

Japan: Selected Issues

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JAPAN

Selected Issues

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Approved by the Asia and Pacific Department

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EXECUTIVE SUMMARY

With reconstruction following the Great East Japan earthquake underway, Japan has laid out a plan for fiscal consolidation over the medium-term to bring down public debt. To solidify these welcome reforms, additional longer-term measures are needed and should focus on reigning in social spending and raising growth, which are the topics of the background papers for the 2012 Article IV consultation.

Chapter I presents an analysis of the effects of possible future pension reforms on fiscal consolidation and growth. Among various available options, increasing the pension eligibility age appears most attractive as it would help reduce the fiscal burden and stimulate economic activity by raising old-age labor force participation. Other options include “clawing back” a small portion of pension benefits from wealthy retirees, reducing the preferential tax treatment of pension benefit incomes, and collecting contributions from dependent spouses of employees. These options could reduce the public contribution to the public pension system by up to 1¼ percent of GDP by 2020.

Chapter II discusses the challenge of raising potential growth. Although productivity growth has been comparable to that in other countries, the decline in the labor force has lowered potential growth to below 1 percent. Higher growth is, however, needed to bring down Japan’s high debt-to-GDP ratio and to support continued job and income growth. The most promising avenue for increasing potential growth is to pursue mutually reinforcing structural reforms aimed at raising labor supply, deregulating protected domestic sectors, creating new growth sectors such as in energy, environment, health care services, establishing a more growth-supporting financial sector, and integrating further with Asia. International evidence shows that broad based reforms can raise potential growth by up to 1 percent over the course of a decade.

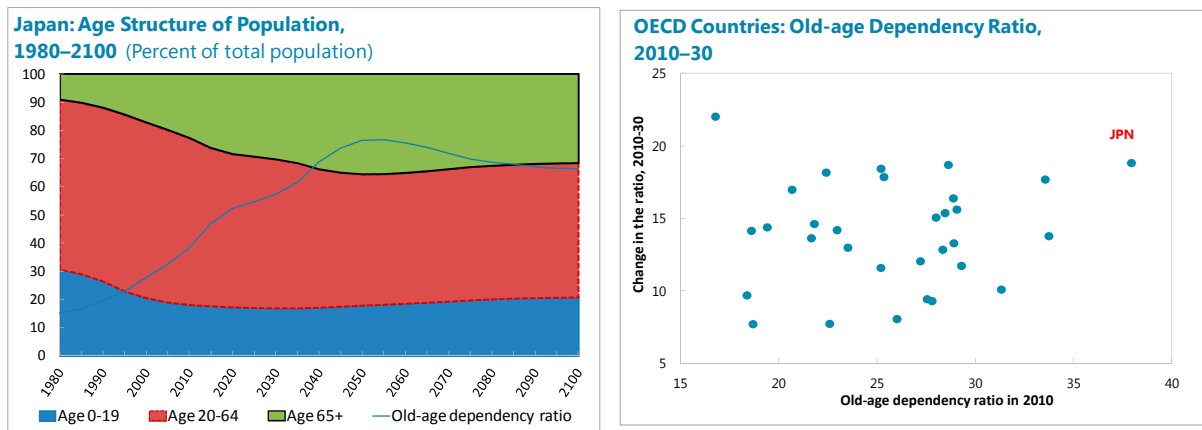
Chapter III discusses the role that the financial sector can play in supporting growth. While overall credit conditions have been accommodative, credit growth has remained weak, especially for SMEs and startups. At the same time, the financial needs of the private sector are changing with population aging and greater outward orientation. To raise growth and address these new needs the government should encourage financial institutions to enhance their credit risk assessment as public credit support measures are phased out, which would help SME growth and restructuring. At the same time, a deepening of capital markets could improve the availability of risk capital for the development of new markets and businesses, while removal of regulatory barriers could aid start-ups.

I. OPTIONS FOR PENSION REFORM IN JAPAN¹

A. Introduction and Main Findings

1. **Japan is taking the global lead in population aging.** Its life expectancy has increased over time to 83 years which is the highest in the world today. As baby boom generations (born in 1947–49) started retiring in 2007, the old-age population will continue to increase disproportionately in coming years. At the same time, the fertility rate declined markedly during the past decades. As a result, Japan’s old-age dependency ratio (the ratio of the population aged over 65 years to the working age population) reached the highest in the world and is expected to rise from 38 percent in 2010 to 57 percent in 2030 (Figure I.1).²

Figure I.1. Japan: Population Aging in Japan and OECD Countries¹



Sources: OECD (2011) and United Nations database.

¹ The old-age dependency ratio is defined as population of age 65 or higher divided by population of age 20–64.

2. **Containing social security spending is a key fiscal policy challenge in Japan.** Social security spending (mostly pension, medical, and old-aged care spending) has been rising steadily and now takes up nearly 55 percent of the total non-interest spending by the general government, reflecting the rapid population aging (Figure I.2). Although the increase in this spending will be moderate compared with other advanced countries (IMF, 2011; IMF, 2012), Japan needs to reduce its fiscal deficit (10 percent of GDP in 2012), which calls for rationalizing social security. Moreover, already large intergenerational imbalances (where younger generations bear a heavier fiscal burden than older generations) can be aggravated if reforms are delayed.³ Importantly, well-designed reforms would strengthen growth potential. In particular, raising the pension eligibility age could encourage continued participation in the labor force by aged workers, while reforms that reduce concerns about the sustainability

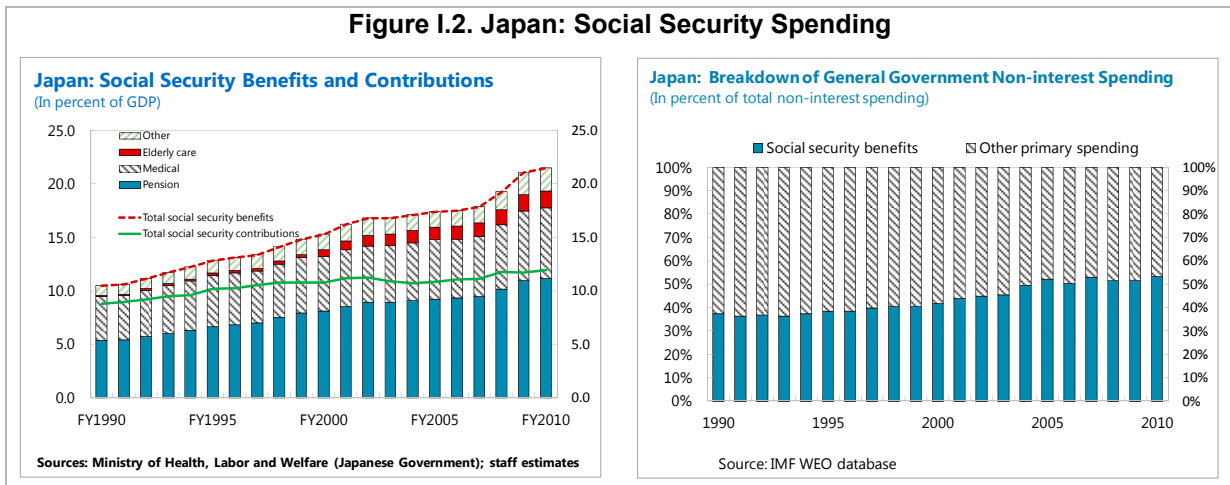
¹ Prepared by Kenichiro Kashiwase, Masahiro Nozaki (both FAD), and Kiichi Tokuoka (APD).

² South Korea is the only country where population aging advances more rapidly than Japan.

³ See forthcoming IMF Working Paper: K. Tokuoka “Intergenerational Implications of Fiscal Consolidation in Japan: An Approach Using A Lifecycle Overlapping Generations Model.”

of social security could reduce precautionary saving and lead to higher household consumption.

Figure I.2. Japan: Social Security Spending



3. **At the same time, it would be critical for Japan to strike a balance between achieving fiscal savings and providing social safety nets.** Japan's public pension plays an important role in helping reduce old-age poverty as the system has a redistributive feature, supported by a government subsidy of about 2 percent of GDP. Going forward, the 2004 pension reform (discussed in detail below) is projected to contain public pension spending relative to the pace of population aging. Against this background, a key issue is how further reform could preserve the public pension's role in providing social insurance while yielding fiscal savings.

4. **This paper focuses on the impact of various pension reform options on fiscal consolidation, equity, and economic growth.** The most attractive option is to increase the pension eligibility age in light of high and rising life expectancy in Japan. This would have a positive effect on economic growth in the long run by helping to raise labor force participation and would be relatively fair in sharing the burden of fiscal adjustment between young and old generations. Other attractive options include better targeting by "clawing back" a small portion of pension benefits from wealthy retirees, reducing preferential tax treatment of pension benefit incomes, and collecting contributions from dependent spouses of the Employees' Pension Insurance program (EPI)-eligible employees. These options could reduce the government annual subsidy by up to 1¼ percent of GDP by 2020. Across-the-board cuts in the replacement ratio and higher pension contributions are less desirable options. Cuts in the replacement ratio would undermine the pension's role in alleviating old-age poverty, while higher contributions would discourage labor market participation and aggravate already large intergenerational imbalances. Apart from parametric reforms to pension benefits and contributions, raising returns from public pension funds, including through further diversifying investments, could help enhance sustainability of the pension system and strengthen its role as a safety net.

5. **Japan would also need to contain non-pension social security spending.** Health spending is expected to rise faster than pension spending and increase by 1 percentage point of GDP during 2010–30, which would create additional pressure on public finances. Health spending could be contained by better targeting benefits to lower income households and increasing efficiency (for example, by relaxing entry of private institutions in the old-aged-care area and encouraging wider use of generic treatments). Raising contributions for higher income and old-aged households could also help ease fiscal pressure.

6. **This paper is organized as follows.** Section B describes the current public pension system and reviews recent reform efforts. Section C identifies reform options with estimated fiscal savings and discusses the effect on economic growth and intergenerational imbalances. This paper does not examine the issue of sustainability of Japan’s public pension system.

B. The Pension System and Past Reforms in Japan

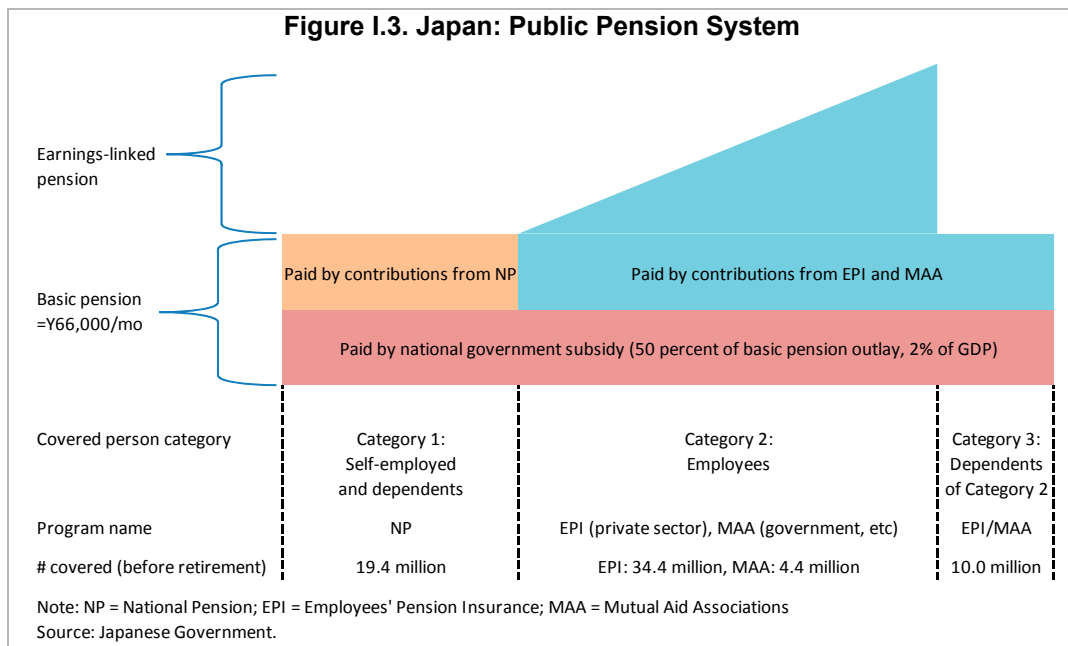
7. **Japan has a universal, defined-benefit public pension system.** Japan’s public pension is, in principle, a pay-as-you-go system. Pension benefit spending totaled 10.6 percent of GDP in FY2010, consisting of the old-age pension (8.9 percent of GDP), disability pension (0.4 percent of GDP), and survivor pension (1.3 percent of GDP). The system’s main characteristics are as follows (Figure I.3).

- **Participants.** All residents of age 20 or older are obliged to participate in the system and are grouped into three categories. Category 1 participants are self-employed and their spouses, and are covered by the National Pension (NP) program.⁴ Category 2 participants are employees of private sector enterprises and central and local governments, with private sector employees covered by the EPI program and government employees by the Mutual Aid Associations programs (MAAs).⁵ Category 3 participants are dependent spouses of Category 2 participants.
- **Contributions.** Category 1 participants pay flat rate contributions, while Category 2 participants contribute by paying payroll taxes (the payment is equally shared between an employee and an employer). The contribution rates are being raised through 2017 to JPY16,900 per month in 2004 prices (from JPY 15,020 per month in 2011) for Category 1 participants and to 18.3 percent of gross earnings (from 16.4 percent in 2011) for Category 2 participants, and remain at these levels thereafter. Category 3 participants are not obliged to contribute. Total pension contributions from households and employers reached 6.5 percent of GDP in FY2010.

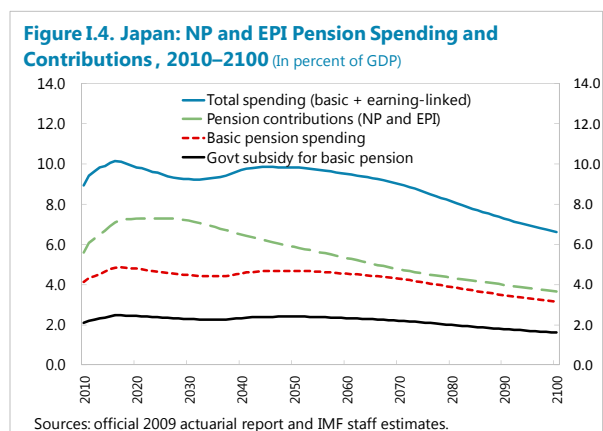
⁴ In 2007, it became clear that the government had lost track of some of the pension contribution records, which led to a loss of public confidence in the public pension system. Partly reflecting this, participation to the NP has been on a trend decline and fell from 64 percent in FY2007 to 60 percent in FY2010.

⁵ There is also a MAA for teachers in private schools.

- **Basic pension.** All participants are eligible to receive a flat-rate basic pension benefit.⁶ The central government provides a subsidy to finance half of the basic pension benefit payments. The rest is paid from pension contributions collected by the program to which participants belong, and a drawdown from a reserve fund if contributions are temporarily insufficient to cover the payment.
- **Earnings-linked pension.** Category 2 participants (in the EPI and the MAAs) receive earnings-linked benefits, in addition to the basic pension benefit.⁷ Category 1 and Category 3 participants are not eligible for this benefit. The payment is fully financed by contributions paid by Category 2 participants, and a drawdown from reserve funds, if necessary.



8. **The system was reformed substantially in 2004.** The reform introduced an automatic adjustment of benefit levels to changes in demographic structures—the so-called “macro indexing”—although it has not been activated yet (Box I.1). As a result, aggregate pension benefit expenditure and contributions from households and employers will not increase as a percent of GDP in the long run, despite rapid population aging (Figure I.4).



⁶ Those who have paid contributions for 25 years or more and have reached age 65 are eligible for basic old-age pension benefits. The benefit depends on the number of years for which contributions are paid.

⁷ The earnings-linked benefit is calculated from an individual’s lifetime average earnings and an accrual rate. The accrual rate for those who were born after April 1946 is 0.5481 percent per month.

9. **In addition, the 2004 reform increased the ratio of the government subsidy to the basic pension benefit from $\frac{1}{3}$ to $\frac{1}{2}$.** Consequently, the subsidy increased from $1\frac{1}{2}$ percent of GDP in 2008 to 2 percent of GDP in 2009, and is expected to remain around $2\text{--}2\frac{1}{2}$ percent of GDP in the medium and long run. While this helped put Japan's pension system on a sustainable footing, it has added to the spending pressure on the government.

C. Pension Reform Options to Reduce the Fiscal Burden

10. **In broad terms, three reform measures are available to improve pension finances:** an increase in the pension eligibility age, a reduction in the pension replacement ratio (benefit), or an increase in contributions. There are trade-offs across these measures; for example, a higher retirement eligibility age can be combined with lower contributions without negatively affecting pension finances. These options, however, differ in the impact on economic growth (see Box I.2) and intergenerational imbalances (Karam et al., 2010; Tokuoka, 2012; Kashiwase and Rizza, 2012).

11. **Reform measures recently proposed by the government are unlikely to generate fiscal savings.** In line with the tax and social security reform plan adopted in February 2012, the government plans to eliminate the past ad-hoc nominal freeze of pension benefits by 2014 (a precondition of macro indexing); extend the coverage of the EPI to part-time workers; and consolidate the EPI and the MAAs. On a net basis, these measures are not expected to reduce the fiscal burden.

12. **Some specific reform options to reduce the fiscal burden are presented in Table I.1,** alongside estimates of potential fiscal savings to reduce the government subsidy to the basic pension (discussed below in detail).⁸ While the focus of this paper is a reduction in the government subsidy, fiscal savings from pension reforms could also be used, for example, to reduce pension contributions (payroll taxes), which could improve incentives to work. Although reform of the earnings-linked pension would not reduce the government subsidy because the benefit is fully financed by contributions, it would complement reform of the basic pension, including by reducing the pension contribution rate, and could reduce the burden for employers and employees thereby stimulating economic activity.

Table I.1. Japan: Options to Reduce Government Subsidy for Basic Pension
(In percent of GDP)

	Annual savings in 2020
Raise basic pension eligibility age to 67	$\frac{1}{4}\text{--}\frac{1}{2}$
Reduce benefits for wealthy retirees	$\frac{1}{4}$
Eliminate preferential tax treatment for pension benefit income	$\frac{1}{4}\text{--}\frac{1}{3}$
Collect contributions from dependent spouses	$\frac{1}{4}\text{--}\frac{1}{2}$
Reduce replacement ratio across-the-board by 3 percentage points	$\frac{1}{2}$
Raise contribution (payroll tax) rate by 1 percentage point	$\frac{1}{2}$
Reduce contribution (payroll tax) rate by 1 percentage point	$-\frac{1}{2}$

Sources: IMF staff estimates.

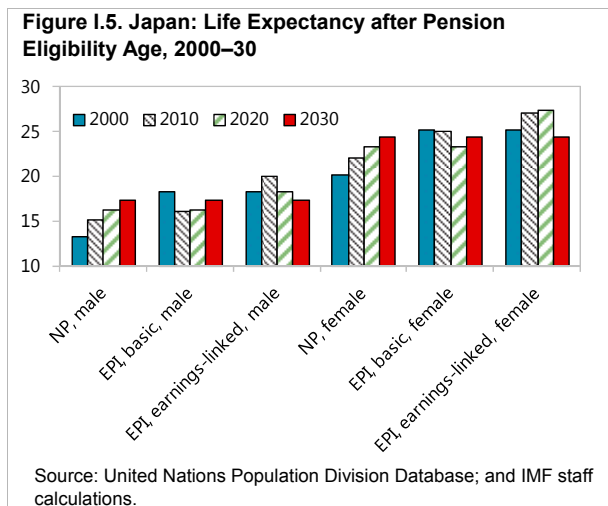
⁸ See the Appendix for data and methodologies.

