7, the economy initially is in equilibrium with price level P_{Q_0} and real output level Q_0 at point A. AD is the aggregate demand curve and AS stands for the aggregate supply curve. The aggregate supply curve is constructed with an increasing slope to show that at some real output level, it becomes difficult to increase real output despite increases in the general level of prices. At this output level, the economy achieves full employment. Let us suppose that the initial equilibrium, point A, is below the full employment level. When the relative price of energy resources (crude oil, natural gas, coal, etc.) increases, the aggregate supply curve shifts to AS' . The employment of existing labor and capital with a given nominal wage rate requires a higher general price for output if sufficient amounts of the higher-cost energy resources are to be used.

The *productivity* of existing capital and labor resources is reduced so that potential real output declines to Q_1 . In addition, the same rate of labor employment occurs only if real wages decline sufficiently to match the decline in productivity. This, in turn, happens only if the general level of prices rises sufficiently (P_{Q_1}) given the nominal wage rate. This moves the economy to the level

² Easy monetary policy reduces the interest rate, which increases demand in the commodities market, including the crude oil market, creating inflationary trends in these markets. Since Japan currently has a high level of demand for oil and LNG, these inflations in the energy market can disrupt the economic growth (Taghizadeh-Hesary and Yoshino 2013a, 2014; Yoshino and Taghizadeh-Hesary, forthcoming-a).

³ In March 2011, a 9.0 magnitude earthquake struck off the coast of Sendai, Japan, triggering a large tsunami. The damage to Japan resulted in an immediate shutdown of about 10 gigawatts of nuclear electric generating capacity. Between the 2011 Fukushima disaster and May 2012, Japan lost all of its nuclear capacity as a result of scheduled maintenance and lack of government approvals to return to operation. Japan replaced the significant loss of nuclear power with generation from imported natural gas, low-sulfur crude oil, fuel oil, and coal. This caused the price of electricity to rise for the government, utilities, and consumers, and caused inflation. Increases to the cost of fuel imports have resulted in Japan's top 10 utilities losing over \$30 billion in the past 2 years. Japan spent \$250 billion on total fuel imports in 2012, a third of the country's total import value. Japan consumed over 4.7 million barrels per day of oil in 2012. The increased cost of imported energy had a significant negative impact on the Japanese economy (Taghizadeh-Hesary and Yoshino 2013b; Taghizadeh-Hesary et al. 2013).

of output Q_1 and price level P_{Q1} . This point is indicated in Figure 7 at point B, which is a disequilibrium point. Given the same supply of labor services and existing plant and equipment, the output associated with full employment declines as producers reduce their use of relatively more expensive energy resources and as plant and equipment become economically obsolete.

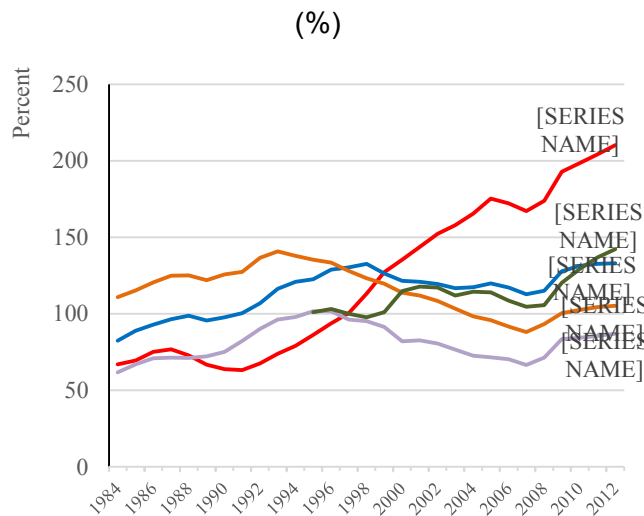
On the other hand, on the demand side of the economy, when the prices of energy resources rise, their consumption declines. Because of this drop in consumption, the aggregate demand curve shifts to AD' , which in turn reduces the prices from the previous disequilibrium level at P_{Q1} and sets them to P_{Q2} as the final equilibrium price. This lowers the output levels due to less consumption in the economy from the previous point of Q_1 to Q_2 . This point is indicated in Figure 7 at point C, which is the final equilibrium point.

The economy may not adjust instantaneously to point C, even if point C is the new equilibrium. For example, price rigidities due to slow-moving information or other transaction costs can keep nominal prices from adjusting quickly. Consequently, output and prices move along an adjustment path such as that indicated by the arrow in Figure 7.

