OECD Economic Surveys

Japan

ECONOMICS

OECD

Volume 2003/18 – February 2004

OECD ECONOMIC SURVEYS

2003-2004

Japan

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

Pursuant to Article 1 of the Convention signed in Paris on 14th December 1960, and which came into force on 30th September 1961, the Organisation for Economic Co-operation and Development (OECD) shall promote policies designed:

- to achieve the highest sustainable economic growth and employment and a rising standard of living in member countries, while maintaining financial stability, and thus to contribute to the development of the world economy;
- to contribute to sound economic expansion in member as well as non-member countries in the process of economic development; and
- to contribute to the expansion of world trade on a multilateral, non-discriminatory basis in accordance with international obligations.

The original member countries of the OECD are Austria, Belgium, Canada, Denmark, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States. The following countries became members subsequently through accession at the dates indicated hereafter: Japan (28th April 1964), Finland (28th January 1969), Australia (7th June 1971), New Zealand (29th May 1973), Mexico (18th May 1994), the Czech Republic (21st December 1995), Hungary (7th May 1996), Poland (22nd November 1996), Korea (12th December 1996) and the Slovak Republic (14th December 2000). The Commission of the European Communities takes part in the work of the OECD (Article 13 of the OECD Convention).

Publié également en français.

Table of contents

Boxes

Tables

Annexes

Figures

BASIC STATISTICS OF JAPAN

THE LAND

Area (1 000 sq. km), 1995	377.8
Cultivated agricultural land (1 000 sq. km), 1995	51.3
Forest (1 000 sq. km), 1994	251.4
Densely inhabited districts[1] (1 000 sq. km), 1995	12.3

Major cities, October 2000 estimate (million inhabitants):	
Tokyo (23 wards)	8.1
Yokohama	3.4
Osaka	2.6
Nagoya	2.2
Sapporo	1.8
Kobe	1.5
Kyoto	1.5

THE PEOPLE

Population, October 2002 estimate (1 000)	127 435
Number of persons per sq. km in 2001	337
Percentage of population living in densely inhabited districts in 1995[1]	64.7
Net annual rate of population increase (1995-2000)	0.2

Labour force as per cent of total population, October 2002	52.8
Percentage distribution of employed persons, 2002:	
Agriculture and forestry	4.2
Manufacturing	19.3
Service	61.4
Other	15.1

PRODUCTION

Gross domestic product in 2002 (billion yen)	499 742
Growth of real GDP, 2002	0.2
Gross fixed investment in 2002 (per cent of GDP)	24.1

Growth of real gross fixed investment, 2002	–4.7
Net domestic product of agriculture, forestry and fishery, at producer prices, in 2001 (billion yen)	5 027
Growth of industrial production, 2002	–1.5

THE GOVERNMENT

Public consumption in 2002 (per cent of GDP)	17.9
Current public revenue in 2001 (per cent of GDP)	31.3
Government employees as a per cent of total employment, 2002	8.6

	House of Representatives	House of Councillors
Composition of Parliament, November 2003:		
Liberal Democratic Party	237	113
Democratic Party	177	69
Peace and Reform (*Komei*)	34	23
Communist Party	29	20
Others	23	20
Vacancy	0	1
Total	480	247
Last elections	November 2003	July 2001

FOREIGN TRADE AND PAYMENTS
(2002, billion yen)

Commodity exports (fob)	49 480
Commodity imports (fob)	37 746
Services balance	–5 337
Investment income balance	8 266
Current balance	14 140
Exports of goods and services as a per cent of GDP	11.2
Imports of goods and services as a per cent of GDP	9.9

	Exports	Imports
Percentage distribution:		
OECD countries	56.6	44.0
of which: North America	31.5	20.0
Asia	36.3	38.9
Other	11.9	17.1
Total	100.0	100.0
Crude material and fuels (SITC 2, 3, 4)	1.2	25.4
Semi-manufactured goods (5, 6)	18.5	16.7
Machinery and transport equipment (7)	68.2	28.8
Other (0, 1, 8 ,9)	12.1	29.2
Total	100.0	100.0

THE CURRENCY

Monetary unit: Yen

Currency unit per US$, average of daily figures:	
Year 2002	125.3
October 2003	109.5

1. Areas whose population density exceeds 5 000 persons per sq. km.

This Survey is published on the responsibility of the Economic and Development Review Committee of the OECD, which is charged with the examination of the economic situation of Member countries.

•

The economic situation and policies of Japan were reviewed by the Committee on 13 October 2003. The draft report was then revised in the light of the discussions and given final approval as the agreed report of the whole Committee on 19 November 2003.

•

The Secretariat's draft report was prepared for the Committee by Randall Jones, Hideyuki Ibaragi, Jens Høj, Richard Herd and Michael Wise, under the supervision of Yutaka Imai.

•

The previous Survey of Japan was issued in January 2003.

Assessment and recommendations

A wide-ranging programme, covering both macroeconomic policies and structural reforms, is necessary to achieve a robust and sustained expansion

The recent acceleration of growth has raised hopes that Japan's economic fundamentals are changing for the better following a disappointing decade, during which economic growth averaged only 1 per cent a year. Indeed, Japan has made progress in addressing some structural problems, notably the weakness of the banking sector, while restructuring in the corporate sector has advanced. However, despite these positive signs, there is still considerable uncertainty regarding Japan's economic outlook. Achieving a robust, sustained expansion will depend on overcoming serious structural problems, which still limit Japan's growth potential and weaken demand. Resolving such problems requires greater resolve in pursuing a broad-based policy that features structural reforms to improve resource allocation, revitalise business sector activity and restore the soundness of the banking sector. The latter would improve the effectiveness of monetary policy, which, while very expansionary, has proven incapable of bringing an end to the deflation that has persisted since the mid-1990s. Monetary policy must remain expansionary until the recovery is secure and deflation has definitely ended. Extensive use of fiscal stimulus has increased public debt to more than 150 per cent of GDP just as Japan enters a phase of marked population ageing. The challenge for fiscal policy is to pursue sustained fiscal consolidation over an extended period.

Japan's recovery strengthened in mid-2003

Gauging the strength of the recovery is not easy, but Japan's upturn appears to be continuing, with output growth likely to exceed 2½ per cent in 2003. Corporate restructuring efforts have paid off with a recovery in profits, resulting in a rebound in business investment. Macroeconomic policy has also played a supportive role; further monetary policy easing has kept long-term interest rates at low levels, while the stance of fiscal policy has been slightly expansionary since 2002. Export growth has been buoyant, supported by strong demand from China. However, the pace of growth has been insufficient thus far to reduce the unemployment rate, which is still near its record high of around 5½ per cent, while the underlying trend of moderate deflation continues. Nevertheless, increased optimism about Japan's economic prospects has attracted substantial inflows of foreign investment, which have helped to boost the stock market by one-third since April, thus strengthening the balance sheets of financial institutions. Meanwhile, there are signs of some progress in dealing with long-standing problems in the banking sector, the key to re-opening the monetary transmission mechanism. The expansion is projected to continue through 2004, though at a more moderate rate, subject to interest and exchange rate developments and the international economic environment.

The Bank of Japan's policy of quantitative easing…

The Bank of Japan has moved aggressively into the uncharted territory of quantitative easing under zero interest rates by substantially increasing the targets for the current account balances at the central bank. This approach has been successful in maintaining stability in financial markets and preventing a deflationary spiral, as low interest rates have had a positive impact on economic activity. However, there is little evidence of a significant effect on bank lending, which continues to decline, thus limiting the positive impact on the real economy. At the same time, Japanese government bonds have been extensively used in implementing the quantitative easing approach, which appears to have distorted the allocation of financial flows. In particular, the central bank's commitment to continue large purchases of government bonds has attracted private-sector purchases in this market. The resulting run-up in prices has created the risk of latent losses for financial institutions once deflation ends and the yield curve becomes steeper.

... should be strengthened by expanding the range of assets that it purchases...

The priority for monetary policy should continue to be stopping deflation, which has a negative impact on Japan's growth prospects. To achieve this objective, the central bank should strengthen the effectiveness of quantitative easing by broadening the range of assets that it purchases. The recent decision by the Bank of Japan to buy securities backed primarily by receivables held by, or loans to, small and medium-sized enterprises is thus welcome and will also increase the investment capacity of smaller firms. The authorities should consider expanding the range of assets further. Such an approach would enhance the credibility of the Bank of Japan's commitment to ending deflation since inflation would likely generate capital gains on those assets whose prices are positively correlated with inflation. Moreover, it could help to ease the impact of the quantitative easing policy on the government bond market. Further opportunities to limit the impact on that market have been provided by intervention in the foreign exchange market, which amounted to nearly 13.5 trillion yen in the first nine months of 2003.

... while developing a medium-term strategy to cope with the return to positive inflation rates

Looking further ahead, monetary policy should also include a coherent exit strategy to deal with the complex adjustment that will occur when deflation ends. This will require a medium-term framework for monetary policy management, including a long-run target for the inflation rate or the price level that is high enough to limit the risk of falling back into deflation. The central bank should commit to continue monetary easing for a longer period than necessary to achieve the target, thus allowing some overshooting, until the risk of deflation becomes negligible. The recent clarification by the Bank of Japan of its commitment to continue the quantitative easing policy is welcome.

Strengthening the effectiveness of monetary policy also depends on improving the health of the banking sector...

Increasing the effectiveness of monetary policy also requires addressing further the problems in the banking sector, which have essentially closed the credit transmission channel. Bank lending has been shrinking at an annual rate of around 2 per cent during the past few years, reflecting both the banks' need to protect their balance sheets and weak loan demand from the corporate sector. The weakness of capital in the banking sector is partially due to the large loan losses stemming from the high level of non-performing loans, resulting in ten consecutive years of net operating losses. The deflationary environment keeps the rate of default on loans at a high level, which, in turn, limits the effectiveness of monetary policy in ending deflation. Moreover, the declining value of collateral raises the external finance premium, thus further slowing the growth of lending. Given the close linkage between the weakness in the banking sector and deflation, these two problems must be solved simultaneously. It is essential, therefore, that further monetary policy measures by the Bank of Japan be accompanied by decisive action to restore the health of the banking sector. In this regard, initial progress in implementing the Programme for Financial Revival, a bold programme for rehabilitation of the financial sector announced in October 2002, is welcome.

… by reducing their non-performing loans…

One key priority in restoring the health of the financial sector is the government's goal of reducing the major banks' stock of non-performing loans by half to about 4 per cent of total lending by March 2005. The banks have made progress toward this objective, reducing the ratio to 7.2 per cent in March 2003, despite new non-performing loans. However, this will be a challenging target to achieve since the rate of new non-performing loans remains high. This increase reflects both a deterioration in loan quality during a period of sluggish economic growth and stricter self-assessment of assets by the banks, prompted by special inspections of major borrowers by the Financial Services Agency. The first round of regular inspections found a level of non-performing loans that was substantially above that reported by the banks, suggesting that the size of the problem was larger than acknowledged by the banks themselves. One positive sign is that the gap between the authorities and the banks regarding the amount of non-performing loans narrowed in the second and third regular inspections. Further strengthening the self-assessment of assets, as well as provisioning, is a key aspect of fully resolving the non-performing loan problem.

… in part through using public institutions effectively to accelerate corporate restructuring…

The newly created Industrial Revitalisation Corporation (IRC) and the Resolution and Collection Corporation (RCC) should be used effectively to accelerate the disposal of non-performing loans and corporate restructuring. Both institutions will purchase loans through March 2005 to supplement the role of the private sector. Achieving the IRC's desire to revitalise some 100 firms requires it to offer terms sufficiently attractive to induce banks to sell their loans, mainly those classified as "requiring special attention". On the other hand, offering too high a price will make it difficult to realise its hope of recording profits, which will in any case require successfully restructuring the companies responsible for the bad loans. This is also true of the RCC, which purchases loans of poorer quality mainly to smaller firms, which are chiefly classified as "in danger of bankruptcy" or below. In short, both institutions should purchase loans at appropriate prices and impose effective restructuring programmes to avoid moral hazard problems and allow these publicly financed institutions to break even financially, thus avoiding additional burdens for taxpayers.

… increasing capital in the banking sector…

Even with the efforts of the IRC and the RCC, achieving the government's target of accelerating the pace of disposal of non-performing loans will nevertheless be a challenge, given the weakness of banks' capital. In addition to the declines in the quantity of capital, it is necessary to address concerns about its quality. *First*, the banks and the life insurance companies, another troubled area of the financial system, hold significant amounts of each other's capital, creating concerns about "double-gearing" and systemic risks. *Second*, deferred tax assets – future tax deductions which banks are allowed to count as capital – are of questionable quality, given the banks' long record of operating losses. This problem was recognised by an outside auditor that disallowed much of the deferred tax assets claimed by a major bank in May 2003, forcing it to seek an injection of public funds. The increased accountability of auditors is an important step that should be maintained to boost confidence in financial markets. Given that deferred tax assets account for about half of tier I capital, their quality requires careful scrutiny. The issues related to setting a ceiling on deferred tax assets in banks' capital are currently being discussed by the Financial System Council. These factors may create a need for additional capital, either from the private sector or from injections of public funds, subject to strict conditions. It is important to rigorously enforce guidelines prohibiting banks from acquiring capital from weak clients in exchange for loans.

… and taking measures to improve profitability

The weakness of capital in the banking sector reflects a fundamental problem of low underlying profitability due to narrow lending margins, despite significant restructuring efforts to cut costs. This suggests a need to improve the governance of banks, including those for which the government is a major owner. In addition, the imposition of guidelines on the level of bank lending to small and medium-sized enterprises seems to run counter to the general thrust of Japan's bank rehabilitation strategy by weakening the accountability of bank management for its lending decisions. Finally, low profitability suggests excess capacity in the banking sector. It is thus essential to scale back the growing role of government financial institutions, which have used their inherent advantages to increase their market share. Moreover, injections of public funds should be made selectively, subject to strict conditions related to the implementation of restructuring programmes. In addition, properly carrying out due diligence is essential to ensure the accountability of the new management at restructured banks.

While low interest rates are forestalling strains in financing the budget deficit…

Achieving the 2005 target for reducing non-performing loans by half implies an acceleration of corporate restructuring, which would have a negative impact on output and employment in the short run. However, given the precarious state of public finances, any discretionary increases in social welfare outlays should be offset by spending cuts elsewhere and any increase in revenues due to a rise in nominal income should be used to reduce the deficit. Indeed, with a deficit estimated at nearly 8 per cent of GDP in 2003, public debt is likely to exceed 150 per cent of GDP. The impact of the sharp run-up in debt has been limited by the exceptionally low level of interest rates on government bonds, reflecting the risk aversion of investors and the persistence of deflationary expectations. Indeed, interest payments in absolute terms are lower than a decade ago despite the substantially higher level of public debt. If interest rates had remained at their level of the early 1990s, government interest payments would be higher by nearly 5 per cent of GDP. The transition to positive rates of inflation, even if there is no rise in the real interest rate, will boost interest payments on public debt over time, creating a risk of financing strains.

... a credible, medium-term fiscal consolidation plan is needed

The fiscal situation is not sustainable at present given that the nominal interest rate exceeds the nominal growth rate. Moreover, population ageing is creating pressure for increased outlays, while there are areas, such as the financial sector, where additional public spending may be necessary to enhance growth prospects. In addition, there is a risk of significant contingent liabilities associated with government special status corporations. The government has taken steps to limit expenditures, although the impact on the budget deficit has been more than offset thus far by weak economic conditions that continue to erode tax revenues. However, assuming no supplementary budget in FY 2003, there is likely to be a ½ per cent of GDP decline in the structural budget deficit in 2004. A more significant tightening could undermine the on-going recovery and reinforce deflation, thus delaying a major decline in the budget deficit. In sum, the authorities must negotiate a narrow path that avoids actions that might push the economy back into recession, while building confidence in the longer-term sustainability of public finances. The key to building such confidence appears to be taking concrete steps early on to cut the budget deficit, as expected in 2004, and by establishing a credible consolidation programme that spells out the changes in expenditure and revenue necessary to reduce the budget deficit further in 2005 and over the medium term.

Such a plan should include specific tax and expenditure measures...

The government announced a *Reform and Perspectives-FY 2002 Revision* that targets a primary budget surplus by the early 2010s, while keeping general government expenditures at the FY 2002 level of 38 per cent of GDP. Such a surplus is necessary to stabilise public debt, though at a higher level of around 180 per cent of GDP. However, the *Perspective* does not provide specific measures to achieve this major shift in public finances, which, according to OECD calculations, amounts to an 8 percentage point change in the primary balance. The credibility of the *Perspective* could be enhanced by establishing a direct link to specific spending and revenue decisions, as well as by strengthening the policy feedback mechanism to take into account deviations from targets. In particular, meeting the spending limit will be a challenge given the spending pressures, notably those related to population ageing. Indeed, meeting the spending limit in the FY 2003 budget required a significant reduction in discretionary outlays to balance increased expenditures mandated by the social security programmes. With discretionary spending falling, it will be more important than ever to increase the efficiency of public expenditure to enhance growth prospects.

… accompanied by reform of the pension system

Public finances will come under greater pressure over the longer term from the ageing of the population, as the ratio of elderly to younger people continues to increase more rapidly than in other OECD countries. Public expenditure on pensions has doubled from 6 to 12 per cent of national income in the past decade and will rise to 17 per cent by 2060 if no further action is taken. The authorities have announced a plan to set a ceiling on the contribution rate and allow benefit levels to adjust to demographic and economic trends. Such an approach should be implemented to avoid significant hikes in contribution rates, with negative implications for work incentives. This should be accompanied by policies to ensure that those most at risk of poverty in old age – notably women, who tend to work part-time – have more opportunity to accumulate pension rights. This could be achieved by bringing part-time workers into the earnings-related second-tier pension system. Although activity rates of the elderly are already among the highest in the OECD area, consideration should be given to reducing the disincentives for persons over the age of 60 to continue working while drawing the second-tier pension. As a reduction in replacement rates would force pensioners to rely more on private saving, the government needs to ensure a better flow of information to savers on the real financial health of pension funds and insurance companies. In particular, regulators should ensure that the interest rate used to value future liabilities is adjusted to current realities and that fund sponsors take prompt corrective action when an actuarial deficit emerges in a pension fund.

Fiscal consolidation will require increased tax revenues

Given the objective of freezing public expenditures as a share of GDP, balancing the budget will require a significant rise in government revenue, which at under 32 per cent of GDP is well below the OECD average. The FY 2003 budget provides some tax reductions that are intended to spur growth, followed by base-broadening measures that will make the changes revenue neutral over the medium term. However, much more will need to be done in the area of tax reform in order to achieve the fiscal consolidation targets. The general principle should be to streamline tax relief and allowances, while broadening the tax base, to limit the distortive effects of higher tax rates that would reduce Japan's potential growth rate, which at 1¼ per cent is already one of the lowest in the OECD area. Given the size of the fiscal consolidation required, an increase in the consumption tax rate will be required at some point.

While some progress in regulatory reform has been achieved...

While the low potential growth rate partly reflects falling labour inputs, it is primarily due to the deceleration of productivity growth. To counter this trend, the Japanese authorities have emphasised the importance of structural reform to boost productivity and have made progress in some areas. In particular, urban zoning regulations have been reformed to encourage more efficient use of land, while requirements for starting new companies have been eased to promote entrepreneurship. Policies to introduce competition to network industries have been implemented, while additional resources have been granted to the Fair Trade Commission (FTC). To encourage international competition, Japan entered into its first free trade agreement, with Singapore, at the end of 2002.

... raising Japan's growth potential requires strengthening competition...

However, reform must be accelerated to increase Japan's growth potential. One key is to strengthen competition, which appears weak in Japan based on a number of indicators, such as internationally high prices in a number of protected sectors. Enhancing competition would help lower those prices and promote innovation, thus boosting consumer welfare and improving resource allocation. There is considerable scope, therefore, for using pro-competition policies to raise Japan's growth prospects, in part by upgrading the FTC.

- Its independence should be increased by selecting its commissioners from a wider range of society, rather than relying on civil servants.
- Its resources should be evaluated to ensure that they match its expanding role.
- Establishing a career path within the FTC would help it to better use its resources by attracting higher quality staff.
- Sanctions for violation of the law should be increased to strengthen their deterrent effect.

Stronger sanctions – including surcharges and penalties – would also enhance the effectiveness of the leniency programme, which is under consideration. The introduction of this programme, as well as a whistleblower programme to counter widespread anti-competitive collusion that is often linked to trade associations, should be brought forward.

… improving the framework for network industries…

Another reason for weak competition is that the regulatory policy framework for network industries is still in its infancy compared to most other OECD countries. There are no independent sectoral regulators at present to ensure pro-active *ex ante* regulation, a necessary condition for introducing competition in markets dominated by strong incumbents. Moreover, regulatory capture appears to be widespread, which could be addressed through the creation of a single regulator covering relevant network sectors. The most liberalised network industry is the *telecommunication sector*, where the rapid expansion of broadband connections has strengthened competitive pressure. However, despite significant declines, prices remain high in some areas and important issues concerning interconnection charges remain to be settled. Liberalisation of the *electricity* and *natural gas* sectors has been hampered by market structures characterised by local monopolies. Hence, the most important measures necessary for competition are establishing physical interconnection and non-discriminatory access charges and conditions, as well as the vertical unbundling of activities. In the *postal market*, the universal service obligation for new entrants should be ended if competition in the basic letter segment is to develop.

… and relaxing regulations in the transport sector…

Relaxing overly prescriptive regulations and strengthening competition are needed to reduce the cost of intermediate inputs, such as *transport*, which are among the highest in the OECD area. Costs are increased by tight regulation of charges for facilities – often used to cross-subsidise the construction of additional infrastructure. Existing infrastructure could be better exploited by allowing prices to affect demand, such as by introducing a market-based slot allocation mechanism in the airport sector. Moreover, related services, such as cargo handling and maintenance, are often provided on a non-competitive basis. In some cases, prices appear to be co-ordinated through complex interrelationships between companies that may prevent new entry, pointing to the need for a pro-active competition authority. As in other segments of the transport sector, prices should be reduced through the privatisation of facilities and the introduction of market-based charges. In addition, regulation tends to stifle competitive pressures, pointing to the need for removing the pre-notification requirement for price changes.

… and the retail sector

The retail sector is characterised by a relatively large number of small shops, providing high quality at high prices. However, to the extent that prices are pushed up by collusive practices in the distribution sector, this should be addressed by rigorous enforcement of competition policy. Meanwhile, the large-store segment appears less developed than in other countries. Regulations that restrict the establishment of large stores and thus limit the access of consumers to low-priced goods should be relaxed.

The creation of special structural reform zones…

Regulatory reform is also essential to remove barriers to the establishment of new businesses and to achieve social goals at minimum cost. While progress has been made in many areas, addressing the more challenging issue of regulations in the social welfare area requires the creation of a more powerful organisation to succeed the Council for Regulatory Reform, whose mandate expires in March 2004. Given the strong opposition that the Council, which consists of private-sector experts, faces from some ministries, its successor should have a more formal legal basis. The creation of special structural reform zones is another way to overcome the power of vested interests by using the creativity and knowledge of local authorities and the private sector in removing obstacles to growth. Such an outcome, though, depends on preventing ministries from blocking proposals that could create new business opportunities. Moreover, the success of special zones depends on the demonstration effect to spread reform from limited areas to the rest of the country. The regulatory framework for environmental protection would also be improved by increasing reliance on economic incentives, such as cutting taxes on very-low sulphur content diesel fuel, to reduce air pollution.

… and increased trade and investment should also enhance competition…

Enhanced international competition through increased inflows of direct investment and trade is another priority. The government is taking measures aimed at doubling the cumulative amount of foreign direct investment in Japan in five years, mainly by reducing obstacles and pro-active measures such as disseminating relevant information. Its success, however, may ultimately depend on creating more positive attitudes to foreign investors at the local level and enhancing Japan's growth potential to attract the interest of overseas firms. While some flexibility may be necessary for some sensitive products, excessive pressure to maintain high levels of protection for agriculture should not be a reason to prevent Japan's inclusion in free trade agreements, which would allow it to tap into the economic dynamism of Asia. In addition to increasing the welfare of Japanese consumers, improvement of agricultural market access would in general help developing countries expand their exports to Japan. Within that sector, further opening of the rice market, which has already been partially opened to imports, might help the rural sectors in certain Asian developing countries, even if the primary benefits might accrue to higher-income countries. Any aspects of multifunctionality in agriculture, such as protecting the environment, should be dealt with by adopting well-targeted policy measures that minimise trade distortions. In the manufacturing sector, the development of trade and investment links with developing countries would be further promoted through lower tariffs on textiles and clothing. Increased trade, combined with effective foreign aid, would help poorer countries move onto faster growth paths. Although Japan was the largest aid donor in the 1990s in absolute terms, the aid programme has been cut in recent years. Greater transparency in decision-making and enhanced accountability for results might help the public accept a higher aid budget.