Raise Pension Eligibility Age

13. **The pension eligibility age is being raised to 65.** The pace of the increase differs between the basic pension and the earnings-linked pension, by program (the NP or the EPI), and by gender. The eligibility age for the basic pension is currently 65 for the NP participants and is being raised to 65 by 2013 for male EPI participants (and by 2018 for female EPI participants). For the earnings-linked pension, the eligibility age is currently 60, and will be raised gradually to 65 for men during 2013–25 (and for women during 2018–30).

14. **A higher eligibility age for the basic pension would generate substantial fiscal savings.** Increasing the pension eligibility age for the basic pension to 67 for all categories of participants by 2020 would reduce the government subsidy to the basic pension by $\frac{1}{4}$ – $\frac{1}{2}$ percent of GDP by then (compared with the base case projection included in the 2009 actuarial review). If it were raised further to 69 by 2030, the fiscal savings could reach $\frac{3}{4}$ percent of GDP in 2030.

15. **Taking account of rising life expectancy, there is scope to increase the eligibility age.** Life expectancy at birth is expected to increase from 85.2 years to 89.4 years for women (from 78.3 years to 82.4 years for men) during 2000–30. For participants in the NP, life expectancy after the pension eligibility age is expected to increase by 4 years during this period, if the eligibility age remains constant at 65 (Figure I.5). For participants in the EPI, it will decline reflecting the gradual rise in the pension eligibility age, but from a much higher base in 2010 compared with the NP. Moreover, old-aged Japanese are expected to remain healthy and less likely to be disabled, which would allow them to make the choice to work longer. Sanderson and Scherbov (2010) showed that the ratio of adults with disability to those without disability in Japan is projected to rise only marginally to 13 percent by 2050 from 10 percent in 2005–10 despite the sharp rise in the (standard) old-age dependency ratio during this period.



16. **The gap between life expectancy and the pension eligibility age is larger in Japan than in most other countries.** As shown in the top row of Figure I.6, three OECD countries (Iceland, Norway, and the U.S.) have a higher pension eligibility age than Japan in 2010. By 2030, three other countries (Australia, Denmark, and U.K.) will set their eligibility age above 65. As other OECD countries also raise the eligibility age in line with longer life expectancy,⁹ the average pension eligibility age is expected to increase from 63.1 in 2010 to

⁹ During 2010–30, Australia will raise the pension eligibility age from 63.5 to 66, Denmark from 65 to 67, U.K. from 62.5 to 66, and U.S. from 66 to 67. Austria, Czech Republic, France, Greece, Hungary, Italy, South Korea, (continued...)

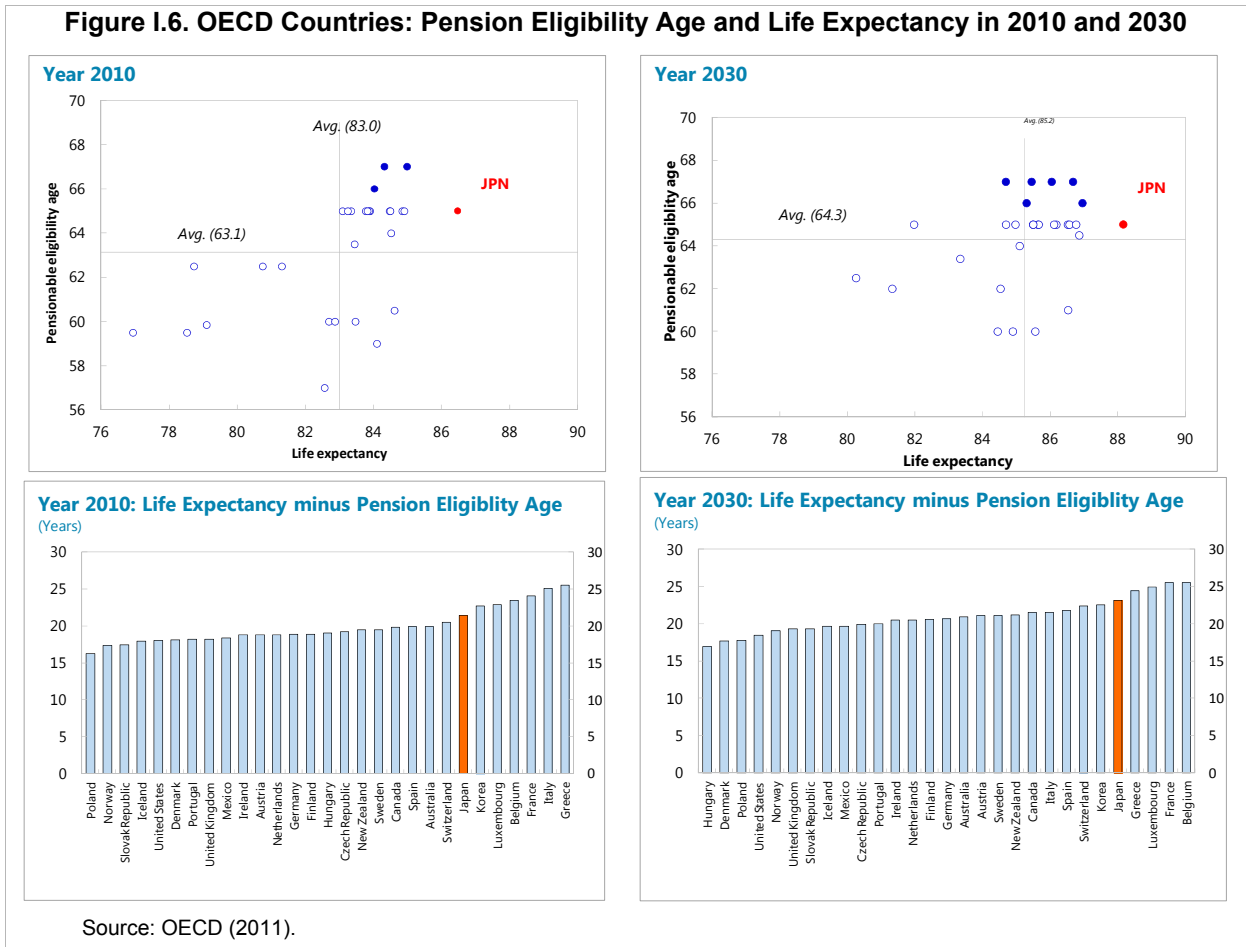
64.3 in 2030. While Japan continues to take the global lead in life expectancy, the pension eligibility age remains capped at 65.

17. **Raising the pension eligibility age would also have a positive effect on economic growth and could be fairer from an intergenerational resource perspective.** It would promote continued labor force participation of old-aged workers and raise consumption through improved lifetime earnings (Box I.2). Unlike the option of raising the contribution rate, the burden would be more equally shared between younger and older generations (Tokuoka, 2012). Although a higher pension eligibility age for the earnings-linked pension would not reduce the government subsidy, it would bolster long-run economic growth (by encouraging labor participation), lessen intergenerational imbalances, and complement the planned reform of the basic pension.¹⁰ It would also allow for a reduction in the contributions, thereby lowering labor costs and increasing household disposal income.

18. **An increase in the pension eligibility age should be accompanied by an expansion of the safety net, especially for those with disabilities.** Total spending for disability pension benefits amounted to 0.4 percent of GDP in Japan, which is low compared with other advanced countries (Momose, 2008). Disabled retirees will become vulnerable as macro indexing also reduces disability pension benefits in the future. In the United States, about a quarter of all workers in their sixties may find work difficult on account of disabilities or poor health (Munnell, Soto, and Golub-Sass, 2008). Although Japanese aged over 65 years are relatively healthy and less likely to be disabled (as noted earlier), they should be protected by a well-designed disability pension and social assistance programs to ensure that an increase in the pension eligibility age does not raise old-age poverty.

Slovak Republic, and Switzerland will also increase their retirement age. Iceland and Norway expect to keep the retirement age at 67.

¹⁰ The government plans to reform the pension system into a simpler two-tier system: a noncontributory flat-rate pension and an earnings-linked pension with a payroll tax rate of 15 percent. The latter has features of a notional defined contribution system (such as one adopted in Sweden). That is, contributions are accumulated in an individual account with a notional rate of return and the pension benefit is calculated by dividing the pension wealth by remaining life expectancy at retirement. This would make the choice of retirement age actuarially fair as it does not penalize late retirement. This would also transfer the risk of higher longevity from younger generations to retirees, and help alleviate intergenerational imbalances.



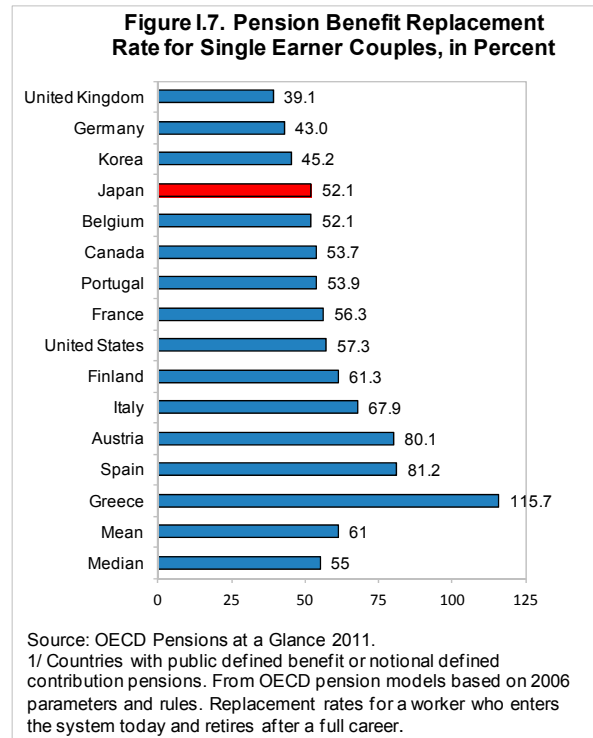
Lower Replacement Ratio

19. **A lowering of the pension replacement ratio is already planned under macro-indexing.** The ratio is officially defined as a pension benefit for a representative couple divided by the average wage of the working age population. The representative couple comprises a private sector employee covered by the EPI and a spouse who does not work. The 2009 actuarial survey projects that the replacement ratio is set to decline to 57 percent by 2020 and to 50 percent by 2038.

20. **Although cutting the replacement ratio further, beyond macro indexing adjustments, could reduce the government subsidy to the basic pension, doing so could worsen old-age poverty.** An across-the-board reduction in the replacement ratio by 3 percentage points would reduce the government subsidy by $\frac{1}{2}$ percent of GDP by 2020. This option could have a positive effect on economic growth similar to the higher pension eligibility age (Box I.2), and would help correct intergenerational resource imbalances by placing a larger fiscal burden on older generations than on younger ones. However, with the current level of the basic pension benefit (JPY66,000 per month) barely covering the basic consumption needs (food, housing, and utilities) of a retiree, an across-the-board cut would

undermine the pension system's ability to contain old-age poverty (see Box I.3). Moreover, the fiscal savings would be offset by higher demand for social assistance spending.¹¹

21. International comparisons also suggest that Japan's pension benefits on average are on the low side. The replacement ratio for a representative couple, of about 50 percent, is below the median and mean for OECD countries (Figure I.7). More broadly, one can look at gross pension wealth, which measures the value of retirement incomes over a lifetime (OECD, 2011). This indicator takes account of life expectancy, the pension eligibility age, the replacement ratio, and the way in which retirement benefits are indexed. Japan's gross pension wealth is also low compared with other OECD countries.



22. A more targeted reduction in the replacement ratio, therefore, would be appropriate, instead of across-the-board benefit cuts. In the current pension system, the government subsidy finances half of the basic pension benefit payments, regardless of the income level of retirees. Alternatively, the subsidy could be targeted toward poorer retirees and reduced for wealthier retirees, by introducing a “claw-back,” similar to that adopted in Canada. For example, a 10 percent cut or “claw-back” of the pension benefit for 10 percent of the wealthiest retirees (with annual pension benefit equivalent to JPY2.5 million or higher per person) would reduce the government subsidy by ¼ percent of GDP in 2020.^{12 13} In reality, a “claw-back” could be applied more broadly, for example, to the wealthiest one-quarter of retirees, which would either generate larger fiscal savings or allow for higher average benefits than currently planned for lower-income retirees.

¹¹ The social assistance system pays the difference between the guaranteed minimum income and own-source incomes of the poor. The minimum income level for individuals is determined by area and age, and ranges from JPY63,000 per month to JPY 81,000 per month for an individual of age 65.

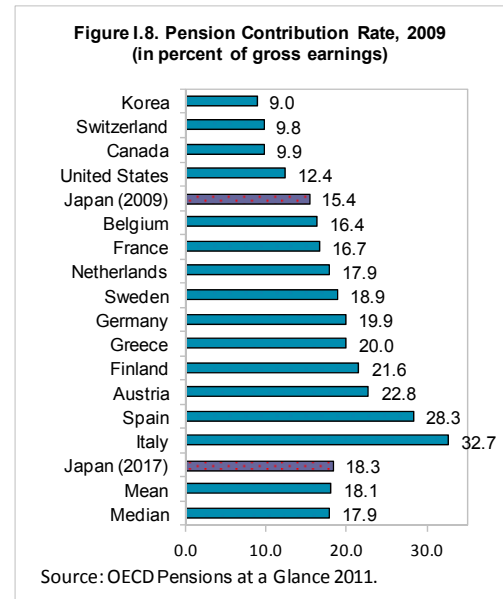
¹² In Canada, a claw-back of 15 percent is applied to retirees with an annual income equivalent of US\$70,000 or higher.

¹³ At the individual level, the claw-back amount under this scheme will be less than the government subsidy (except for 0.2 percent of the richest retirees).

Higher Contribution Rates

23. **A higher contribution rate would generate fiscal savings.** In 2017, Japan’s pension contribution rate (for the EPI, levied on payroll) will be close to the average of advanced countries (Figure I.8). Raising the contribution rate for the basic pension by 1 percentage point would increase contributions by $\frac{1}{2}$ percent of GDP in 2020, which could be used to reduce the government subsidy to the basic pension.

24. **This option, however, would have a detrimental effect on growth and aggravate intergenerational imbalances.** Empirical studies find that a higher pension contributions rate has a negative effect on labor supply (see Box I.2).¹⁴ A higher contribution rate also increases the burden on younger generations disproportionately because pension contributions are paid by the working-age population.



Reducing Preferential Treatments

25. **Eliminating the preferential tax treatments of pension income would also generate sizeable fiscal savings.** At present, a substantial part of the public pension benefit (basic and earnings-linked combined) is deducted from taxable income when calculating personal income tax liability.¹⁵ For those aged 65 or older, the public pension benefit is fully exempt from tax up to JPY1.2 million per year. Even for the wealthiest 2 percent of retirees, 40 percent of the pension benefit is exempt from income tax. On an aggregate level, about three quarters of pension benefit income is exempt from taxable income. We estimate that eliminating this preferential treatment or a tax expenditure would reduce the government subsidy by $\frac{1}{4}$ – $\frac{1}{3}$ percent of GDP. Some other countries, such as France and New Zealand, do not exempt pension benefit from taxable income (OECD, 2011).

26. **Collecting pension contributions from dependent spouses could also contribute fiscal savings.** Under the current system, dependent spouses of employees covered by the EPI (Category 3 participants) will receive basic pension benefits even though they do not pay contributions now. They comprise 15 percent of total working-age participants of the public pension system. Because benefits for Category 3 participants are paid out of contributions from both single and married employees, they are effectively cross-subsidized by single employees. This preferential treatment also creates a disincentive to work, because a spouse can be qualified as a Category 3 participant only if his or her annual earnings are lower than JPY1.3 million. The government subsidy would be reduced by $\frac{1}{4}$ – $\frac{1}{2}$ percent of GDP in 2020 if all Category 3 participants contributed to the NP.

¹⁴ Some Euro area countries are considering a revenue-neutral shift from social contributions toward a VAT to improve export competitiveness. Such a reform has been known as “fiscal devaluation.”

¹⁵ In Japan, pension contributions (and investment returns of the reserve fund) are tax exempt, and pension benefit incomes are added to taxable incomes after the deductions.

Box I.1. Japan: How Does Macro Indexing Work?

This box explains the macro indexing of pension benefits introduced in 2004 in a simplified framework. To maintain the sustainability of pension finances, macro indexing will cut benefit levels automatically in accordance with population aging, while contribution rates are moderately increased to reach a constant level in 2017. The reform was a major shift from pension reforms prior to 2004, which had not resorted to benefit cuts.

The pension system's financial balance at time t equals

$$B(t) = cW(t)L(t) - P(t)N(t),$$

where c is the pension contribution rate, $W(t)$ is the average wage earned by the working age population, $L(t)$ is the number of participants of working age, $P(t)$ is the pension benefit per person, and $N(t)$ is the number of retirees. The reserve fund outstanding, $R(t)$, increases by the rate of return $i(t)$ and the financial balance:

$$R(t) = B(t) + (1 + i(t))R(t-1).$$

Macro indexing adjusts pension benefits downward in line with changes in the number of working age participants and life expectancy, until period t^* :

$$\Delta P(t) = \begin{cases} \Delta W(t) + \Delta L(t) - \mu, & t \leq t^* \\ \Delta W(t), & t > t^* \end{cases}$$

where Δ indicates a growth rate, e.g., $\Delta W(t) = (W(t) - W(t-1)) / W(t-1)$. The parameter μ is an estimated rate of increase in life expectancy, and is fixed at 0.3 percent. With $\Delta L(t)$ expected to be negative owing to a decline in the working-age population, the adjustment improves the financial balance. The end period of adjustment, t^* , is determined such that pension finances achieve sustainability, i.e., the reserve fund outstanding suffices to cover benefit payments in the 100th year from now. That is,

$$R(t+99) \geq P(t+100)N(t+100).$$

The replacement rate, $P(t) / W(t)$, will decline until t^* , and remain constant thereafter.

The 2009 actuarial review projects that the macro index adjustment will continue until 2038. The replacement ratio (where the pension benefit is measured for a representative single-earner couples) is projected to decline from 62 percent in 2009 to 50 percent in 2038, and remain constant thereafter.

The adjustments are restricted in several cases. First, the replacement rate should not decline below 50 percent. If such an event is envisaged to occur in the next 5 years, a system overhaul is called for. Second, macro indexing is suspended during periods of deflation. More precisely, benefit levels will never decline over time in nominal terms since the benefit adjustment follows

$$\Delta P(t) = \max(\Delta W(t) + \Delta L(t) - \mu, 0), \quad t \leq t^*.$$

Third, macro indexing has not started yet, although the 2009 actuarial review presumed it would begin in 2012. Ad hoc suspension of price indexation during deflation in the early 2000s raised the pension benefit from the level implied by the original indexation rule. Elimination of this discrepancy is the precondition for macro indexing to begin.

Box I.2. Japan: Growth Impact of Pension Reform Options

Containing pension benefits could have a positive impact on output.

• **Raising the pension eligibility age.** On the theory front, using the IMF's Global Integrated Monetary and Fiscal (GIMF) model, Karam et al. (2010) showed that raising the pension eligibility age could boost the level of U.S. GDP by 3 percent over the long term by encouraging longer working lives. With a longer working period, households increase consumption as their lifetime income is higher. Similarly, using an overlapping generations (OLG) model with an explicit lifecycle,¹ Cournède and Gonand (2010) reported that, in Europe, fiscal consolidation involving raising the pension eligibility age would boost labor supply and would be more growth-friendly than tax-based fiscal consolidation. The point that fiscal consolidation involving a higher pension eligibility age could be less costly is confirmed by running a lifecycle OLG model in the context of Japan (see text charts).²

Empirical findings are consistent with these theoretical observations. Internationally, labor force participation is positively correlated with the pension eligibility age (see, for example, Gruber and Wise, 2002; 1999; 1998).