3.2 Fiscal Consolidation

Figure 8 compares the debt to gross domestic product (GDP) ratio of selected OECD countries.

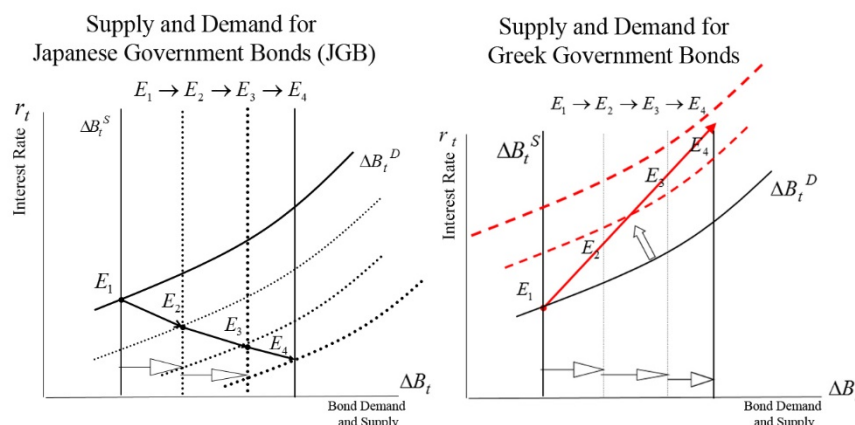
Figure 8: Gross Domestic Product/Debt Ratio of Selected Organisation for Economic Co-operation and Development Countries



Source: OECD Economic Outlook.

Japan's debt/GDP ratio is the highest among OECD countries, yet the Japanese economy is still sustained. Although the Greek government debt/GDP ratio is lower than that in Japan, Greece almost went bankrupt in 2012. The differences between Japan and Greece can be seen in the demand for government debt; more than 90% of Japanese government debt is held by domestic investors, whereas about 70% of Greek government debt is held by overseas investors.

Figure 9: The Government Bond Market, Japan and Greece



Source: Authors.

Figure 9 describes the supply of government bonds and demand for government debt. The vertical line shows the supply of government bonds in the primary market. No matter what the rate of interest is, the government has to finance its budget deficits. Therefore the supply of government bonds is vertical in the primary market. The demand for government bonds increases when the interest rate rises. Thus the demand curve for government bonds is denoted as an upward sloping demand curve in Figure 9.

Both Japan and Greece have increased their sales of government bonds, meaning that the supply curve of government bonds has shifted to the right in the primary market. Demand for Japanese government bonds is increasing from banks, insurance companies, and pension funds as the sluggish economy has reduced demand for corporate loans (Figure 9, left chart). Monetary easing has increased bank deposits and these funds have often been invested in government bonds. Japanese interest rates remain at a very low level.

Table 2: Holders of Japanese and Greek Government Bonds, 2011

Holders of Japanese Government Bonds	Percentage of Total	Holders of Greek Government Bonds	Percentage of Total
Banks and postal savings	45	Overseas investors	33
Life and non-life insurance	20	Domestic investors	21
Public pension funds	10	European Central Bank	18
Private pension funds	4	Bilateral loans	14
Bank of Japan	8	Social pension funds	6
Overseas investors	5	International Monetary Fund	5
Households	5	Greek domestic funds	3
Others	3		

Note: Overseas investors are highlighted for each country. For Greece, 70% of the debt is held by overseas investors, compared with 5% for Japan.

Source: Ministry of Finance, Japan, and *Financial Times*.

The holders of Japanese and Greek debt are entirely different (Table 2). About 70% of investors in Greek government bonds are overseas investors, and they are very quick to sell the Greek bonds if they feel risk is involved. However, for Japan, only 5% of the total issued Japanese government debt is held by overseas investors. As demand for Greek bonds has diminished, the demand curve of Greek bonds has shifted to the left, as is shown in Figure 9 (right chart), which has progressively raised the interest rate on Greek bonds. The Greek interest rate

increased to more than 20%, while the Japanese interest rate has remained at about 1% or less (Yoshino and Mizoguchi 2013).

It remains crucial for Japan to reduce its budget deficit. One way of doing this is to raise tax revenues and from April 2014 the consumption tax rate was increased from 5% to 8%. However, it is also important to reduce government spending. In order to reduce government expenditure on social welfare and pension funds, people will have to work longer and not rely on social security and pensions. This means the retirement age needs to be postponed and wage rates must be based on productivity rather than seniority. The Abe government is considering these issues.