… which requires greater labour market flexibility to cope with the resulting shifts in workers

Increased labour market flexibility is essential to cope with strengthened competition and accelerated restructuring in the financial and corporate sectors. The ability of policy-makers to alter private-sector practices, such as the seniority-based wage system, which appears to constrain flexibility, is limited. Nevertheless, the government can take the lead in encouraging performance-based pay in public corporations. Policies to encourage the development of a more active and deeper external labour market by further relaxing restrictions on fixed-term contracts, temporary workers and private job-placement firms, would also be beneficial. Moreover, the high level of protection for regular workers should be reduced. Emphasising training to develop skills that are transferable between firms appears to have larger benefits than employment subsidies, which typically entail large dead-weight costs. A larger external labour market could, in turn, facilitate greater use of performance-based wages, which should help boost the productivity of workers. Less reliance on seniority-based wages would also help encourage the continued employment of older workers beyond the age of 60. Finally, the labour force participation of prime-age women would be boosted by family friendly policies.

Summary

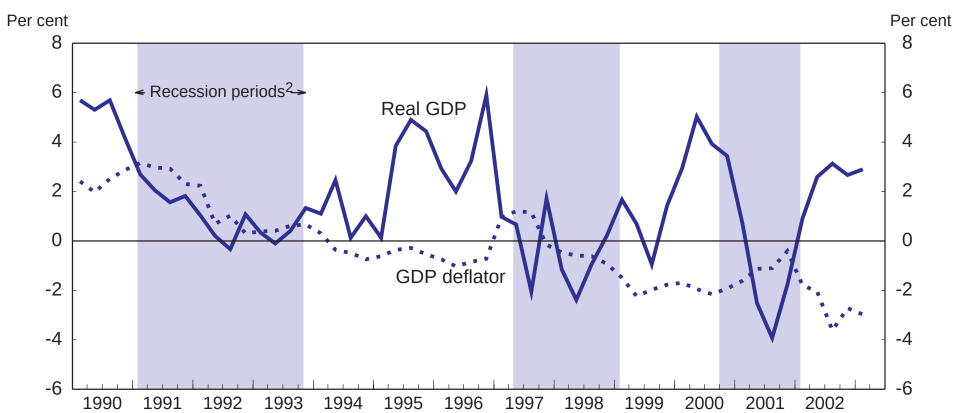
The current economic upturn does not diminish the urgency of continuing with fundamental reforms to lay the foundation for a robust and sustainable expansion strong enough to reverse the downward trend in Japanese living standards relative to other OECD countries and to restore price stability after nearly eight years of deflation. Given the negative implications of falling prices, the Bank of Japan should strengthen its quantitative easing policy by further expanding the range of assets it purchases. In addition, the effectiveness of monetary policy depends critically on resolving the problems in the banking and corporate sectors. The authorities should follow through on the objective of substantially reducing non-performing loans and revitalising the corporate sector, while ensuring that banks are adequately capitalised, using public money if necessary. Moreover, it is important to scale back the role of government financial institutions. Given the likely negative impact of accelerated bank and corporate-sector restructuring on activity and the need to ensure that the recovery is not ended prematurely, excessive fiscal policy tightening should be avoided, while any increase in revenue due to buoyant activity should be used to reduce the deficit. Achieving the moderate fiscal consolidation projected for 2004 is a key to building confidence in the longer-term sustainability of public finances, which also requires a credible consolidation plan for 2005 and the years beyond, including measures to limit spending and boost tax revenues. Moreover, it is essential to prevent increases in spending as a share of GDP, an objective that requires reform of pension and health care programmes in the face of rapid population ageing. Given the constraints on macroeconomic policy, a successful programme to revitalise the economy will require a broad programme of structural reform, focused on strengthening competition to boost consumer welfare and improve the allocation of resources. To achieve such an outcome, competition policy should be improved by making the Fair Trade Commission stronger and more effective and by creating a framework conducive to competition in network industries that have been liberalised, such as telecommunications and energy. Expanded international trade, greater inflows of direct investment and removal of outdated regulations – accelerated through the recently created special zones – also have important roles to play in boosting competition. In sum, a broad-ranging programme of carefully designed macroeconomic policies and far-reaching structural reforms to enhance Japan's growth potential is needed.

I. Macroeconomic developments and key economic challenges

The economic upturn that began in early 2002 faltered during the course of the year but gained a second wind in the spring of 2003. With six consecutive quarters of positive growth, this upturn has already matched the length of the previous expansion, which started at the end of 1999 (Figure 1). However, the pace of output growth, at an annualised rate of nearly 3 per cent since the beginning of 2002, has not been strong enough to reduce the unemployment rate markedly from its record high of 5½ per cent, while deflation, as measured by the GDP deflator, was running at an annual pace of 3 per cent in the first half of 2003. Consequently, nominal GDP has now fallen about 4 per cent from its 1997 peak. The key question is whether this upturn will prove more durable, ending the pattern of mild expansions following shallow downturns that have resulted in average growth

Figure 1. **Economic growth and deflation**

Quarterly changes,[1] three-quarter moving average



1. Seasonally-adjusted annual rate.
2. The identification of recessions is based on detailed analyses of a variety of indicators. The trough of the 2001 recession has not yet been officially identified.

Source: Cabinet Office.

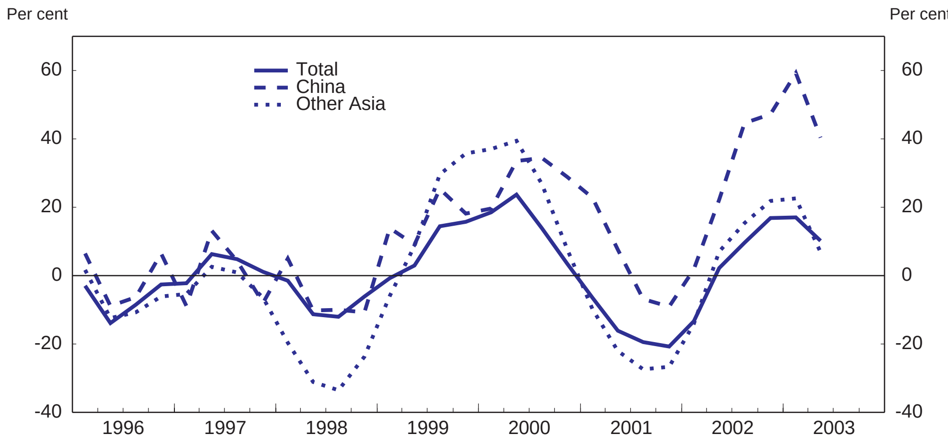
of only 1 per cent a year over the past decade. Japan's poor performance, despite expansionary macroeconomic policies, reflects the impact of the collapse of the asset price bubble, failure to adequately address banking-sector problems, weak competition and outdated regulations in many sectors that limit business-sector dynamism.

Despite declining nominal wages and the rise in the unemployment rate, consumer spending has been a major stabilising force during the past few years in the context of a volatile external environment and on-going restructuring in the business sector. Indeed, the share of private consumption in GDP has risen to more than 57 per cent, compared to an average of 55 per cent in the 1990s. However, the capacity of the household sector, whose wealth is on a downward trend, to sustain a robust economic upturn is limited. Moreover, the scope for macroeconomic policies to promote growth and to ensure price stability appears to be small, placing Japanese policymakers in a difficult dilemma. The reliance on expansionary fiscal policy over the past decade has supported activity but has been unable to launch a durable economic recovery, while boosting the public debt to GDP ratio to extraordinarily high levels. Further use of fiscal instruments is thus constrained by the risk that a continued run-up in public debt will undermine confidence, resulting in a hike in long-term interest rates. Meanwhile, the Bank of Japan has lowered short-term interest rates to zero and introduced a policy of quantitative easing. This approach has helped maintain financial-market stability and prevent a deflationary spiral, but has not succeeded thus far in ending deflation or triggering a strong recovery. One reason that quantitative easing has not had a marked impact on broad monetary aggregates nor on the real economy is that bank credit continues to decline: the impact of monetary policy is partially blocked by the problems in the banking sector, suggesting a need to focus on the restructuring of that sector. Moreover, weak competition in many sectors, problems in network industries and regulations constrain productivity and growth. Further measures to boost competition and regulatory reforms are thus essential. In short, a broad-based programme that combines appropriate macroeconomic policies with structural reforms is required to meet the difficult challenges facing Japan.

The economic recovery remains on track

The economic upturn beginning in early 2002 has been led, in part, by exports, which have risen at a 12 per cent annual rate during the 18 months through mid-2003. External demand was concentrated in other Asian economies, which were responsible for a third of the increase in Japanese exports over that period, with China playing a key role (Figure 2). Indeed, China (including Hong Kong) has emerged as the second-largest market after the United States, with a share of 18 per cent of Japanese exports in mid-2003. The export-led recovery took place despite falling shipments of information and communication technology

Figure 2. **Export growth led by Asia**
Year-on-year percentage change, US dollars



Source: OECD.

goods, as exports of cars and related equipment – which account for a quarter of Japanese exports – recorded double-digit growth. However, exports were negatively affected by the rise in the yen during 2002 and geo-political concerns in 2003 that slowed world trade. Consequently, export growth decelerated markedly in the first half of 2003. Nevertheless, the foreign balance made a significantly positive contribution to the recovery as import growth slowed sharply from 10.6 per cent in the second half of 2002 to 1.1 per cent in the first half of 2003. A key factor was reduced travel abroad because of the severe acute respiratory syndrome. In sum, the current account surplus increased slightly to 2.8 per cent of GDP in the first half of 2003 (Table 1).

Private-sector demand

Stronger growth, combined with the restructuring efforts of firms, boosted profitability in the corporate sector. Indeed, current profits rose by a quarter in FY 2002, reaching 2.6 per cent of sales in the manufacturing sector, as during the last cyclical upturn in 2000. However, the rate of profitability remains low compared to past levels as well as to other countries.[1] Moreover, the improvement was marked by a polarisation of performance between healthy companies and those that are financially distressed – the counterpart of the non-performing loan

Table 1. **The current account and external trade**

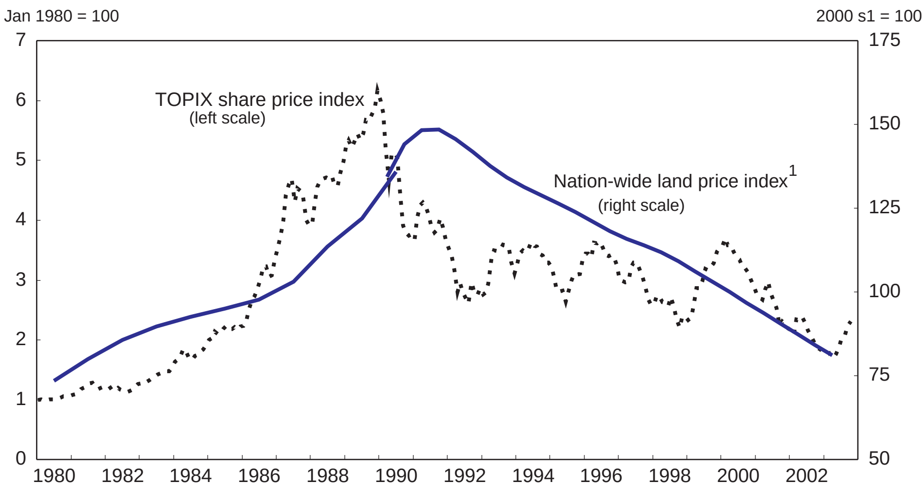
	1999	2000	2001	2002	2003[1]	Seasonally adjusted annual rates 2002 1st half	2002 2nd half	2003[1] 1st half	2003[1] 2nd half
	Trillion yen								
A. Balance of payments									
Trade	14.0	12.6	8.5	11.7	7.1[2]	11.7	11.6	6.7[2]	7.6[2]
Exports	45.8	49.5	46.6	49.5	58.0[2]	48.4	50.5	57.3[2]	58.8[2]
Imports	31.8	37.0	38.1	37.7	50.9[2]	36.7	38.9	50.6[2]	51.2[2]
Services	–6.2	–5.1	–5.3	–5.3	–	–4.9	–5.6	–	–
Investment income	6.6	6.5	8.4	8.3	8.2	8.7	8.0	7.9	8.6
Transfers	–1.4	–1.1	–1.0	–0.6	–1.0	–0.3	–1.0	–0.9	–1.1
Current account	13.1	12.9	10.7	14.1	14.5	15.1	12.9	13.8	15.2
Per cent of GDP	2.6	2.5	2.1	2.8	2.9	3.0	2.6	2.8	3.1
	Percentage change from previous year								
B. Trade in goods (customs basis)									
Volume									
Exports	2.1	9.4	–10.2	8.3		3.4	13.5	–0.2	
United States	4.3	3.0	–14.9	2.8		–2.0	7.8	–10.6	
EU	–1.4	3.9	–16.8	–5.8		–11.7	0.8	–12.8	
Asia	9.7	17.1	–9.6	18.0		10.6	25.4	2.0	
Imports	9.6	11.0	–1.4	1.6		–3.3	6.6	13.4	
Unit value									
Exports	–8.1	–0.7	5.5	–1.8		–2.1	–1.5	1.9	
Imports	–12.2	4.6	5.1	–2.0		–3.2	–0.7	–1.5	

1. Second half estimated by the OECD.
2. Exports and imports in 2003 include goods and services.
Source: Bank of Japan, Balance of Payments Monthly; Japan Tariff Association, Summary Report of Trade of Japan; and OECD.

problem for the banking sector.[2] Nevertheless, the increase in profitability and the rebound in exports have contributed to four consecutive quarterly increases in business investment through mid-2003.

The rise in business investment has stabilised its share of GDP at around 16 per cent, compared to 19 per cent at the beginning of the 1990s. One key factor for the long-term decline in the investment ratio has been the sharp fall in equity prices (Figure 3), which has lowered the net worth of firms, thus boosting their financing costs. Declining equity prices have been accompanied by sharp falls in land prices, which on balance have also probably had negative effects on business investment. Although the lower price of land reduces the cost of business start-ups and residential construction, it also cuts the value of collateral. This, in turn, tends to raise the cost of external financing, thus discouraging bank lending. The price of land continued to drop through the first half of 2003, with the rate of

Figure 3. **The collapse of the asset price bubble**



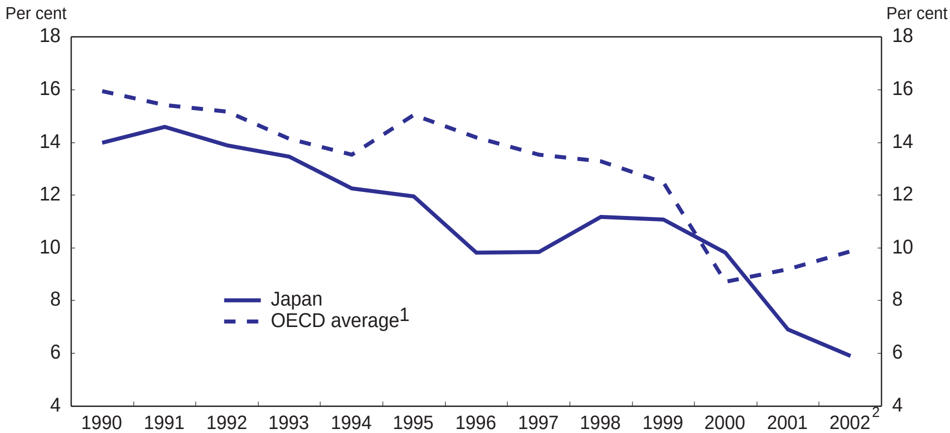
1. The index is annual through 1989, and half yearly thereafter.
Source: Datastream and Japan Real Estate Institute.

decline accelerating for both residential and commercial land in regions adjacent to the three major metropolitan areas. In contrast, equity prices, which fell by more than a quarter during the year to March 2003, staged a strong recovery beginning in the second quarter of 2003. Falling asset prices have discouraged business investment by providing a negative indicator of future growth prospects and by reducing the market valuation of a firm's capital stock relative to the cost of acquiring new capital.[3] Despite the long-term decline in business investment, its share of GDP remains above the OECD average. The resulting rise in the capital stock in the context of stagnant growth has substantially boosted the measured capital to output ratio during the past decade,[4] which helps to explain the low rate of return on capital. Accelerating corporate restructuring through the exit of non-viable firms, thus boosting the rate of capital scrapping, would improve the prospects for keeping business investment growth positive.

Increased corporate profitability also led to a stabilisation of labour market conditions, which had deteriorated in 2001 and 2002 in the context of weak demand and corporate restructuring. Employment declined in 2002 by more than 1 per cent, while employee compensation fell more than 2 per cent in nominal terms, reflecting a substantial drop in bonus payments accompanied by a decline in regular wages.[5] The traditional positive link between profits and bonus payments appears to have been broken, at least temporarily, by restructuring in the

Figure 4. **Household saving rates**

Per cent of household disposable income



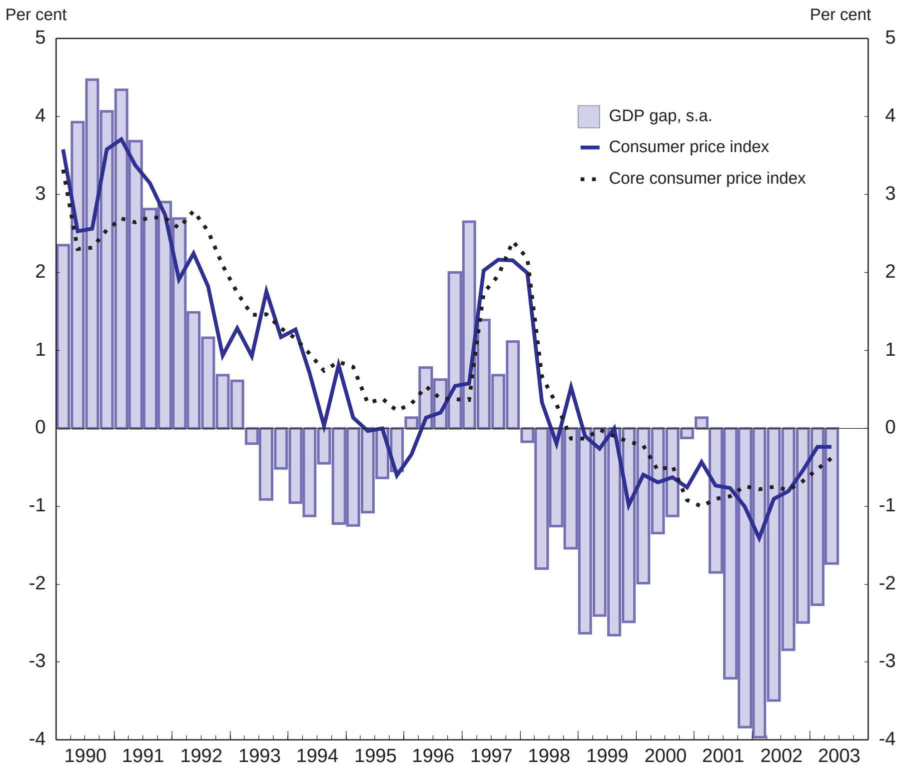
1. A simple average of the 29 countries for which data are available.
2. OECD projection.
Source: OECD.

corporate sector. Subsequently, compensation stabilised in nominal terms in the first half of 2003, thanks to overtime and bonus payments, while employment levelled off. With prices, as measured by the private consumption deflator, falling at a 1½ per cent annual rate, stable labour income in nominal terms provided enough real income gains to support a 1 per cent rise in private consumption.[6] However, these trends imply that the persistent fall in the saving rate (Figure 4), which has sustained private consumption and the Japanese economy, was reversed with the end of falling labour income in the first half of 2003.

Unemployment and deflation

The unemployment rate, generally a lagging indicator of economic conditions, has remained stable (on a seasonally-adjusted basis) around the record high of 5½ per cent. This reflects the fact that as employment stabilised, the labour force participation rate also stopped falling. However, taking account of the rising number of discouraged workers suggests a less favourable picture. Indeed, if the labour force participation rate had remained at its 2000 level, the unemployment rate in the first half of 2003 would have been nearly 1 percentage point higher.[7] One positive labour market indicator has been a rise in the job offer-to-applicant ratio from 0.5 to 0.6 during the course of 2002. However, the unemployment rate has failed to decline, suggesting that the mismatch problem in the labour market has become more serious.

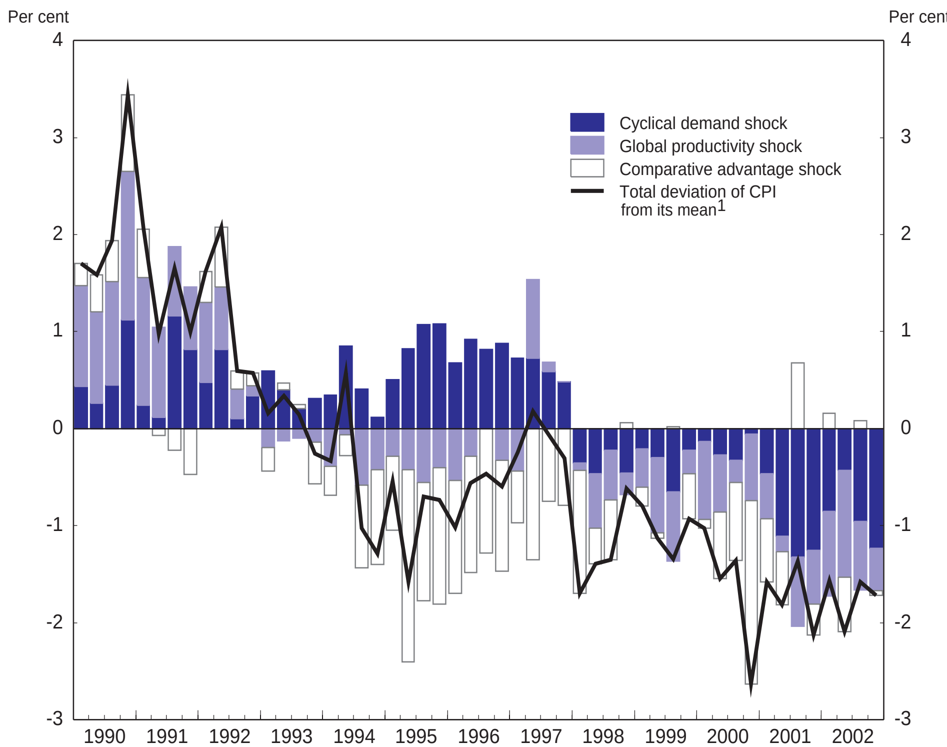
Figure 5. **Trend of deflation**
Percentage change from previous year



Source: Bank of Japan and OECD.

Despite the cyclical upturn, deflation has remained persistent. Although the headline consumer price index fell only ¼ per cent (year-on-year) in the first semester of 2003, this reflects rising prices for oil and fresh food (Figure 5). The core measure, which excludes these two components, fell by twice as much over the same period. In addition, a hike in out-of-pocket medical care costs in April also had a significant impact on the consumer price index.[8] Excluding such costs from the core measure, the underlying deflation rate was 0.6 per cent (year-on-year) in the second quarter – close to its average rate since 2000.[9] The private consumption deflator also reported a steady decline in the price level, though at a faster rate of around 1½ per cent through mid-2003. The broadest measure, the

Figure 6. **Decomposition of deflation**
Quarter-to-quarter percentage change at annual rates

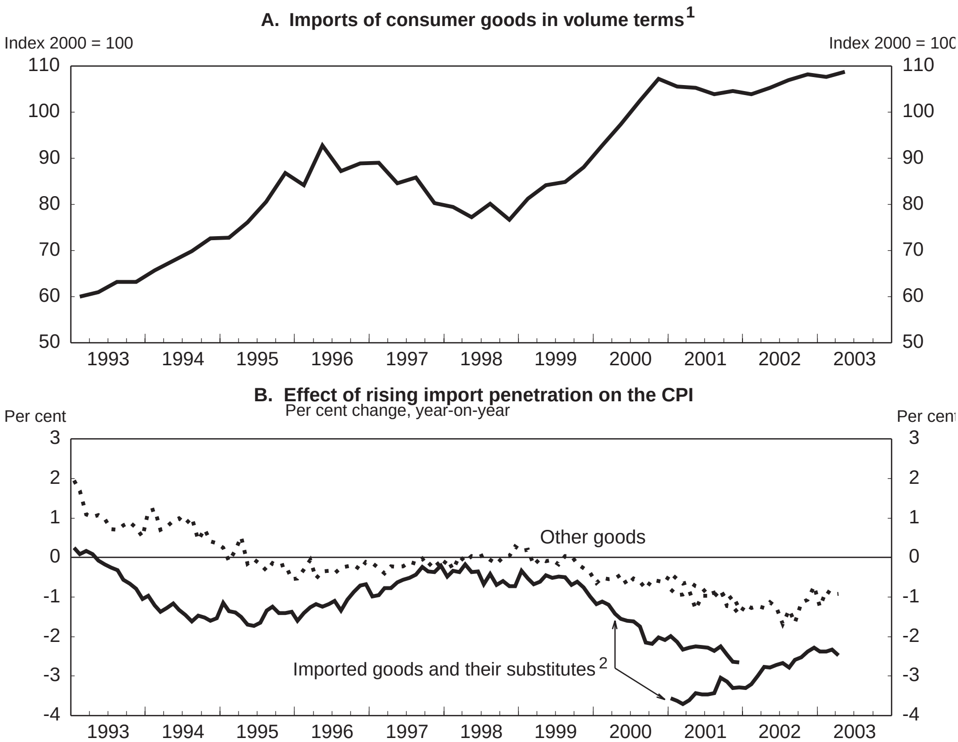


1. The deviation of the consumer price index from its mean of 1.09 per cent over the 1985 to 2002 period. Thus, the sum of the bars in each quarter differs from the actual inflation rate by 1.09 percentage points.
Source: Kamada and Hirakata (2002), updated by the authors.