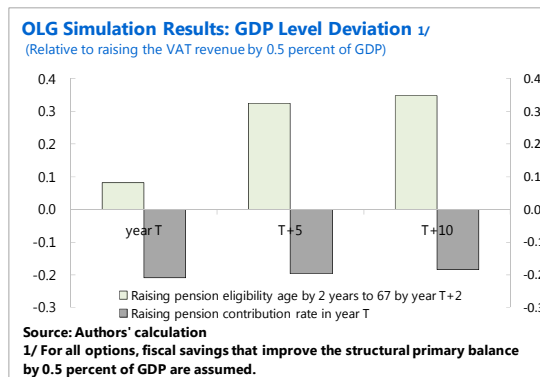
• **Reducing the pension replacement rate.** Qualitatively, reducing the pension replacement rate would have a similar positive impact on output to raising the pension eligibility age. The GIMF simulation by Karam et al. (2010) showed that reducing the pension replacement rate would also boost output over the long term, although the positive impact would be less because in their setup, the incentive for increasing labor supply is weaker.³

International empirical evidence shows that labor participation is strongly and negatively correlated with the generosity of pension benefits, which is determined by the pension replacement rate and the pension eligibility age. This may be because the generosity of pension benefits functions as an implicit tax on work (Gruber and Wise, 1998).

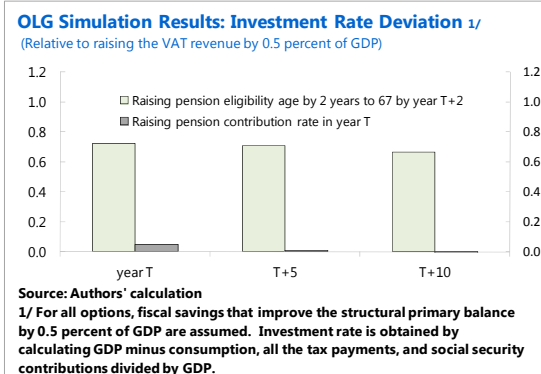
Raising the pension contribution rate would have a detrimental effect on output.

• **Theory shows that a higher pension contribution rate has both substitution and income effects** because pension contributions are proportional to earnings, as with personal income tax. While these effects have opposite impacts on labor supply, simulation analysis typically concludes that the former is dominant, and a higher contribution rate reduces labor supply and thus output (see text charts and Karam et al. (2010)).

In terms of output, raising the pension eligibility age would be less costly than revenue increases...



...as the former stimulates labor supply and capital accumulation.

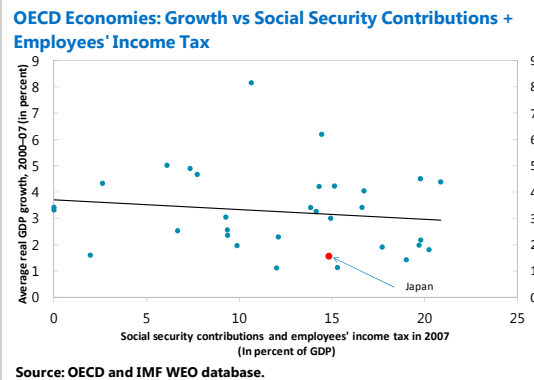


• **Data also show that growth is negatively correlated with the burden from social security contributions and personal income tax** (text chart). More formally, Arnold (2008) reported cross-country regression results that indicated that higher personal income tax, whose impact on output is similar to that of higher social security contributions, reduces GDP growth (for a comprehensive literature review, see OECD (2010)).

¹ The GIMF is also an OLG model, but it makes stylized assumptions about the lifecycle (for example, a constant rate of decline in productivity over the lifecycle, a constant probability of death). An OLG model with an explicit lifecycle (for example, with a hump-shaped wage profile) could produce results with a different magnitude.

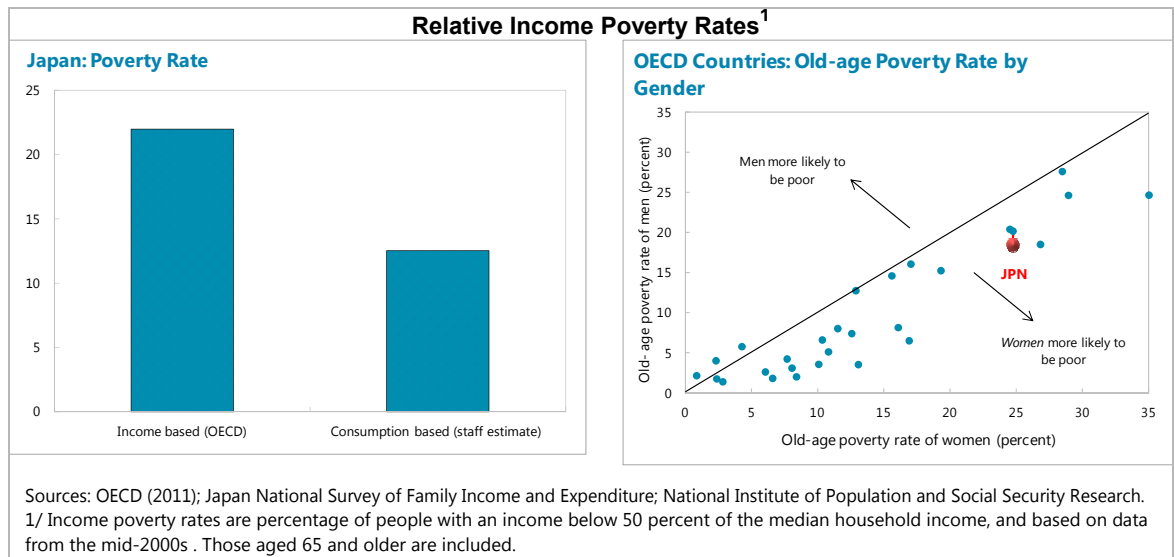
² For details about simulation assumptions, see Tokuoka (2012).

³ This partly reflects the assumption in the model that the size of labor force (length of work life) is exogenously determined. In a model where the size of labor force is endogenously determined by the level of pension benefits, a reduction in pension benefits could have a larger positive impact on labor supply.



Box I.3. Japan: Old-age Poverty in Japan and the Role of Pensions

Despite the low income replacement rate, Japan's pension reforms have helped reduce the relative poverty rate¹ among old-aged persons. When the poverty rate is measured based on a threshold (50 percent) of median household income, Japan's old-age poverty rate is around 20 percent in recent years and high compared to other OECD countries (OECD 2011). In the absence of the old-age pension, however, this rate would increase threefold (Abe 2011). Pension benefits alleviate relative poverty among the old-aged and help maintain their consumption level during retirement. When relative poverty is measured instead by consumption expenditure, which is financed partly by assets, the rate falls to below 15 percent and has come down quite significantly since the 1980s (Ohtake 2005). As past pension reform often sets benefits to a sufficient standard of living, Japan's public pension system helps attain a more equitable consumption level (Komamura 2010, Yamada 2010).



The relative poverty rate among the old-aged is disproportionately high for women. Across different household types, old-aged people who live alone face a particularly high poverty rate, followed by a household of a retiree who lives with his/her daughter (Abe 2011). As Japan's typical household structure is expected to change² and women typically live longer than men, future pension reforms may need to be supplemented by a targeted safety net program to those who are vulnerable.

More analysis on the distribution of income and wealth data would be necessary to develop a well-designed safety net program. For example, if a household with a large amount of assets invests the majority of its assets in bank deposits, its income could be low in the current low interest rate environment but such a household can still enjoy a high level of consumption. Therefore, cash transfers solely based on income levels might provide financial support to wealthy households. Identifying those really in need would require information on not only income but also assets.

¹ Unlike the absolute poverty rate, which measures the share of population who do not meet the minimum standard of living, the measure of relative poverty draws an inference about the underlying income inequality.

² A family of parents with children living together in a given household has been the norm in Japan for decades, and accounted for 30-42 percent of total number of households during 1980-2005. Based on the most recent projection by NIPSS (2008), a single person household is expected to become the largest among all household types, and reach 37.4 percent in 2030 from 29.5 percent in 2009. With population aging, the most of this increase comes from a single-person household of 65 years of age or older.

APPENDIX I.1. JAPAN: METHODOLOGIES TO CALCULATE FISCAL SAVINGS FROM REFORM OPTIONS

Raise Basic Pension Eligibility Age to 67

The calculation is based on the projected number of pension benefit recipients as well as the level of basic pension benefits in 2020. The number of recipients is estimated by the official population projection by gender. The ratio of age 65–66 population to age 65 or older would be 9.5 percent for male and 7.7 percent for female in 2020. The level of basic pension benefits in 2020 reflects macro indexing as envisaged in the official 2009 actuarial report. If the eligibility age for the basic pension becomes 67 for all recipients (i.e., Categories 1–3 and both male and female), aggregate basic pension spending would be reduced by 0.37 percent of GDP, compared with the status quo of the current schedule of eligibility age increases. The calculation also takes account of early retirement.

Reduce Benefits for Wealthy Retirees (Claw-back)

Data on the distribution of old-age pension benefits are available for the NP and the EPI (<http://www.mhlw.go.jp/topics/bukyoku/nenkin/nenkin/toukei/nenpou/2008/toukei-list22.html>). They indicate that 10 percent of the wealthiest retirees receive about 25 percent of aggregate old-age pension benefits in 2010 (the basic and the earnings-linked pension benefits combined). If 10 percent of benefits are reduced or “claw-backed” for such retirees, aggregate old-age pension benefits would be reduced by 3.1 percent or by ¥1.1 trillion (0.23 percent of GDP). For 99.8 percent of retirees, monthly pension benefits were less than ¥300,000 in 2010; thus, the benefit claw-back would be less than ¥30,000 on an individual basis, i.e., less than 50 percent of the basic pension benefit. If an aggregate claw-back rate of 3.1 percent is applied to aggregate old-age pension benefits in 2020, pension benefit spending would be reduced by 0.26 percent of GDP.

Eliminate Preferential Tax Treatment for Pension Benefit Income

Data on the distribution of old-age pension benefits is available for the NP and the EPI (<http://www.mhlw.go.jp/topics/bukyoku/nenkin/nenkin/toukei/nenpou/2008/toukei-list22.html>). With these data, income tax collections from pension benefit recipients are estimated for 2010, assuming that pension incomes are the only source of income for them. Based on the current schedule of income tax rates, elimination of preferential tax treatment of pension benefits would have increased tax collections by ¥1.4 trillion (0.30 percent of GDP). The calculation incorporates the basic deduction of ¥380,000 from annual taxable incomes (applied to all income tax payers), but does not take account of spouse deductions since data for the marital status of retirees is not available.

Collect Contributions from Dependent Spouses

According to the official 2009 actuarial report, the monthly contribution rate for the NP would be ¥19,728 in 2020 (in 2020 prices), and the number of Category 3 participants would

be 8.9 million. Thus, if all of Category 3 participants contribute, contributions will increase by ¥2.1 trillion (0.39 percent of GDP).

Reduce Replacement Ratio Across-the-board by 3 Percentage Points

According to the official 2009 actuarial report, the average monthly wage in 2020 is expected to be ¥459,000. To reduce the replacement ratio by 3 percentage points, monthly basic pension benefits for a retiree and a spouse need to be reduced by ¥13,770, or ¥6,885 individually. If this reduction is applied for all retirees excluding those who receive basic pension benefits of less than ¥6,885, aggregate basic pension spending would be reduced by ¥2.7 trillion (0.50 percent of GDP).

Raise Contribution (Payroll Tax) Rate by 1 Percentage Point

According to the official 2009 actuarial report, the EPI participants' annual wage will add up to ¥201 trillion in 2020. Therefore, a 1 percentage point increase in the contribution (payroll tax) rate would raise contributions by ¥2 trillion. This translates into an increase of monthly contribution per person by ¥4,322 (¥2 trillion divided by Category 2 participants in the EPI and Category 3 participants). If the higher contribution rate of ¥4,322 is applied to Category 1 participants and Category 2 participants in the MAAs, contributions will increase by ¥0.8 trillion. Thus, the total increase would reach ¥2.8 trillion (0.51 percent of GDP).

REFERENCES

- Abe, Aya, 2011, “Sotaiteki Hinkonritu no Suii: 2007–10,” National Institute of Population and Social Security Research, December.
- Arnold, Jens, 2008, “Do Tax Structures Affect Aggregate Economic Growth? Empirical Evidence from a Panel of OECD Countries,” OECD Economics Department Working Papers, No. 643.
- Cournède, B., and F. Gonand, 2010, “Restoring Sustainability in the Euro Area: Raise Taxes or Curb Spending,” OECD Working Paper No. 520 (Paris: Organization for Economic Cooperation and Development).
- Gruber, Jonathan, and Wise, David, 2002, “Social Security Programs and Retirement Around the World: Micro Estimation,” NBER Working Paper No.9407.
- Gruber, Jonathan, and Wise, David, 1999, “Social Security Programs and Retirement Around the World,” *Research in Labor Economics*, Vol. 18, pp. 1–40.
- , and Wise, David, 1998, “Social Security and Retirement: An International Comparison,” *American Economic Review*, Vol. 88, No. 2, pp.158–63.
- IMF, 2011, “The Challenge of Public Pension Reform in Advanced and Emerging Economies,” IMF Policy Paper. Available via the internet at: www.imf.org/external/np/pp/eng/2011/122811.pdf.
- IMF, 2012, “The Economics of Public Health Care Reform in Advanced and Emerging Economies” ed. by Ben Clements, David Coady, and Sanjeev Gupta (Washington: International Monetary Fund).
- Kashiwase, Kenichiro and Pietro Rizza, 2012, “Who Will Pay? Dynamics of Pension Reforms and Inter-generational Inequity” (forthcoming IMF Working Paper).
- Momose, Yu, 2008, “Shogaisha Ni Taisuru Shotoku Hosho Seido,” *Shakaihosho Kenkyu*, Vol. 44, No. 2, Autumn, 2008.
- Munnell, Alicia, Mauricio Soto, and Alexander Golub-Sass, 2008, “Would People Be Healthy Enough to Work Longer,” Working Paper 2008–11, Center for Retirement Research at Boston College.
- NIPSS, 2008, “Households Projections for Japan: 2005–30,” National Institute of Population and Social Security Research, 2008.
- OECD, 2011, “Pensions at a Glance 2011: Retirement-Income Systems in OECD and G20 Countries,” (www.oecd.org/els/social/pensions/PAG) OECD Publishing
- OECD, 2010, “Tax Policy Reform and Economic Growth,” OECD Publishing.

Ohtake, Fumio, 2005, *Nihon no Fubyodo*, Japan.

Sanderson, Warren C. and Scherbov, Sergei, 2010, “Remeasuring Aging,” *Science*, Vol. 329, No. 5997, pp. 1287–1288

Shikata, Masato, 2010, “Koreisha no Saitei Shotoku Hosho” in *Saitei Shotoku Hosho* ed. by Kohei Komamura, Japan.

Tokuoka, Kiichi, 2012, “Intergenerational Implications of Fiscal Consolidation in Japan: An Approach Using a Lifecycle Overlapping Generations Model” (forthcoming IMF Working Paper).

Yamada, Atsuhiko, 2010, “Kokusaiteki Perspective kara mita Saiteichingin Shakaifujono Mokuhyosei,” *Syakaiseisaku*, Vol. 2, No. 2.

II. JAPAN'S GROWTH CHALLENGE: WHAT NEEDS TO BE DONE AND WHAT CAN BE ACHIEVED?¹

1. **During the last decade, Japan's growth rate has been one of the lowest among advanced economies.** At an average rate of 0.8 percent in the 2000s, growth was below that of France, Germany, the U.S., and many other developed economies. Deflation, lingering effects of the asset bubble burst in the late 1980s, and structural constraints on domestic markets have commonly been thought of as the main culprits for this outcome. Yet, economic fundamentals have also been less favorable than in other countries. In particular faster and earlier population aging weighed on growth.

2. **Given the need for robust growth to support fiscal consolidation and reduce the very high public debt-to-GDP ratio,** this note poses three questions:

- (1) Does Japan have a growth problem?
- (2) How can growth be raised? And,
- (3) How much faster can Japan grow?

3. **The paper finds that productivity growth has been comparable to that in other countries, but the decline in the labor force has weighed on overall GDP growth.** There is considerable scope for raising trend growth, although macroeconomic policies can only play a limited role: necessary fiscal consolidation will likely depress growth for some time and conventional monetary policy is constrained by the zero interest bound. The most promising avenue for increasing potential growth is to pursue mutually reinforcing structural reforms aimed at raising labor supply, deregulating protected domestic sectors, creating new growth sectors (e.g., energy, environment, health care services), establishing a more growth-supporting financial sector, and integrating further with Asia.

4. **Growth gains could be sizeable.** Based on evidence from country case studies and model simulations we assess that real GDP growth could increase by up to 1 percentage point to 2 percent over the course of a decade including though increased immigration, greater labor force participation of women and the aged, higher productivity, especially in protected sectors.

5. **The remainder of the note is structured as follows.** The next section assesses Japan's past growth performance. It is followed by a discussion of policy options to raise growth. The final section assesses the potential economic impact of various reforms.

A. Does Japan Have a Growth Problem?

6. **Japan's large growth deceleration stands out compared to other advanced economies** (Figure II.1). Potential growth fell precipitously from an average of 4 percent in

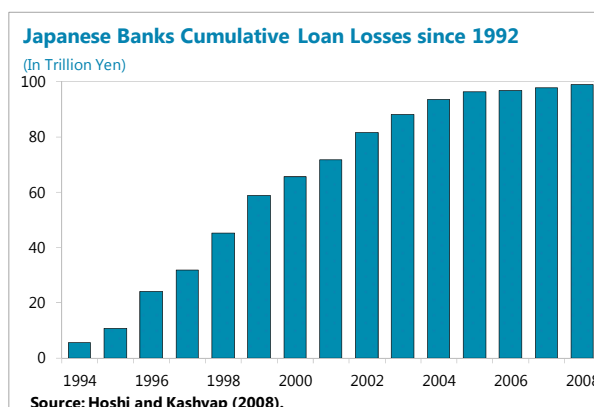
¹ Prepared by Stephan Danninger and Chad Steinberg.

the 1980s to less than 1 percent in the 2000s. Other large advanced economies also experienced growth declines, but decreases were more modest in comparison.

7. **A long-term growth decomposition by the Bank of Japan shows that the slowdown came in two waves** (Figure II.1 bottom chart). In the early 1990s—the first decade after the asset bubble burst—growth fell by over 2 percentage points, primarily as a result of a rapid deceleration in capital formation and a reduction in total factor productivity (TFP) growth. In the second phase, beginning in the late 1990s, TFP growth began to recover, but was held down by declining labor input and weak investment growth. More recently, the effects of the global recession in 2008-09 have depressed investment as in many other countries.

The main reasons for the decline in trend growth during the last two decades were:

- *A drawn-out resolution of Japan’s banking crisis and balance sheet repair.* Following the collapse of asset prices in the late 1980s, banks and non-financial corporations were slow in addressing balance sheet problems (including sizable bad debt and high leverage). Low nominal interest rates allowed banks to roll over credit to nonviable “zombie” firms, and a muted policy response facilitated the accumulation of bad debt on banks’ balance sheets (Hoshi and Kashyap 2010). With lending constrained, as banks needed to rebuild capital buffers, private investment declined and growth fell, requiring repeated fiscal stimulus to keep the economy going. Only after decisive financial sector reforms in the early 2000s under Prime Minister Koizumi did credit conditions ease again.