In conclusion, the government will need to manage short-term fiscal policy in a timely and flexible manner, while firmly expressing the political will to restore Japan's fiscal balance over the medium and long term. The government knows that it has to stick to the current target of fiscal consolidation, which aims to cut the primary deficit of the central and local government in half between FY2010 and FY2015 and to achieve a fiscal surplus by FY2020.

4. GROWTH STRATEGY

The third arrow of Abenomics is growth strategy. Over the medium and long term, the Japanese government will take measures to strengthen the competitiveness of the economy, overcome energy constraints, and enhance the innovation platform based on a well-defined growth strategy, while at the same time accelerating the removal of domestic institutional obstacles, including regulations. In this section, we first review the growth strategies of the current government in Japan and then mention a new method for financing risky businesses and local small and medium-sized enterprises (SMEs), which has been proposed mainly by Naoyuki Yoshino, one of the authors of this paper, to the Japanese government.

4.1 Growth Strategies of the Current Japanese Government

In January 2014, during a National Diet meeting, Finance Minister Taro Aso identified 10 major aspects of Japan's growth strategy:

- (i) The government will encourage companies to increase wages of their employees, which will encourage the expansion of domestic consumption.
- (ii) In order to cover increasing social security spending, the government will increase taxes.⁴
- (iii) The government's deficit targets are: by 2015, the budget deficit over GDP ratio should be half of the 2010 level and by 2020 the ratio should be zero. In order to achieve this goal, the government will make its spending much more efficient.
- (iv) Since Japan's population is aging, the government will encourage greater female participation in the labor force, in part by improving child care facilities. The government will also encourage retired people to continue working.
- (v) Medical expenses for elderly people have been increasing drastically. The government will monitor prices of medicine and health care to ensure they reflect market prices. The government will put in place a regional medical care system.
- (vi) The government will ensure there is sufficient funding for disaster preparedness.

⁴ The rate of consumption tax in Japan was raised from 5% to 8% on 1 April 2014.

- (vii) The government will provide more scholarships to students, and increase expenditure on research and development.
- (viii) The government will provide sufficient funding for repairing aging infrastructure.
- (ix) The government will ensure SMEs have access to easy financing for research and development.
- (x) The farming population is aging and the government will provide sufficient funds to ensure an efficient and competitive agricultural sector.

4.2 Home Town Investment Trust Funds: A Genuine Way to Foster Economic Growth

After the housing bubble in Japan burst in the early 1990s, the blame was put on Japan's unique system of financial intermediation. This was called the "collateral principle" as lending criteria were based on the amount of collateral, rather than the viability of the project. Adopting Anglo-American ways of finance subsequently became a national objective in Japan. Two decades later, the Lehman crisis devastated the world economy, and Anglo-American financial methods were discredited. In March 2011, the Great East Japan Earthquake and tsunami struck Japan. During the long and painful recovery process, there was a strong desire among the Japanese people to contribute to the recovery process, as well as a simultaneous realization of the need to finance local SMEs and start-up companies. Many of these potential providers of capital were looking for opportunities to contribute in some way, rather than to benefit from high returns. There was also a clear need for a meeting place for these borrowers and lenders. Furthermore, the country's budget deficit-to-GDP ratio breached 200% in 2010, casting doubt on the efficiency and effectiveness of public investment—private financing with transparent performance monitoring was called for.

In order to overcome these issues, a new form of financing, the hometown investment trust fund (HIT), was proposed. The name reflects the goal of the fund: to connect fund providers and their hometowns. A committee at the Cabinet Office was created to study the proposal. There are three main advantages of HITs.

First, HITs are able to reinforce financial stability by reducing information asymmetry and sharing risk. The downfall of the pre-Lehman "originate and distribute" model was that borrower IOUs were hidden deep within complicated financial instruments. This made risk difficult to calculate and track, and once markets had lost faith in the ability of borrowers to pay back, nobody knew where the risks were and credit markets froze. Far from "distributing" risk to achieve financial stability, information ended up being as asymmetric as it could possibly have been. In contrast to this model, the HIT method encourages stability by reducing information asymmetry as much as possible. This is because households—and firms, if they want to invest in other companies—are keen to obtain information on the borrowing firms, mainly SMEs. The lenders are from the same "hometown" as the borrowers, or they may share a similar interest. There is also a low degree of scale and concentration, with both the lenders and borrowers being relatively small and dispersed. Accordingly, this form of financial intermediation allows risk to be distributed, but does not make it invisible in the process.