GDP deflator, showed a larger decline of around 3 per cent, reflecting sharp falls in the price of investment goods.[10]

It is difficult to identify precisely the causes of deflation, which results from a number of interrelated factors on the demand and supply sides. In the short term, the path of price changes is thought to be determined by demand pressure (as measured by the output gap), supply shocks and expectations. A recent analysis found that the pattern of stagnant growth and falling prices has been caused by both demand and supply-side shocks since 1998 (Figure 6). On the demand side, weak demand pressure has resulted from the on-going fall of asset prices and a number of negative external developments, such as the

Figure 7. **Supply-side influences on inflation**



1. Seasonally adjusted. The figure for the second quarter of 2003 is based on April data.
2. Excludes petroleum, agricultural and aquatic products. The data for 1993 to 2001 is based on 1995 weights for the CPI, while that beginning in 2001 is based on 2000 weights.

Source: Bank of Japan.

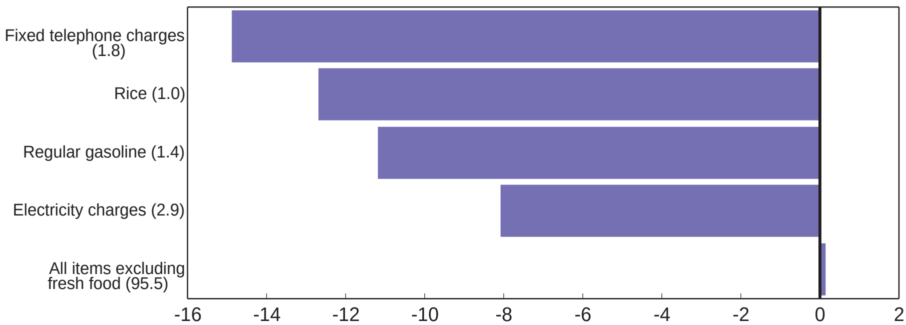
1997 Asian crisis. Demand factors are estimated to account for roughly one-third of the variations in the consumer price index since 1998, suggesting that supply-side factors play an important role. Such a role would be consistent with the fact that the Japanese economy has recorded small increases in output while prices have been declining.

On the supply side, two factors, in particular, appear to have been significant.

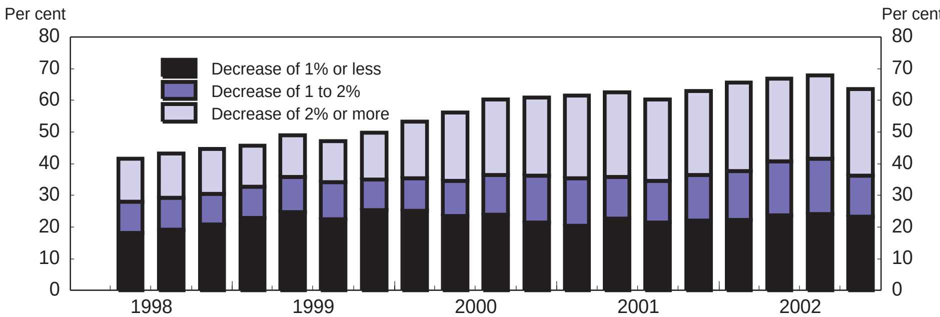
– Imports of consumer goods have risen nearly 40 per cent in volume terms since 1998, reflecting Japan's increasing openness and integration in the world economy (Figure 7). The prices of these imports and their domestic substitutes have declined at a substantially faster pace than other goods (Panel B).

Figure 7. **Supply-side influences on inflation** *(cont.)*

C: Effects of deregulation on the CPI
Cumulative changes from 1995 to 2002 in per cent[1]



D. Percentage of items in the CPI whose prices are falling



1. Based on the 2000 weights for the CPI, which are indicated in parentheses.
Source: Bank of Japan.

– Deregulation has led to falling prices for a number of goods and services. For example, prices of fixed telephone services, rice, gasoline and electricity have dropped substantially since 1995 (Panel C).

While imported goods and deregulated items have led price declines, deflation has become broadly entrenched over time. The proportion of goods experiencing price declines has risen from 40 per cent in 1998 to 60 per cent in 2002 (Panel D). Moreover, the extent of the decline exceeded 2 per cent for more than a quarter of products that year. While deflation has negative implications for growth (see below), gradual price declines of the magnitude recorded during the past decade are not the underlying cause of Japan's economic stagnation but rather a symptom of weak demand, as well as the supply-side factors discussed above.

An overview of progress in implementing the reform programme

The Koizumi government that took power in April 2001 launched a wide-ranging reform programme aimed at revitalising the economy (see 2002 *Survey*). Since the programme was outlined in June 2001, the government has been actively implementing structural reform aimed at the fundamental goal of promoting economic growth by supporting the shift of power from the government to private agents and from central to local government. Consequently, the reform programme should lead to a smaller and more efficient government, while improving the allocation of resources. The major areas of reform include:

- Deregulation.
- Financial-sector reform.
- Improving human capital and enhancing flexibility in the labour market.
- Stronger competition and encouraging openness and entrepreneurship.
- Social security reform.
- Improvement of the budget process and better public management (including privatisation).
- Devolution of power from central to local government.

Progress during the past two years has been uneven across these areas (Figure 8),[11] reflecting political pressures that have forced compromises in some areas of the government's plans. Notwithstanding the general impression thus created that the reform process has stalled, there has been significant progress in some areas, notably deregulation and reform of the labour market. The financial sector shows mixed results, with the October 2002 programme including important steps forward in a number of areas, notably the provisioning for and disposal of non-performing loans. However, some important issues, such as the treatment of banks' deferred tax assets, remain unresolved. While improvements have been made in the health care system, pension reform to cope with the rapid ageing of the population is still under consideration. Although some significant changes have been made in the budget process, progress in reforming the public sector, notably by privatising the government special status corporations and introducing competition in network industries, has been disappointing, reflecting strong political resistance in this area. In sum, there is a tendency for most reform measures to be implemented only partially and ineffectively, in contrast to the original, more ambitious, policy goals. This suggests the need to strengthen political commitment to achieving the specified outcomes of the reforms.

The stance of macroeconomic policy

The policy of quantitative monetary easing introduced in March 2001 has been aggressively implemented by the Bank of Japan. The target for the current

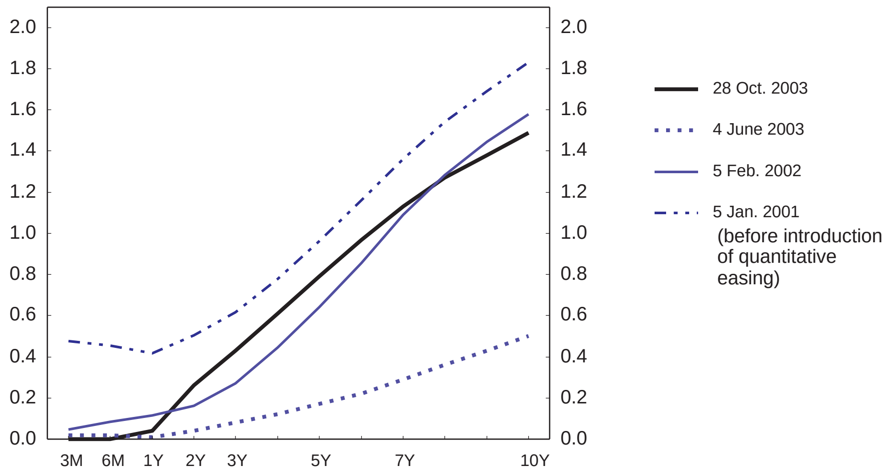
Figure 8. **The structural reform programme**

Source: See Annex II for details.

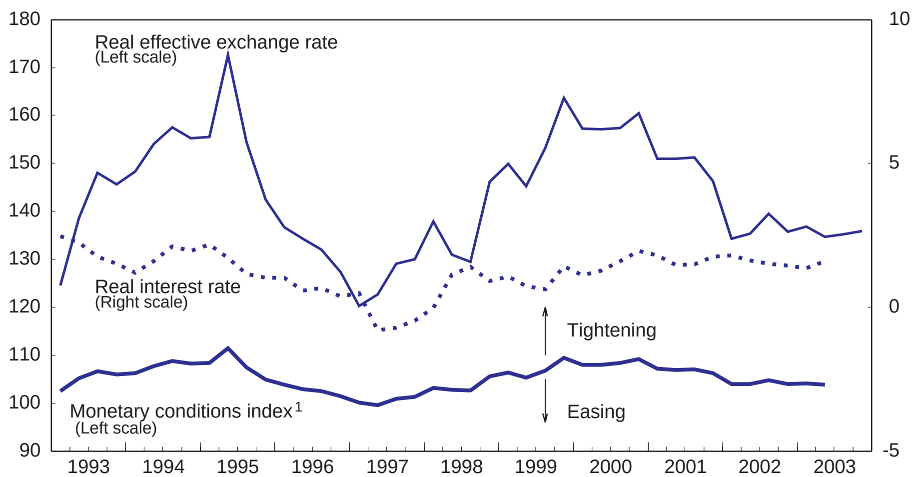
account balances at the central bank was raised progressively from 5 trillion yen initially to a range of 27 to 32 trillion yen in October 2003, with the central bank purchasing about 1.2 trillion yen of government bonds per month to finance this operation. The Bank has promised to continue this policy, which has substantially increased the monetary base, until the growth in the consumer price index (excluding fresh food) registers zero or positive in a stable manner. The quantitative approach has been successful in reducing the yield on ten-year government bonds from 135 basis points before the introduction of the new policy to below 50 basis points in the spring of 2003 before stabilising at around 150 basis points in September (Figure 9). Meanwhile, the short-term rate has been kept close to zero, while remaining stable at around 1½ per cent in real terms, as measured by

Figure 9. **The stance of monetary policy**

A. The yield curve



B. Monetary conditions index



1. The monetary conditions index is defined as the level change in the three-month deposit rate deflated by the four-quarter percentage change in the private consumption deflator (adjusted for the 1989 and 1997 tax hikes) plus one-quarter of the percentage change in the real effective exchange rate of the yen (unit labour cost definition) against 29 OECD and 12 non-OECD trading partners. The weight (one quarter) was derived from INTERLINK model simulation properties.

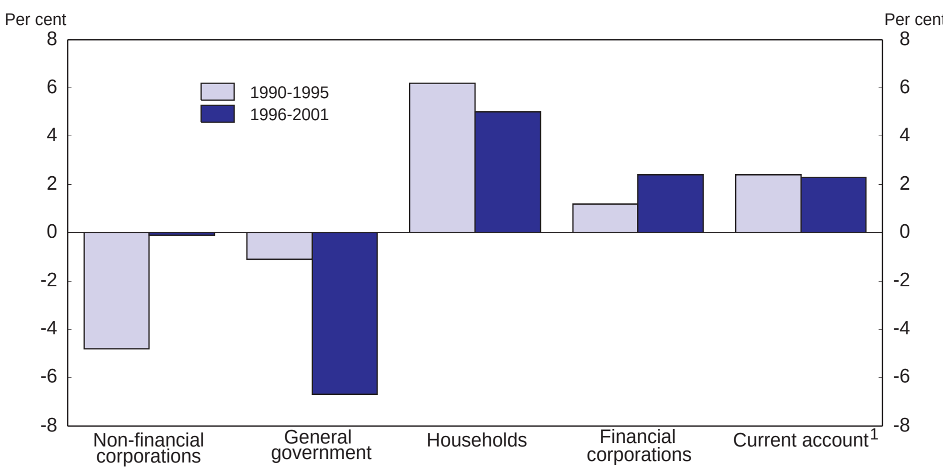
Source: Datastream, Bank of Japan and OECD.

the private consumption deflator (Panel B). In addition, the real effective exchange rate has stabilised following a substantial decline in 2001. Consequently, overall monetary conditions have remained broadly unchanged.

The stance of fiscal policy has been mildly expansionary with the cyclically-adjusted budget deficit widening from 5½ per cent of GDP in 2001 to 6¼ per cent in 2002 and a projected 7 per cent in 2003. The rising deficit occurred despite a slight fall in general government spending in nominal terms over that period, even though social security spending increased. However, revenues have fallen by a larger amount. Consequently, the general government budget deficit widened from 6 per cent in 2001 to an estimated 7½ per cent in 2003. In contrast, the fiscal stance is expected to be slightly restrictive in 2004, with the cyclically-adjusted deficit falling by ½ per cent of GDP, assuming that there is no supplementary budget in FY 2003 and that the government achieves its stated objective of limiting spending in FY 2004 to that in the current fiscal year in nominal terms. In addition, a planned broadening of the tax base in 2004 may boost revenues.

The financing of the large government deficits has been accommodated by increased net private-sector saving, which is primarily a result of reduced business investment (Figure 10). In the first half of the 1990s, in contrast, the government budget was close to balance, with an average deficit of less than 1 per cent of GDP a year. In the private sector, the large deficit recorded by non-financial

Figure 10. **Saving-investment balances by sector**
Per cent of GDP



1. The current account equals the sum of the other four categories, after taking account of statistical errors.
Source: National Accounts, ESRI and CAO.

corporations was covered by household savings of around 6 per cent of GDP. With total private-sector saving exceeding the small government deficit, Japan recorded a current account surplus averaging 2.4 per cent of GDP in the first half of the 1990s. The external surplus remained at around the same level during the second half of the decade despite dramatic changes in saving patterns. *First*, as noted above, the government budget deficit widened considerably, averaging nearly 7 per cent of GDP between 1996 and 2001. Thus, there was a deterioration equivalent to 6 per cent of GDP. *Second*, this was nearly matched by the decline in net borrowing by the non-financial corporate sector to zero as it reduced investment.[12]

Prospects in the short and medium term

With a 2.8 per cent rise in output in the first half of 2003 (seasonally-adjusted annual rate), the economy has recorded six consecutive quarters of positive growth. The pick-up in growth was accompanied by an exceptionally large decline – more than 7 per cent at an annual rate in the first half of 2003 – in the deflator for business investment. If the decline in the deflator were overstated, it would exaggerate the rates of growth of both business investment and GDP.[13] The key question is whether this upturn will prove to be more durable than that of 1999-2000, which recorded only six quarters of positive growth before the recession of 2001. One positive factor is the pick-up in the world economy since mid-2003, which is boosting Japanese export growth. Further increases in corporate profits are likely to sustain business investment, while the one-third rise in the stock market since its trough in March 2003 reduces the risk of instability in the banking sector. Moreover, it may provide a positive wealth effect for households and reduce fears of further declines in employment. The wealth effect, combined with further gains in real disposable income should sustain private consumption. In sum, output growth is expected to reach around 2¾ per cent in 2003, the highest since a similar rate was achieved in 2000, with the upturn continuing into 2004 (Table 2).

However, the weakness of the non-manufacturing sector in Japan's dualistic economy may limit the improvement in the labour market, slowing the pace of growth to around 1¾ per cent in 2004 and 2005. Moreover, investment growth may slow in the latter half of 2004, in line with the long-run declining trend in the investment rate, while the effort to reduce the budget deficit requires cuts in public investment. Nevertheless, the further narrowing of the output gap may help to reduce deflation, as measured by the GDP deflator, to around ½ per cent in the second half of 2005. There are a number of risks, though, that could limit the pace and durability of the expansion. A sharp appreciation of the yen could slow growth while strengthening deflationary pressure. The outlook for the Japanese economy will depend importantly on the strength of the rebound in world trade. Other risks include the emergence of larger risk premia in interest rates and other strains associated with rising public debt.

Table 2. **Short-term outlook**[1]

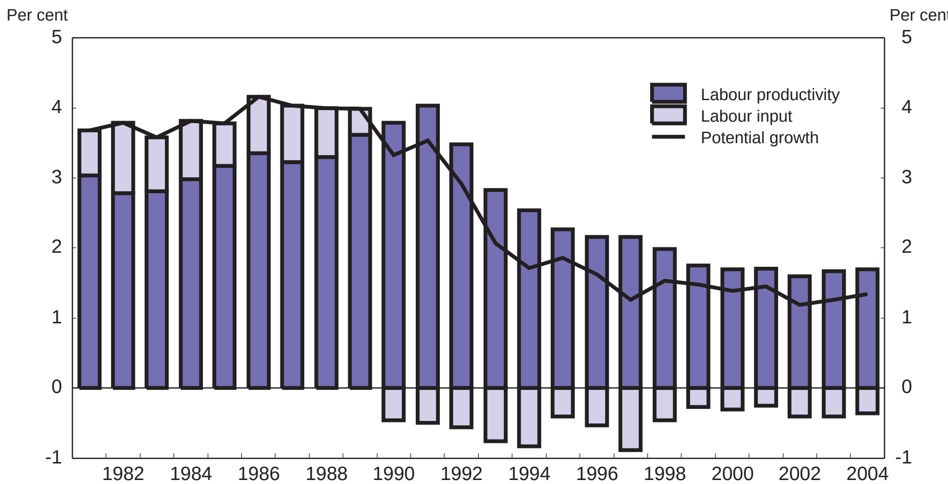
	2002	2003	2004	2005	2003		2004		2005	
					1st half	2nd half	1st half	2nd half	1st half	2nd half
Demand and output (volumes)										
Consumption										
Private	1.3	1.1	1.1	1.1	1.1	0.4	1.3	1.2	1.1	1.0
Government	2.3	1.6	2.0	1.8	0.7	3.4	1.6	1.5	1.9	2.0
Gross fixed investment	−4.7	4.4	0.2	0.0	5.6	5.0	−1.1	−1.1	0.3	0.6
Public[2]	−4.9	−7.0	−8.3	−3.5	−10.3	4.0	−13.4	−8.4	−1.7	−1.0
Private residential	−4.8	−1.9	−1.4	−2.0	−3.1	0.4	−0.8	−2.0	−2.0	−2.0
Private non-residential	−4.7	10.3	3.5	1.5	14.0	6.2	3.3	1.8	1.4	1.5
Stockbuilding[3]	−0.4	0.2	0.1	0.1	0.0	−0.3	0.3	0.2	0.1	0.1
Total domestic demand	−0.5	2.3	1.1	1.0	2.2	1.8	1.0	0.9	1.1	1.2
Exports of goods and services	8.1	7.5	9.5	9.8	6.3	6.0	10.9	10.1	9.8	9.7
Imports of goods and services	2.0	4.5	5.2	5.1	1.1	5.7	5.0	5.0	5.2	5.2
Net exports[3]	0.7	0.5	0.7	0.8	0.6	0.2	0.8	0.8	0.8	0.8
GDP	0.2	2.7	1.8	1.8	2.8	2.0	1.8	1.6	1.8	1.9
Inflation and capacity utilisation										
GDP deflator	−1.7	−2.5	−1.3	−0.8	−3.0	−0.8	−1.6	−1.1	−0.7	−0.5
Total domestic deflator	−1.6	−2.2	−1.3	−0.7	−2.7	−1.0	−1.4	−0.9	−0.6	−0.5
Private consumption deflator	−1.5	−1.4	−0.6	−0.4	−1.5	−1.1	−0.5	−0.4	−0.4	−0.3
Unemployment rate	5.4	5.3	5.2	5.0	5.4	5.3	5.3	5.2	5.1	5.0
Output gap	−3.2	−1.9	−1.5	−1.0	−2.0	−1.8	−1.6	−1.4	−1.1	−0.9
Memorandum items:										
Net government lending										
(% of GDP)	−7.1	−7.4	−6.8	−6.9						
Gross debt	147.3	154.6	161.2	167.2						
Net debt	71.8	79.1	85.7	91.7						
Short-term interest rate	0.1	0.0	0.0	0.0						
Long-term interest rate	1.3	1.1	1.7	1.8						
Current account (% of GDP)	2.8	2.9	3.6	4.3						

1. Assuming an exchange rate of 111.2 yen to the dollar.
2. Including public corporations.
3. Contribution to GDP growth.

Source: OECD, OECD *Economic Outlook* 74 (November 2003).

Japan's growth prospects over the medium term appear mediocre as its rate of potential growth has slowed from 4 per cent in the second half of the 1980s to around 1 per cent at present (Figure 11). One key factor in the slowdown was the shift of labour inputs from a positive to a negative contribution since 1991. This reflects a reduction in hours worked and a fall in employment since 1998, which resulted in a higher unemployment rate, despite a declining working-age population. A second,

Figure 11. **Potential growth**



Source: OECD.

more important factor has been a deceleration in labour productivity growth from a peak of almost 4 per cent to around 1½ per cent in recent years.

Looking ahead, there is unlikely to be any significant pick-up in labour input that would boost the rate of potential growth over the medium term. Indeed, the working-age population is projected to continue falling, at a rate of 0.4 per cent annually (Table 3). This may be largely offset by a continued trend rise in labour force participation, even though Japan's rate is already 3 percentage points above the OECD average. However, working hours, which remain 10 per cent above the OECD average,[14] are likely to decline further. The net effect is a negative contribution of 0.3 percentage point to output growth during the period 2003 to 2008. If labour productivity continues to rise at its current pace of around 1½ per cent a year, Japan's potential growth would remain the lowest in the OECD area at 1.2 per cent over the next five years.

Key challenges facing Japan

Japan faces a number of serious and interrelated problems, notably weak growth prospects, entrenched deflation and an increasingly large public debt problem. Its disappointing performance over the last decade has contributed to concern about its ability to address these problems. Indeed, Japan's output per capita, measured in purchasing power parity terms, has declined from 83 per cent of the US level in the mid-1990s to under 75 per cent at present (Figure 12). Japan has thus gone from being one of the richest OECD countries to around the average.