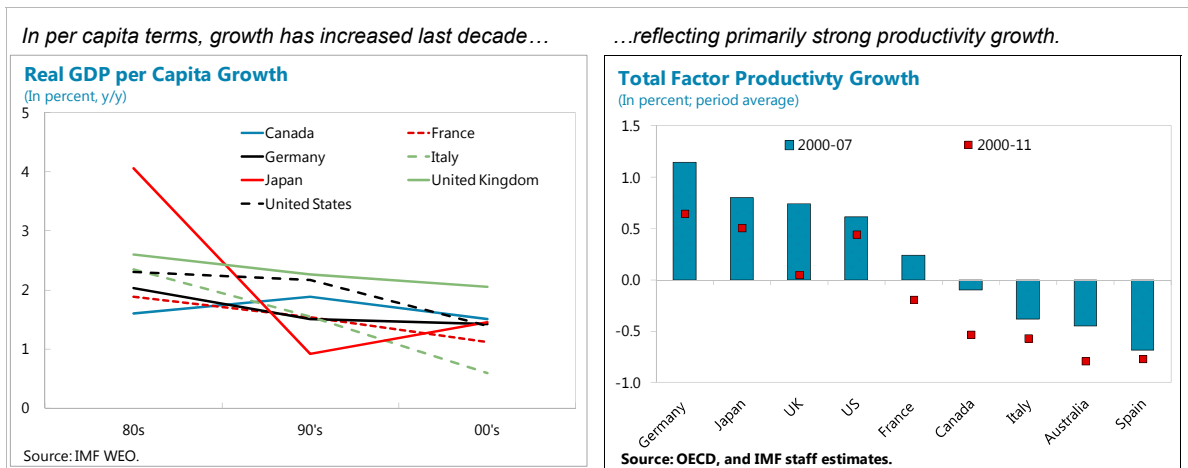


- *Population aging* accelerated in the mid 1990s and with a shrinking labor force reduced potential growth (Figure II.1). The growth penalty from aging has been larger than in other advanced economies (OECD 2010) and will continue to weigh on growth during this decade. Aging effects are projected to level off in the 2020s as the old-age dependency ratio approaches 50 percent in 2030 compared to 35 percent now.
- *Mild deflation* for over a decade has lowered growth expectations and slowed private investment by raising real levels of debt, sustaining high real interest rates, and aggravating fiscal problems by lowering tax revenue and raising real social spending as many benefits are not adjusted for deflation.

8. **On the upside, government spending and labor market reforms supported growth.** Large public infrastructure spending after 1995 boosted the public capital stock, although the impact on trend growth has likely been small due to declining marginal productivity gains (Doi and Ihori 2006). Amendments to the dispatched labor law in 1999

and 2003—which eased employment conditions for temporary and part-time workers first in non-manufacturing and then in manufacturing sectors—created new employment opportunities and may have raised contribution from labor to growth, especially in manufacturing (Hoshi and Kashyap 2010).

9. **Stripping out the effects of aging, Japan had a solid growth record until the global crisis** (text figure). During the 2000s, growth in per capita terms was at par with the U.S., and TFP growth was comparatively high and at similar levels as in Germany. This overall positive development was, however, interrupted by the global recession, which hit Japan particularly hard—given its specialization in high-end consumer durables and capital goods—and lowered its potential growth rate to an estimated ½ percent in 2012, mainly on account of a sharp decline in investment and discouraged labor supply.



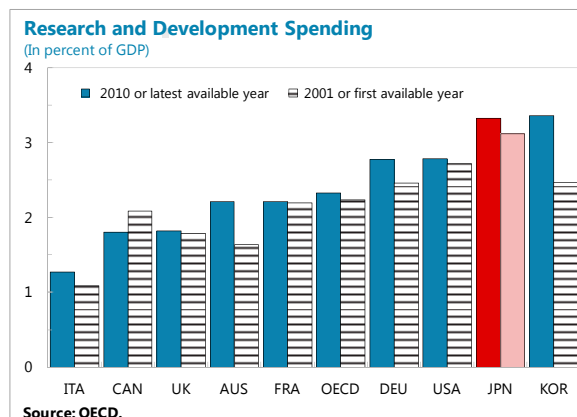
10. **Regaining a potential growth rate of 1 percent over the medium-term would be consistent with a continuation of demographic and economic conditions that have shaped trend growth.** While the negative effects of the global crisis on employment and capital formation will gradually wane, long-term brakes on growth will continue to weigh on potential growth. Aging will slow growth further as the labor force shrinks, and an exit from deflation will take time and depress business profitability and capital formation. Despite a temporary boost from reconstruction spending, uncertainty about the global outlook and, more recently, electricity supply is weakening growth prospects.

Potential Growth in Japan			
	2007	Current	Medium-term 1/
Potential GDP growth	1.4	0.5	1.0
Contributions from:			
Labor	0.1	0.0	-0.2
Capital	0.7	-0.2	0.4
TFP 2/	0.7	0.7	0.8

Note: IMF staff estimates. 1/ Current policies
2/ Total factor productivity, which captures technology growth.

11. **Although productivity growth is already high, Japan could grow faster given several favorable factors.** Japan has close ties to the fastest growing economic region, strong balance sheets among large corporations, and a steady current account surplus. About 50 percent of Japan’s exports go to Asia, and businesses are well placed to meet the needs of

a growing middle class in the region. Innovation has remained an important driver of growth as a result of comparatively high spending on research and development (text figure).



12. Raising potential growth significantly above 1 percent would be essential to:

- Offset some of the short-term growth costs of fiscal consolidation and provide long-term support for a decade of fiscal withdrawal that is necessary to put the very high public debt-to-GDP ratio on a downward path;
- Provide steady job and income growth to avoid reform fatigue; and
- Generate sufficient momentum to facilitate a return to positive inflation. A rise in potential growth can help raise inflation, if new activity meets pent-up demand and growth is supported by accommodative monetary policy and rising private sector activity.

A one-percent higher real growth rate, for instance, would reduce the debt-to-GDP ratio by 10-15 percentage points over a decade by increasing the denominator and boosting tax revenue. This improvement would also help generate a policy buffer given that a cyclical downturn would likely occur sometime during the 10-year long fiscal adjustment period.

B. How Can Growth be Raised?

13. **The government's updated growth strategy prepared in 2011 lays out a broad action plan.** The goal of the policy efforts is to achieve an average nominal GDP growth rate of about 3 percent and an average real GDP growth rate of about 2 percent between 2011 and 2020. Its key elements are reconstruction after the earthquake, the development of tourism, energy, environment, and health care as new growth sectors, and structural reforms to raise labor supply and domestic demand. Although a detailed assessment of the growth effects is beyond the scope of this paper, a potential drawback of the strategy is that it may rely too much on picking winners through targeted sectoral incentives—a strategy, which is not very effective in advanced economies (Aghion 2009). The strategy also sidesteps difficult labor markets reforms (e.g., accelerated immigration), an opening up of domestic sectors (e.g., services and agriculture), and reforms of the financial system to raise the availability of risk capital to encourage investment.

14. **To raise potential growth significantly, Japan's growth reforms will likely need to proceed simultaneously on multiple fronts.** There appears no single measure that could raise growth substantially and quickly. Moreover, lack of fiscal space and the zero interest rate bound limits the scope for jump-starting growth through supportive macroeconomic policies. A depreciation of the yen—which is assessed to be moderately overvalued in the

2012 IMF Staff Report for Japan—would help and could be the result of a decade long fiscal consolidation effort as suggested by IMF staff.

To create growth synergies, the strategy should be centered on achieving three goals:

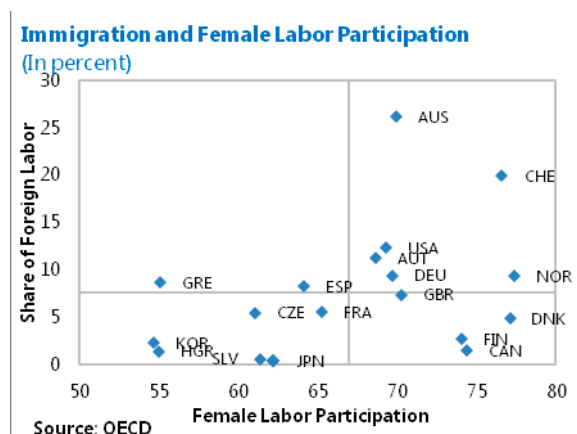
- *Sustainable public finances* by adopting a credible fiscal consolidation strategy while minimizing growth costs.
- *Steady positive inflation* by achieving a robust recovery and powerful monetary easing.
- *Structural reforms* to spur private activity through greater labor supply, an opening of domestic sectors, a growth-supporting financial system, and closer links with overseas economies.

15. **The immediate priority is a firm commitment to fiscal consolidation to limit fiscal vulnerabilities and continue powerful monetary easing.** Due to the high level of public debt and large holdings of JGBs by banks a rise in interest rates poses a risk to the stability of public finances and the financial sector. The adoption of a credible adjustment strategy would limit these concerns. Given continued deflationary pressures further powerful monetary easing is needed including through an expansion of the BoJ's asset purchase program This would accelerate an exit from deflation and help raise growth, but to be more effective such efforts would need to be also supported by ambitious structural reforms to boost confidence and raise domestic demand (discussed below).

16. The remainder of this section focuses on a set of structural reform measures that in combination could create important growth synergies.

Raising Labor Participation Rates

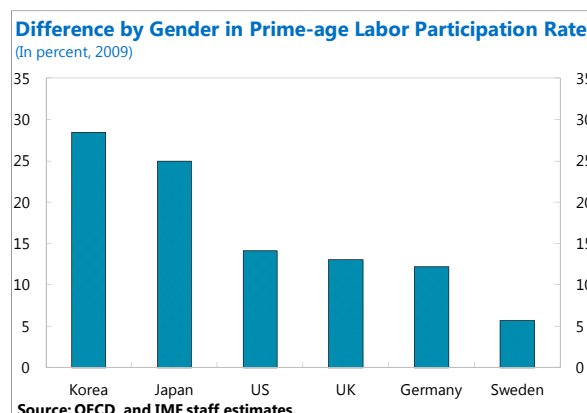
17. **Given the decline in the labor force, increasing participation needs to be an integral part of any growth strategy for Japan.** Luckily, there is much Japan can still do to help mitigate the decline in the size of its workforce relative to other OECD countries as both female labor force participation and immigration are low (see text chart). Old-age participation rates are high in comparison to other countries, but low when adjusted for Japan's higher life expectancy and better physical health and functionality of the aged (Sanderson and Scherbov 2010).



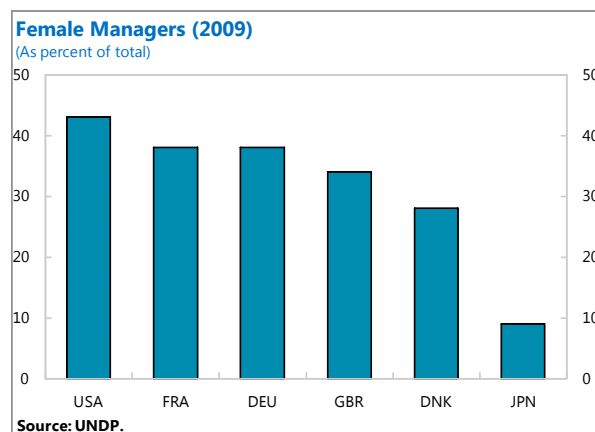
18. **This section will discuss policies to raise labor participation of women and the old-aged,** policies to encourage a better allocation of labor, and finally the possibility of immigration.

Female Labor Participation

19. **Japan has a very low female labor participation (FLP) rate when compared to other advanced economies**, with the difference between male and female participation rates nearly 25 percentage points. At the same time, young women in Japan are more educated than both their OECD peers and their male counterparts, with women in their 20s having on average 14.3 years of schooling. Thus, getting more women into the workforce would not only increase the size of the labor force but also possibly increase its skill intensity. We estimate that if Japan was to raise its FLP ratio to the level of the G-7 average, per capita GDP would be approximately 5 percent higher, raising potential GDP growth by as much as a quarter of a percentage point during the twenty year transition period.



20. **One obstacle to higher FLP rates is the high drop-out rate of women from the labor force following child birth.** FLP rates for women in their early twenties are similar to comparator countries, but then fall off sharply. This reflects both weak support systems for working mothers and the reluctance of firms to hire career female employees at the start of their careers. When women re-enter the labor market, they often choose lower-paying non-regular positions, and as a result, Japan stands out in cross-country comparisons with a low share of female managers (text chart).

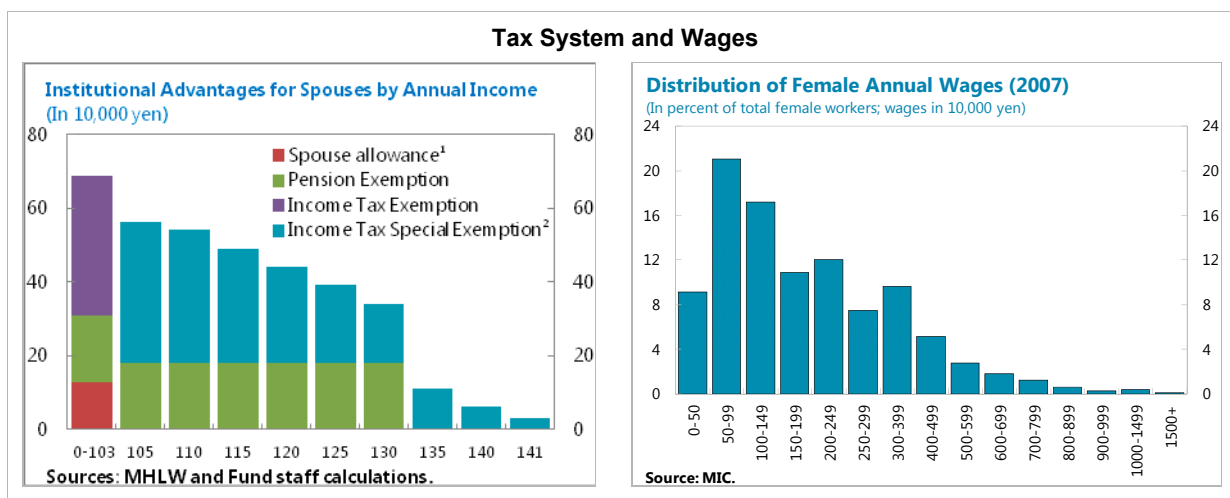


21. **While societal preferences need to be respected, providing support for working mothers and making the workplace more flexible may help reduce this disparity in female labor participation.** Recent work by Steinberg and Nakane (2012) shows that demographic shifts within countries—for example, the number of marriages, higher levels of female education, and fewer children—are highly associated with changes in FLP rates over time. But they also find that policies matter. Sweden has a high level of female labor participation because it provides significant support for working mothers. Denmark too, has been very successful by making part-time work equal in pay and benefits to full-time work; thus, making it possible for more women to participate in a meaningful way that at the same time allows them to balance work-life demands.

22. **According to OECD statistics, Japan provides much fewer of these benefits.** Public expenditure on childcare and early educational services is in the bottom one-quarter of the distribution, and informal reports within Japan also show that demand largely outstrips supply, with potential unmet demand as high as one-third of current childcare capacity. Making the workplace more flexible in terms of hours worked, would also go a long way in encouraging more women to enter the workforce.

23. **Women also often provide home-based care for the old-aged, which also prevents them from seeking employment.** New designs of long-term care services in other countries have allowed women to remain in the labor force, while at the same time creating a new service market (Box II.1).

24. **Another disincentive for women to work full-time may arise from Japan's tax system.** Japan's tax system, like that of many other advanced economies, has implicitly compensated women for not fully participating in the workforce, as tax systems were originally designed to treat families rather than individuals equally. In Japan the threshold for tax and private companies' benefits on pensions and spouse allowances is ¥1.03 million. This level is commonly referred to as the "barrier to full-time female employment," with many female spouses often preferring part-time to full-time work. A histogram of annual wages of female workers indeed indicates that just under one-third of workers (first two bars on the right hand side chart) earn less than the ¥1.03 million threshold.



25. **Reducing tax distortions could encourage more married women to seek full-time employment.** In 2004, one of the special dependent exemptions was eliminated as part of a package of reforms to promote gender equality following the passage of the Basic Law for a Gender-Equal Society, which provides general guidelines for the promotion of gender equality in society but does not stipulate penalties. Elimination of two other exemptions, one on pension contributions and one on dependent income, would raise employment incentives and is currently under review. Their elimination would have the additional benefit of reducing tax expenditures.

26. **The short-term impact of removing tax disincentives on female labor supply may not be large if implemented as a standalone measure.** Analyses of micro datasets to date largely find a minimal impact from these distortions. Ishizuka (2003) finds that eliminating the distortions would lead to a small increase in regular full-time employment, but at the same time lead to a decrease in overall participation. Murakami (2008), meanwhile, found that the 2004 reforms had no discernible impact on participation choices in the short-run. Given other constraints to female labor force participation, this outcome does not seem surprising.

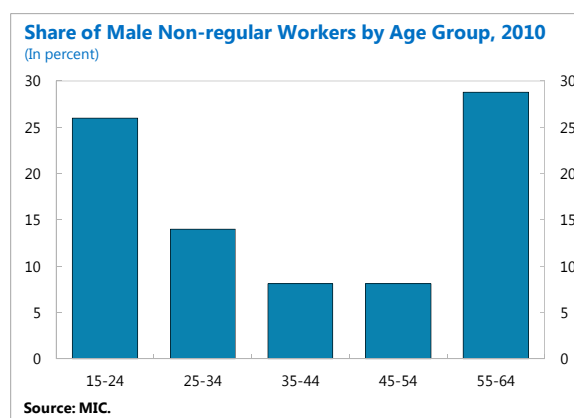
Old-Aged Labor Participation

27. **Across the OECD, life expectancy has risen faster than the average retirement age.** In Japan, the OECD country with the highest life expectancy at 82.6 years, a mandatory retirement age of 60—relative to the OECD average of 64.4 years—is incongruous with the rising longevity. A recent law that encourages firms to rehire productive workers on non-regular contracts between the ages of 60 and 64 has helped lift employment rates for workers in this age group from 53 percent in 2006 to 57 percent in 2010. Despite this rise employment rates still fall significantly with age, from 75 percent of the 55-to-59 group in 2010 to 57 percent of the 60-to-64 group and 36 percent of the 65-to-69 group (OECD 2011).

28. **Increasing the average retirement age would help increase labor participation and help reduce pressure on pension systems.** The current standard retirement age is 65 years with early retirement possible at age 60. Raising the average retirement age under the current lifetime employment system may create inequities for the younger generations, with many firms currently using the early retirement age as a means to reduce the number of workers. Thus, to achieve greater labor participation of the old aged by raising the retirement age requires also a change to the current lifetime employment system to one that places greater weight on performance and flexibility.

A more flexible labor market to help increase participation and facilitate job mobility.

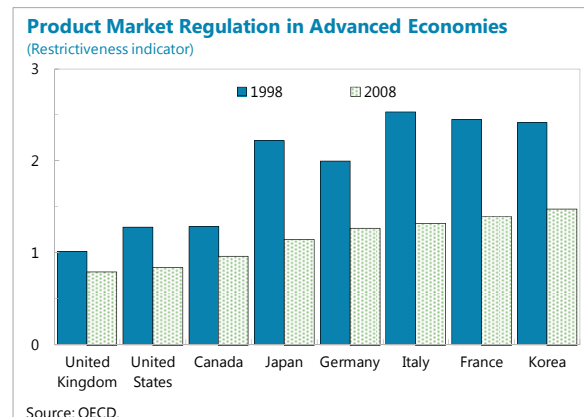
29. **Achieving greater labor participation will also require changes to the functioning of Japan's overall labor market.** The current market's continued reliance on implicit lifetime contracts (Ono 2010)—albeit much less pronounced than in the past—has discouraged firms from hiring in several ways: it creates disincentives to hire career women employees—because they may quit after childbirth; discouraged the hiring of young employees—because they may not be able to afford them over the long-term; and discouraged firms from raising the retirement age—because they need this rule to shed the firm of unproductive and expensive employees. And



in recent decades, as the number of available lifetime employment contracts has declined, an increasing number of youth, women, and old-aged have found themselves in non-regular positions with fewer benefits.