A second advantage of HIT is that it becomes a new source of much needed risk-capital. Financial regulations, notably the Bank of International Settlements (BIS) capital adequacy ratio requirements, are becoming more stringent as banks and other financial institutions are now seen as possible sources of instability. In a macro-prudential sense, this may help to reduce risk, but is detrimental to the supply of risk capital. Firms with little or no collateral are

particularly affected by this change, so the provision of a new and stable source of risk capital can be especially beneficial.

The third advantage of HIT is that it is project driven. Unlike other arrangements, such as the Grameen Bank, where investment destinations are determined later, HIT investors are able to choose the investment they would like to make from a pool of projects. Investors are not necessarily seeking high returns. Instead, they are motivated to invest and help in a project that they feel strongly about. This may be because the project is based in their hometown, or they may see significance in the investment's potential to reduce poverty, address environmental concerns, or assist in disaster recovery. In this way, investors may feel a level of personal satisfaction in their choice, and have the added benefit of actually being able to "see" the results. This is not possible with ordinary mutual funds, where investors are not able to track the destinations of their investments.

The drawbacks of these regional trust funds, however, are that they are not guaranteed by the Deposit Insurance Corporation and risks are borne by the investors. Steps must be taken to increase investor confidence to enable the HIT market to grow, such as ensuring that the terms of the fund are explained in detail to the investors, including the associated risks and where the funds will be invested.

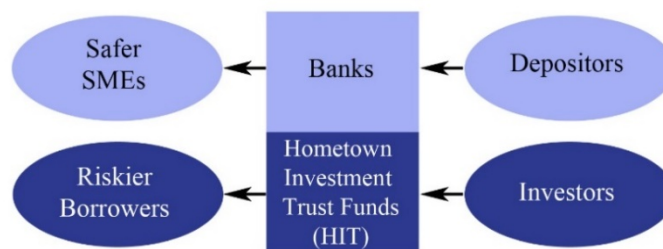
In Japan, two examples of regional funds are those covering (i) wind power generation and (ii) musicians. Currently, there are around 20 wind power generators in Japan, which were constructed through private–public partnerships. For these projects, local residents invested \$1000–\$5000, and in return they received annual dividends from the sales of electricity generated. Musicians' funds gather many small investors, with an average investment unit of \$150–\$500. If a musician becomes successful and his or her work sells well, the fund will benefit from a high rate of return. As a result, there are both successful and unsuccessful funds.

Project evaluations play an important role in the creation of regional funds, as some funds that have invested in risky ventures have failed to perform well. Globally, banks are becoming increasingly concerned about their risks following the implementation of Basel III (Yoshino and Hirano 2011). Since Asia is dominated by bank loans and capital markets are generally not well developed, this makes it even more difficult to raise venture capital and finance riskier projects. Consequently, project assessors must be used to identify potential non-performing investments that could lose money for investors. It should be noted, though, that some of Japan's regional funds are regarded as charities, and an opportunity for investors to contribute to their region and support venture businesses.

Banks are often not able to finance projects that carry high risks, even if the expected rates of return are high. However, if these projects are instead funded by regional funds, rather than by deposits transformed into bank loans, banks are able to receive money through the sales of regional funds by their branch offices, without having to worry about the creation of non-performing loans. Investors must be made fully aware of the risks when making their investments, but they may also receive a high rate of return, and this could increase investments into riskier projects that would otherwise not have been funded.

The success of its regional funds may help a bank to attract more investors. Conversely, if funds do not perform well, investors may decrease in future. In this way, through competition on the basis of the performance of the regional funds, the quality of projects and the risk-adjusted returns for investors can be improved (Yoshino 2012).

Figure 10: Bank-Based Small and Medium-Sized Enterprise Financing and Regional Financing to Riskier Borrowers



SME = small and medium-sized enterprise.

Source: Authors' illustration.

Figure 10 shows bank-based SME financing and regional financing to riskier borrowers. Bank loans go to relatively safe borrowers. HITs finance riskier projects.