Table 3. **Potential output growth over the medium term**

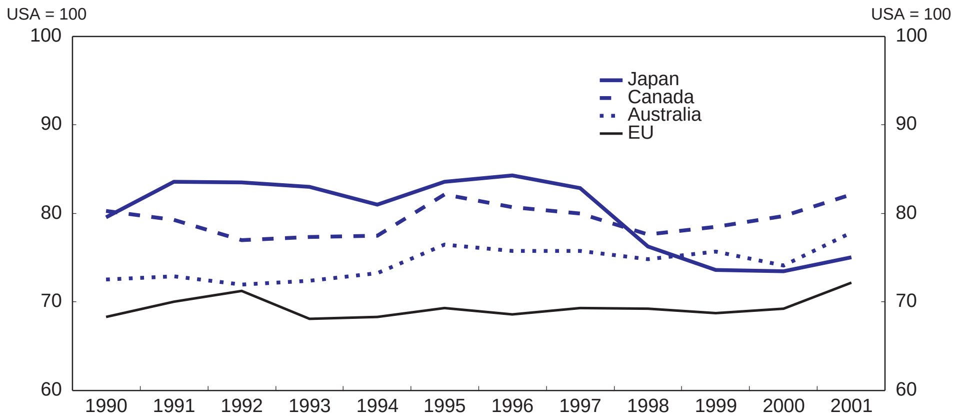
Annual average, percentage points

	Potential GDP growth =		Potential labour productivity growth (output per hour worked)		+ Potential labour input growth (hours worked)		Contributions to labour input growth							
							Working-age population		Trend participation rate		Change in NAIRU		Hours worked per person	
	1996-2002	2003-08	1996-2002	2003-08	1996-2002	2003-08	1996-2002	2003-08	1996-2002	2003-08	1996-2002	2003-08	1996-2002	2003-08
Japan	**1.2**	**1.2**	**2.0**	**1.5**	**–0.7**	**–0.3**	**–0.1**	**–0.4**	**0.4**	**0.3**	**–0.2**	**0.0**	**–0.8**	**–0.2**
Australia	3.7	3.7	2.0	2.4	1.6	1.3	1.4	1.2	0.1	0.0	0.2	0.1	–0.1	0.0
Austria[1]	2.3	2.0	1.9	1.9	0.4	0.1	0.3	0.0	0.0	0.1	0.0	0.0	. .	. .
Belgium	2.1	2.1	1.8	1.8	0.3	0.3	0.1	0.4	0.6	0.2	0.2	0.0	–0.6	–0.3
Canada	3.3	3.1	1.5	1.8	1.8	1.3	1.2	1.1	0.2	0.2	0.2	0.0	0.1	0.0
Denmark	2.4	2.1	2.0	2.0	0.4	0.1	0.2	0.1	–0.1	0.0	0.3	0.0	0.0	0.0
Finland	2.9	2.3	2.5	2.4	0.3	–0.1	0.3	0.2	0.1	0.1	0.3	0.1	–0.4	–0.4
France	2.1	2.0	2.0	1.7	0.2	0.3	0.3	0.4	0.4	0.1	0.2	0.1	–0.7	–0.2
Germany	1.5	1.5	1.8	1.6	–0.3	–0.1	0.0	–0.2	0.4	0.3	–0.1	0.1	–0.5	–0.3
Greece	3.0	3.5	2.3	3.0	0.7	0.4	0.2	0.1	0.5	0.2	–0.1	0.1	0.0	0.0
Iceland	2.9	2.9	1.7	1.8	1.2	1.1	1.3	1.0	0.0	0.0	–0.1	0.1	0.0	0.0
Ireland	7.5	4.8	4.7	3.5	2.6	1.3	1.8	1.1	0.8	0.3	1.0	0.1	–1.0	–0.3
Italy	1.8	1.8	1.6	1.5	0.2	0.3	–0.1	–0.1	0.3	0.4	0.2	0.1	–0.2	–0.1
Netherlands	3.1	1.8	1.8	1.7	1.3	0.2	0.4	0.4	0.9	0.3	0.4	0.0	–0.4	–0.6
New Zealand	3.0	3.2	1.4	1.9	1.6	1.2	1.2	1.1	0.2	0.1	0.3	0.0	–0.1	0.0
Norway	2.8	2.0	2.3	1.6	0.5	0.4	0.7	0.5	0.1	0.0	0.2	0.0	–0.5	–0.1
Spain	2.9	2.8	1.1	1.0	1.8	1.8	0.6	0.3	1.0	1.1	0.2	0.4	0.0	0.0
Sweden	2.4	2.3	2.1	1.9	0.3	0.4	0.4	0.6	–0.3	–0.2	0.1	0.0	0.1	0.0
Switzerland	1.3	1.2	1.0	0.8	0.4	0.4	0.4	0.4	0.0	0.0	0.1	0.0	–0.2	0.0
United Kingdom	2.5	2.4	2.1	2.0	0.4	0.4	0.4	0.3	0.1	0.1	0.2	0.0	–0.2	–0.1
United States	3.4	3.1	1.9	2.1	1.4	1.0	1.3	1.1	0.1	–0.1	0.0	0.0	0.0	0.0
Euro area	2.1	2.0	1.8	1.6	0.3	0.3	0.2	0.1	0.5	0.3	0.1	0.1	–0.3	–0.1
Total OECD	2.6	2.4	1.9	1.8	0.7	0.6	0.7	0.5	0.2	0.1	0.1	0.0	–0.4	–0.2

1. On a per worker rather than per hour basis.

Source: OECD.

Figure 12. **Per capita income in Japan is falling relative to other OECD countries**



Note: Based on current purchasing power parities.
Source: OECD.

Extrapolating this trend would reduce Japan's per capita income to half of the US average – the level of Portugal and Greece today in relative terms – by 2030. Reversing the relative decline in Japan's living standard will require measures to bring deflation to an end (Chapter II), achieve fiscal sustainability (Chapter III) and enhance growth prospects through reforms to strengthen competition (Chapter IV) and the implementation of additional structural reforms (Chapter V).

Ending deflation

The challenge of achieving price stability is complicated by entrenched deflationary expectations. With the price level declining since the mid-1990s, households and firms expect prices to continue falling, as reflected in long-term bond yields, which remain low despite the increase during the past few months. The overall price decline – 10 per cent in the GDP deflator since 1994 and 3 per cent in the consumer price index since 1998 – is relatively mild compared to the experience in the 1930s, when prices fell by about a quarter over a four-year period in both Japan and the United States. Nevertheless, declining prices have become pervasive throughout the economy, as noted above, probably influencing spending decisions of firms.

The growth-inhibiting effects of deflation have limited the impact of positive demand shocks, such as fiscal stimulus, in achieving sustained growth which would, in turn, bring deflation to an end. The negative impact of deflation on growth prospects operates through several channels. *First*, deflation tends to slow the adjustment of real wages, since nominal wage cuts have proven difficult to implement (Box 1). Although Japan is one of the few countries to record nominal wage declines – 1.5 per cent a year on average since 1998 – real wages (deflated by the GDP deflator) have continued to increase nearly ¾ per cent a year. Rising real wages have tended to encourage firms to reduce the number of employees to limit labour costs. *Second*, by increasing the burden of liabilities, it leads to delayed payments and defaults, thus hurting financial institutions. *Third*, deflation transfers income from debtors to creditors, who generally have lower marginal propensities to spend, thus tending to reduce aggregate demand.

Perhaps most importantly, the current level of deflation inhibits growth by keeping real interest rates higher than they should be at this stage of the business cycle, thus reducing the potency of monetary policy. A negative real interest rate, a common monetary policy response to recession, is not possible during periods of deflation[15] because nominal interest rates, in normal circumstances, cannot fall below zero. While the short-term interest rate has remained close to zero, it was the third highest in real terms among the G-7 countries in 2002 at 1.5 per cent, despite the fact that Japan's growth rate was one of the lowest at 0.2 per cent in real terms. Given the limited effect of interest rates, the central bank has focused on injecting liquidity through its quantitative easing policy, which has resulted in a 50 per cent rise in base money during the past two years. However, this policy has failed to boost significantly investment in more risky assets, in part because of the attractive return available on risk-free government bonds.

The impact of the quantitative easing policy on deflation and the real economy has also been limited by the breakdown of the credit channel. Despite the large increase in the monetary base and low long-term interest rates (Figure 9), bank lending continues to decline at a 2 per cent pace. The contraction of credit reflects sluggish demand from the corporate sector and the weakness of banks' capital. Because of the high level of non-performing loans, which undermines their capital base, banks are forced it to reduce risk assets in order to protect their soundness. Indeed, large loan losses have resulted in ten consecutive years of net operating losses for the banks. Although banks have made some progress in writing off bad loans, the stock of non-performing loans is officially reported to be 7.2 per cent of total lending of the major banks and may be considerably higher according to some private-sector estimates. The vicious circle is completed by the fact that deflation boosts the supply of new non-performing loans. The deflationary environment has weakened the ability of firms to repay loans, while raising the real value of debt. Consequently, deflation and the problems in the banking sector are intricately linked.

While stopping deflation has proven difficult for the reasons described above, the end of deflation will bring a new set of challenges. The re-entry problem is complicated because the quantitative easing approach has focused on the

Box 1. Inflation and output

Japan has been experiencing persistent deflation since 1995, except for 1997, when the VAT rate was raised. In such an environment, the slope of the Phillips curve – the relationship between the output gap and inflation – seems to have become flatter (Figure 13). The non-linearity of the Phillips curve in a disinflationary or low-inflation environment is thought to reflect rigidity in prices and wages. It is often argued that nominal rigidity becomes more important when inflation is lower as price and wage adjustments become less frequent. According to this view, the slope of the Phillips curve should decline continuously as the inflation rate falls, since the frequency and size of price adjustments decrease.

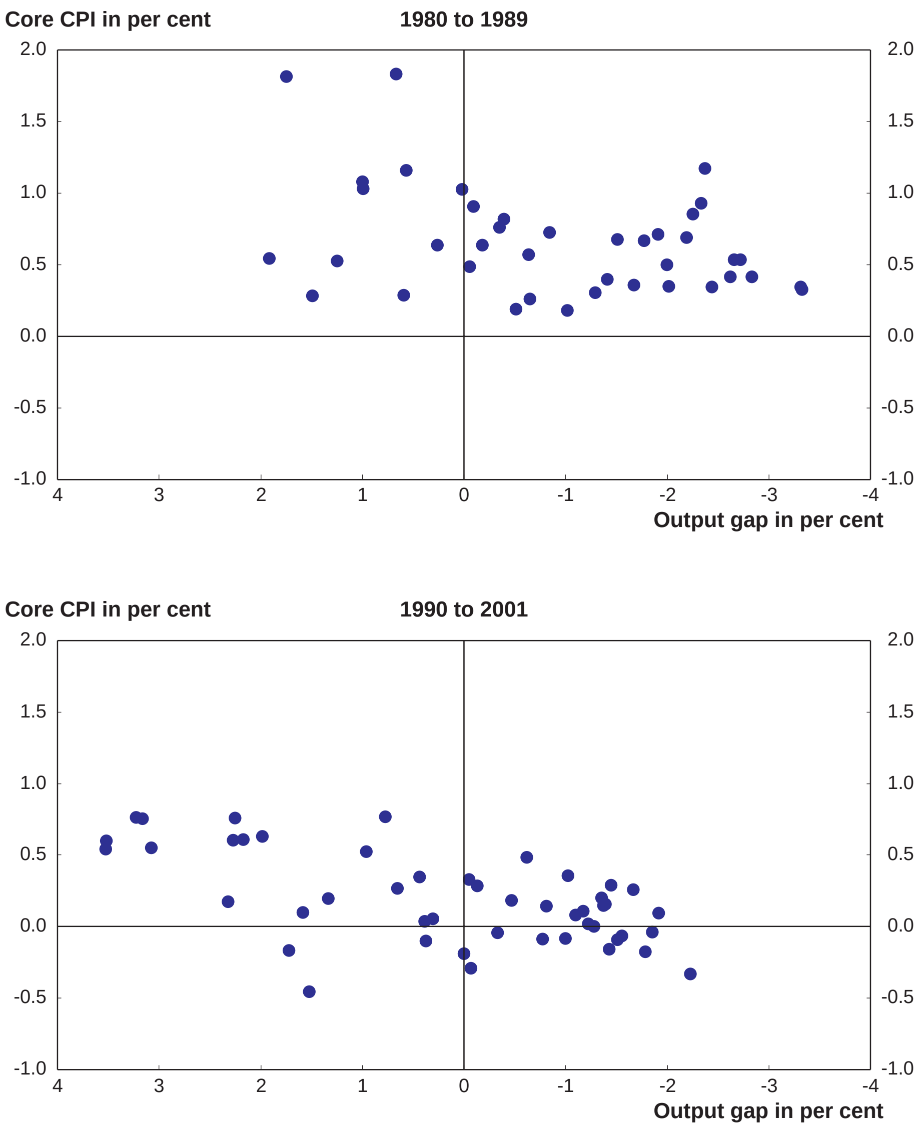
Akerlof *et al.* (1996) provide an explanation for rigidity in nominal wages, arguing that such rigidity arises from the difficulty in reducing nominal wages when inflation is low. Companies and employees very seldom agree on nominal wage cuts unless those companies face a risk of bankruptcy, reflecting managers' view that nominal wage cuts could significantly affect workers' morale. Consequently, the number of firms which reduce nominal wages may not increase in proportion to the degree of disinflation or deflation, leading to nominal rigidity. According to this view, the slope of the Phillips curve would have a break at an inflation rate near zero.

The Secretariat's estimates show some evidence of a change in the Phillips curve when the inflation rate falls below ½ per cent (quarter-on-quarter, non-annualised). Below this rate, the effect of demand pressure is found to be much smaller and is always statistically insignificant (see Annex I). Consequently, the slope of the Phillips curve tends to become flatter as the inflation rate falls. Indeed, when the inflation rate dropped below the threshold of ½ per cent at the beginning of the 1990s, there appears to have been a break in the relationship between the output gap and inflation. However, there is less evidence of a break in the relationship when the inflation rate, as measured by the consumer price index, became negative in 1998. There is also evidence that the slope of the Phillips curve becomes flatter when inflation is more stable. In particular, a break in the relationship is detected in the 1980s when the average and the variance of inflation fell significantly. This suggests that less frequent adjustment in prices and wages might have some impact on the inflation process. In sum, both low inflation and the change in the inflation rate in Japan are related to nominal rigidities. The results of the Secretariat's estimates are consistent with earlier studies, such as Nishizaki and Watanabe (2000).

Although Japanese wages are thought to be relatively flexible compared to other OECD countries, there is anecdotal evidence supporting the view that Japan is experiencing nominal rigidity in wages. While nominal compensation per worker declined by 1.5 per cent on average in the past five years, there has been an increase in compensation in real terms. Indeed, real compensation adjusted by the GDP deflator actually rose by 0.7 per cent over the same period, though it was more or less constant when deflated by the core CPI. Moreover, an increase in labour's share over the 1990s, from 52 per cent to 54½ per cent, also suggests the existence of nominal rigidity.[*] Given the reputation of the Japanese economy for wage flexibility, such a change in the nature of wage setting under low inflation is significant.

* Hattori and Maeda (2000) suggest that most of the rise in the wage per worker in the 1990s can be explained by higher educational attainment and ageing of workers under the seniority wage system.

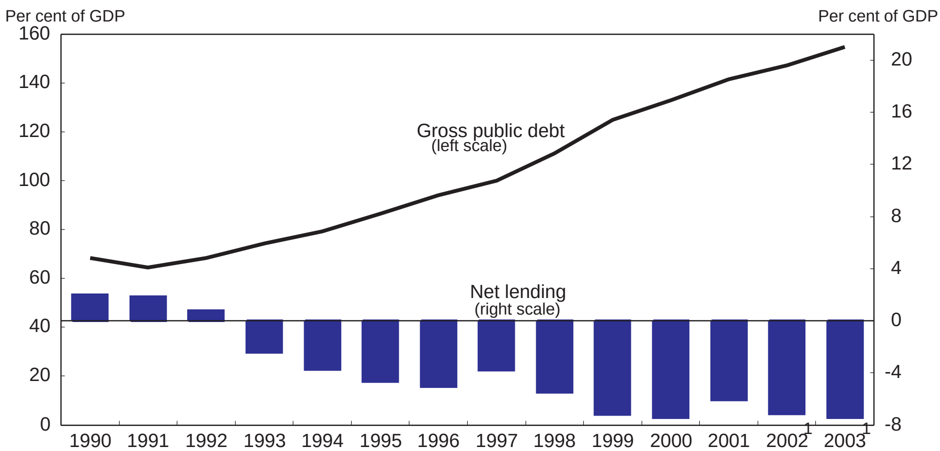
Figure 13. **The Phillips curve has become flatter**



Source: OECD.

Figure 14. **Budget balance and public debt**

Per cent of GDP



1. OECD estimates for 2002 and 2003.
Source: OECD.

purchase of Japanese Government Bonds (JGBs), attracting a high level of private purchases in this market. Even before deflation ends, a significant rise in interest rates and a correction in bond prices may occur quickly. Given that the Bank of Japan holds 60 trillion yen of government bonds (12 per cent of GDP) and the commercial banks own 169 trillion (34 per cent of GDP), a sharp rebound in bond yields would generate huge latent capital losses. The re-entry problem also holds challenges on the fiscal side, where exceptionally low interest rates have limited the amount of interest payments on the large public debt. A marked rise in interest rates may substantially boost the government budget deficit from its current level of around 8 per cent of GDP, creating a risk of financing strains (Figure 14). Moreover, given the size of the public debt, the scope for using fiscal measures to sustain economic activity and bring deflation to an end is limited.

Achieving fiscal sustainability

A primary budget surplus of around 1¾ per cent of GDP would be necessary to stabilise the public debt at 180 per cent of GDP, which would be 30 percentage points higher than its present level, assuming nominal growth of 1 per cent and a 2 per cent interest rate. With the primary budget currently running a deficit of 6 per cent of GDP, a swing of nearly 8 percentage points is necessary to stop the snowballing of public debt. While the level and growth of public debt makes it a serious concern, the scope for reducing the budget deficit in the current economic environment is limited as it could deal a serious blow to growth prospects. On the tax side, receipts from income taxes on households and firms have fallen significantly in absolute terms during the past decade, reflecting both tax cuts and slow economic growth. Consequently, the share of tax and non-tax revenue in GDP in 2001 was below 32 per cent, the second lowest in the OECD area. While higher revenues will certainly be necessary to achieve fiscal sustainability, a significant increase at present risks curtailing the economic expansion.

Spending pressures also complicate the task of reducing the government budget deficit. Perhaps most important is the rapid ageing of the population. Under the current social security system, outlays for pension, medical care and welfare programmes are projected to rise by a third over the next seven years. The contingent liabilities of government corporations might also increase public spending. The debt of such corporations, some of which are scheduled for reform, exceeds total GDP. The financial sector is another area where potential outlays may be necessary. Since all bank deposits were fully guaranteed until April 2002, 18 trillion yen (3.6 per cent of GDP) of public funds have been used to cover the cost of failure of 16 commercial banks and 152 commercial cooperatives between 1996 and March 2003. In addition, the recent injection of 2 trillion yen into a troubled bank and the new framework governing such injections may lead to higher outlays in this area, which would hopefully help restore the credit channel. Given these significant spending pressures, maintaining government expenditures at a constant share of GDP will require major cuts in discretionary outlays, particularly public investment. The importance of such spending in many regional economies suggests that the economic impact could be substantial.

Enhancing competition to boost growth

While increasing the intensity of competition would significantly boost output – by around 6 per cent according to Secretariat estimates – there are many obstacles to achieving this objective. Most serious is the insufficient strength of the Fair Trade Commission (FTC), which was created in 1947 but has played a limited role, reflecting in part the dominance of line ministries in supporting the development of specific sectors. Strengthening the FTC will require measures to expand both its resources and its independence, in part through ending its reliance on retired civil servants from other ministries and creating a career path within the Commission. Low sanctions for violators of the Anti-Monopoly Act limit its deterrent effect and reduce the scope for an effective leniency programme to encourage whistleblowers. The prominent role and high number of trade associations in Japan, which aim to promote flows of information and friendship among their members, is another challenge to preventing collusion and strengthening competition. Reducing the FTC's emphasis on "unjust low prices", which involve an important degree of industry self-regulation, would also help encourage competition.

Strengthening competition will also require overcoming difficult problems in network industries, where the progress in deregulation is still in its infancy compared to most other OECD countries. One deficiency is the lack of independent sector regulators to ensure pro-active *ex ante* regulation. Vertically-integrated industry structures in some sectors, such as electricity and natural gas, have hampered competition. The resulting lack of frameworks for physical interconnection and non-discriminatory access charges and conditions, as well as for vertical unbundling of activities, is a serious problem. In other sectors, such as transport, competition is limited by tight regulation of charges for facilities and related services. In sum, boosting competition will require many reforms to strengthen the FTC and to change the structure of network industries.

Other structural reforms to enhance potential growth

Progress in regulatory reform – another important aspect of enhancing competition – has been disappointing in many respects. The Council for Regulatory Reform, which consists of private-sector experts, has been unable to overcome the opposition of various ministries to its recommendations, despite the Council's location in the Prime Minister's office. Consequently, proposals to open key sectors, including agriculture, health care and education, to joint-stock companies have not been accepted. Barriers to entry thus remain important in many sectors. Perhaps more important is the cost of failure, which tends to discourage business start-ups, a key factor for productivity growth. Moreover, there is no institution with the power to screen new regulations. Japan is also relatively closed to international trade and inflows of direct investment, important sources of competitive pressures. To some extent, this represents Japan's exclusion from regional trade agreements, primarily due to its preference to maintain high levels of protection for agriculture. The failure to boost direct investment, despite a number of measures to encourage such inflows, appears to reflect concerns on the part of potential investors about a difficult business climate and weak growth prospects. The under-development of labour markets external to firms hinders the increased labour mobility that needs to accompany the restructuring of the corporate sector. Finally, the declining working-age population and increased unemployment among young adults are important challenges that need to be met to sustain Japan's growth potential.

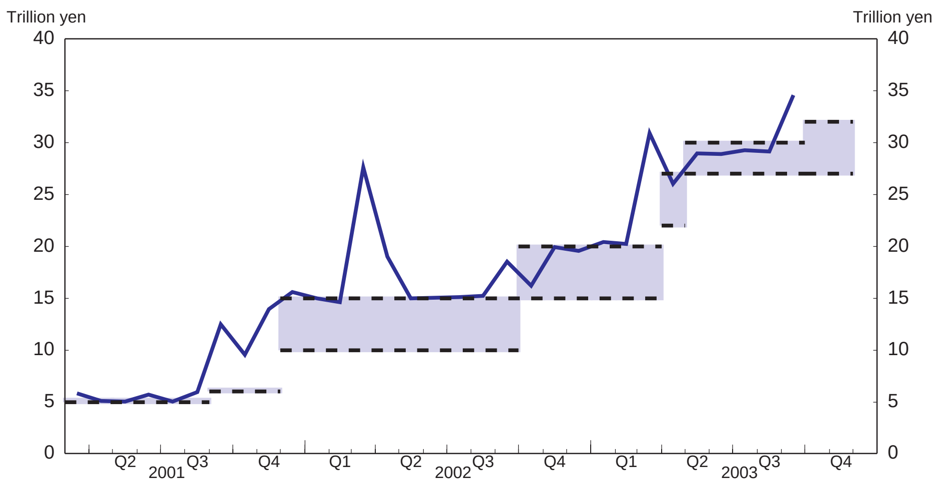
II. Bringing deflation to an end

Faced with the zero constraint on nominal interest rates, the Bank of Japan has substantially increased the quantity of base money through its quantitative easing policy. In addition, the scope of this policy has been expanded by broadening the range of assets purchased by providing credits directly to small and medium-sized enterprises. At the same time, intervention in the foreign exchange market has limited the appreciation of the yen, effectively supporting the recovery of exports. These monetary policy measures have been successful in maintaining financial-market stability and accommodating the current economic recovery. Nonetheless, the central bank has failed to achieve the objective of sustained growth in nominal income as deflation, as measured by the GDP deflator, remained persistent at an annual rate of 3 per cent in the first half of 2003. Moreover, the current policy has serious negative side effects that will complicate the exit from the current situation. Given the corrosive impact of deflation on economic prospects and the risk of a deflationary spiral, achieving a positive rate of inflation is a key priority. This chapter begins by outlining recent developments in monetary policy and the reasons why it has failed thus far to fully achieve the desired impact. It then outlines policy changes that will help bring deflation to an end. One necessary condition is to resolve the problems in the banking sector, which have closed the credit transmission mechanism. The chapter analyses the factors responsible for the fragile banking industry and suggests measures to help restore it to financial health, before offering an overall conclusion.

Monetary policy in the quantitative easing framework

During the past year, the Bank of Japan (BOJ) has been trying to ease monetary conditions further under the "quantitative easing" framework, which was initially announced in March 2001 and has been evolving since then. With short-term interest rates fixed near zero, the central bank conducts monetary policy by setting a target for current account balances at the central bank. The policy target was initially set at 5 trillion yen in March 2001 and eventually raised in October 2003 to 27 to 32 trillion yen – around 6 per cent of GDP and more than five times greater than the level of legally-mandated reserves (Figure 15). The quantitative approach has resulted in a 50 per cent cumulative increase in base money

Figure 15. **Outstanding current account balances at the Bank of Japan**



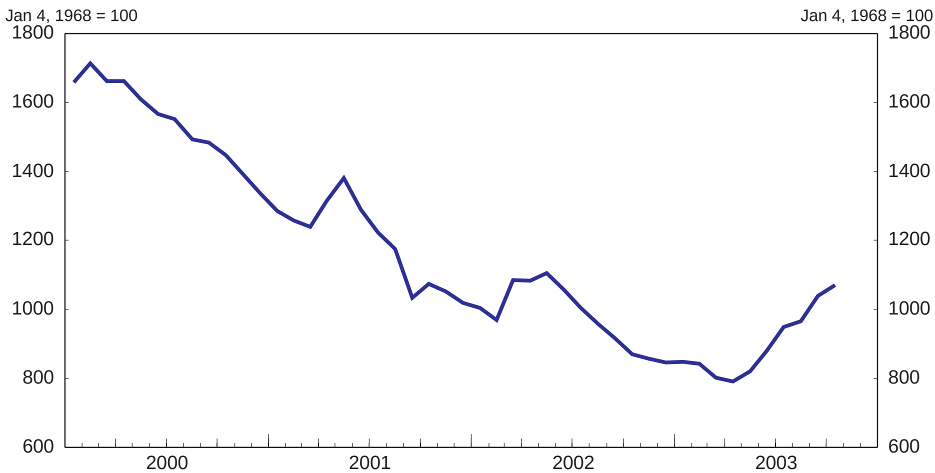
Note: Dotted lines show the Bank of Japan's target.
Source: Datastream.

during the past two years. To achieve the current account target, the BOJ purchases 1.2 trillion yen of Japanese Government Bonds (JGBs) per month, which implies that about a third of the general government deficit is effectively financed by the central bank. The BOJ is publicly committed to continuing quantitative easing until the Consumer Price Index (CPI) measure of inflation, excluding fresh food, registers zero or positive in a stable manner. Monetary policy also aims at preventing an accidental shortage of liquidity in the short-term money markets, such as the one that triggered the collapse of some major financial institutions in 1998. On top of the ample provision of liquidity, the central bank has set up a standby "Lombard-type" lending facility through which it can extend loans at the official discount rate (currently 0.10 per cent) at the request of financial institutions.