30. **Reforms of labor contracts are key to creating a more flexible and equal labor market overall.** Introducing a new, uniform, and more flexible labor contract could increase incentives for hiring nontraditional workers and allow a greater number of young and female workers to enter mainstream career paths with established firms. One possible option is to modify regular work contracts to include phased-in employment protection. Such a new regular work contract would gradually increase the dismissal costs to employers over the course of a worker's tenure. This would help reduce hiring risks given unknown skills of new workers (or more importantly, the length of their tenure), while maintaining employment protection for tenured employees. Such a new uniform regular employment contract would help facilitate greater labor market flexibility, more efficient hiring practices, and fairness (Steinberg and Nakane 2011).

31. **Greater labor market flexibility would also contribute to growth synergies.** Removing rigidities in product markets in combination with more flexible employment arrangements has been shown to lead to a rise in employment and growth in a number of EU countries (Berger and Danninger 2007, Bouis and Douval 2010). A possible channel is the removal of market entry barriers which can lead to an erosion of existing rents accruing to incumbents through the entry of new firms and a restructuring of existing ones. Japan's has made much progress in this area (text chart) although there is room to lower the comparatively high administrative burden on corporations and barriers to entry in network industries, especially electricity.



Immigration—An Extraordinary Measure?

32. **A complementary reform option would be to raise the level of immigration.**² Recently, the government introduced a “points-based” preferential immigration treatment system to attract highly skilled foreign professionals. This measure could be broadened to include lower-skilled immigrants who could fill potential employment bottlenecks in non-tradable sectors, such as childcare and long-term care for the old-aged (Box II.1). With the percentage of foreign-born workers around 1.7 percent³, there is substantial scope to increase

² Raising potential growth by ½ a percent would require additional employment of ½-1 million (out of an 80 million labor force) per year.

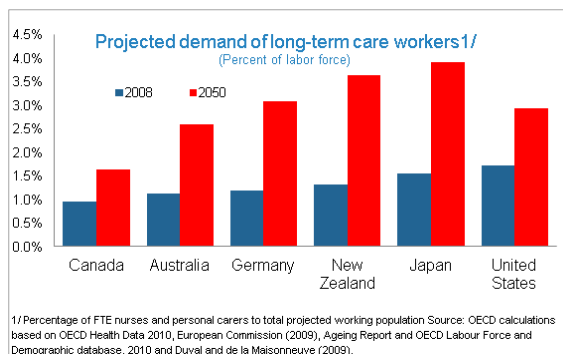
³ The actual share is likely much lower with second generation Japanese, and long-term Korean residents accounting for a significant share of this number.

the supply of foreign-born workers. Public opinion polls too show a surprisingly neutral stance in Japan towards immigration relative to other OECD countries (OECD 2011).⁴

33. **High-skilled immigrants could also be an important source for innovation in traditional sectors.** Kerr and Kerr (2010) report that in the U.S. immigrants represented

Box II.1. Growth Nexus: Long-term Care, Female Labor Force Participation, and Immigration

A growth area in health and social services is long-term care for the old aged.¹ Long-term care (LTC) is a small but growing sector globally. The OECD (2010) estimates that average LTC expenditure accounted in 2008 for 1.5 percent of GDP across the OECD. Spending will likely more than double over the coming decades and could exceed 4 percent of GDP in Japan by 2050. Since LTC is a labor-intensive sector, labor demand will likely grow rapidly in line with rising demand for these services (text chart)



Long-term care programs across the world have steadily evolved and are increasingly shifting to cash benefits with more user choice. There are many different arrangements, but trends have been to move away from fully-covered institutional care-which is costly- to more flexible at-home care arrangements. New cash-for-care programs provide consumers with more choice and control over services (OECD 2010). Recent reforms in Austria, Finland, and Germany, for instance, provide cash benefits for targeted groups, such as disabled elderly, which they then can use to hire home-care help from private providers. Services vary and usually imply some private cost-sharing.

Because of domestic shortages many countries rely on immigration to supply long-term care services. In Europe labor mobility within the EU and simplified licensing requirements provided a boost for such activities.

From a growth perspective a flexible LTC program can raise growth by:

- *Freeing up captured labor or preventing drop-outs of family care-givers, while providing employment for the underemployed.* Availability of qualified in-home care for the old-aged reduces demands on family members, mostly women, to provide care. A study on Australia estimates the opportunity cost of forgone earnings as a result of unpaid family caring as equivalent to nearly 10 percent of the total expenditure on formal health care in Australia (Manaaki, 2009). In several countries the growing service need is met by trained foreign workers, but could also be a source of employment for underemployed domestic labor.
- *Creating a new private service market.* Country experiences, such as in Austria, show that LTC programs with cash-benefits, adequate choice, and quality control address a rising unmet demand (Riedel and Kraus 2010). While the funding for these services currently still comes primarily from the public sector, private contributions are rising. A well-functioning market could draw in private households savings and generate a new services market that could generate substantial employment and income.

¹ Long-term care is the care for people needing support in activities of daily living, such as bathing, dressing, and getting in and out of bed, which are often performed by family, friends, and lower-skilled caregivers or nurses.

⁴ This may reflect the low level of immigration, with anti-immigration sentiment generally rising in countries with larger stocks of immigrants.

almost one half of the engineering workforce based on the 2000 census and several studies connect high-skill immigration to growth in innovation by city or states. Immigration is also essential in providing long-term care for aging populations. The vast majority of studies suggest that immigration does not exert significant effects on native labor market outcomes either on employment and earnings (Kerr and Kerr 2010). In Japan a more ambitious targeted immigration policy for high-skilled could be considered.

34. With the aging of the population and associated fiscal costs, a theme of much immigration in other economies is the positive impact this will have on public finances.

In Japan this is particularly relevant. New immigrants improve public finances by raising output and paying taxes, but at the same time they consume social services. The balance between these revenues and costs are difficult to quantify, however, with most recent studies having mixed results (Kerr and Kerr, 2011).

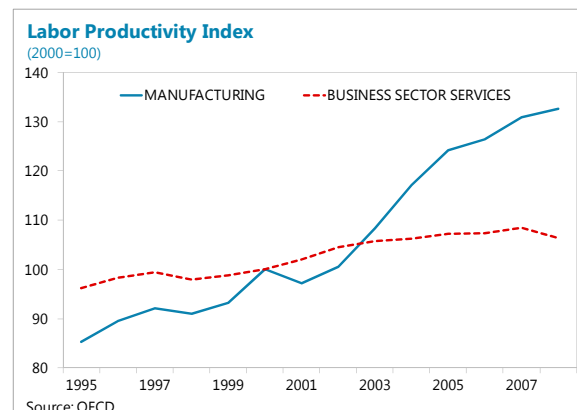
35. There are also potential labor market displacement effects that may emerge due to an increase in the labor supply.

In general, this should put downward pressure on wages overall, with the impact largest on relative wages or employment of natives for whom immigrants are close substitutes. In the health and old-aged care industry where wages are already 25 percent lower than other industries, there is a strong concern that immigration would put downward pressure on wages or at least keep wages from rising. International evidence of these effects, however, is mixed but with the majority of studies unable to substantiate a significantly large impact (Kerr and Kerr, 2011).

36. Beyond increasing the size of the labor force, immigration can also have non-traditional positive impacts on the economy. Saiz (2003, 2007) has shown that immigration has a positive impact on housing prices in the U.S., and an emerging literature is linking immigration to increased entrepreneurship (OECD 2011). And although recent immigrants tend to have lower earnings than natives, the increasing use of point systems—in, for example, Australia, Canada, and the U.K.—can have a compositional effect on the skill-intensity of new immigrants. Finally, immigration can also have positive effects on entrepreneurship through self-employment and job creation.

Opening Up Protected Sectors and Easing Regulations

37. Japan's domestic oriented sectors accounts for more than 80 percent of activity. Comparisons of productivity levels across countries, especially of services, are unreliable and differences in preferences (e.g., for more labor-intensive services) may play a role. But time-series data show that productivity growth in Japan's tradable sector has been much higher than in the services sector (Ogawa, Saito, and Tokutsu 2012). One



reason for the much slower services sector productivity growth could be the lingering effects of past public support policies— generous exemptions and weak penalties in the Anti Monopoly Act—which have limited competition. Reforming the agricultural sector, although affecting only a small share of the economy, could have an important symbolic effect and lead to land consolidation, a rise in land prices, and positive wealth implications.

38. Growth benefits of deregulation could also be seen in downstream industries.

Reforms would not only generate efficiency gains in the directly affected sectors, but also create positive spillover to sectors which use services as inputs. A recent cross-country study finds that greater service sector competition is associated with greater output growth, productivity gains, and exports in downstream sectors (Barone and Cingano, 2011). Across industries the effect is more pronounced in energy provision and through regulation of professional services.

39. An effective means to open domestic sectors could be the participation in international economic and trade agreements.

The most promising decision in this regard, has been Japan's application in late 2011 to join membership negotiations of the *Trans Pacific Partnership* (TPP) free trade agreement. TPP requires unfettered market access by foreign companies to domestic markets, including agriculture and services, potentially triggering domestic reform and efficiency gains. However, given the early stages of the negotiations, improvements are unlikely to materialize before the end of this decade. More recently Japan has also expressed its intention to pursue trade agreements with China and Korea.

A More Growth Supportive Financial Sector

40. More effective financial intermediation and a greater willingness to allow SME restructuring could foster innovation, raise investment, and help generate new markets.

Availability of credit appears ample, but pervasive risk aversion of financial institutions and underdeveloped risk management tools have constrained financing for more risky investments in new growth areas. At the same time, reluctance to let non-viable zombie firms fail and government involvement in credit intermediation (e.g. through direct credit support) have weakened credit assessment, limited SME turnover, and kept corporate debt-levels among SMEs high. Chapter III in this volume discusses how financial sector policies can help promote growth.

International Integration

41. At the international stage, Japan has not taken full advantage of its growth potential in a number of areas.

During the last decade, export market shares have declined faster than in Germany, a country with similar characteristics. Both inward and outward foreign direct investment is low, reducing gains from technology spillovers and limiting competition in domestic sectors. According to the OECD Japan had the lowest import penetration rate for services in 2003 and the lowest growth rate of service imports between

1997 and 2005. Financial and non-financial firms have been cautious in investing overseas with banks often following their clients who have established themselves overseas. At the same time private capital inflows to Asia have recovered remarkably rapidly from the impact of the global financial crisis to reach around 4 percent of GDP (IMF, 2011).

42. **Measures to better tap into Asia's growth momentum include:**

- *Encouraging overseas investment* to help strengthen competitiveness of the export sector and reap benefits from long-term complementarities between foreign investment and domestic activity.
- *Promoting inward FDI* by reducing legal and non-legal impediments, especially in services, and strengthening the business environment. Trade agreements could help with the harmonization or mutual recognition of licenses. Agreeing on common standards and qualification requirements would also substantially enhance market integration and reduce setup costs of foreign firms.
- *Pursuing FTAs* with regional trading partners, especially China and Korea.

C. How Much Faster can Japan Grow?

43. **Sustained increases of potential growth over a decade are rare among advanced economies, but not unheard of.**

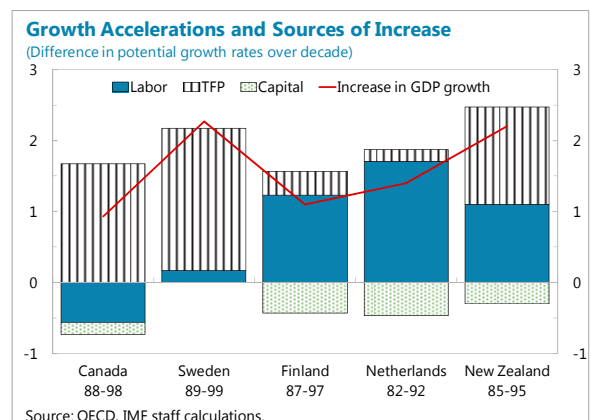
Using the IMF's World Economic Outlook database we find 8 country cases since the 1980s in which real trend GDP growth increased by more than 1 percent over a decade and this increase was sustained over at least 5 years. Several of these growth improvements came after a deep economic crisis (e.g., Finland, New Zealand, and Sweden) and as a result public debt ratios were higher at the end of the 10 year span for the majority of countries.

Durable Potential Growth Rate Increases 1/			
	Decade	Potential growth	
		Initially	End of decade
Canada	1988-98	2.9	3.9
Finland	1987-97	2.1	3.2
Greece	1985-95	0.7	2.5
Iceland	1987-97	2.3	3.3
Ireland	1983-93	1.7	4.1
Netherlands	1982-92	1.2	2.9
New Zealand	1985-95	1.9	3.4
Sweden	1989-99	1.7	3.5

Source WEO, 1/ advanced economies only and defined as a growth rate increase by 1 percentage point over one decade sustained for 5 years.

44. **The factors behind the growth gains differ substantially across the identified cases.**

A decomposition of the growth accelerations by contributing factors shows that the main sources of growth were productivity gains (TFP) and increases in the growth contributions from labor (text chart). But the winning formula was quite different across countries. Much of the improvements in New Zealand, for instance, was a result of labor market reforms that raised labor force participation (Brooks, 1990). In the Netherlands and Sweden, where reforms stand out as having been particularly durable, the improvements



came from productivity growth in Sweden and greater labor contributions in the Netherlands. A deep recession (Netherlands, 1980–82) and banking crisis (Sweden, 1990–92) triggered a change in macro-economic policies and supply side reforms. The public expenditure to GDP ratio was reduced significantly, allowing a reduction of both the large fiscal deficit and high tax levels; labor markets were made more flexible with increased incentives to work; and product markets were reformed to boost competition. Sweden as a result experienced two decades of rapid growth; and the Netherlands, which previously was associated with the “Dutch disease”, became known for its employment miracle.

45. In Japan, a tailored package of reforms could raise potential growth from 1 to up to 2 percent over a decade. This assessment is based on an aggregation of different estimates derived from simulations with the IMF’s GIMF model. The key elements of the growth estimate include:

- An increase in female labor force participation rates to the G-7 average and a rise in old age labor force participation, which could increase the growth contribution from labor by 0.3 percent in the transition period to higher labor force participation.
- Immigration equivalent to 1 percent of Japan’s labor force distributed over a decade could yield another 0.1-0.2 percent higher growth per year. For immigration to be successful, restrictions on foreign employment in labor intensive domestic sectors, such as child, health or old-aged care, would have to be eased simultaneously.
- Financial sector reforms that raise risk capital and induce a restructuring of the SME sectors could lift long-term growth by about 0.2 percentage points. This estimate is derived from simulations with the IMF’s GIMF model, which postulates that productivity increase among smaller firms would reach about 80 percent of that among large firms. This in result would boost productivity by about ¼ percentage points.
- The remaining growth increase of 0.3-0.4 percent could come from confidence effects from fiscal consolidation and improved growth prospects as a result of far-reaching structural reforms, which would raise investment and consumption (Berkmen 2011).

Potential Growth in Japan		
	Medium-term with current policies	Upside scenario with strong structural reforms
Potential GDP growth	1.0	2.0
Contributions from:		
Labor	-0.2	0.2
Capital	0.4	0.8
TFP 1/	0.8	1.0
<small>Note: IMF staff estimates.</small>		
<small>1/ Total factor productivity, which captures technology growth.</small>		

46. Japan’s growth challenge is significant, but its growth goal of 2 percent is attainable. A broad based structural reform package could aid job and income growth, support the necessary fiscal consolidation to bring down public debt, and facilitate a return to steady positive inflation rates.

REFERENCES

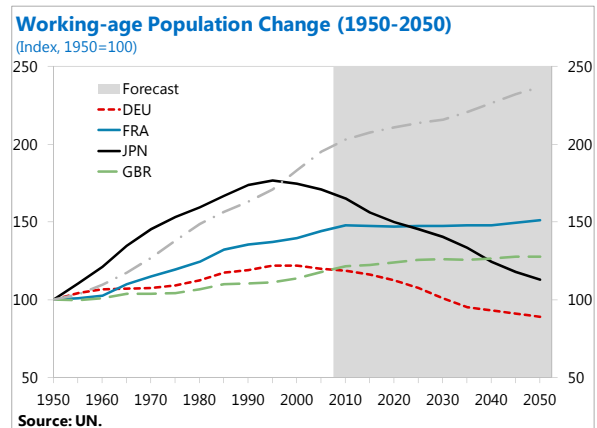
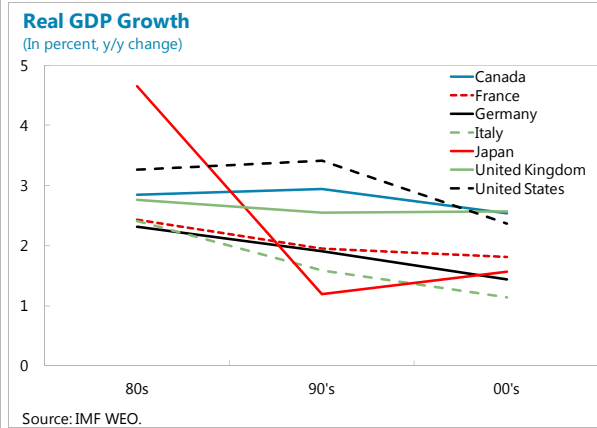
- Aghion, Philippe, 2009, "Some Thoughts on Industrial Policy and Growth," Documents de Travail de l'OFCE, No 2009-09.
- Barone, Guglielmo and Federico Cingano, 2011, "Service Regulation and Growth: Evidence from OECD Countries, *Economic Journal*," Royal Economic Society, Vol. 121(555), pages 931–957, 09.
- Berger, H. and S. Danninger, 2007, "The Employment Effects of Labor and Product Market Deregulation and Their Implications for Structural Reform," IMF Working Paper No. 06/137 (Washington: International Monetary Fund) *IMF Staff Papers*, Vol. 54, pp. 591–619.
- Berkmen, Pelin, 2011, "The Impact of Fiscal Consolidation and Structural Reform on Growth in Japan," IMF Working Paper No. 11/13 (Washington: International Monetary Fund).
- Brooks, R., 1990, "Male and Female Labour Force Participation in New Zealand 1978–1988," Discussion paper, Reserve Bank of New Zealand.
- Doi, Takeo and Toshihiro Ihuri, 2006, "Soft-Budget Constraints and Local Expenditures, CIRJE F-Series CIRJE-F-422," CIRJE, Faculty of Economics, University of Tokyo.
- Ekrane, Boubtane, Dramane Coulibaly and Christophe Rault, 2011, "Immigration, Unemployment and GDP in the Host Country: Bootstrap Panel Granger Causality Analysis on OECD Countries," Working Papers 2011-29, CEPII Research Center
- Hoshi, Takeo and Anil Kashyap, 2010, "Why Did Japan Stop Growing?" Commissioned by the National Institute for Research Advancement, December 29.
- IMF, 2011, *Regional Economic Outlook: Asia and Pacific*, Spring, Washington D.C.
- Kerr, Sari Pekkala and William R. Kerr, 2011, "Economic Impacts of Immigration: A Survey," NBER Working Papers 16736, National Bureau of Economic Research, Inc.
- Manaaki, T., 2009, "How Should We Care for the Carers, Now and into the Future?," National Health Committee of New Zealand.
- OECD, 2010, *Going for Growth*, Paris.
- OECD, 2011, "Help Wanted? Providing and Paying for Long-Term Care," Paris.
- Ogawa, Kazuo, Mika Saito, and Ichiro Tokutsu, 2012, "Japan Out of the Lost Decade: Divine Wind or Firms' Effort?" (forthcoming IMF Working Paper).