4.2.1 Characteristics of Hometown Investment Trust Funds

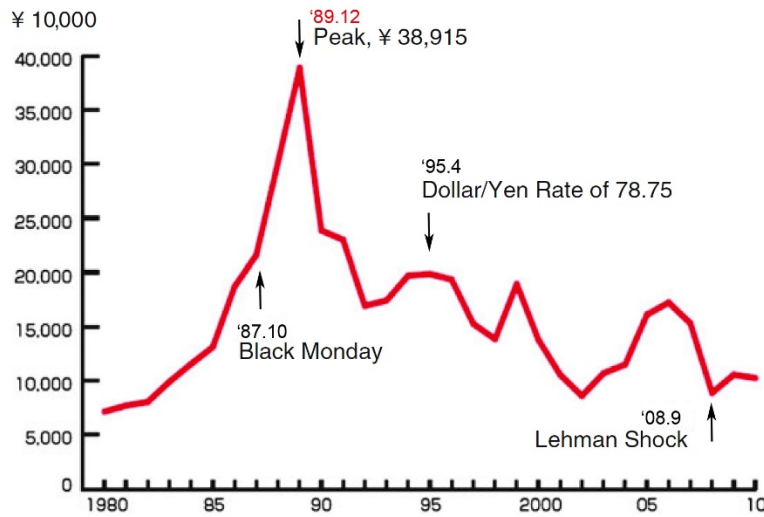
With ordinary investment trusts, an investment is made by a collection of investors who provide funds to a collection of borrowers, with the investors receiving dividends but not knowing specifically what their investment will be used for. The main feature of HITs is that the investor knows the identity of the borrower and the destination of the investment. The investor is able to choose to support his or her local region and borrowers and, by doing so, to use the fund as a form of both investment and donation.

The following sections provide examples of hometown investment trust funds.

4.2.2 Providing Development Funds to Local Regions

Until now, banks have been able to provide loans to local borrowers even if there is a certain level of risk involved. However, in future it will become more difficult for banks to take risks with money from deposits because of the stricter capital adequacy requirements put in place by the BIS. Funds from HITs must be used to complement the activities of banks and to provide capital for enterprises that have strong potential for future growth, even though they may carry some degree of risk. These investments may, for example, be used to fund solar power generation, or other projects that contribute to the environment or provide support to local communities.

Figure 11: Nikkei Stock Average



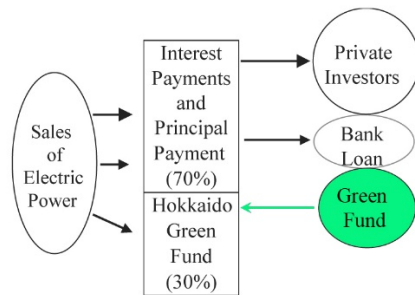
Source: Yoshino (2013).

Figure 11 shows a macro view of stock price movements in Japan. If the economy shrinks, then it follows that average stock prices will decrease. In this case, even investments made according to macro averages will never show any increase in productivity (return) so long as investors do not seek out good projects and invest in those that appear likely to grow. Japan is a country with little economic growth, and as a consequence stock price movements have been stagnant. In such circumstances, “hand-made” investments tailored for individual investors are required. Profitability (meaning returns) will not increase if focus is on average investments.

4.2.3 Use of Private-Sector Funds and the Optimal Mix of Public and Private Funds

Figure 12 shows the forms in which private and public funds invested in wind power. Ideally, it would be preferable if all the funding came from the private sector.

Figure 12: Wind Power Trust Fund of Japan

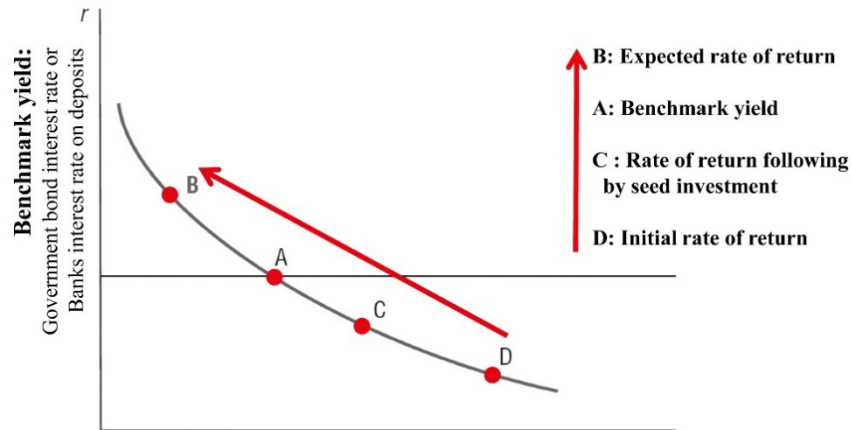


Source: Yoshino (2013).