Recent measures to ease monetary conditions

The BOJ left its policy target unchanged from the beginning of 2002 through October in the expectation that the cyclical recovery would continue. However, it has played a more aggressive role since the autumn of 2002 to reduce the risk of financial instability arising from the weakness of the banking sector. With the stock market falling from July 2002 (Figure 16), there was concern about the impact of lower share prices on the balance sheets of banks, whose shareholdings exceed their tier I capital. To reduce the risk associated with large shareholdings, the central bank announced a scheme in September 2002 to purchase some of those

Figure 16. **Share prices**
The TOPIX index

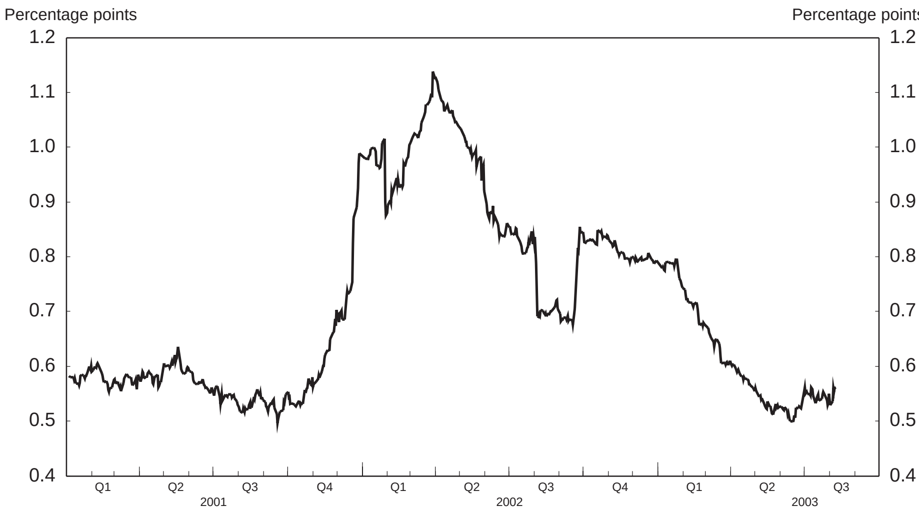


Source: Datastream.

shares from banks.[16] Furthermore, the targeted balance of current accounts held at the central bank was raised by 5 trillion yen to 15 to 20 trillion yen at the end of October when the government released a plan to accelerate the resolution of non-performing loans (see below). At the same time, the outright purchase of JGBs by the central bank was also increased by 200 billion yen to 1.2 trillion yen per month.

The continuing concerns about the weakness of the financial sector and the sharp economic slowdown at the end of 2002, together with the uncertainty associated with the war in Iraq, led to further actions by the BOJ in early 2003. In April, the central bank, led by a new governor, announced that it would consider purchasing from banks Asset Backed Securities (ABS) and Asset Backed Commercial Papers (ABCP), which are mainly backed by receivables held by, or loans to, small and medium-sized enterprises (SMEs). The details of this scheme were announced in June and operations started at the end of July, with maximum purchases set at one trillion yen.[17] This policy is intended to support smooth corporate financing while contributing to diversifying the instruments used to meet the quantitative targets for current balances. This action is a further move into uncharted territory as such operations involve credit risks that could result in losses for the central bank.[18] The BOJ also allowed the current account balances of the banks to exceed the upper end of its target range (20 trillion yen at that time) toward the end of FY 2002 to alleviate concerns about weaknesses in the financial sector. Such excess liquidity continued even after the beginning of the new fiscal

Figure 17. **The spread between corporate and public bonds**



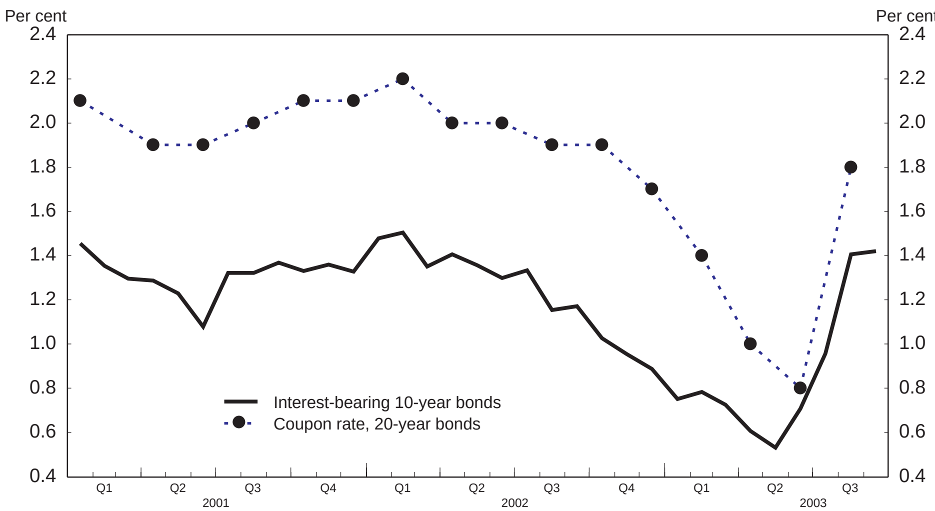
Source: Bank of Japan.

year in April 2003, though it partly reflected some *ad hoc* factors.[19] Rather than mop up the excess liquidity, the BOJ raised its target to the range of 22 to 27 trillion yen at the end of April. This is in sharp contrast to May 2002 when the central bank absorbed all of the liquidity exceeding its target range.

Concerns about fragility in the financial system materialised in May 2003 when the capital adequacy ratio of Resona Bank dropped to about 2 per cent. The BOJ responded immediately by announcing that it would provide loans to Resona if necessary and raised the target range for current account balances further to 27 to 30 trillion yen at the following Monetary Policy Meeting.[20] The effectiveness of the central bank's pre-emptive injection of liquidity into the markets is partly witnessed by the stability in corporate bond markets. Spreads between public and corporate bonds have narrowed significantly since the end of 2002 despite the rising concerns about financial instability (Figure 17). The success in containing the systemic risk associated with Resona's problems, together with the recovery of share prices in general, alleviated the concerns about distress in the banking sector, convincing the BOJ to continue its present stance.

Despite the relative stability in the financial markets, transactions in the short-term inter-bank money market have dried up as there is little incentive for banks to participate when the transaction costs exceed interest rates. This has created difficulty at times for banks in raising funds in the markets, causing them

Figure 18. **Interest rates on government bonds**



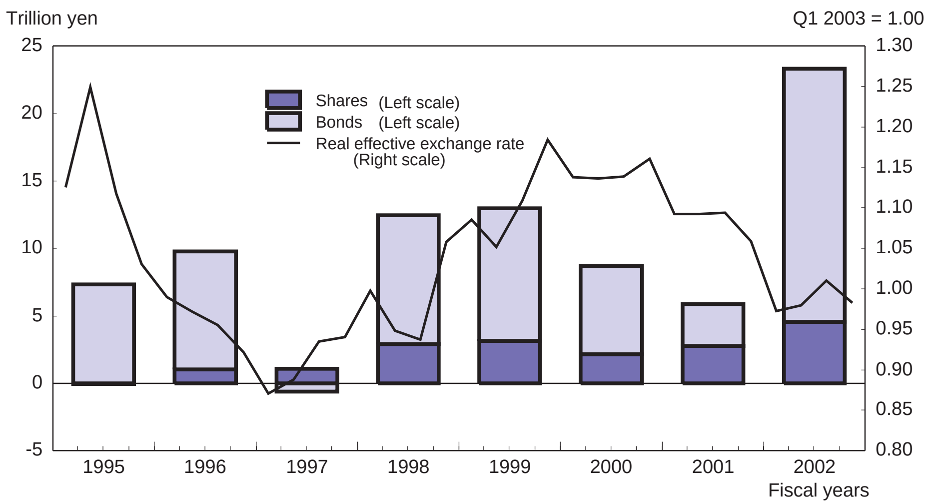
Source: Bank of Japan.

to hold more precautionary reserves. This, in turn, led to further injections of funds by the central bank.[21] Transactions involving short-term money between private agents tend to be conducted through the BOJ's current account, thus skipping the call money market (Bank of Japan, 2003a).

In addition to limiting systemic risks, the quantitative easing has succeeded in lowering long-term interest rates. The yield curve became progressively flatter through mid-2003 (Figure 9), reflecting the BOJ's commitment to continue its current policy until deflation ends. The yield on ten-year public bonds stayed in the range of 1¼ to 1½ per cent in the period from March 2001 to the middle of 2002, which is about 50 basis points lower than the average during the preceding period (Figure 18). Long-term interest rates fell further beginning in August 2002 since deflationary expectations became stronger as the economic recovery lost momentum. The ten-year government bond yield dropped to below the historically low level of 0.8 per cent in February 2003 and fell further to below 0.5 per cent in June. Although the yield has now stabilised at around 1½ per cent, it is still well below the level prevailing in the period before the BOJ committed itself to the quantitative easing policy. Since the rise in long-term interest rates beginning in mid-2003 occurred in tandem with the recovery of share prices, it is widely seen as a correction of the earlier overly pessimistic view on the economy.

Despite the zero constraint on the policy interest rate, the current quantitative easing scheme has had some stimulative impact on the economy through

Figure 19. **Investment in foreign securities and the exchange rate**



Source: Ministry of Finance.

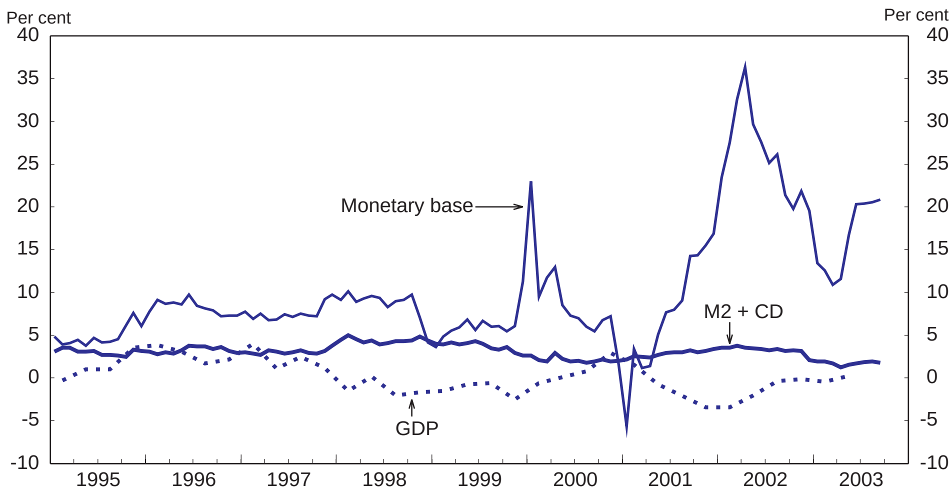
the portfolio rebalancing effect.[22] Some anecdotal evidences suggest that this mechanism may have started working to some extent, though its impact has been small.[23] Life insurance companies, for example, have shifted funds to longer-term government bonds, such as those with maturities of 20 years, leading to a sharp decline in its yield. Excess liquidity in the domestic market appears to be flowing into foreign financial markets as well. Indeed, net investment in foreign securities including shares and bonds rose sharply from 5.9 trillion in FY 2001 to a record high of 23 trillion yen in FY 2002 (Figure 19).[24] Furthermore, an increase in liquidity held by households could stimulate private consumption through both the rebalancing effect and the real balance effect (or Pigou effect). One empirical study shows that the rise in the real value of liquidity stimulated private consumption during the past few years, though its estimated impact is very small.[25] However, the contribution of the rebalancing effect to the recent recovery in share prices is less clear since, as with the decline in bond prices, it is likely to reflect more the changes in investors' expectations of an economic recovery.

Why is the impact of quantitative easing so small?

Although the quantitative easing policy has some positive effects as noted above, its impact on the economy appears to have been small, though not insignificant, during the past two years. Despite the sharp increase in base money,

Figure 20. **The monetary base and money supply have diverged**

Year-on-year percentage change



Source: Bank of Japan.

the GDP deflator has continued to decline in 2003 at an annual rate of 3 per cent. Indeed, the relationship between base money and broad money (the money multiplier) and that between money and nominal GDP (the Marshallian *k*) seem to have changed significantly since the late 1990s (Figure 20).

One important reason why the quantitative easing policy has had such a small impact is that the portfolio rebalancing effect, as noted above, has been weak. The changes in the money multiplier and the Marshallian *k* imply that extremely low interest rates have accelerated the shift of funds to liquid assets since the opportunity cost of holding liquidity (*i.e.* giving up risky assets) is almost zero. In other words, given the current near-zero returns on short-term financial assets, they are viewed as close substitutes for money. It is also likely that the preference for holding higher liquidity may reflect concerns about the fragility of the financial system, which increase precautionary reserve holding and thus limit portfolio rebalancing.[26] Between the mid-1990s and the end of 2002, the share of currency and deposits in the total assets of households rose from 50 to 56 per cent, while it increased from 22 to 26½ per cent for non-financial corporations.

The weakness of the rebalancing effect in response to the sharp rise in liquidity injected by the BOJ is also a consequence of the diminished risk-taking ability of private agents. This reflects the deterioration of their balance sheets resulting from the decline in asset prices and an increase in the real value of their liabilities in a deflationary environment. Although households hold 1 400 trillion yen of financial assets, they have become extremely risk averse due to past capital losses. Given the huge amount of non-performing loans, banks are reducing their risk assets so as to protect the soundness of their balance sheet (see below). Furthermore, banks are required by law to lower their shareholdings to the level of their tier I capital by 2006. Consequently, even though the BOJ has significantly increased the provision of liquidity, the private sector prefers to hold a larger quantity of less risky assets such as JGBs, as well as more cash and deposits (Table 4). In sum, the reluctance of the banks and other private agents to take risks is another factor limiting portfolio rebalancing, thus negating the effectiveness of quantitative easing.

The apparent impotency of monetary policy also arises from the collapse of the credit channel, which is paralysed by both demand and supply factors. In addition to the constraint on banks' lending capacity due to their weak capital base, declines in asset prices have reduced the value of collateral. This, in turn, raises the external finance premium due to the higher cost of evaluating the creditworthiness of borrowers, thus discouraging banks from lending. At the same time, demand for bank loans is also weak as good companies have ample cash flows thanks to their past corporate restructuring efforts. Meanwhile, companies in the real estate and construction sectors, which have the largest share of bank loans and are highly indebted, have no more capacity for borrowing. Moreover, deflation discourages firms from borrowing. With falling nominal sales, the real value of debts is rising even though interest payments are low. Downward rigidity in nominal compensation squeezes profit margins, reducing the net wealth of firms and thus increasing external financing costs.

The fact that bank loans are constrained not only by supply-side but also by demand-side factors raises the question of whether the restoration of a healthy banking system could have an impact strong enough to eliminate deflation. According to some observers, the problems of the banking sector are due primarily to over-lending in the past, rather than a credit crunch and, hence, cleaning up the banking system will not lead to an expansion of credit (Meltzer, 2001). Moreover, credit conditions and growth are generally assumed to be endogenous factors that amplify the impact of shifts in monetary policy rather than generating positive autonomous effects (Bernanke, 1995). Hence, credit may not grow in the absence of a shift in macroeconomic policy or strong positive demand shocks, even if the banking sector were healthy. However, it is clear that once the economy starts moving toward a sustainable growth path, the credit channel must play an important role in supporting the recovery, given the relatively small role that securities markets play in Japan. The recovery of the credit channel, therefore, is definitely a necessary condition for sustainable growth, even though it may not be a sufficient condition (see below).

Table 4. **Compostion of banks' assets**

Trillion yen

Fiscal year	Cash and deposits				Lending		Public bonds		Equities		Total assets
	Value	Share (%)	BOJ's current account		Value	Share (%)	Value	Share (%)	Value	Share (%)	Value
			Value	Share (%)							
1990	139.0	12.5	5.3	0.5	692.2	62.3	70.6	6.4	68.4	6.2	1 111.3
1995	146.9	13.1	3.4	0.3	727.3	64.7	80.2	7.1	62.2	5.5	1 124.8
1998	132.7	11.5	5.8	0.5	728.8	63.4	87.1	7.6	55.1	4.8	1 149.6
1999	145.6	12.8	14.5	1.3	692.7	60.7	124.3	10.9	65.5	5.7	1 140.5
2000	149.9	12.5	5.1	0.4	698.7	58.3	157.3	13.1	49.9	4.2	1 197.6
2001	159.3	13.7	27.0	2.3	680.6	58.5	140.4	12.1	44.5	3.8	1 163.9
2002	160.9	13.8	29.2	2.5	652.1	56.0	169.4	14.5	29.6	2.5	1 165.2

Source: Bank of Japan, *Flow of Funds*.

Finally, the impact of the current quantitative easing on the yen is rather ambiguous as the exchange rate is affected by many factors. With the zero constraint on nominal interest rates, the real interest rate remains significantly positive in the context of deflation. Interest parity conditions, therefore, do not necessarily favour depreciation. As discussed earlier, the shift of funds to foreign financial markets did not lead to a weaker yen. After the BOJ adopted the quantitative easing approach in March 2001, the yen weakened by 6 per cent from 125 yen per US dollar to 133 yen in February 2002. However, this was more than offset by an appreciation of 12 per cent to the level of 119 yen by August 2002. After stabilising at around that level for a year, the yen appreciated further to about 110 yen at the end of September 2003. The BOJ intervened actively as an agent of the Ministry of Finance in the second quarter of 2002 and in the first three quarters of 2003 when speculative movements were observed in the exchange market. The amount of intervention reached 4 trillion yen (0.8 per cent of GDP) in 2002 and nearly 13.5 trillion yen (2.7 per cent of GDP) during the first nine months of 2003.

In conclusion, the above analysis indicates that the quantitative easing policy to increase the monetary base has had only a limited positive impact on the economy for a number of reasons:

- The portfolio rebalancing effect has been weak due to the low opportunity cost of holding liquid assets, financial-sector fragility that has boosted precautionary holdings of cash and the reluctance of households and financial institutions to take risks.
- The credit channel has broken down.
- Quantitative easing has failed to have a significant impact on the exchange rate.

Meanwhile, the current monetary policy strategy based on increased purchases of long-term government bonds to achieve the quantitative target is attracting private-sector purchases in this market. This creates a risk that financial institutions will incur huge capital losses on their bond holdings once deflation ends, thus complicating the exit strategy. The BOJ is now pursuing measures to restore the credit channel by helping banks through purchasing shares they hold and by supporting the finance of SMEs by fostering asset-backed securities and commercial paper markets. But the question remains whether such a strategy, combined with measures to accelerate the resolution of non-performing loans, can restore sustainable growth of nominal income in the near future.

How can monetary policy contribute to restoring sustainable growth of nominal income?

Given the zero bound on interest rates and the difficulties in the banking sector that constrain the effectiveness of monetary policy, the monetary authorities have often stated that their available policy tools have already been exhausted. Nonetheless, a variety of alternative tools have been suggested, including: taking direct or indirect measures to raise asset prices to supplement portfolio rebalancing by the private sector; changing the foreign exchange regime to boost the economy; and influencing expectations of future inflation in order to reduce real interest rates.

As discussed in past *Economic Surveys*, one way to reinforce the current quantitative easing scheme is for the BOJ to purchase a broader range of assets. This might encourage the shift of private funds to more risky assets, which, in turn, would stimulate the economy. Higher asset prices could also alleviate a major constraint on the credit channel by decreasing external financing costs for borrowers through higher value for collateral. Indeed, the central bank has already taken a step in this direction by purchasing shares held by private banks. Although its main purpose is to reduce the excessive shareholding by banks for prudential reasons, this operation effectively helps avoid possible downward pressure on share prices that would result if banks sold those shares in the market. The recent decision by the BOJ to purchase ABS and ABCP could also accommodate portfolio rebalancing by small businesses by increasing their investment capacity or encouraging them to buy other assets. It would be useful for the central bank to purchase securitised assets such as Exchange-Traded Funds (ETFs), which are based on a stock price index, and Real Estate Investment Trusts (REITs), as such operations could affect prices of real assets with less distortive effects on the relative prices of the underlying specific assets. Since the securitised assets are a closer substitute to liquid assets than the underlying real assets themselves, the development of such financial products, whose markets are currently small, could encourage the shift of funds held by households and financial institutions. That implies that the size of BOJ purchases needed to achieve a significantly positive impact may not be necessarily large. One of the advantages of this option compared to the current framework is that it could alleviate the exit problem to some extent since the prices of these real assets are likely to increase when inflation expectations rise. This is in sharp contrast to the current strategy of purchasing mainly JGBs, which are likely to experience price declines when deflation comes to an end.[27] However, given the limited size of the securitised asset markets, the purchase of such assets alone would not be able to offset the impact of a possible decline in bond prices accompanied by higher inflation expectations.

It is often argued that one of the easiest ways out of deflation would be to let the exchange rate depreciate (McCallum, 2001 and Svensson, 2000). Although a fall in the yen would alleviate deflation by stimulating the economy and by driving up import prices, the key question is how to generate desirable depreciation and how to keep the exchange rate at the appropriate level. One possibility is massive intervention in foreign exchange markets. Such intervention can be funded by printing more currency and hence does not require the use of foreign reserves. It has also been argued that depreciation of the yen could be achieved by setting a price level target in order to generate expectations of currency depreciation and then pegging the exchange rate at the lower level. However, such a strategy could generate negative reactions from other countries, preventing the positive effects from being realised. In sum, currency depreciation would likely require a multilateral approach. As noted above, the active official intervention in 2002 and the first nine months of 2003 has been conducted against speculative movements in the exchange market. This approach is successful in stabilising the exchange rate when there is pressure for appreciation.

Another widely discussed option is for the BOJ to commit to a specific inflation target. However, it is difficult to establish a credible commitment to any specific inflation target since the unpredictability of the transmission mechanism and the ineffectiveness of policy instruments makes it very uncertain how the objective could be achieved (see the 2002 *Survey*). As noted above, the constraints on the transmission mechanism limit the expected impact of monetary policy at present. As these obstacles are overcome, the BOJ needs to have a clear framework for monetary policy management so as to prevent both overshooting and undershooting of the optimal inflation rate. This is particularly important as the markets begin to worry about the possible end of quantitative easing, given the on-going recovery. One risk is that the large amount of reserves at present, which far exceed the necessary level, could generate hyperinflation. On the other hand, an excessively tight policy would eliminate inflationary pressure at an early stage, pushing the economy back into deflation. Given the existence of large slack in the economy, the latter risk probably outweighs the former at present.