- Ono, Hiroshi, 2010, "Lifetime Employment in Japan: Concepts and Measurements, *Journal of the Japanese and International Economies*," Elsevier, vol. 24(1), pages 1-27, March.
- Riedel, Monika and Markus Kraus, 2010, "The Austrian Long-term Care System," ENEPRI Research Report No. 69, 28 May.
- Sanderson, and S. Scherbov, 2010 "Remeasuring Aging," *Science* 10, September 2010: Vol. 329 no. 5997 pp. 1287–1288.
- Steinberg, C. and M. Nakane, 2011, "To Fire or to Hoard? Explaining Japan's Labor Market Response in the Great Recession," IMF Working Paper No. 11/15 (Washington: International Monetary Fund).
- Steinberg, C. and M. Nakane, 2012, "Can Women Save Japan?" (forthcoming IMF Working Paper).

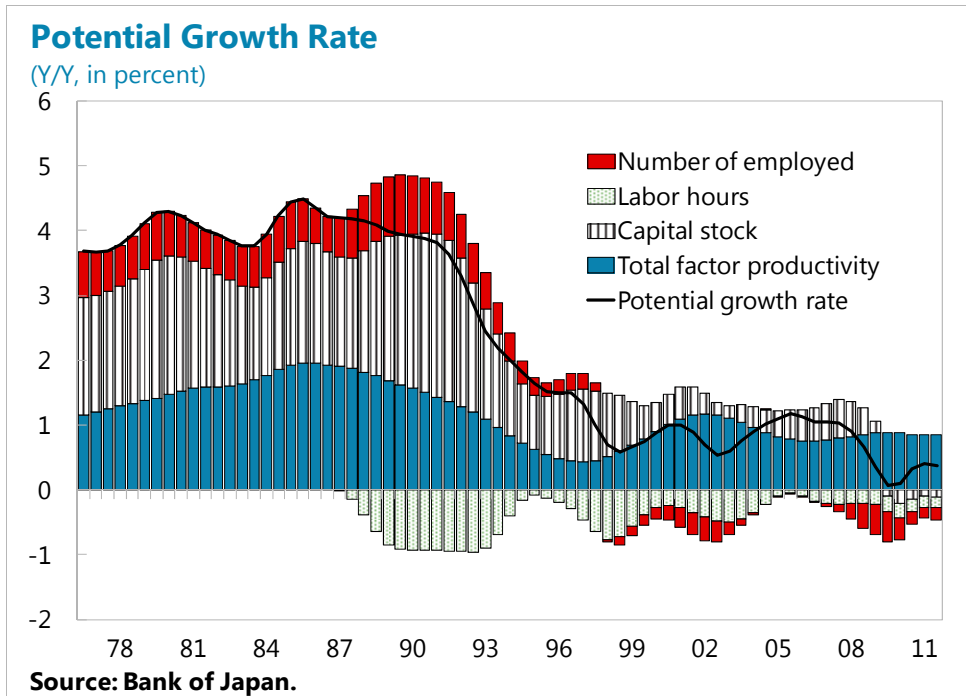
Figure II.1. Japan's Growth Challenge

Average GDP growth has been near the bottom of the G-7

...mainly the result of accelerated population aging.



Japan's overall growth rate has fallen precipitously since the 1980s....



III. FINANCIAL POLICIES TO SUPPORT GROWTH¹

1. **Overall credit conditions in Japan have been accommodative but credit growth has remained weak, especially for SMEs and startups.** In part, this is because of the persistent structural weaknesses of SMEs, with highly indebted and nonviable firms having been sheltered by public credit support measures. Regulatory barriers and the lack of market development have also played a role, including by adding to the costs of starting a business and limiting the types of credit available. Other reasons for slow credit growth include weak economic growth in recent years, coupled with an aging population, and a desire by firms to deleverage following the global financial crisis.
2. **The financial needs of the private sector are also changing, as the population ages and as more firms expand their operations overseas, especially in Asia.** Household demand for age-related savings and insurance will increase, while firms' financial needs for their operations will likely be more diverse. Banks are also adjusting their business models to improve core profitability by expanding overseas and lending to regions outside their home prefectures.
3. **To support growth, financial policies need to address the impediments to credit growth and meet the financial needs of the private sector.** This paper argues that to encourage the supply of risk-based capital, costly government support measures should be phased out and the capital base of smaller regional banks be strengthened to foster consolidation and accelerate SME restructuring. At the same time, efforts are needed to deepen capital markets to improve the availability of risk capital and address regulatory barriers to starting businesses. It will also be important to continue to monitor closely the cross-border financial services as firms expand abroad and households invest overseas.
4. **The paper is organized as follows.** It first discusses the reasons behind weak credit growth, slow progress on SME restructuring and limited access to risk capital, before discussing some policy options to resolve these problems. The paper also discusses the changing financial needs of the private sector in the financial system and their implications for policy.

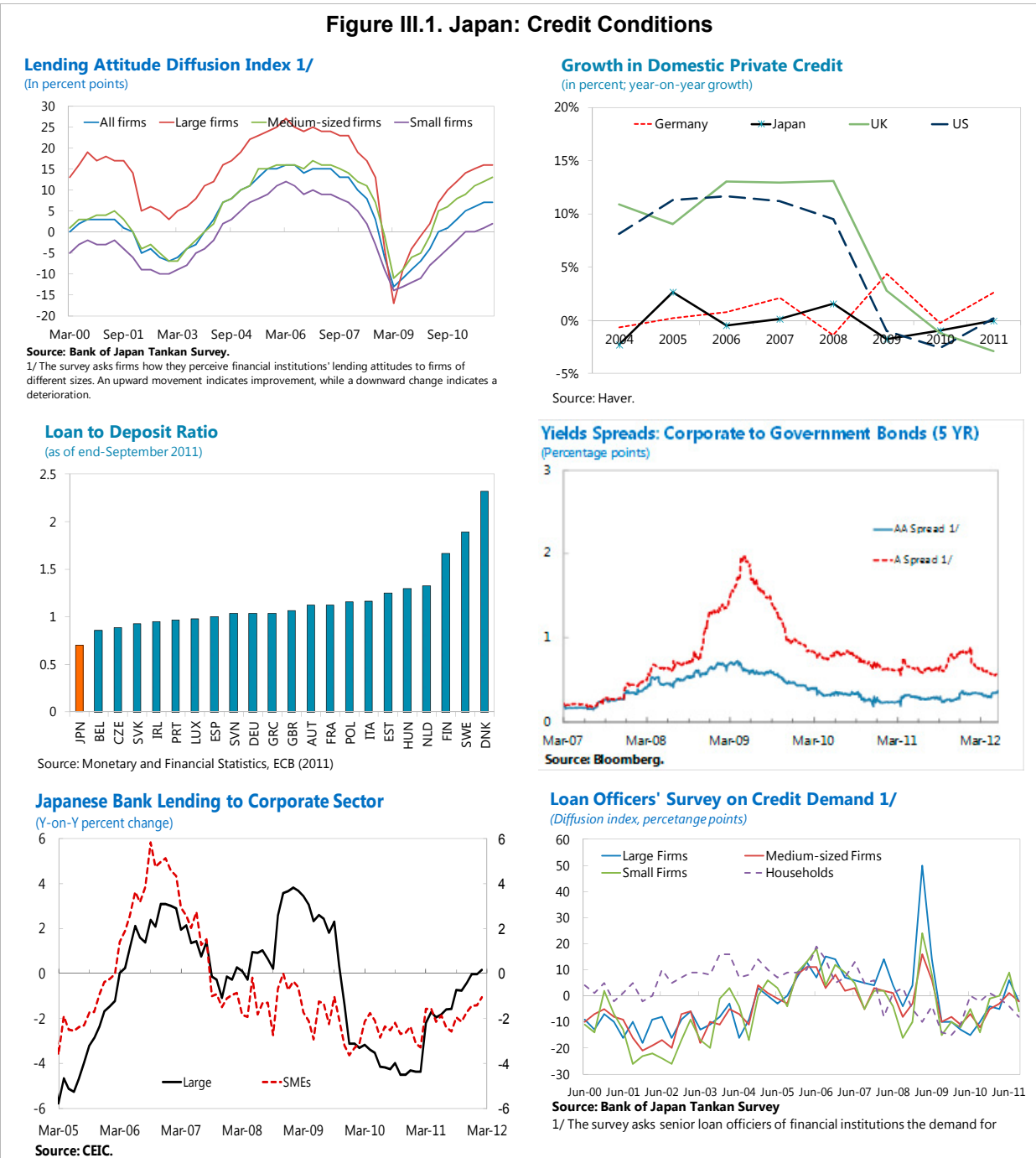
A. Why is Credit Growth Weak?

5. **Credit growth remains weak, even though banks' lending attitudes and corporate bond markets have largely bounced back from the low points following the Lehman crisis.** The BoJ Tankan survey of firms' perception suggests that financial institutions have improved their lending attitudes and credit availability for all categories of companies (Figure III.1). By late 2011, the diffusion index had recovered to positive territory for the first time since the Lehman crisis in late 2008, but bank's attitudes to larger firms

¹ Prepared by W. Raphael Lam (APD) and Jongsoo Shin (OAP) based on the "Japan FSAP Update: Technical Note on Credit Intermediation". We are thankful for the assistance by Mr. Tsukada and Mr. Takahashi of the Credit Risk Database in data access. We also acknowledge the comments from seminar participants from the Bank of Japan, Financial Service Agency, Ministry of Finance, Ministry of Economy, Trade, and Industry, and the Cabinet Office.

have recovered more than those for small firms. In addition, banks have plenty of liquidity to lend, with loan-to-deposit ratios at historical lows (below 70 percent) and the lowest among advanced countries. Funding conditions in debt market have also been favorable as bond spreads returned to pre-crisis levels (less than ½ percent for AA-rated debt). Credit growth has been recovering, but barely grew in early 2012 for large corporations while credit to SMEs fell by 1 percent y/y. The Tankan survey diffusion index on credit demand by firms and households has improved since the earthquake but remained fairly weak.

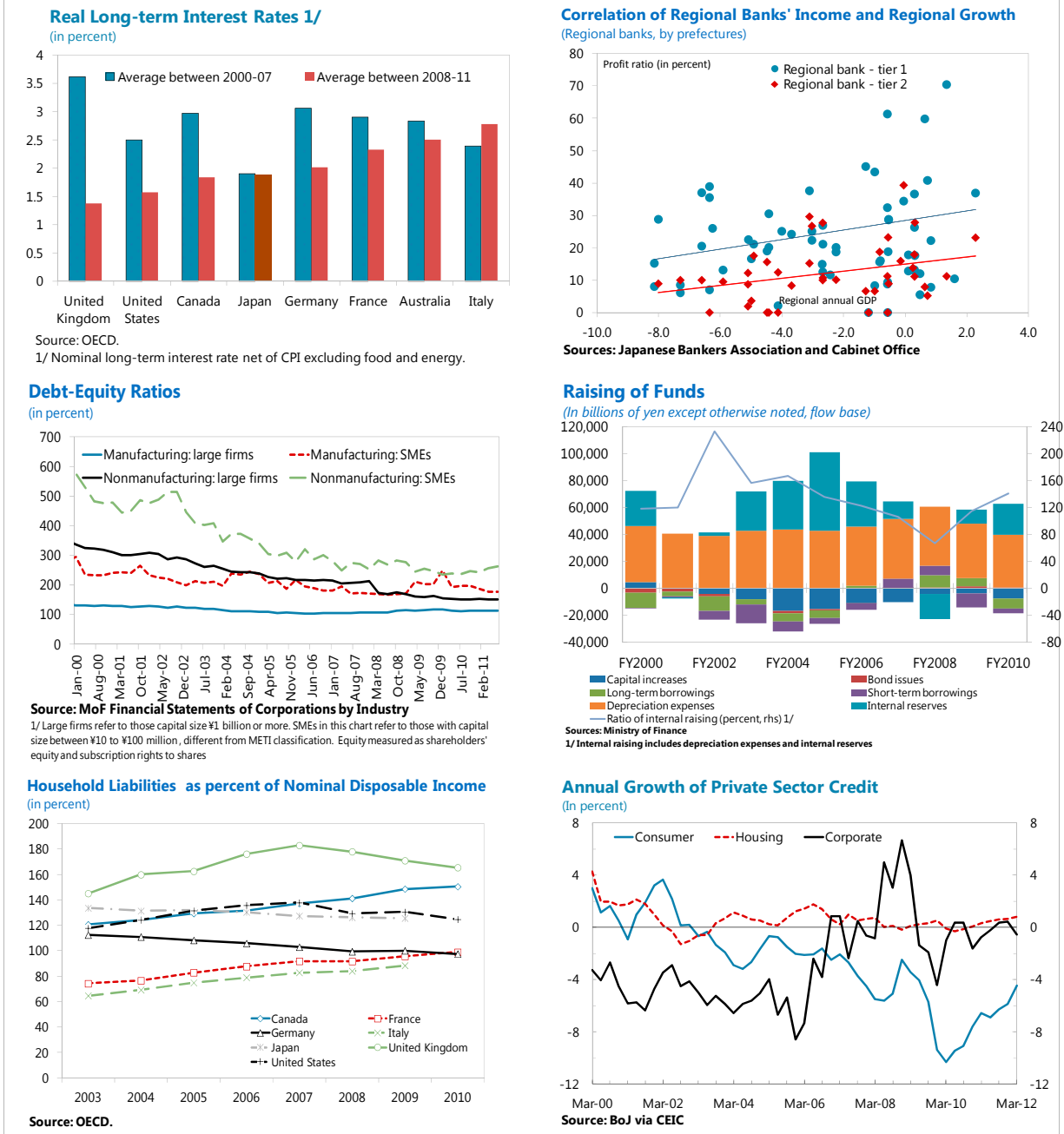
Figure III.1. Japan: Credit Conditions



6. **Several factors have contributed to weak credit growth despite accommodative financing conditions.** These include relatively weak economic growth, deleveraging following the crisis, and structural weaknesses of SMEs.

- **Macroeconomic conditions.** Weak growth prospects have deterred firms from borrowing for capital investment, while lingering deflation limited the decline of real interest rates compared with other countries, thereby not providing much stimulus to credit demand (Figure III.2). Structural factors such as population aging and the shrinking rural economy (served mainly by regional banks) have also contributed to weak credit demand.

Figure III.2. Japan: Factors Contributing to Weak Credit Growth



- **Firms deleveraging.** Firms have scaled back their capital investment and shifted towards internal financing. Internal financing (through retained earnings and depreciation) increased from 60 percent of external financing to 150 percent during FY2008–FY2010, in part reflecting a wish to further deleverage following the global financial crisis, similar to firms in other advanced countries.
- **Household deleveraging.** Household liabilities as percent of disposable income have continued to decline steadily over the past decade. By 2009, the level had reached about 125 percent of disposable income. This is about the level of U.S. household debt to income and higher than in many European countries, but household net worth remains the highest among G-7 countries. The steady decline in household debt partly reflects population aging, with a decline in household formation. While total liabilities to income have fallen, demand for housing loans from banks has risen slightly, partly because of reconstruction after the earthquake. Moreover, bank credit filled a gap left by the scaling back of the Japan Housing Finance Agency’s (JHF) direct retail mortgages lending. However, overall building activity remains well below pre-crisis levels. Consumer credit (primarily credit cards and consumer loans) has contracted sharply since the crisis due to deteriorating income prospects, along with a tightening of regulation to protect consumers and curb excessive lending in recent years.

7. **Slow credit growth to SMEs reflects their structural problems of high leverage and low profitability.** SMEs have been deleveraging, particularly for nonmanufacturing SMEs, but they still have high debt (at 250–300 percent of equity; 2½ times higher than large firms) and loans to SMEs still account for about half of the bank credit (Table III.1). Moreover, they have lower net profit margin (adjusted by firms’ capital ratio) at about 1½ percent than large firms, and far below the average of 8 percent for other advanced economies (Tokuda 2011). In addition, those SMEs with credit guarantees tend to take longer to repay current debt and are more likely to incur losses (text charts).

Table III.1. Summary Statistics of the Corporate Sector—By Industry and Capital Size

Sector	All				Manufacturing				Nonmanufacturing			
	All	Large	Medium	Small	All	Large	Medium	Small	All	Large	Medium	Small
Size of capital 1/												
Summary statistics 2/												
Capital / Total assets	6.7	9.6	4.0	3.8	7.9	10.4	3.9	3.5	6.1	9.1	4.0	3.9
Return on assets	0.8	0.9	0.9	0.7	1.0	1.1	1.1	0.9	0.8	0.8	0.8	0.7
Debt equity ratio	222.1	168.2	278.9	307.3	138.6	114.9	177.2	208.1	288.9	230.4	342.5	348.2
Interest rate coverage (in times)	1.0	0.9	1.0	1.0	1.0	1.2	1.0	1.0	1.0	0.9	1.0	1.0
Adjusted net profit margin 3/	3.3	6.2	1.6	1.5	4.4	6.6	1.9	1.4	3.0	6.0	1.6	1.6
Labor productivity 4/	0.3	0.8	0.3	0.2	0.4	0.4	0.4	0.2	0.3	0.8	0.3	0.2

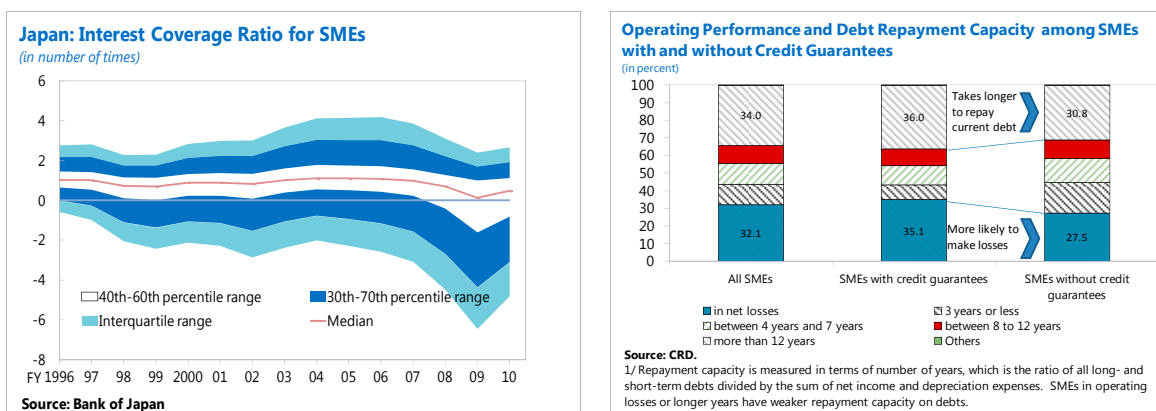
Sources: Ministry of Finance and staff estimates.

1/ by size of capital, which provides a proxy for firm size.

2/ Averages from 2000 by sector and size of capital.

3/ Net profit margin adjusted by the capital ratio relative to its sectoral mean.

4/ Value-added per employee



8. **Borrowing costs, however, do not vary much despite the wide variation of firm performance among SMEs.** The difference in borrowing costs between the lowest and highest risk deciles is only about 100 basis points and appears small compared with the large differences in operating performance between these groups (Table III.2). This may reflect the government credit support measures that limited the degree to which borrowing costs reflected underlying credit risks.

Table III.2. SMEs' Performance and Soundness, by Risk Ratings

	Debt equity ratio 1/	Return on assets 2/	Interest coverage ratio	Borrowing cost 3/	Repayment capacity 4/
Full sample	1.75	0.30	0.82	2.21	0.09
After 2008	1.28	0.14	0.44	2.06	0.08
Before 2008	1.98	0.38	0.93	2.29	0.09
Risk rating 5/					
1	1.24	3.57	8.39	1.79	0.39
2	1.99	1.59	3.01	1.97	0.18
3	2.56	0.92	1.76	2.06	0.12
4	2.93	0.57	1.19	2.02	0.09
5	2.72	0.31	0.83	2.00	0.07
6	2.28	0.15	0.53	2.09	0.06
7	1.70	0.07	0.31	2.23	0.05
8	0.64	0.03	0.19	2.41	0.04
9	-1.32	0.00	0.09	2.65	0.03
10	-1.74	-1.85	-0.30	2.99	0.02

Source: CRD.