However, in the case of enterprises that represent a public good, such as solar power panels, it is conceivable that public funds (from the national or local government) could be introduced in the form of matching funds or grants that would be combined with funds from private sector investors. In Figure 12, private sector funds represent 70% and public sector funds 30% of the total. If we suppose that all the proceeds from the investment project go to the private sector investors, and if we assume that, even though the profitability for the private sector investors will

not be high, it will increase if dividends do not have to be paid to the originators of the national government funds. This will make the investment attractive to private sector investors because it will offer an anticipated rate of return higher than the benchmark profitability shown by the horizontal line in Figure 13.

Figure 13: Rate of Return on Each Project



Source: Authors' illustration.

If private and public sector funds are combined as described, there may be a leveraging effect. This is because investors can be told that the project has official government support, and also that, even if the rate of return is low, interest and dividends need not be paid to the public investors, thereby increasing the rate of return for private sector investors. These two effects highlight the necessity of combining private and public funds. A third reason is that, through the introduction of private sector funds, project efficiency will be enhanced as lengthy, low-quality construction work will be avoided as the private sector alone would usually only concentrate on generating profits as quickly as possible (Yoshino 2010).

4.2.4 Stable Supply of Risk Capital in Japan and Asia

Like Japan, the rest of Asia has financial systems centered around banks that may offer microcredit, although at high interest rates. Difficult access to credit can prove a significant obstacle for SMEs and other smaller borrowers. The HIT funds discussed above can potentially be important alternatives to microcredit and venture capital in Asia. In future, it may also be possible to invest in infrastructure investment trusts.

In the US and Europe, venture capital and other funds are usually short term in nature. For large road or other infrastructure projects in Japan and throughout Asia, long-term funding from HIT funds could be a useful new source of funding, although it remains to be seen whether HIT funds will be able to provide long-term funding for projects for 5 or 10 years, or even longer. Money from life insurance companies and pension funds is best suited to stable funding for the long term. If private pension funds also begin to participate, then demand will emerge in tandem for long-term HIT funds as places for them to invest. For HITs to engage in long-term fund management, an increase will be needed, on the fund-providing side, in the number of pension funds and life insurance companies that want long-term investment. In the case of Japan, pension funds and insurance companies will need to thoroughly assess the projects that will receive their investments through long-term HIT funds, such as infrastructure projects, and long-term hometown investments as they expand the range of their investments (Yoshino 2013).

5. CONCLUSION

In this paper, the current status of the Japanese economy was described, including Japan's government budget deficit-to-GDP ratio, which breached 200% in 2010; problems caused by Japan's aging population; the lack of efficiency and effectiveness of public investment; and the country's sluggish economic growth. In order to address some of these concerns, the government of Shinzo Abe, which was elected in December 2012, introduced a reform program called Abenomics, which aimed to revive the sluggish economy with "three arrows": fiscal consolidation, more aggressive monetary easing from the Bank of Japan, and structural reforms to boost Japan's competitiveness and economic growth

As for fiscal consolidation, the government aims to implement its short-term fiscal policy in a timely and flexible manner, while also firmly expressing the political will to restore the fiscal balance over the medium and long term by cutting the primary deficit of the central and local government in half between FY2010 and FY2015 and achieving a fiscal surplus by FY2020.

As for the second arrow, aggressive monetary policy, the BOJ set a price stability target of 2% (year-on-year rate of change in the consumer price index). The government expects the BOJ to implement aggressive monetary easing to achieve this target as soon as possible. Although prices started to rise after monetary easing, this was largely due to higher oil prices, and the 2% inflation rate target has still not been achieved. The current governor of the BOJ, Haruhiko Kuroda, is pursuing a monetary policy that involves buying long-term government bonds and increasing the monetary base (this is in contrast to the former government, when an expansionary monetary policy was mainly carried out by buying short-term government bonds).

In the third arrow, the growth strategy, the government has encouraged higher wages to encourage the expansion of domestic consumption; raised taxes in order to cover increasing social security spending; encouraged female participation in the labor force; considered postponing the retirement age because of the aging population; prepared for a transition to a regional medical care system for old people and taken measures to reduce their health care costs; provided sufficient budget for disaster preparedness; considered increasing the share of R&D and education in government expenditure; improved access to financing for SMEs; and considered carrying out agricultural reforms in order to overcome inefficiencies in the sector.

In the growth strategies section we explained a proposed new form of financial intermediation called the hometown investment trust, reflecting its goal to connect fund providers and their hometowns. One of the earliest proponents of this was Naoyuki Yoshino, co-author of this working paper. This new form of financial intermediation has been proposed to the Japanese government, which is currently considering it as a remedy to revive the sluggish growth of Japan.

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