Consequently, the monetary framework needs to have a strong commitment to reduce the risk of returning to deflation and should allow some temporary upward deviation from the desired level of inflation as long as such risks remain. One option would be to pledge to continue monetary easing for a longer period than otherwise required. It could take such forms as setting the interest rate below the level suggested by the Taylor rule or promising to continue the zero interest rate policy.[28] Such a commitment could slow the rise in long-term interest rates and generate stronger stimulus to the economy once inflation expectations turn positive. In this regard, the BOJ recently clarified its commitment to continue the quantitative easing policy by specifying two necessary conditions for policy change.[29] Furthermore, it suggests that it could continue the quantitative easing policy in certain circumstances even if those two conditions are met. To further strengthen credibility, some form of price level target would also be useful (Woodford and Eggertsson, 2003). Since this approach allows a temporary hike or drift in inflation during the transitional period – in order to allow the price level to catch up to the target level after a period of deflation – it would strengthen the commitment to inflation. Price level targeting automatically strengthens the credibility of inflationary policies when negative shocks arise as a larger gap between the target and the current level requires a more aggressive inflationary stance. The level of the long-run target for either inflation or the price level will also need to be sufficiently high.[30] According to one study, an economy running at a targeted rate of inflation of zero is more likely to fall into deflation following a negative shock than an economy with a higher rate of inflation.[31] The measurement errors often attached to the consumer price index and the need for leaving scope for negative real interest rates also support the desirability of targeting a positive inflation rate. Moreover, given the possibility of nominal rigidity at very low inflation rates, aiming at an inflation rate near zero could constrain the flexibility of wage and price adjustments to demand shocks, possibly amplifying the fluctuation of unemployment and output (see Box 1).[32]

The purchase of a broader range of assets, including real assets and foreign assets, would also boost the credibility of the BOJ's commitment to stopping deflation (Box 2). A mere pledge to achieve a certain rate of inflation or price level

Box 2. Policy commitment to ending deflation

A number of recent studies focus on the role of expectations in bringing about positive inflation. The basic idea is that, despite the zero bound on interest rates, the BOJ can stimulate the economy by generating positive inflation expectations and thus lowering the real interest rate. A key to such a strategy is to establish the credibility of the authorities' commitment to certain goals or policy rules aiming at positive inflation. One of the pioneering studies (Krugman, 1998) argues that a rise in the money supply has no effect under liquidity trap conditions as long as the private sector expects the increase to be reversed in the future. This would suggest the need for an inflation target in order to change the expectations of private agents. However, subsequent studies argue that a promise to achieve an inflation target is ineffective unless it is accompanied by other policy actions that bind that commitment. Although the central bank has an incentive under the zero bound on interest rates to commit to an inflation target, when deflationary pressure actually subsides, the *ex post* optimal inflation could be below the previously promised level. This would give the central bank an incentive to renege on its commitment. If private agents are rational, the inflation target is obviously ineffective when the authorities have both the capability and the incentive to renege on its commitment *ex post* (Eggertsson, 2003). One way to prevent them from doing so is to bind the commitment with some other policy measures that would punish the authorities if they were to renege. For example, a tax reduction funded by public bonds or the purchase of real assets by the authorities could reduce the incentive to renege since continuing deflation raises the real value of public debt or incurs capital losses in real assets. Such policies, though, require an agreement between the central bank and the fiscal authorities, which may be difficult in practice given the more independent status of the BOJ at present.

may not be credible as the central bank might have an incentive to renege on its *ex ante* commitment once deflationary pressures subside. At that point, the *ex post* optimal inflation rate might be below the earlier targeted level. However, the purchase of real assets could provide the BOJ with a strong incentive to achieve the targeted inflation rate since it would otherwise incur significant capital losses. Although it is often argued that BOJ purchases of risky assets would inevitably raise the potential fiscal cost stemming from capital losses of the central bank, the BOJ's incentive to minimise the fiscal costs would strengthen its commitment to the inflation target. In the same way, the purchase of foreign assets by the central bank could also have the same binding effect since downward pressure on the yen, possibly accompanied by higher inflation expectations, would generate capital gains from foreign assets.

Improving the health of the banking sector

The failure of the credit channel to function is a key factor that has limited the impact of the Bank of Japan's policy of quantitative easing. As noted above, both demand and supply factors explain why this policy has not been successful in reversing the decline in bank credit that began in the mid-1990s. It is clear that demand and supply factors are closely linked and that causality runs in both directions. Stagnant economic conditions reduce the demand for new loans, as well as the ability of firms to repay outstanding loans. The result is higher default rates that undermine the financial health of banks. At the same time, the lending capacity of banks is limited by the need to protect the soundness of their balance sheets, causing banks to shrink their volume of risk assets, thus preventing monetary policy from having its full effect. The latter linkage is substantiated by the fact that banks with higher initial proportions of non-performing loans and lower loan-loss reserve ratios recorded the largest declines in credit between 2000 and 2002 (Dell'Ariccia, 2003). Although there is not a credit crunch in an aggregate sense – in fact the non-financial corporate sector is a net lender – the flow of money into safe havens is limiting the availability of credit to many potential borrowers, particularly smaller firms. While total bank lending has fallen by 12 per cent since 1995, lending to small and medium-sized enterprises has declined by twice that amount.

In addition to the decline in the overall level of lending, the problems in the banking sector have been slowing growth by skewing the allocation of credit toward the weakest firms. This comes about through the following mechanism. Given the banks' impaired capital base, they have an incentive to extend loans to their large, but weak, clients in order to avoid recognising additional loan losses and to maintain their capital levels. This leads to a policy of "ever greening" in which banks lend to troubled firms in order to prevent or delay bankruptcy. There is evidence that large companies are far more likely to receive additional credit if they are in poor financial condition (Peek and Rosengren, 2003).[33] Moreover, these firms continue to perform poorly after receiving additional loans. As a result, the tendency to supply credit to the companies that are relatively less productive weakens the prospects for growth and slows corporate restructuring. The price-cutting behaviour of these weak but protected firms also tends to increase deflationary pressure while hurting viable firms. In addition, supplying capital to weak companies undermines the long-run prospects for the banks by slowing the development of a more dynamic client base. This has been a serious problem in the past and although the introduction of stricter assessment of asset quality has helped improve the situation, problems still exist. In sum, while the poor macroeconomic performance is a fundamental cause of financial-sector weakness, problems in this sector are a factor blocking the prospects for growth. A recovery in lending by banks, which remain the dominant players in the Japanese financial system, is a necessary condition for a robust and sustainable expansion.

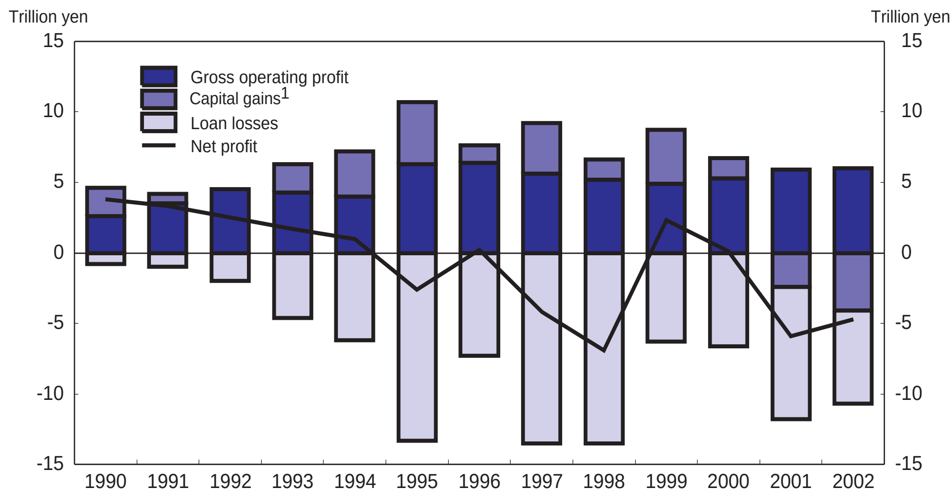
The non-performing loan problem has undermined the financial health of the banking sector

The banking sector has not achieved a net operating profit since FY 1992. During the 1990s, though, the banks were able to offset about two-thirds of their cumulative operating losses with capital gains from the sale of equities and land purchased prior to the bubble period. Such gains enabled the banks to avoid net losses in all but three years during the 1990s (Figure 21), although this did not prevent the failure of a number of banks, including three large ones. However, the scope for capital gains had been largely used up by the end of the 1990s. With realised capital gains turning negative in FY 2001 and FY 2002, the banking sector has become increasingly vulnerable. Indeed, net losses amounted to almost 10 trillion yen (2 per cent of GDP) during the past two years. Such losses occurred despite the quantitative easing policy of the Bank of Japan, which has supported bank profitability by supplying abundant liquidity at interest rates close to zero.

The consistent net operating losses are fundamentally due to the non-performing loan problem, which has imposed 87 trillion yen (17 per cent of 2002 GDP) in loan losses on the banks since 1993 (Table 5). Although gross operating profit has been on a slight upward trend since FY 1999, it remains less than loan losses. Such losses reflect weak economic conditions and the more rigorous application of loan standards, which tend to boost the amount of provisioning required. The stricter self-assessment of assets has been accomplished in part through the FSA's special inspections of the classification of large borrowers in 2002 and 2003.

The second round of special inspections covered 167 borrowers, including 142 that were included in the first round in 2001 (see the 2002 *Survey*), with total loans of 14.4 trillion yen from the 11 major banks. It covered most of the large companies that have seen their share prices or credit ratings plunge. As a result of the discounted cash flow method of provisioning introduced by the Programme for

Figure 21. **Profitability in the Japanese banking sector**



1. On equities and real estate.
Source: Fukao (2003).

Financial Revival, banks were obliged, according to a tentative calculation by the FSA, to boost provisions by 500 billion yen while writing off 800 billion yen worth of non-performing loans related to borrowers reviewed in this special inspection. A total of 2.4 trillion yen – 17 per cent of the loans investigated – were downgraded, a relatively small proportion compared to the first round when the share was more than one-half. This indicates that the banks' assessment of loans is gradually converging to that of the FSA, a conclusion supported by the FSA's regular inspection.[34] More than 90 per cent of the downgraded loans were in wholesale and retail trade, construction, real estate and financial services other than banks.

The large loan losses and declining equity prices reduced the capital base of internationally-active banks by more than 11 per cent during the year to March 2002 (Table 6). With capital shrinking, banks have been forced to cut lending to accelerate the disposal of non-performing loans and to protect the soundness of their balance sheets. Despite an 8 per cent fall in risk-adjusted assets during the year to March 2002, the ratio declined from 11.0 to 10.6 per cent. Given that equity holdings are about a quarter higher than tier I capital, fluctuations in the stock market put the banks at risk of falling below the 8 per cent threshold. In addition to the declining quantity of capital, there is also concern about its quality. *First*, the life insurance industry, another troubled part of the financial sector, and the banking sector are important providers of capital to each other, creating a

Table 5. **The balance sheet of the Japanese banking sector**[1]

Trillion yen

Financial year	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Lending margin (A)	7.1	8.9	9.8	9.2	9.7	10.8	10.7	10.0	9.6	9.7	9.4	9.8	9.7
Other revenue (B)[2]	2.6	2.2	2.5	2.8	2.1	3.3	3.7	3.6	3.1	2.5	3.0	3.1	3.2
Operating costs (C)	7.1	7.5	7.7	7.7	7.8	7.8	8.0	8.0	7.5	7.3	7.1	7.0	6.8
Salaries and wages	3.7	3.9	4.0	4.0	4.0	4.0	4.0	4.0	3.6	3.5	3.4	3.2	3.0
Gross operating profit (D) = (A) + (B) – (C)	2.6	3.5	4.5	4.3	4.0	6.3	6.4	5.6	5.2	4.9	5.3	5.9	6.0
Loan loss (E)	0.8	1.0	2.0	4.6	6.2	13.3	7.3	13.5	13.5	6.3	6.6	9.4	6.6
Net operating profit (F) = (D) – (E)	1.8	2.5	2.5	–0.4	–2.2	–7.0	–1.0	–7.9	–8.3	–1.4	–1.3	–3.5	–0.6
Realised capital gains (G)[3]	2.0	0.7	0.0	2.0	3.2	4.4	1.2	3.6	1.4	3.8	1.4	–2.4	–4.1
Net profit (F) + (G)	3.8	3.3	2.5	1.7	1.0	–2.6	0.2	–4.2	–6.9	2.3	0.1	–5.9	–4.7
Assets	927.6	914.4	859.5	849.8	845.0	848.2	856.0	848.0	759.7	737.2	804.3	772.0	751.4
Outstanding loans	522.0	537.0	542.0	539.0	539.0	554.0	563.0	536.0	492.0	476.0	474.0	465.0	440.4

1. All commercial banks.
2. Other revenue (B) includes all other profits such as dealing profits and fees, but excludes realised capital gains on equities and real estate.
3. Realised capital gains include gains from equities and real estate.

Source: Fukao (2003) and Bank of Japan, *Monthly Report*, August 2003.

Table 6. **Capital of the banking sector**[1]

Trillion yen

	March 2001	Sept 2001	March 2002	Percentage change in year to March 2002
Tier I (A)	21.8	19.9	18.3	–16.1
Tier II (B)	16.1	15.3	15.3	–5.0
Total capital (A + B = C)	37.9	35.2	33.6	–11.3
Risk-weighted assets (D)	343.5	329.2	316.6	–7.8
Loans	304.5	298.3	289.1	–5.1
Equities	31.6	25.4	24.6	–19.6
Capital adequacy ratio (C/D)	11.0	10.7	10.6	
Components of capital				
Public funds (F)	4.6	4.6	4.6	0.0
Proportion of tier I capital (F/A)	21.1	23.1	25.1	
Deferred tax assets (G)	4.7	6.6	7.2	53.2
Proportion of tier I capital (G/A)	21.6	33.2	39.3	
Adjusted capital (C – F – G = H)	28.7	24.1	21.9	–23.7
Adjusted capital adequacy ratio (H/D)	8.3	7.3	6.9	

1. This table shows the capital of internationally-active banks – 20 in total – which are subject to the 8 per cent capital adequacy ratio. Domestic banks are only required to have a 4 per cent ratio.

Source: Bank of Japan.

situation of "double-gearing". *Second*, "deferred tax assets", which were introduced in 1998, nearly doubled to almost 40 per cent of banks' tier I capital during FY 2001.[35] Banks are allowed tax deductions for loan losses only when the losses are legally recognised, *i.e.* removed from the balance sheet. Consequently, a large proportion of provisioning for non-performing loans is not recognised by the tax authority. Since these provisions could reduce the future tax burden once the borrowers fail, part of them are included in capital as deferred tax assets. However, for the deferred tax assets to be of any value, the banks must generate taxable income.[36] The long string of losses recorded by the banks and the limited outlook for profits suggest that the actual value of deferred tax assets is likely to be quite small. Without them, though, the banks would be seriously under-capitalised. According to the FSA, the capital adequacy ratio for the major banks excluding deferred tax assets would have been 5.5 per cent in September 2002, about half of the reported level and well below the 8 per cent threshold.

The danger of relying on deferred tax assets is illustrated by the injection of public funds to re-capitalise the Resona Bank Group in May 2003. An independent auditor found that the bank's deferred tax assets, which accounted for 77 per cent of its total capital, were significantly overstated. The auditor's action was not a result of any changes in the rules related to deferred tax assets, but rather was due to measures in the October 2002 package (see below) to strengthen the role of auditors. Auditors are now required to check not only the evaluation of loans and provisioning, but also to assess the viability of the bank ("going concern audit"). In addition, the calculation of capital adequacy, which used to rely on banks' self-assessment, also has to be examined by outside auditors. The Japan Institute of Certified Public Accountants has required its members to adopt stricter assessments of deferred tax assets of major banks, stressing the need to verify the estimates of future flows of taxable income.

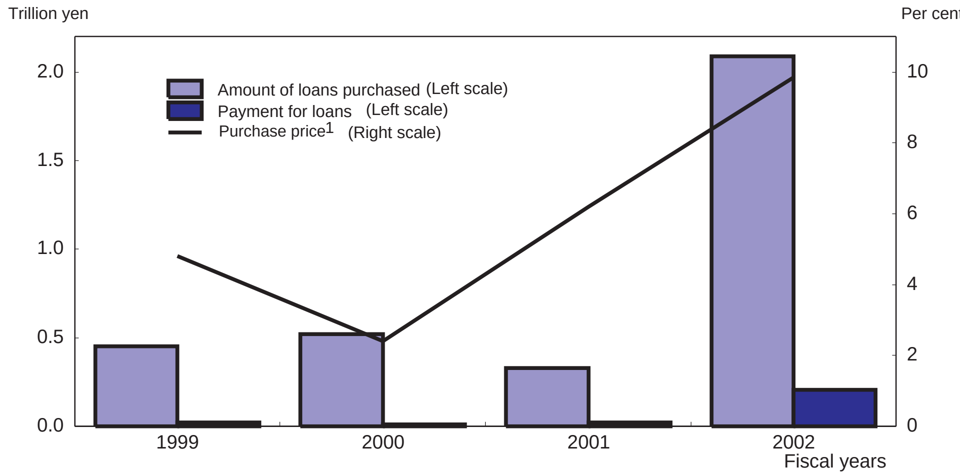
Resona's capital adequacy ratio was reduced to under 4 per cent after the correction of its deferred tax assets and it was forced to apply for an injection of 2 trillion yen in public funds. This boosted the ratio to over 12 per cent and made the government the major owner of the bank.[37] Consequently, it has assumed the responsibility to turnaround Resona in order to recover the public funds injected and avoid any additional burden on taxpayers. About 140 bank officials, including the president, were forced to resign. The bank's rehabilitation plan includes reducing both personnel and the number of branches by 14 per cent and a 30 per cent pay cut for remaining employees. Moreover, Resona has adopted a US-style corporate governance structure in which three separate committees, composed primarily of outsiders, will handle nominations, compensation and auditing. The decision to strictly apply existing rules is a positive development that will encourage other banks that rely heavily on over-estimated deferred tax assets to raise more capital. Moreover, the independent role played by the auditor in this case, in contrast to their traditionally cosy relationship with banks, should help increase confidence that fundamental problems are being addressed.

The government's strategy to improve the health of the banking sector

In October 2002, the government announced the Programme for Financial Revival to deal with banking-sector problems by:

- *Strengthening asset assessment and provisioning*: In addition to the special inspections discussed above, the FSA instructed major banks to use the discounted cash flow method[38] to calculate the reserves necessary to cover potential losses on loans to large borrowers classified as "need special attention" and "in danger of bankruptcy".[39] As noted above, the FSA has tentatively calculated that banks added 500 billion yen of extra loan-loss reserves following the second special inspection, boosting the coverage on special attention loans from 22 per cent in September 2002 to 35 per cent in April 2003. There have also been measures to improve the quality of on-site inspections[40] and the classification of loans to SMEs.
- *Accelerating the disposal of non-performing loans*: the FSA instructed the banks in April 2002 to remove 50 per cent of loans classified as doubtful or below within one year and 80 per cent within two years. Furthermore, it established a target of reducing the proportion of non-performing loans

Figure 22. **Loans purchased by the Resolution and Collection Corporation**



1. Equal to the payment for loans divided by the total amount of loans purchased.
Source: Resolution and Collection Corporation.

for the major banks by half by March 2005 from its level of 8.4 per cent of total loans in March 2002. However, no numerical target has been established for regional banks, which account for a third of non-performing loans in the banking sector.

The Resolution and Collection Corporation (RCC)[41] and the Industrial Revitalisation Corporation (IRC) are playing a role in promoting corporate restructuring and in accelerating the disposal of non-performing loans by purchasing such loans from banks through March 2005. However, the two publicly funded institutions are aimed at different types of loans and companies. The RCC mainly purchases loans classified as "in danger of bankruptcy" or below and focuses on smaller firms. The participation of the RCC in auctions for non-performing loans has been adding depth to the market, winning almost a quarter of its bids. Since FY 2002, the amount of loans purchased has increased by more than four times to 2 trillion yen, while the average purchase price doubled from 5 to 10 per cent of the original book value of loans (Figure 22). The RCC uses a checklist approach in determining which companies can be rehabilitated. Between November 2001 and March 2003, it accepted 110 companies, of which 27 were involved in court-based reconstruction and 83 in private settlements. The RCC's goal is to dispose of the assets within three years after purchase.

The IRC, in contrast, purchases a higher quality of assets – primarily loans classified as "requiring special attention". The objective is to promote restructuring of viable firms by purchasing their loans, mainly those from secondary banks, leaving the main bank and the IRC as the major creditors. This should provide a better framework for the main bank to deal with its troubled clients by overcoming the typical conflicts that arise between creditors under "London Rules" type work-outs.[42] Following its creation in April 2003, the IRC began to identify a number of potential companies. The first three companies, including a bus company in Kyushu that runs 600 bus routes, were announced in August. These companies were chosen, in part, because of their important roles in the local economy. The process is initiated when a main bank brings a case to the IRC, which then conducts a preliminary investigation and analyses the firm's restructuring plan. The involvement of a professional and neutral agency like the IRC, which has hired experts *inter alia* from investment banks, is intended to improve the restructuring process. The IRC acts as a mediator between the main bank, the secondary banks and the company in setting the amount of debt forgiveness and debt/equity swaps. However, if there is no agreement, the firm would normally have to undergo a court-based procedure with its creditors. In total, the IRC hopes to purchase loans made to some 100 companies, amounting to 10 trillion yen, over a two-year period and then sell them over the following three years. While any losses would be covered by tax revenue, the IRC hopes to record a profit of more than 50 billion yen during its five-year mandate.

Challenges to achieving the government's strategy for the banking sector

The banks are making progress in reducing their stock of non-performing loans, which fell from 40 trillion yen in September 2002 to 35 trillion yen in March 2003 (Table 7). During the first half of FY 2002, the banks removed more than 7 trillion yen of loans from their balance sheets. However, this was partially offset by tighter assessment of loan quality and deteriorating business conditions for borrowers, which generated nearly 6 trillion yen in new non-performing loans, according to the FSA. This illustrates the difficulty of lowering the amount of bad loans in an economy struggling with slow growth and deflation. Nevertheless, the major banks' non-performing loans fell to 7.2 per cent of total lending in March 2003, despite the continued decline in loans, indicating significant progress toward the 2005 objective. However, without a sustained economic recovery, the inflow of new non-performing loans will remain high. Moreover, even if growth accelerates, structural factors may prevent a rapid fall in the rate of creation of new non-performing loans. Firms in some industries have accumulated extremely high levels of debt, making them vulnerable to failure. At the same time, with the drop in the value of real estate collateral, banks are less protected from loan losses in cases of corporate failure (Oyama and Tanaka, 2003). In addition to rising non-performing loans, further declines in total lending would make it difficult to meet

Table 7. **Non-performing loans in the banking sector**

Trillion yen

	March 2002			September 2002			March 2003			Percentage change[1]		
	Doubtful and bankrupt	Special attention	Total NPLs[2]	Doubtful and bankrupt	Special attention	Total NPLs[2]	Doubtful and bankrupt	Special attention	Total NPLs[2]	Doubtful and bankrupt	Special attention	Total NPLs[2]
Major banks[3]	16.5	11.8	28.3	12.3	11.6	23.9	8.7	11.5	20.2	–47.3	–2.5	–28.6
% of lending	5.0	3.6	8.4	4.2	3.9	8.1	3.1	4.1	7.2			
Regional banks	10.2	4.6	14.8	10.2	4.8	15.0	9.8	4.9	14.7	–3.9	6.5	–0.7
% of lending	5.5	2.5	8.0	5.6	2.6	8.3	5.2	2.6	7.8			
Other[4]	n.a.	n.a.	n.a.	0.8	0.4	1.2	0.3	0.2	0.5	n.a.	n.a.	n.a.
% of lending				10.2	4.4	14.6	3.2	2.6	5.8			
Total of all banks	**26.7**	**16.5**	**43.2**	**23.3**	**16.8**	**40.1**	**18.8**	**16.6**	**35.3**	**–29.6**	**0.6**	**–18.3**
% of lending	**5.2**	**3.2**	**8.4**	**4.8**	**3.5**	**8.3**	**3.9**	**3.5**	**7.4**			

1. March 2002 to March 2003.
2. Non-performing loans include three categories: requiring special attention; in danger of bankruptcy; and bankrupt/*de facto* bankrupt. The latter two categories are shown together in this table.
3. Except for March 2002, Shinsei Bank and Aozora Bank are excluded, leaving 11 banks in this category.
4. Other city banks, long-term credit banks and trust banks.

Source: Calculated from Financial Services Agency data.

the 2005 target for reducing the major banks' non-performing loan ratio to about 4 per cent.[43] This highlights two fundamental problems facing the banks. *First*, they do not have sufficient capital. *Second*, loan losses are undermining capital because profitability is low.

The need for more capital

All four of Japan's major banking groups have announced plans to raise capital by issuing preferred or common stocks. While only one of the groups is strong enough to issue common shares, two groups plan to sell preferred shares to foreign financial institutions. The fourth intends to ask over 1 000 corporate clients and institutional investors to buy preferred shares. Given the weak state of the corporate sector, the practice of asking customers to provide capital raises concern since, in essence, it amounts to banks lending money for the purpose of financing the purchase of their stock.[44] The FSA has issued guidelines calling on banks to refrain from using their influence as lenders to force share purchases by corporate customers. Specifically, the guidelines prohibit boosting capital through direct or indirect lending to customers that are not capable of paying back such loans. Banks are also forbidden from selling shares to companies that they are assisting through cuts in interest rates or debt forgiveness. However, the enforcement of the guidelines is unclear. Since this issue falls under the Anti-Monopoly Law, which is enforced by the Fair Trade Commission, the FSA argues that it is the Commission's responsibility.

The amount of capital needed by the banks is likely to be larger than indicated by official statistics since there still remains the view among private-sector experts that the level of non-performing loans is much higher than reported in Table 7. This view is based on a number of arguments. *First*, the special investigations by the FSA, which were limited to 3 per cent of total loans, discovered that a substantial portion of the loans classified as normal or needing attention were actually non-performing. The fact that the percentage of loans downgraded fell between the first and second investigations suggests progress in tightening assessment of loan quality. However, there is likely to be a period of catch-up as banks examine their entire loan books, thus significantly boosting the total level of non-performing loans. *Second*, classifying loans on the basis of debt service history does not give an accurate picture in a period of extremely low interest rates. Even weak firms can meet this standard in the current environment, particularly since banks often give even lower rates to troubled firms. If interest rates were closer to historical levels, loans to bad firms would be quickly downgraded. Using forward-looking criteria that take account of the economic prospects of firms and their ability to meet their interest obligations would likely give a much larger magnitude of non-performing loans. *Third*, a number of firms have received debt forgiveness, leading to the loans being classified too generously. In sum, a number of analysts estimate that uncovered loan losses of banks total 20 to 30 trillion yen

(4 to 6 per cent of GDP),[45] nearly matching the total reported in March 2003. However, the situation is improving with the implementation of the Takenaka Plan, which is upgrading asset assessment in particular.