1/ Negative debt equity ratios and interest rate coverage indicates negative equity and net losses.

2/ in percent.

3/ Repayment capacity is defined as a ratio of the sum of net income and depreciation to debt level.

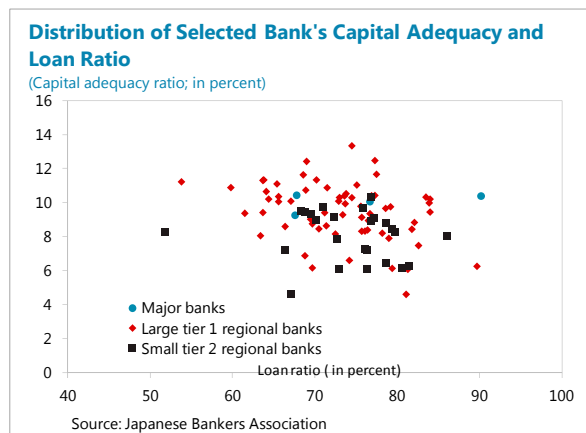
4/ Lower risk rating number indicates higher creditworthiness.

9. **Despite their structural weaknesses, there have been only limited exits or restructuring of nonviable SMEs.** The entry and exit of SMEs is also low at about one-third of that in other advanced countries. Japan has made efforts to improve corporate

restructuring through reforms of insolvency laws.² About 7,000 SMEs (less than 1 percent of total SMEs) have applied for business rehabilitation during 2000–09 under the new procedures but only 40 percent of those have achieved rehabilitation (Figure III.3).

B. Why Have SMEs Been Slow to Restructure?

10. **Creditors and nonviable SMEs have little incentive to restructure loans.** The size of individual SME loans is usually too small for banks to justify restructuring on a case-by-case basis. In addition, recognizing the losses would hit profit and capital, especially for smaller regional/shinkin banks that generally lack expertise, face higher nonperforming loan ratios (4-6 percent relative to 2 percent among major banks), and may not be in a strong capital position (Watanabe 2012).³ More than half the larger (tier 1) regional banks and most small (tier 2) regional banks have capital adequacy ratios below that of the major banks (text figure).⁴ The existence of multiple creditors and the wide use of personal guarantees by SMEs adds to the difficulties in voluntary workouts or business transfers. Moreover, bankruptcy carries a high social stigma in Japan.



11. **Several public credit support measures could also have weakened credit risk assessment and reduced the incentives to restructure.** The measures were put in place after the global financial crisis and the Great East Earthquake, including an expansion of public credit guarantees, safety-net lending by government-affiliated financial institutions (GFIs), and temporary SME Financing Facilitation that was accompanied by a revision of the FSA's inspection manual and supervisory guidelines to relax the requirement of classifying restructured loans under the 'normal' category (Table III. 3).⁵ As a result, the size of public guarantees increased from about 4 to 6 percent of GDP over the past four years. These measures helped shelter existing firms from tighter credit conditions and limited the number of bankruptcies. Nonviable firms, however, were able to find support from low-cost credit that limited the pressure on them to enter

² Following the enactment of the Civil Rehabilitation Act in 2000, the SME Revitalization Support Councils and the Business Rehabilitation Alternative Dispute Resolution System (ADR) were established. The Corporate Reorganization Act and the Bankruptcy Act were amended to facilitate restructuring. The Industrial Revitalization Corporation of Japan (IRCJ) operated during 2003-2007 to dispose of nonperforming loans and revitalize firms with excessive debts. Private equity and consulting firms also specialize in restructuring of distressed companies.

³ Most regional and shinkin banks have capital above the minimum requirement of 4 percent of risk-weighted assets (RWA) at present. The FSAP stress tests suggest that the potential capital shortfall of small banks is small (about $\frac{3}{4}$ percent of GDP).

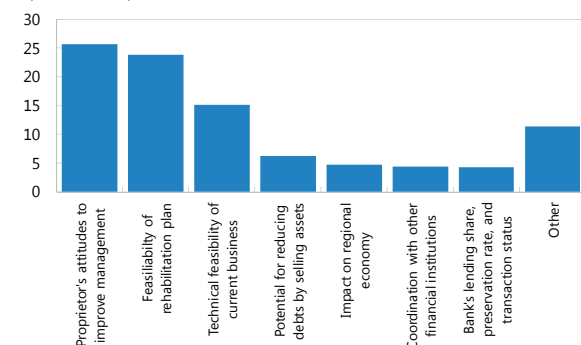
⁴ Internationally active banks are subject to a minimum capital requirement of 8 percent of their risk weighted assets, while it is 4 percent for banks with mainly domestic activity.

⁵ The GFIs in the note refers to financial institutions that are publicly-held and those private financial institutions that remain affiliated with the government. For a complete list of support measures, please see SME White Paper (2011).

Figure III.3. Japan: Slow SME Restructuring

Areas of Concerns on Rehabilitation Support

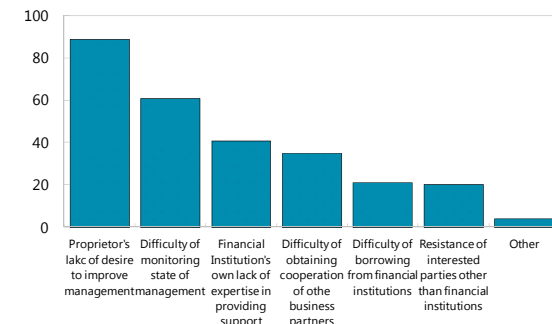
(in percent of responses)



Source: Japan Small Business Research Institute Survey of SMEs

Obstacles to Continuation of Rehabilitation Support

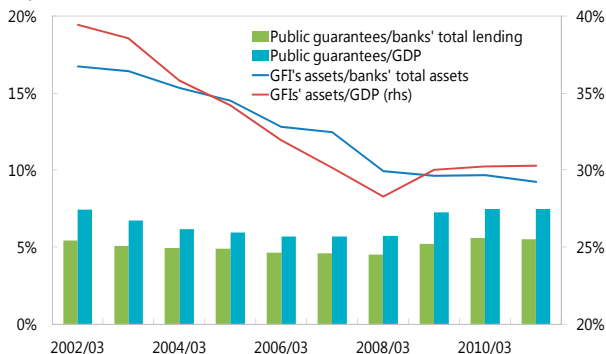
(in percent of multiple responses; after commencement)



Source: Japan Small Business Research Institute Survey of SMEs

Public Credit Support

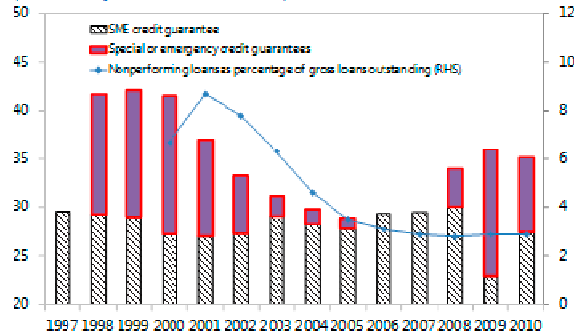
(In percent)



Sources: Bank of Japan and National Credit Guarantee Corporation

SME Loans and Credit Guarantees

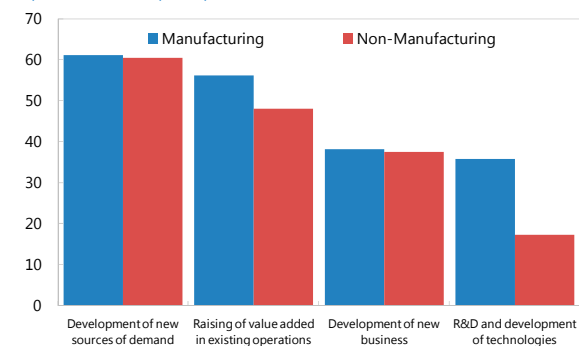
(in trillions of yen unless otherwise stated)



Sources: SME Agency, METI, BOJ, and Jibun and Kuji (2006).

Key Areas for Improving SMEs Prospects

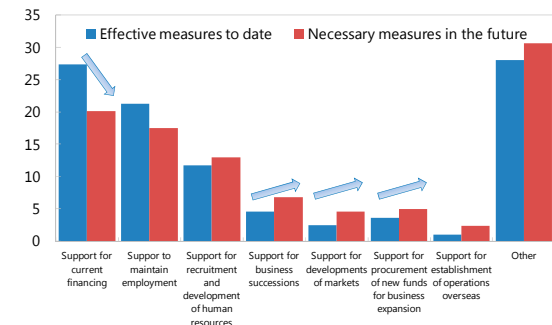
(in percent with multiple responses allowed)



Source: Japan Small Business Research Institute

SME Support Measures - Effectiveness and Needs

(In percent of responses)



Sources: Japan Small Business Research Institute Survey of SMEs

Table III.3. Government Credit Guarantee Schemes

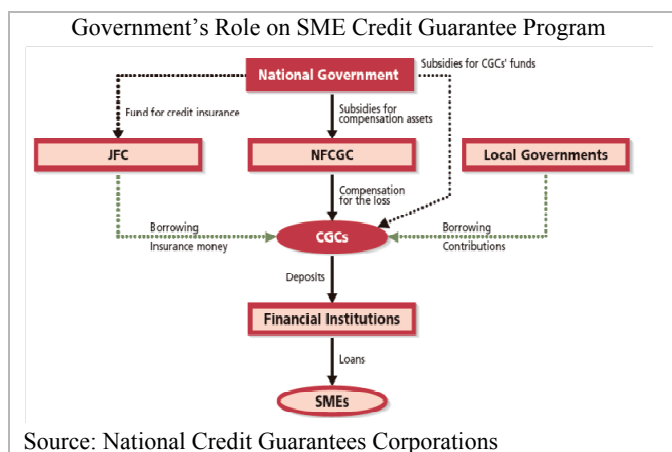
	Standard Credit Guarantees	Special and Emergency Credit Guarantees
Guarantee limit	¥280 million <i>of which</i> : unsecured loans ¥80 million.	¥280 million
Guarantee percentage	80 percent of loans under accountability-sharing system	100 percent
Guarantee fees	1.15 percent on average	about 0.8-1.0 percent on average

Source: SME Agency, METI.

bankruptcy and restructuring. The costs of these measures, however, have begun to outweigh the benefits, including by:

➤ ***Weakening credit risk assessment.***

Banks have less incentive to assess and take on credit risk under the support measures, as the guarantees covered a large share of the loan, in some cases up to 100 percent of the credit (Arping, Loranth, and Morrison 2010, and Uesugi, 2010). Over half of the SMEs that received some support (e.g., loan modification) noted in a survey that this would have a negative impact on their ability to obtain new borrowing, suggesting that the guarantees are not very effective in helping SMEs build their creditworthiness.



- ***Understating credit risk.*** Relaxing the requirement of restructured loans to be classified as “normal” under the revision of guidelines and the SME Financing Facilitation Act could lead to an understatement of the true credit risk that banks face. According to the BOJ, banks’ NPL ratio would rise by about 1 percentage point if firms with restructured loans failed to recover. A previous special guarantee program in the late 1990s and early 2000s cost government about ¥2 trillion (½ percent of GDP), large relative to the total credit guaranteed of ¥40 trillion.
- ***Reducing nonguaranteed loans and limiting incentives to restructure SMEs.*** Keeping nonviable SMEs afloat through credit support measures could reduce credit supply for startups. The continued availability of credit support at low cost has cushioned nonviable SMEs from exits or restructuring as they face little pressures to restructure. Moreover, creditors are able to rollover guaranteed loans with borrowers without requiring business improvements that would be needed in case of restructuring.⁶

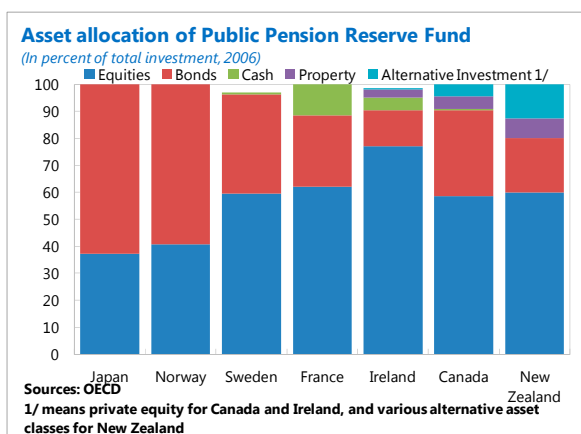
C. Why is the Availability of Risk-Based Capital Limited?

12. **Availability of risk-based capital is very limited despite plenty of liquidity.** Start-ups rely predominantly on self-finance, but the median value of funds raised from this source is small relative to other financing sources (Figure III.4). Although venture capital financing is able to raise sizeable funds, its availability is limited. Japan ranks second to last in venture capital investment as a share of GDP among the OECD. Business transfer rates, initial public offerings, and securitization of SME loans are also low by international standards.

⁶ At the same time, creditors decide whether to roll over the guaranteed loans considering various factors, such as the creditworthiness of borrowers.

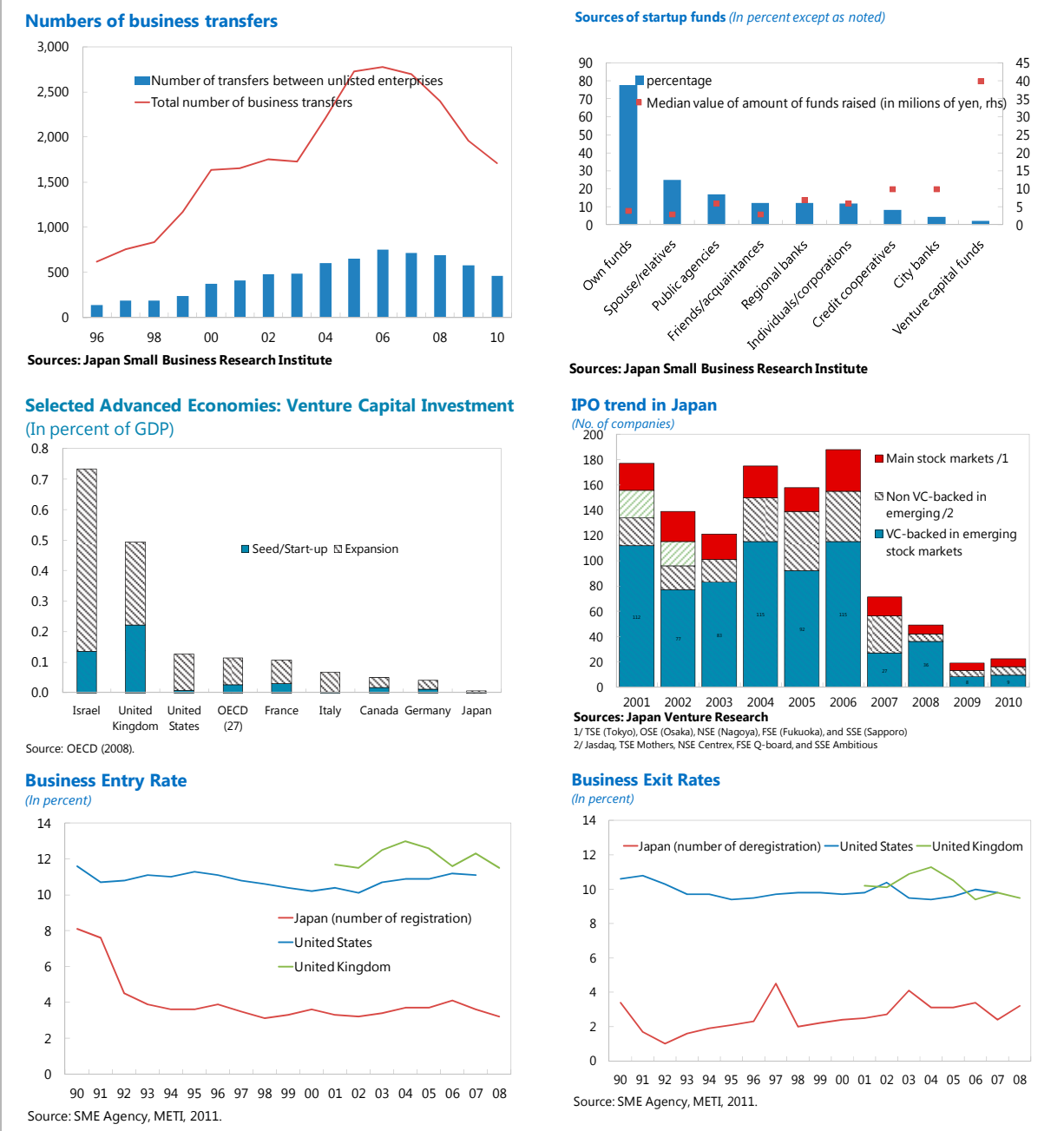
13. Several regulatory and institutional barriers contribute to the limited availability of risk-based capital, including:

- *Regulatory barriers.* Difficulties in starting a business contribute to the low business startup rate in Japan (World Bank, 2012). Japan ranks relatively low among other G-7 countries and Asia's industrialized economies in the ease of starting a business, particularly related to the time required and fees charged in business registration (Figure III.5). While Japan ranks better than average in the overall ease of doing business and access to credit, it is below a number of Asia-Pacific economies.
- *The lack of timely credit information.* While several credit registries are available, over half of surveyed financial institutions consider that assessing SME credit risks remains challenging due to limited information and untimely disclosure.⁷ Financial institutions often do not share credit information through credit registries, partly because of legal constraints and lack of a unique identification system in the absence of a tax identification number. These likely contributed to a financing gap for the 'middle-risk' group as large banks service high credit-worthy customers and lending companies engage in high-risk unsecured lending, but leave out the middle-risk group (Schaede 2005).
- *Public pension funds have been restricted from investing in riskier assets.* Japan's public pension funds differ from some other advanced countries in that regard, with a much higher share of assets in government bonds and no exposure to property or alternative investments (text figure).



⁷ Credit registries in Japan include the Credit Risk Database (CRD), Risk Data Bank of Japan (RDB), Credit Risk Information Total Services (CRITS), and shinkin data bank (SDB). Financial institutions could also get access to credit risk databases from designated credit bureaus based on the Money Lending Business Act, such as Japan Credit Information Reference Center Corp. (JICC) and Credit Information Center (CIC). There appears to be no centralized credit bureau for consumer loans, such as late payment, bankruptcy and others, are shared between banks and consumer finance under the scheme, even they are owned by these banks), leaving scope for improving efficiency through information sharing.