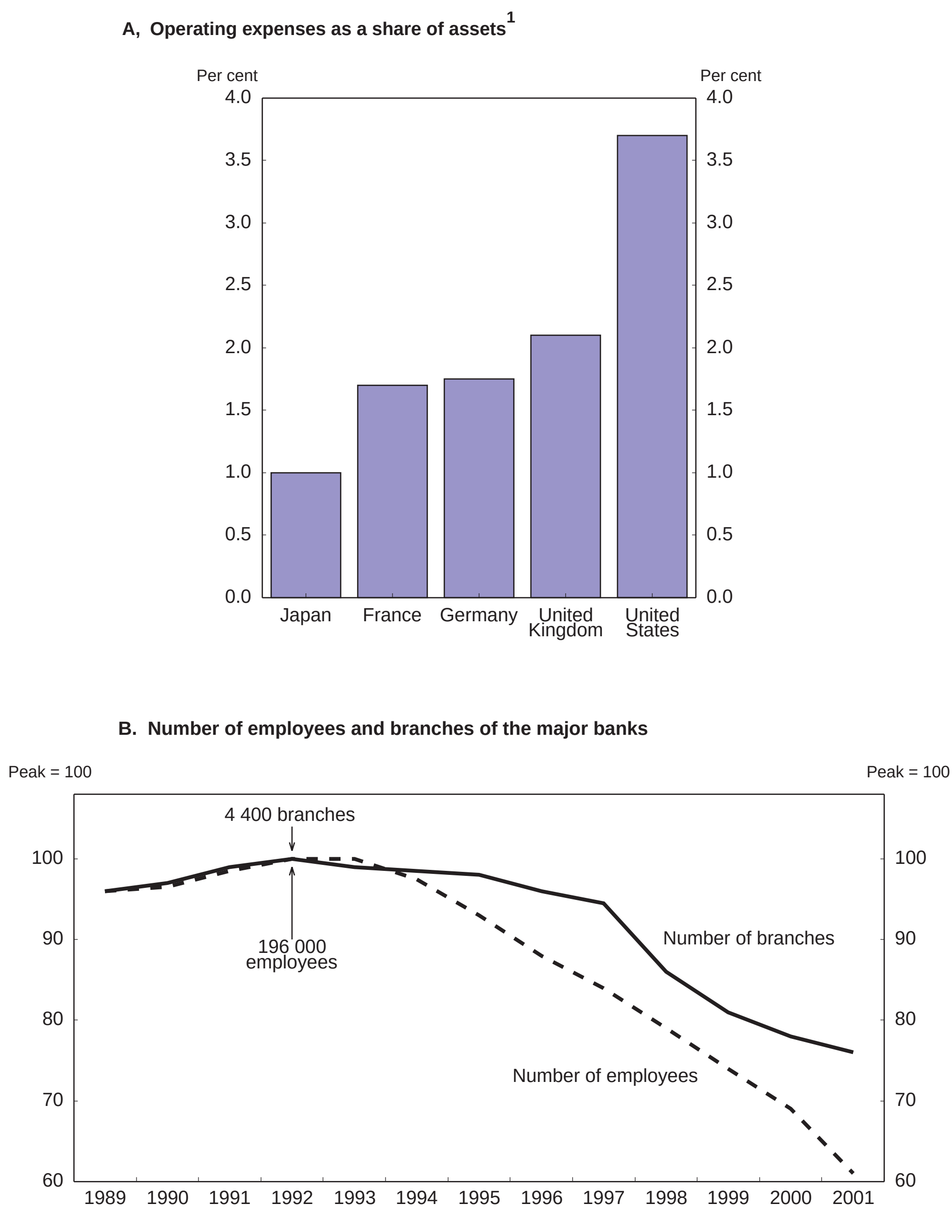
The size of the non-performing loan problem and the fact that capital is not as large as reported, once adjustments to deferred tax assets are made, indicate the difficult predicament facing banks. These problems give banks a big incentive to roll over loans to troubled companies, rather than recognise the losses. Achieving an accelerated pace of non-performing loan disposal by making further use of public funds to re-capitalise the banking sector appears inevitable. According to estimates made by some experts in 2002, the cost for the major banks alone might be more than 20 trillion yen (Kashyap, 2002). Under the current framework, injections of public funds are only allowed when there is a risk of a systemic crisis in the financial sector. The Financial System Council, an advisory body to the Prime Minister, issued a report regarding the use of public funds for financial institutions in July 2003. Following the release of this report, the FSA established an in-house group to examine the possibility of creating a new framework based on this report.[46]

The authorities are also trying to strengthen bank balance sheets by reducing their holdings of equities. Shareholding is to be reduced to 100 per cent of tier I capital by September 2006. The objective is to diminish the influence of stock market swings on bank capital and lower the risk of under-capitalisation. As of September 2002, major banks' holdings exceeded tier I capital by 24 per cent. Meeting the target will require an acceleration of the declining trend that began in 1998. Since then, banks' share of total equities in Japan has fallen by half from 15 to 7½ per cent in FY 2002.

The challenge of boosting profitability

Dealing effectively with the stock problems of high levels of non-performing loans and the low level of capital requires addressing the flow problem of weak profitability. The low level of profitability makes it difficult for banks to cover the increased loan default risk since the collapse of the bubble. For FY 2002, preliminary figures show gross operating profits of 6 trillion yen, insufficient to cover the 6.6 trillion yen in loan losses, let alone capital losses (Table 5). Increasing the profitability of banks in order that they can survive loan losses is thus essential. The low profitability is not due to high operating costs. Indeed, costs are relatively low in Japan, averaging only 1 per cent of assets during the second half of the 1990s, compared to more than 3½ per cent in the United States (Figure 23). Moreover, there has been a significant rationalisation of the banking sector during the past decade. The number of employees at the major banks has fallen by 39 per cent while the number of branches has fallen by 24 per cent (Panel B). Moreover, banks need to invest heavily in information technology – an area that was neglected

Figure 23. **Operating expenses of banks**



1. Average for 1995-99 in per cent.

Source: OECD for Panel A and Bank of Japan for Panel B.

during the 1990s – in order to remain competitive (Fukao, 2002). Banks are attempting to raise profits by boosting fee income, such as imposing charges for using ATMs on Saturday.

Weak profitability is fundamentally due to low interest margins on lending. Indeed, net interest income relative to assets is around three times higher in the United States than in Japan (Table 8). Interest margins on lending in Japan are insufficient to cover expenses and realised credit costs, making lending an unprofitable activity for banks (Figure 24). Low interest margins suggest that there is overcapacity in the banking sector, despite the progress toward rationalisation. The need for reduced capacity suggests that there should be some selectivity in providing public funds to banks. Another key to boosting margins and enhancing profitability is bringing deflation to an end. It is difficult for banks to increase lending margins, given the zero bound on deposit rates and their inability to raise borrowing rates in a weak economy.

Low interest margins also reflect the important role of government financial institutions, which provide severe competition, subsidised by taxpayers, for banks. With direct subsidies from the government and the advantage of zero-cost capital, the public institutions have a 60 basis-point advantage relative to private financial institutions (Fukao, 2003). In terms of assets, banks' share among depository institutions declined from 83 per cent in 1989 to 77 per cent in 2000, while the Postal Saving System's share doubled from 11 to 20 per cent. Banks' share of deposits fell from 84 to 77 per cent over the same period. Although reducing the role of government financial institutions was a priority of the Koizumi government, progress has stalled, in part due to concern about maintaining lending to SMEs. The situation would be exacerbated if the Tokyo Metropolitan Government follows through on its plan to create a bank, with capital of about 200 billion yen, to provide loans to SMEs. With expected loans of around 5 trillion yen, it would be

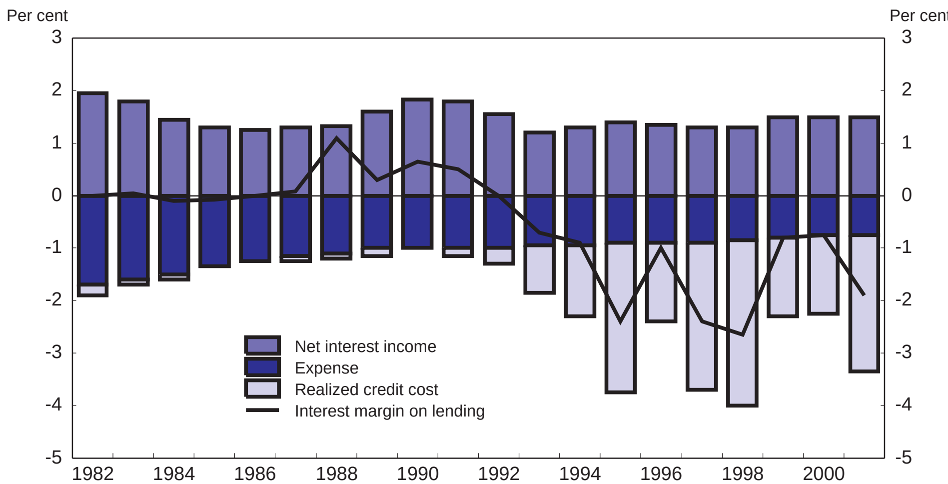
Table 8. **Comparison of bank profitability in Japan and the United States**

Per cent

	1990	1995	2000	2001
Return on assets				
Japan	0.41	–0.31	0.01	–0.76
United States[1]	0.68	1.74	1.75	1.69
Net interest income as a share of assets				
Japan	0.76	1.27	1.17	1.27
United States	3.40	3.57	3.33	3.26
Net interest income as a share of total income				
Japan	7.32	76.6	75.8	76.0
United States	67.7	65.2	57.3	57.8

1. Pre-tax.
Source: Fukao (2003) and Kashyup (2002).

Figure 24. **Interest margin on lending**



Source: Bank of Japan.

a major competitor for banks. Moreover, it might prompt other local governments to establish similar banks. Concern about lending to smaller firms has also led the FSA to include requirements on lending to SMEs in banks' restructuring plans.[47] However, banks are reluctant to extend credit to smaller firms because the price does not justify the higher risk. Imposing such constraints on banks' lending behaviour seems to run counter to the general thrust of the bank rehabilitation strategy by weakening the accountability of bank management for its lending decisions.

The low profitability of banks partly reflects their weak governance. Since many banks have been re-capitalised using public funds, the government has a crucial role to play in improving the governance of banks as a shareholder as well as a supervisor. Indeed, public funds injected to re-capitalise banks during the past five years represent 4½ trillion yen of the capital of internationally-active banks, about a quarter of their total. Overall, the government has injected public funds into more than 30 banks and required them to submit restructuring plans.[48] In October 2002, the FSA also announced plans to penalise banks that received public funds if they do not meet the targets set in their restructuring plans and to hold management responsible. The FSA has the authority to issue management improvement orders to banks that fail to meet their targets.[49] A stronger action would be to turn the government's preferred shares into common shares, which provide voting rights. According to FSA guidelines issued in April 2003, the conditions under which the authorities might take this step include a failure to pay dividends on preferred stock for two consecutive years, steep declines in a bank's earnings, under-capitalisation and failure to improve performance after the implementation of corrective measures. The strengthened role of auditors should also improve the governance of banks since they are required to express an opinion on whether an institution qualifies as a "going concern".

Problems in the life insurance sector

The health of the banking sector is linked to that of the life insurance companies, the second largest part of the financial sector, with assets amounting to about 30 per cent of GDP. The two sectors are important providers of capital to each other. Indeed, the insurers are major shareholders of the banks, owning more than 10 trillion yen in bank equity and subordinated debt in 2001. The banks, in turn, are significant purchasers of the subordinated debt and surplus notes of the insurance companies. As a result of this "double-gearing", the weakness in the life insurance industry has implications for the banking sector, in addition to being important in its own right.[50] Double-gearing results in poor-quality capital, thus raising systemic risk. If a major life insurer goes bankrupt, the banks that provided funding to it will lose money, prompting a fall in the stock prices of those banks. This would, in turn, reduce the assets of the insurance companies holding those bank stocks (Fukao, 2003).

The life insurance industry has also experienced severe problems, as evidenced by the failure of seven of the major 20 companies since 1997, while seven other companies have entered into alliances with foreign investors. Solvency ratios fell sharply for most companies in FY 2002 and a number cancelled dividend payments to policyholders. The problems facing life insurance companies are similar to those of the banks in many respects: non-performing loans, significant exposure to the stock market and competition from government financial institutions. Indeed, the Postal Insurance System accounts for 40 per cent of the assets in the life insurance sector. In addition, premium income has been cut by policy cancellations and a decline in new policies by households, who are wary of the financial weakness in this sector. However, the key problem is that in the higher interest rate environment in the past, the life insurance industry promised returns to policymakers that turned out to be unrealistically high, due to the fall in interest rates and the weak stock market. By 2002, the difference between what the life insurers had promised to pay and the current yield – the "negative carry" – had reached 1.25 trillion yen. To solve this problem and protect policyholders, the Diet passed a bill in July 2003 that allows the companies to cut guaranteed yields on existing policies even if the companies are not on the verge of bankruptcy. Such reductions, though, require the approval of both the authorities and policyholders. Banks that provided capital to the life insurance company would also have to bear a portion of the financial pain. However, life insurance companies may be reluctant to request cuts in yields, fearing that it would spark a surge of cancellations by policyholders. Indeed, previous attempts to introduce such a measure prompted an angry response from policyholders.

Assessment

Bringing deflation to an end is the top priority for the monetary authorities. The current quantitative easing policy should be strengthened in several respects. First, the range of assets purchased by the BOJ should be broadened. Such a move would reinforce the impact of quantitative easing and alleviate the exit problem when inflation returns. For the medium term, a solid framework for monetary policy management needs to be established to contain risks of both overshooting and undershooting the optimal inflation rate. Given the large slack in the economy, such a framework should include a commitment to reduce the possibility of returning to deflation by pledging to continue easing for a longer period than otherwise required and by allowing a temporary deviation from the desired level of inflation until such a risk diminishes. The BOJ's recent clarification of its commitment to continue the quantitative easing policy is welcome in this regard. The level of the medium-term target for either inflation or the price level also needs to be sufficiently high to limit the risk of falling back into deflation. Purchasing a broader range of assets would boost the credibility of the commitment of the BOJ to stopping deflation since inflation would likely generate capital gains on those assets.

Ending deflation will also require simultaneously resolving the problems in the banking sector that have prevented the monetary transmission mechanism from functioning. While some observers have argued against rapid financial-sector restructuring on the grounds that it would worsen economic conditions and raise the risk of a deflationary spiral, it is clear after a decade of stagnation that decisive action is needed. Time has not only failed to solve the problems, it has made many of them worse. The authorities recognised the urgency in its October 2002 plan for financial-sector restructuring. The progress achieved in implementing this plan is encouraging and should be accelerated.

In particular, the weakness of capital is forcing banks to shrink their loan books to protect the soundness of their balance sheets. While it is important that banks obtain more capital from the markets, the authorities should not allow the banks' efforts in this regard to influence their lending policies, while guarding against double-gearing. Moreover, capital regulations should impose meaningful standards. In particular, a stricter evaluation of deferred tax assets and a lower ceiling on their maximum amount should be applied to all banks so that reported capital levels accurately reflect their economic strength. The fact that a recent audit found that deferred tax assets were unrealistically high at a major bank suggests that this is an important problem for financial regulation. This discovery forced the bank, Resona, to seek public funds, making the government the major owner and giving it a chance to make Resona a model of reform. However, the decision to impose a quota on lending to SMEs, which already accounts for three-quarters of Resona's loans, is doubtful from an economic point of view. Moreover, it is essential to make clear that this is the last re-capitalisation using public funds for this bank.

Given the size of the banking-sector problem, a clear framework for using public funds is needed to re-capitalise banks before they reach critical condition. In dealing with weak banks, the benefits of salvaging information about borrowers and maintaining credit flows in the short run provide potential rationales for injecting public funds. However, given the excess capacity existing at present, the downsizing of the banking sector would boost the profitability of stronger banks. Thus, government assistance should be selective, particularly in the context of the difficult fiscal situation. Moreover, a new framework for the injection of public funds into banks should take into consideration market signals in deciding which banks to support. For example, those that cannot attract private financing should receive lower priority. In addition, assistance should be conditional on effective reform of risk management and reduction of non-performing loans in line with the targets set in 2002.

Meeting the targets for reducing the stock of non-performing loans, based on strict loan classification, should be a priority. Greater use of forward-looking criteria for loan classification and provisioning is essential during a period of very low interest rates, and should be combined with improved supervision. The sale of non-performing loans and corporate restructuring should also be accelerated by the RCC and the IRC. It is important that these publicly funded organisations impose market discipline in their loan repurchases and restructuring efforts in order to avoid moral hazard problems and allow them to break even financially, thus avoiding additional burdens for taxpayers. The IRC's role is complicated by the different priorities between itself and the banks in the selection of companies. While the IRC prefers companies strong enough to recover and have a significant economic impact, the banks would rather sell the loans of weak companies. Some initial successes will be needed to win the confidence of banks in the IRC, which hopes to handle up to 100 firms. Success in speeding up the disposal of non-performing loans and the pace of corporate restructuring would have a negative short-run impact on employment and output. However, the closure of non-viable firms, who often pursue price-cutting strategies, would reduce deflationary pressure.

Finally, boosting the low profitability of the banking sector is essential to cope with the problems of high non-performing loans and under-capitalisation. Reducing capacity through the exit of weak institutions would be beneficial in this regards. Perhaps most importantly, the growing role of government financial institutions, which reduce the ability of private banks to compete, should be scaled back. Improving the governance of banks is another key to boosting profitability.

III. Achieving fiscal sustainability

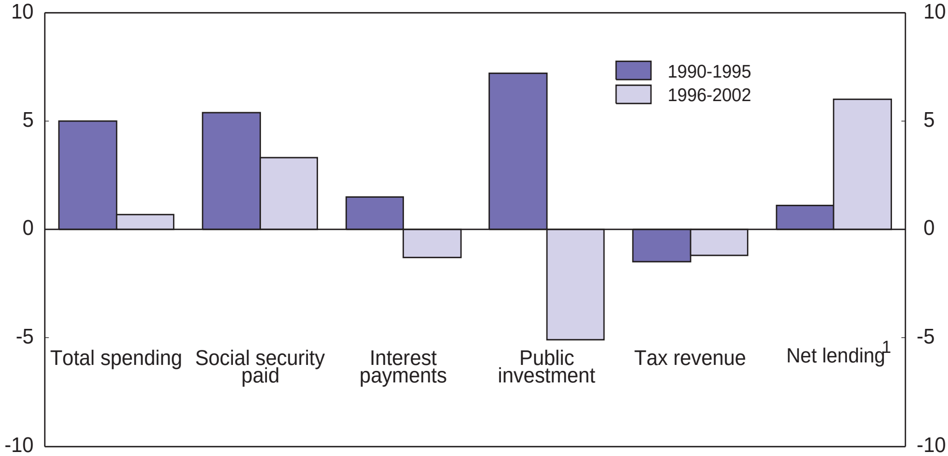
The deterioration of the fiscal situation has continued, with the general government deficit rising to a projected 7¾ per cent of GDP in 2003 and public debt soaring to more than 150 per cent. The large budget deficit mainly reflects weak economic conditions, which outweigh the authorities' consolidation efforts to date. The government is trying to reduce the deficit by keeping the level of expenditures constant as a share of GDP but, with deflation eroding the tax base, shortfalls in revenue have prevented progress thus far. One positive development is the fiscal reform initiatives launched during the past several years, which have improved the allocation of spending, thus boosting the efficiency of public expenditures.

Given the size of the deficit and the substantial increase in public debt, the sustainability of fiscal policy is a serious concern. However, the financing of the public debt is very stable as indicated by the exceptionally low long-term interest rate in Japan. Indeed, the extreme risk aversion of investors and the persistence of deflationary expectations pushed up bond prices to a record high in June 2003. This reduces interest payments by the government, facilitating the rollover of the public debt. Nevertheless, concerns about fiscal sustainability remain strong among households as unfavourable demographic factors are expected to add further pressure on spending. The government has introduced a *Medium-term Economic and Fiscal Perspective*, which aims at achieving a primary budget surplus in the early 2010s.

The biggest challenge facing the authorities is thus to ensure fiscal sustainability in the uncertain economic environment prevailing at present. This requires bold actions to defeat deflation and to lead the economy to a more normal growth path. At the same time, a credible medium-term fiscal consolidation programme, which includes concrete plans, needs to be established. Achieving these difficult and in some respects contradictory goals will require a carefully designed strategy to ensure consistency between short and longer-term objectives. The first section of this chapter updates recent developments in fiscal policy and assesses the current policy stance. The second part focuses on whether fiscal policy is sustainable and then discusses how sustainability can be ensured over the longer term. The final section provides an overall assessment of fiscal policy in both the short and longer term.

Figure 25. **Government expenditure and revenue trends**

Annual average percentage change in nominal terms



1. Net lending is presented as a share of GDP.

Source: Cabinet Office, National Accounts and OECD estimates.

Recent developments in fiscal policy: the deterioration continues

The worsening fiscal conditions over the past decade reflect strong pressure for increased social security-related spending and the continued decline in tax revenues (Figure 25). The latter is due to both major tax reductions in the 1990s and the weak economy. In particular, deflation has squeezed the nominal income of households and companies, thus reducing tax revenue. The growth of spending is mainly driven by the rapid ageing of the population, despite a series of reforms of the social security schemes. In contrast, interest payments by the government have fallen since 1996, despite the sharp surge in public debt, thanks primarily to lower interest rates. On the other hand, a large increase in public investment during the first half of the 1990s was substantially unwound in the second half of the decade. Falling public investment has helped keep total government expenditures constant over the past several years in nominal terms. However, with continued weakness in tax revenue, this has not been sufficient to reduce the budget deficit.

The FY 2002 *budget outcome turned out to be expansionary*

The initial central government budget for FY 2002 was intended to limit the reliance on public bonds to 30 trillion yen, the level issued in FY 2001. Achieving this target – which ruled out any supplementary budgets – was expected to lead to a tightening of fiscal policy relative to the outcome of the FY 2001 budget, which had included two supplementary budgets.[51] However, a significant weakening in the momentum of the economic recovery during the course of 2002 and a sharp fall in share prices led the government to announce an economic and structural reform package in October 2002. The package consisted of measures to expand the social safety net, accelerate the resolution of non-performing loans, prevent a credit crunch, implement further regulatory reforms and introduce front-loaded tax cuts. Since some of the measures in the package required additional budget outlays, the government announced in December a supplementary budget that was subsequently passed in January 2003. That budget provided 4.2 trillion yen of additional expenditures, in part for the social safety net and public investment, which was partially offset by 1.7 trillion yen of budget savings (Table 9). The 2.5 trillion yen net rise in spending was accompanied by a tax shortfall of the same amount, boosting the financing cost of the supplementary budget to 5 trillion yen (1 per cent of GDP). Rather than resort to creative accounting as in the previous year, the government allowed public bond issuance to exceed the 30 trillion yen ceiling, thus improving budget transparency. Overall, the fiscal stance in FY 2002 turned out to be slightly expansionary.

Table 9. **The FY 2002 budget**

Trillion yen, general account of central government

	Expenditures		Revenues		Borrowing
Initial budget		81.2		51.2	30.0
Supplementary budget (December 2002)	Total, net	2.5	Tax revenue	–2.5	5.0
	Increased spending:	4.2			
	Safety net	1.5			
	Employment	0.5			
	SMEs	0.5			
	Other	0.5			
	Public investment	1.5			
	Mandatory spending	1.2			
	Decreased spending:	–1.7			
	Mandatory spending	–1.2			
	Local transfers	–0.5			
Total FY 2002 budget		**83.7**		**48.7**	**35.0**
(Reference) FY 2001 budget including supplementary budgets		86.4		53.7[1]	32.5[2]

1. Tax revenue totalled 49.6 trillion yen.
2. Includes 2.5 trillion yen of borrowing from a special account.
Source: Ministry of Finance.

The **FY 2003** *budget capped spending and improved its allocation*

The government decided to adopt an expenditure cap in the FY 2003 budget, rather than targeting the amount of public bonds issued. Specifically, the objective was to limit total expenditures of the central government, as well as their general purpose expenditures (total expenditures minus interest payments, redemption of public bonds and transfers to local governments) to the same level in nominal terms as in FY 2002. This approach is more appropriate than the bond issuance target since it allows increased flexibility for fiscal policy in recessionary periods when tax revenues decline. However, achieving such a ceiling on expenditures will be challenging since population ageing continues to exert strong pressure on social security spending. Indeed, mandatory spending including social security, which amounts to 6 per cent of GDP or around 70 per cent of general expenditures, rose by 1.2 per cent in the initial budget for FY 2003 relative to the initial budget for the previous year (Table 10). The increase occurred despite some politically difficult consolidation measures, such as a cut in pension benefits and an increase in co-payments for medical care.[52] Meeting the expenditure cap required that other outlays be reduced substantially: public investment and total discretionary expenditures were cut by 3.7 and 1.8 per cent, respectively, in the initial budget.