Figure III.4. Limited Availability of Risk-based Capital and Business Transfers



14. **Market practices such as banks’ preference for fixed-asset collateral and personal guarantees in lending also tend to limit risk-based financing.** Banks’ lending decisions typically depend on collateral availability (often in fixed assets) and personal guarantees (unlimited liability subject to a maximum amount and duration) (Shirota, Imakubo, and Nishioka 2011).⁸ While these are common practices across countries, it

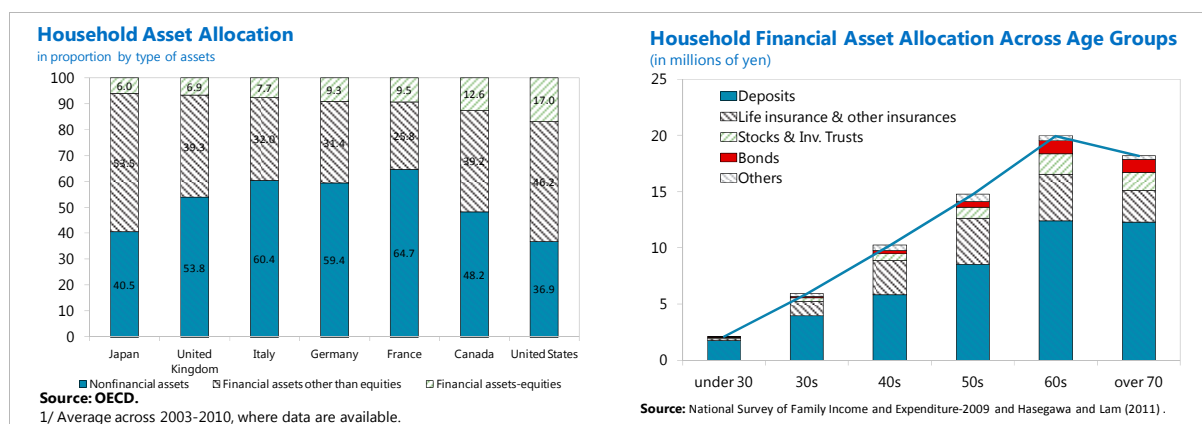
⁸ Financial institutions often request a personal guarantee in financing to SMEs. In the past, guarantors often bore indefinite unlimited joint and several liabilities under blanket guarantee contracts, placing on excessive burden on guarantors. The Act for Partial Revision of the Civil Code came into effect in 2005 to rectify this by invalidating oral agreements, mandating

(continued...)

appears that it is more prevalent in Japan given its larger reliance on bank finance, and relatively less use of asset-based lending. Moreover, claims with personal guarantees are not easily transferable due to legal provisions. More than a quarter of SMEs consider the use of personal guarantees to be an obstacle to business transfers.

15. **While efforts have been made to promote risk-based financing, it has not been widely used by financial institutions.** The GFIs and BOJ have begun to promote asset-based lending (ABL) but many financial institutions—particularly smaller regional/shinkin banks—have limited expertise in ABL (Figure III.5).⁹ Financing based on account receivables is well established because nominal claims are easy to recognize but face the challenge of double assignment of the same claims. Difficulty in assessing a fair value has limited the availability of inventory-based and current-asset based financing (JSBRI 2011). Smaller banks, in particular, do not have the expertise to assess the fair value of certain type of collateral such as inventory and intangible assets. The launch of the Act on Electronically Recorded Monetary Claims (ERMC) in FY2007 could help stipulate rights on claims and avoid the risk of double assignment of claims, and thereby lift banks' lending to SMEs. However, the development of this system is at an early stage and banks need to incur a sizeable investment and operating cost to make use of it.

16. **Risk appetite in the financial system is tepid.** In Japan, household financial assets are about five times disposable income, the highest among the OECD. However, these financial assets are held in cash and deposits with financial institutions, who in turn allocate most of their assets to government securities (text charts). The low risk appetite largely reflects social preference in an aging society, risk-averse corporate governance, and weak economic conditions at present.



contracts to stipulate maximum guarantee amounts, and limiting guarantee obligations to within five years (within three years when no period is specified).

⁹ Various GFIs have made efforts in promoting asset-based lending since 2007. The BOJ has revised its lending facility to support growth to include asset-based lending in 2011.

Figure III.5. Japan: Market Practices and Regulatory Factors that Limit Risk-based Capital

Economy	Japan	G-7 average excl. Japan	Selected Asian economies 1/
Ease of Doing Business Rank	20	27	7
Starting a Business - Rank	107	39	9
Getting Credit - Rank	24	33	7
Protecting Investors - Rank	17	44	37
Enforcing Contracts - Rank	34	43	9
Resolving Insolvency - Rank	1	23	12

Source: World Bank (2012).

1/ include Australia, Hong Kong, SAR, Korea, and Singapore

Use Rate of Collateral and Personal Guarantees

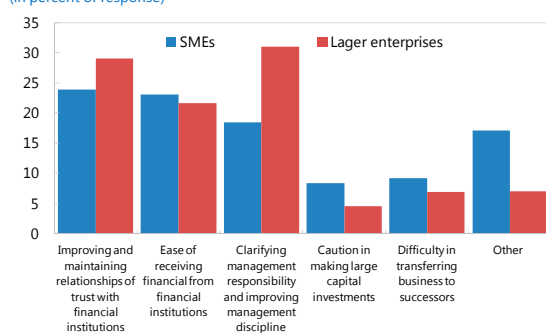
(in percent of multiple responses)



Source: Uesugi (2010)

Effects of Personal Guarantee Obligations

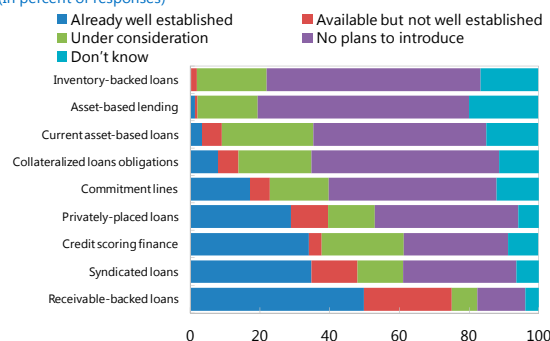
(in percent of response)



Source: Japan Small Business Research Institute Survey on SMEs

New Methods of Financing and Usage

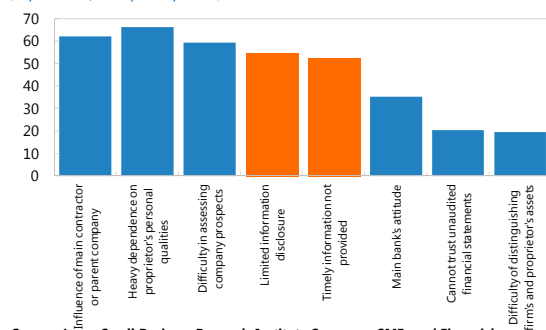
(In percent of responses)



Source: Japan Small Business Research Institute (2006) Survey on SMEs

Challenges in Assessing SME Credit Risk

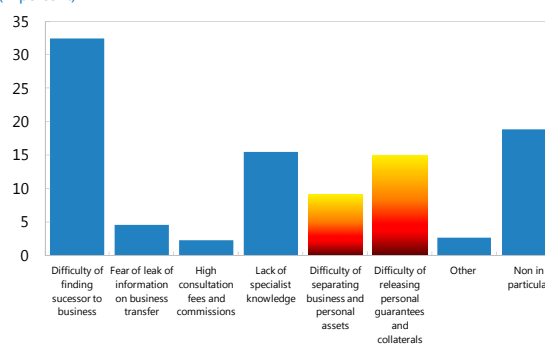
(In percent of multiple responses)



Source: Japan Small Business Research Institute Survey on SMEs and Financial Institutions.

Obstacles Encountered during Business Transfers

(in percent)



Source: Japan Small Business Research Institute Survey of SMEs

17. **The government's role in the financial system could play a role in the risk aversion.** For instance, Japan Post Bank and Insurance, which accounts for more than 10 percent of total financial sector assets, channels considerable private savings to investment securities, mostly Japanese Government Bonds. In addition, several public financial institutions do not operate on an even-playing field with private financial institutions, as several are not subject to corporate tax and capital requirements. Inspections of GFIs by the Financial Services Agency are infrequent, taking place about once every 2–3 years.

18. **The full privatization of Japan Post would create a level playing field and help channel private savings with a better balance between risk and return.** However, full privatization of Japan Post has been delayed, as has privatization of some other GFIs that provide credit (e.g., Shoku-Chukin bank and Development Bank of Japan). Delays of the GFI reforms could complicate their business strategies, e.g., Japan Post Insurance may not be able to underwrite health-care policies.

D. Policy Options to Support Credit Growth

19. **The factors contributing to slow credit growth in Japan are complicated and no single reform will provide a silver bullet to jump start credit growth.** Appropriate macroeconomic policies, together with reforms to open up protected sectors, including some service sectors and agriculture, would help boost growth (discussed in Chapter 2). In the financial sector, a number of policy measures could help foster a more dynamic financial sector, as follows:

- **Gradually phase out credit support measures.** Special credit guarantees with full coverage of the loan value need to be phased out as the recovery takes hold. Over time, reducing the normal guarantee coverage ratio from 80 to 60 percent in line with international averages (IMF, 2006) and scrutinizing the rollover of guarantees would ensure market discipline in monitoring credit risk by banks. Moreover, the temporary SME Financing Facilitation Act should also be phased out by March 2013, such that banks would not have an obligation (but still retain the option) to restructure loans at the request of SMEs. This would help limit restructured loans being reclassified as ‘normal.’
- **Advance GFIs reform.** Efforts are needed to reduce the government’s role in ownership of financial institutions and to ensure a level-playing field. Reform should involve full privatization plans for many GFIs (including Japan Post), which may help increase the availability of risk capital to the private sector. More frequent inspections by the FSA and more transparent and accountable governance for GFIs are also needed to maintain financial stability and limit contingent fiscal risks.
- **Encourage consolidation of regional and shinkin banks with low profitability by raising their capital requirements.** Increasing the capital requirement for domestic-oriented banks from 4 percent at present would facilitate consolidation. For instance, less than 5 percent of smaller banks would have a capital shortfall if the capital requirement for those banks was raised to 6 percent of risk-weighted assets (still below the minimum requirement of internationally-active banks at 8 percent). This may risk, in the near term, a contraction in credit as regional banks deleverage to meet the capital requirement, but the contraction could largely be mitigated by bringing in new capital through equity issuance, lower dividend payouts, or a temporary public capital injection. Over the medium term, higher capital would put these institutions in a stronger financial position to take on risk.

- **Accelerate SME restructuring.** Consideration could be given to refocusing the public asset management company to advance SME restructuring. This would encourage the restructuring and exit of nonviable SMEs by using debt-equity swaps to incentivize banks and SMEs under out-of-court voluntary workouts (Laryea 2010). Based on simulations with the IMF’s Global Integrated Monetary and Fiscal (GIMF) model, addressing SME structural weaknesses could raise aggregate productivity by about ¼ percentage points, which in turn would lift long-term growth by 0.1–0.2 percentage points from the baseline.¹⁰
- **Promote risk based financing** by encouraging use of asset-based lending and deepening capital market developments. The authorities (government and municipalities) could take the lead in originating and trading electronically-registered claims for firms and households, which could avoid the risks of double assignment of claims. Current support to SMEs should be scaled down and better targeted by redirecting GFIs’ lending away from reinsuring SME guarantees toward risk-based lending, as studies show startups obtaining GFIs’ financing tend to outperform (Fukanuma, and Tadanobu, and Watanabe 2006). Capital markets for securitized loans could be developed further by revising the investment restrictions for institutional investors (e.g., pension funds)—once the supervision and regulatory framework is strengthened—to encourage alternative investments such as securitized loans and venture capital. This could improve long-term returns and help channel funds towards private investment, eventually lifting growth.
- **Streamline regulatory measures** to reduce the time and cost of starting businesses, particularly for business registration, which could promote business creation and transfers. Consideration could be given to broadening the coverage of credit registries through a more centralized database, and including a consumer data bureau for personal credit information. This could be facilitated by linking the proposed taxpayer identification system to the identification of credit information of firms and individuals.

E. Changing Financial Needs of the Private Sector

20. As the population ages and firms continue to expand overseas, their financial needs would likely become more diverse. Financial institutions will therefore need to adjust their business models accordingly.

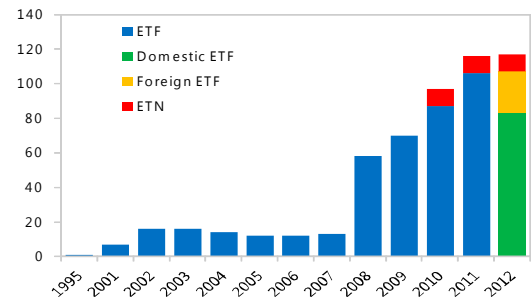
Households’ Needs

21. **As the population ages, demand for ageing-related savings and insurance products would likely increase.** Household financial assets are sizeable (nearly ¥1,500 trillion or over 3 times of GDP) and over half are held in cash and deposits as risk appetite is

¹⁰ The GIMF model is a multi-region dynamic general equilibrium model that analyzes the growth impact of an increase in productivity. If SME structural weaknesses were addressed, we would expect that the productivity of smaller firms would increase to about 80 percent of that of large firms. As a result, aggregate productivity would increase by ¼ percentage points.

low in general. Household savings have begun to shift to new financial products in pursuit of higher returns, but these only comprise about 5 percent of total financial assets. Retail financial innovation such as investment trust (toushin funds) and health-care life insurance products has been introduced to meet such demand. Estimates suggest that age and cohort effects are statistically significant in determining financial asset allocation. For example, younger households tend to hold 5-10 percent less in deposits while younger cohorts save 5-8 percent more in life insurance products than earlier cohorts.

Number of ETF and ETN
(Those listed on Tokyo Stock Exchange)



Sources: Tokyo Stock Exchange

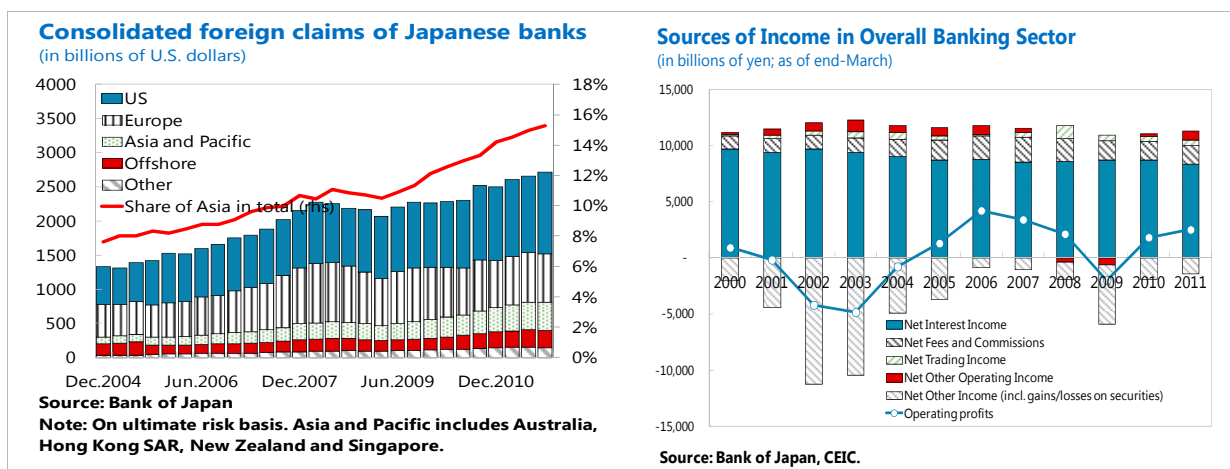
1/ In number of issues. ETF and ETN refers to exchange-traded funds and exchange-traded notes.

Corporate Sector Expanding Overseas

22. **As firms expand overseas, they would likely shift towards more diverse financing and transactional needs.** In that regard, banks could meet the rising demand by expanding overseas and fostering relationship banking (e.g., FX funding and syndicated services). Large firms may seek syndicated loans or project finance. In addition to large corporations, SMEs are also seeking overseas affiliation for markets and supplies and nearly 40 percent of surveyed SMEs consider cross-border financing and settlement are key challenges in developing overseas affiliation. In this regard, the Financial System Council (2009) recognized benefits of a more diverse financing base.

Banks' Business Models

23. **Banks are adjusting their business models to meet the changing needs of clients but so far have had modest success in enhancing core profitability.** As domestic credit demand remains sluggish, major banks are increasingly expanding overseas, with these assets rising from about ¥20 trillion to about ¥33 trillion (adjusted for FX) during September 2007-2011, mostly in the Asian region. The net interest margin for overseas lending (about 1–3 percent varying across types of lending) is, however, just slightly above the domestic margin due to intense competition with local banks and higher funding cost overseas. Ongoing deleveraging by European banks has provided takeover opportunities and major banks and insurers have been taking a selective approach focusing on syndicated finance and promising markets.



24. What are the Implications of Changing Financial Needs on Policies?

- **Retail financial innovation could be further enhanced.** Current regulations have room to improve on the licensing and distribution of insurance products, according to the Detailed Assessment Report in the FSAP Update.¹¹ In parallel, policies should strengthen consumer protection and household financial literacy.
- **Further efforts are needed to deepen capital markets.** Government initiatives on a ‘two-track’ financial system—a balance between banks and the capital market for channeling credit and sharing risk—have had limited success. The FSAP Update considered that reforms to the financial tax, legal and regulatory framework (e.g., by improving the resolution framework for nonbank financial institutions) would help address the key obstacles.
- **Changes to banks’ business models to improve profitability are welcome but would require close monitoring.** Banks’ overseas expansion would raise new regulatory and supervisory challenges. The FSA and BOJ would need to deepen cross-border risk monitoring arrangements, for example, by making active use of Memoranda of Understanding with foreign supervisory authorities.

¹¹ For example, although it is clear that an insurer is licensed for either life insurance or nonlife insurance, the specific class of insurance approved is not publicly disclosed. Such information can be useful to consumers and intermediaries.

REFERENCES

- Arping, S., Loranth G., and Morrison A., 2010, “Public Initiatives to Support Entrepreneurs: Credit Guarantees versus Co-financing,” *Journal of Financial Stability*, 6(2010), pp. 26–35.
- Bank of Japan, 2012, “Financial System Report,” April.
- Fukanuma, H., and N. Tadanobu, W. Watanabe, 2006, “Do Governmental Financial Institutions Help Startups Grow? Evidence from Japan,” Keio University Working Paper, November.
- Hosono K., Sakai K., and Tsuru K., 2006, “Consolidation of Cooperative Banks (Shinkin) in Japan: Causes and Consequences.”
- International Monetary Fund, 2006, “Republic of Korea: Selected Issues”, October.
- Japan Financial System Council, 2009, “Overview of the Medium-term Vision for the Future of the Japanese Financial System,” February.
- Japan Small Business Research Institute, 2011, “White Paper on Small and Medium-sized Enterprises in Japan,” 2011.
- Jones, R. and Tsutsumi M., 2009, “Financial Stability: Overcoming the Crisis and Improving the Efficiency of the Banking Sector in Japan,” OECD Economics Department Working Papers No.738, December.
- Laryea T., 2010, “Approaches to Corporate Debt Restructuring in the Wake of Financial Crises,” International Monetary Fund Staff Position Note, January.
- Miyakawa, H., 2009, “Electronic Claims’ Potential to Revolutionize Finance,” Nomura Research Institute, *Lakyara* Vol.58, August.
- Ono, A., Sakai, K., and Uesugi, I., 2008, “The Effects of Collateral on SME Performance in Japan,” RIETI Discussion Paper Series 08-E-037.
- Schaede U., 2005, “The “Middle Risk Gap” and Financial System Reform: Small Firm Financing in Japan, *Monetary and Economic Studies*, February.
- Shirota, T., Imakubo, K., and Nishioka, S., 2011, “Issues Surrounding the Financing of Small and Medium Enterprises—Liquidation of Receivables Through Asset-based Lending and Electronically Recorded Monetary Claims” *Bank of Japan Review*, June (in Japanese).
- Tokuda, H., 2011, “Searching for Clues to the Low Profitability and Competitiveness of Japanese SMEs: An Analysis Based upon International Comparisons,” *Mizuho Research Paper*, No. 28.

- World Bank Group, 2011, "Doing Business 2012: Doing Business in a More Transparent World."
- Uesugi I., 2010, "The Impact of International Financial Crises on SMEs: The Case of Japan," Hitotsubashi University Working Paper.
- Uesugi, I., 2008, "Efficiency of Credit Allocation and Effectiveness of Government Credit Guarantees: Evidence from Japanese Small Businesses," Bank of Japan Working Paper Series, No.08-E-2, February.
- Uesugi, I., Sakai, K., and Yamashiro G., 2010, "The Effectiveness of Public Credit Guarantees in the Japanese Loan Market," January 2010, Journal of Japanese and International Economy.
- Watanabe W., 2012, "The Bank Balance Sheet Effect on Loan Pricing and the Bank Size Evidence from Main Bank-SME Relationships in Japan," Keio University Working Paper, February 20.