Table 10. **The FY 2003 budget**

Trillion yen, general account of central government

	(A) FY 2002 initial	(B) FY 2002 final	(C) FY 2003 nitial	Percentage change C/A	Percentage change C/B
Total expenditures	81.2	83.7	81.8[1]	0.7	–2.3
Debt servicing	16.7	16.7	16.8	0.8	0.8
Transfers to local government	17.0	16.5	17.4	2.3	5.5
General purpose spending[2]	47.5	50.5	47.6	0.1	–5.7
of which:					
Public investment[3]	9.3	n.a.	8.9	–3.7	n.a.
(excluding facilities)	(8.4)	(10.0)	(8.1)	–3.9	–19.0
Mandatory spending	32.8	n.a.	33.2	1.2	n.a.
Discretionary spending	5.5	n.a.	5.5[4]	–1.8	n.a.
Total revenue	51.2	48.7	45.3	–11.5	–7.0
Taxes	46.8	44.3	41.8	–10.7	–5.6
Non-tax revenues	4.4	4.4	3.6	–19.4	–18.1
Borrowing (public bonds)	30.0	35.0	36.4	21.5	4.0

1. Takes account of the shift of some items from other accounts in the central government due to institutional changes. If these *ad hoc* factors are excluded, total spending in the initial budget for FY 2003 is slightly below that for FY 2002.
2. Equals total expenditures minus debt servicing and transfers to local government.
3. The figure for public investment includes facilities for education, science and technology, social welfare, and aid for developing countries.
4. Discretionary spending is adjusted for the shift of some budget items from other categories.

Source: Ministry of Finance.

While the Ministry of Finance is obliged to cut total discretionary spending to meet the expenditure targets, the FY 2003 budget introduced a mechanism to facilitate the shift of discretionary spending toward priority areas. The Ministry can approve requests from other ministries for spending increases of up to 20 per cent, thus allowing greater flexibility to concentrate resources on more productive projects. As a result, priority areas such as science and technology and waste management were allocated more funds. With regard to public investment, the allocation has also shifted in favour of more productive projects, such as urban transport, at the expense of infrastructure in rural areas.

In sum, the government controlled spending pressures reasonably well at the initial budget stage. Indeed, after taking account of some institutional changes in the central government, total expenditures in the initial budget for FY 2003 were slightly below the level in the previous year.[53] However, this does not necessarily ensure a good *ex post* budget outcome as there is always strong political pressure for a supplementary budget towards the end of the fiscal year. The frequent use of such budgets is due to the budgeting method in which the government sets guidelines for the initial budget based on the allocation of spending in the previous year's initial budget, rather than on the actual outcome, including any supplementary budgets. As a result, the initial budget tends to be significantly smaller than the actual outcome in the previous year, leading to pressure for a supplementary budget to narrow the gap. This is the case in FY 2003 (Table 10). While total spending in the initial budget rose 0.7 per cent relative to the FY 2002 initial budget, it was 2.3 per cent below the final outcome for FY 2002. In particular, the gap is large in public investment, explaining why ministries and politicians demand supplementary budgets every year. On the other hand, the gap seems to be narrowing to some extent, as the size of recent supplementary budgets has become smaller (Table 11).

Although the FY 2003 budget limits the growth of expenditures, the overall fiscal stance is expansionary since it includes 1.8 trillion yen of front-loaded tax cuts (0.4 per cent of GDP). The planned tax changes, which are part of a fundamental tax reform that is to be implemented, are expected to promote growth by increasing incentives for investment and by promoting the shift of funds from savings to real assets or to consumption. The tax reductions in FY 2003 include (Table 12):

- An introduction of tax credits for investment in R&D and information and communication facilities.
- A streamlining of inheritance and gift taxes and a cut in the rates to promote more transfers from parents to children and to boost residential investment.
- A consolidation and reduction in taxes on dividends and capital gains.
- A cut in real estate transaction taxes.

Table 11. **Fiscal packages since 1992**

Billion yen, project cost basis

	Total amount	Social infrastructure investment					Tax cuts	Other
		Public works		Building and equipment equipment	Public works by local government	Sum of 2-5		
		General public works	Disaster relief					
	1	2	3	4	5			
28 August 1992	10 700	3 400	500	550	1 800	6 250	0	4 450
13 April 1993	13 200	3 640	530	1 150	2 300	7 620	150	5 430
16 September 1993	6 200	1 000	450	0	500	1 950	0	4 200
8 February 1994	15 300	3 590	0	610	300	4 500	5 850	4 900
14 April 1995	4 600[1]	205[2]	718[2]	154[2]	0	1 077[2]	0	3 543[2]
20 September 1995	12 800	3 930	700	910	1 000	6 540	0	6 270
24 April 1998	16 700	4 500	200	1 500	1 500	7 700	4 600	4 350
16 November 1998	23 900	5 700	600	1 800	0	8 100	6 000	9 800
11 November 1999	18 000	4 486	700	1 614	0	6 800	0	11 200
19 October 2000	11 000	2 500[3]	500	n.a.	0	5 200	0	5 800
16 November 2001	1 000	0	300	100	0	400	0	600
1 February 2002	2 600	0	0	100	2 500	2 600	0	0
30 January 2003	3 600[4]	1 500	200	n.a.	1 100	2 800	0	800[4]
Cumulative	139 600	34 451	5 398	8 488	11 000	61 537	16 600	59 543

1. OECD estimate.
2. Budget figures, rather than project cost figures.
3. Only includes projects funded by the supplementary budget.
4. The amount shows net increase (budget savings are subtracted).

Source: Cabinet Office, Ministry of Finance and OECD.

Table 12. **Estimated impact of FY 2003 tax reform**
Billion yen, central government

	FY 2003	Following years	Note
Tax cuts			
1. Corporate tax	–1 304	–1 417	Tax credit for investment will be lifted in March 2006
R&D	–547	–588	
Investment incentives	–527	–445	
SMEs	–230	–384	
2. Inheritance and gift taxes	–103	–165	Special measure for the acquisition of property will be lifted in March 2005
3. Taxation of financial transactions and stocks	–96	–125	Tax rates on property income will be raised in FY 2008
4. Taxation of land	–210	–210	This reduction will be lifted in FY 2005
Total of 1-4	–1 713	–1 917	
Planned tax increase			
5. Income tax (individual)	–	+479	This measure will take effect in FY 2004
6. Consumption tax	–	+504	This measure will take effect in FY 2004
7. Liquor and tobacco taxes	+163	+187	
8. Others	+6	+7	
Total of 5-8	+169	+1177	
Other	+6	+26	
Total, net impact[1]	–1 538	–714	

1. With the end of some of the tax cuts, the tax reform is expected to be revenue-neutral over the medium term.
Source: Ministry of Finance.

However, to avoid further exacerbating the fiscal situation, some of these reductions are only temporary. Moreover, they are to be followed by a broadening of the base for income tax and the consumption tax in FY 2004.[54] Thus, the overall impact is expected to be revenue-neutral over the medium term.

At the time of preparing these tax measures, it was argued that fiscal stimulus was needed in FY 2003 to sustain the still fragile economic recovery and to overcome continued deflation, particularly given the zero bound on policy interest rates that has limited the effectiveness of monetary policy. On the other hand, given the trend decline in potential growth that has accompanied the deterioration of fiscal conditions, there is a need for comprehensive tax reform aimed at setting the right incentives and broadening the tax base. Thus, the FY 2003 tax measures are a combination of some short-term stimulus measures and more fundamental tax changes. The latter, which includes a broadening of the base for income tax and the VAT, as well as changes in the taxation of capital income, are welcome steps, while more substantial reform of the tax system remains to be carried out.

The FY 2004 budget aims to keep spending level in nominal terms

In August 2003, the government adopted a guideline for the FY 2004 budget. As in the FY 2003 budget, the main objective is to limit both total and general purpose spending of the central government to the level in the previous year in nominal terms. This is to be accomplished by reducing discretionary spending (excluding the priority area of outlays for science and technology) by 2 per cent. A key element necessary to achieve this objective is a 3 per cent decrease in public investment. Maintaining spending at the previous year's level also requires limiting the increase in mandatory spending to 880 billion yen (a 2½ per cent rise from the FY 2003 budget), which is 220 billion less than in the case of no policy change. Achieving this target, therefore, requires further policy initiatives, especially in social security. Although the Ministry of Finance envisages further cuts in nominal pension benefits to reflect gains in purchasing power resulting from past deflation, a decision on that issue has been postponed until the end of the year when the FY 2004 budget plan is to be finalised. With regard to reform of the budgeting process, the government plans to introduce new measures to improve public management, including a target-oriented approach and multi-year budgeting in some pilot projects. It has also been decided to reform a part of the transfers to local governments (around 4 trillion yen) by 2006, which may lead to some cuts, and to shift some tax sources to the local level.

The stance of fiscal policy

The Secretariat's estimate of cyclically-adjusted net lending for general government indicates that the stance of fiscal policy is expansionary in CY 2003, before becoming slightly restrictive in CY 2004 (Table 13). The estimate is based on the following assumptions:

- There will be no supplementary budget in FY 2003.
- In FY 2004, total expenditure by the central government will remain at the level of the FY 2003 initial budget in nominal terms. The broadening of the tax base will be phased in as announced.

The weakness of tax revenue in CY 2002 led to a widening of the cyclically-adjusted deficit by 0.8 per cent of GDP, though half of that amount can be attributed to the fall in deferred tax payments on matured postal saving accounts. In CY 2003, the tax changes discussed above and the January 2003 supplementary budget are expected to result in a 0.6 per cent of GDP increase in the deficit on a cyclically-adjusted basis, even under the assumption of no supplementary budget.

Table 13. **General government deficit and debt**
Per cent of GDP[1]

Calendar year	2000	2001	2002	2003	2004	2005
Net lending	–7.4	–6.1	–7.1	–7.4	–6.8	–6.9
Net primary balance	–6.0	–4.7	–5.6	–5.7	–5.0	–5.1
Cyclically-adjusted net lending	–7.1	–5.5	–6.3	–6.9	–6.5	–6.6
Cyclically-adjusted primary balance	–5.7	–4.1	–4.8	–5.3	–4.7	–4.8
Gross debt	133.1	141.5	147.3	154.6	161.2	167.2

1. Deferred tax payments on postal savings accounts reduced net lending in 2000. 2001 and 2002 by 0.5, 0.6 and 0.2 percentage point, respectively.
Source: OECD.

The fiscal stance in CY 2004 is assumed to be slightly restrictive, with a ½ per cent of GDP decline in the cyclically-adjusted deficit, based on the planned tax increase and the assumption of no supplementary budget in FY 2003.

As noted above, the practice of setting the initial budget relative to the previous year's initial budget typically results in strong pressure for a supplementary budget in the latter part of each fiscal year. The adoption of a supplementary budget in FY 2003 would probably be reflected in the fiscal stance in CY 2004. However, with the risk of an economic downturn appearing to diminish, the pressure for a further easing in the fiscal stance will likely subside.

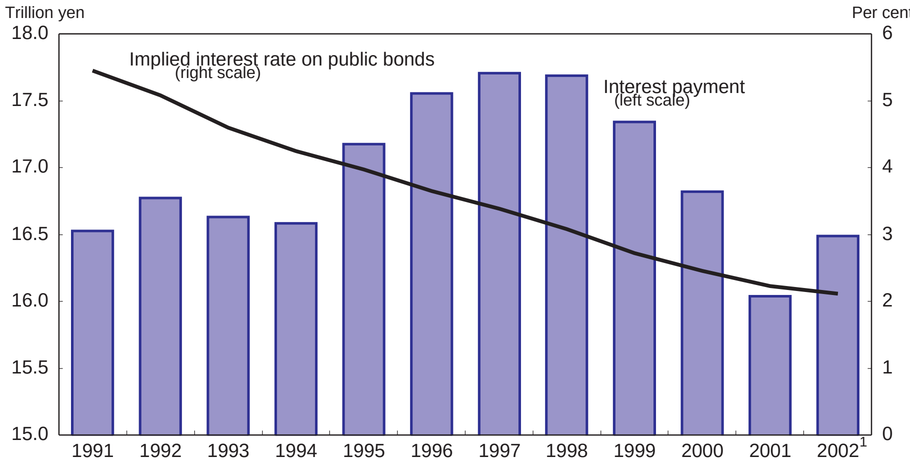
Is fiscal policy sustainable over the medium term?

Despite continued large budget deficits and the accumulating government debt, long-term interest rates have fallen to extremely low levels, as discussed in Chapter II. Indeed, the benchmark ten-year government bond yield dropped below 0.5 per cent in early June 2003, matching the historical low recorded in 1998, before rebounding to around 1.5 per cent in September. This seems to suggest that the markets do not require a higher risk premium despite the deterioration of the fiscal balance. Persistent deflation, rather than hyper-inflation, in the face of huge government budget deficits also seems to imply that the credibility of the government remains intact. However, it is uncertain whether these indicators do, in fact, attest to the sustainability of fiscal policy.

The huge budget deficits and high level of debt are supported by a number of special factors

The low level of interest rates has limited the government's interest payments. Such payments were indeed lower in nominal terms in CY 2001, at 16 trillion yen (3.2 per cent of GDP), than in CY 1991, even though government debt more than doubled during the same period from 300 trillion yen to more

Figure 26. **Interest payments**



1. OECD estimate.
Source: Cabinet Office, National Accounts and OECD estimates.

than 700 trillion yen (Figure 26). The average interest rate on the public debt (total interest payments divided by government debt) fell from 5.5 per cent in CY 1991 to 2.2 per cent in CY 2001. If the average interest rate and the composition of government debt had remained at their 1991 levels, 23 trillion yen (4.6 per cent of GDP) in additional interest payments would have been required in CY 2001.

Excess domestic savings help to finance budget deficits without causing disturbances in financial markets. As discussed in Chapter I, the increase in government net borrowing has been completely offset by the sharp decline in net borrowing by the non-financial corporate sector, leaving the domestic economy as a whole in a net saving position (Figure 10). At first glance, changes in the saving-investment positions may suggest that the public sector has crowded out private-sector investment. However, the decline in the long-term interest rate, in real as well as nominal terms, indicates that the causality is likely to run in the opposite direction: a fall in investment in the private sector has accompanied an economic slowdown, resulting in a higher government deficit due to lower tax revenue.

Moreover, the current problems in the financial sector have facilitated the financing of public debt. Given the weakness of their capital base, financial institutions are hesitant to invest in risk assets or to expand their lending, thus favouring the purchase of government bonds.[55] Consequently, during the past five years, private banks increased their holdings of government bonds by 40 trillion yen

(8 per cent of GDP), while they cut lending by 50 trillion yen. Moreover, given the fragility of private financial institutions, public financial institutions' share of households' assets continues to increase, helping to finance public debt. Households have around 240 trillion yen (48 per cent of GDP) in postal savings accounts. This allows the Postal Savings System and the Trust Fund Bureau to hold a quarter of the total stock of government bonds. In addition, under the current quantitative easing scheme (see Chapter II), the Bank of Japan purchases some 14 trillion yen of government bonds per year. Consequently, a third of the net lending of the general government is virtually financed by the central bank, which currently holds 15 per cent of total outstanding government bonds.

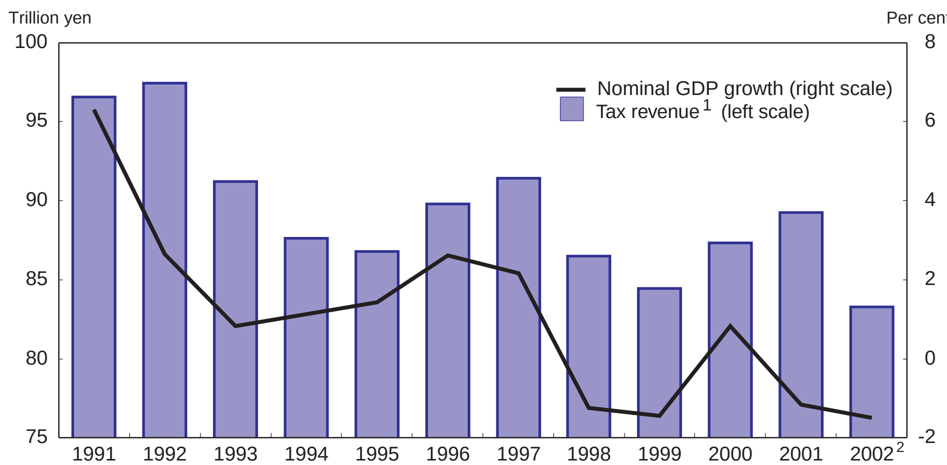
The current fiscal situation is not sustainable

The above arguments suggest that the current stability in public finance has not been supported by strong fundamentals in the Japanese economy. On the contrary, it reflects the fragility of the economy, as shown by the weakness in private demand and the lack of risk-taking by households and the corporate sector. Hence, the currently low level of long-term interest rates and the stability in public finance do not guarantee fiscal sustainability because the current peculiar economic situation itself is not sustainable. Strains in financing the budget deficit may arise when a robust expansion is achieved and business investment increases. Moreover, since necessary reforms tend to be postponed in the current low interest-rate environment, the problem of fiscal sustainability could become even more serious.

Indeed, the rapid accumulation of public debt raises serious concerns. With a primary deficit of nearly 6 per cent of GDP and a nominal interest rate that exceeds the growth rate of nominal GDP, debt dynamics work to drive up the debt to GDP ratio very rapidly. A simple calculation suggest that the level of primary surplus required to stabilise the debt to GDP ratio at 180 per cent would be 1¾ per cent of GDP, under the assumptions of nominal growth of 1 per cent and a 2 per cent interest rate.[56] This implies that fiscal consolidation of nearly 8 per cent of GDP is necessary just to stop the snowballing of public debt. However, such a large-scale consolidation is difficult to implement in the current environment in which the economy appears vulnerable to negative impacts from large cuts in spending or increases in taxes. The experience in 1997 suggests caution in taking radical steps toward fiscal consolidation.

The continuation of deflation and the decline in nominal income make it difficult to reduce the government deficit through increased tax revenues. After peaking in the early 1990s, total tax revenues fell by 7 trillion yen in the decade to 2001, reducing its share of GDP from 20.5 to 17.5 per cent (Figure 27). In particular, revenues from income taxes on households and corporations declined by 16 trillion yen during the same period. Although a large part of the decline

Figure 27. **Tax revenue and GDP growth**

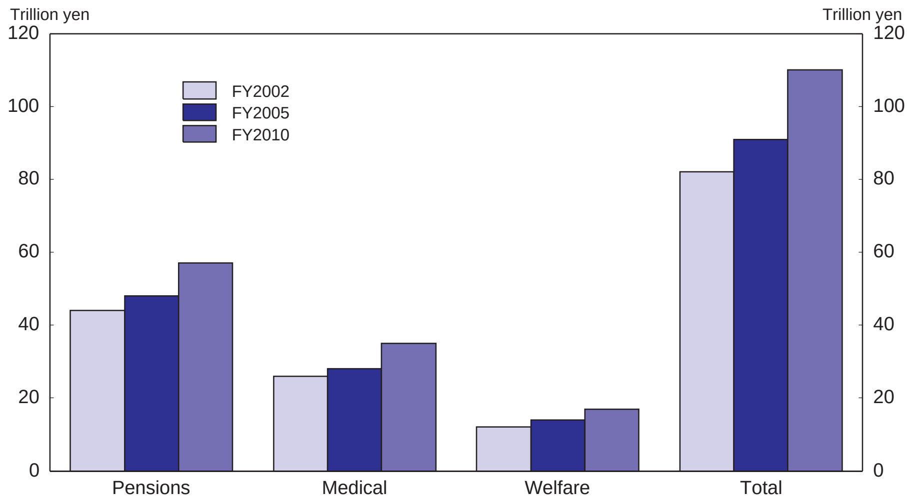


1. Excludes social security contributions.
2. OECD estimate for tax revenue.
Source: Cabinet Office, National Accounts and OECD estimates.

– around 10 trillion yen – can be explained by tax cuts,[57] the weak economy and deflation have also had a significant effect on revenue. Given the generous tax allowances, a quarter of income earners do not pay any income tax at all and almost 80 per cent of income tax payers fall in the lowest tax bracket of 10 per cent. In addition, the proportion of firms paying corporate income tax has fallen from more than 50 per cent in the early 1990s to 30 per cent at present. The relatively small role of indirect taxes amplifies the impact of declines in nominal income on tax revenues. Consequently, the share of tax and non-tax revenue in GDP has fallen from a peak of 34 per cent in the early 1990s to under 32 per cent in 2001, one of the lowest in the OECD area.[58]

Population ageing also raises serious concerns about the sustainability of public finances. The share of the population over the age of 65 is expected to rise from 18.5 to 22.5 per cent in 2010, and to 35 per cent in 2050. Such rapid ageing of the population is generating huge spending pressures. According to the government's estimate, expenditures for social security, including pension, medical care and other welfare programmes, are expected to increase from 82 trillion yen (16 per cent of GDP) to 110 trillion yen in FY 2010 under the assumption of unchanged policies (Figure 28).[59] Moreover, under the existing social security system, the net burden on generations born after 1980 could amount to 42 million yen per capita for public services, which is three times higher than that on the generation born

Figure 28. **Projected social security spending**



Source: Ministry of Finance.

between 1970 and 1979.[60] This suggests the necessity of fundamental reform in the social security system (see below).

Concerns about fiscal sustainability are amplified by uncertainty about contingent liabilities. The planned reform of government special status corporations might increase the liabilities of the general government. Indeed, in 1998, some 27 trillion yen (5 per cent of GDP) of debt held by the Japan Railway and the National Forest Special Accounts was financed by the central government. The recent plan for the reform of the public highway construction corporations may require central and local government financing of the liabilities held by the *Honshu-Shikoku* bridge authority. Moreover, according to published data, 129 government corporations, which are predominantly funded by the government, held some 532 trillion yen of gross liabilities (106 per cent of GDP) as of FY 2001 and receive 8 trillion yen of subsidies and additional funds per year to finance their operations. In this regard, the planned corporatisation or privatisation may reveal that some government corporations face larger liabilities than currently published.[61]

Contingent liabilities could also arise from the resolution of failed financial institutions. The government Deposit Insurance Corporation has already provided a significant amount of funds to protect depositors at failed banks. Between 1996 and March 2003, 18 trillion yen (3.6 per cent of GDP) of public funds were provided to cover the cost of the failure of 16 commercial banks, including the Long-term Credit Bank and the Japan Credit Bank, and 152 credit cooperatives. Since the government has postponed the re-introduction of a ceiling on guarantees on current deposits until 2005, there is a risk that this type of contingent liability will remain large.

How can fiscal sustainability be ensured?

Given the current huge stock of government debt and the concerns about stronger spending pressure due to population ageing, it is crucial to maintain private-sector confidence in the prospects for fiscal consolidation in order to prevent a hike in the risk premium on government bonds, which could increase the fiscal burden substantially. This suggests the need for a detailed medium-term plan to maintain confidence. The government introduced the *Medium-term Economic and Fiscal Perspective* in January 2002 showing economic prospects and possible fiscal consolidation paths (see 2002 *Survey*). A key feature of the Perspective was the adoption of an expenditure target in terms of its ratio to GDP. Specifically, the government is committed to limiting general government expenditure during the coming four years to a ceiling of 38 per cent of GDP, the level recorded in FY 2002. Bringing deflation to an end in FY 2002 and meeting the expenditure cap were expected to result in a primary budget surplus for central and local governments by the early 2010s.

The government revised the Perspective in January 2003 to reflect changes in economic developments and prospects (Table 14). The revised version shows that the fiscal condition becomes even more difficult with the continuation of deflation. Deflation is now expected to continue through FY 2004, rather than end in FY 2002. Based on this more realistic assumption, the revised Perspective expects that the primary deficit of central and local governments could be about 1½ percentage point of GDP larger than originally projected (Figure 29). Consequently, narrow public debt is projected to stabilise in 2010 at 146 per cent of GDP, 8 percentage points higher than in the original Perspective.[62] However, in the absence of any policy feedback mechanism that takes account of deviations from the spending assumptions, the revision is only useful for its illustrative effects.

As discussed in the 2002 *Survey*, the government's Perspective falls short of generating confidence about the outlook for fiscal consolidation. Although it explicitly commits the government to a cap on total spending in terms of its ratio to GDP, it does not have any concrete measures to limit expenditures, with the exception of public works. The lack of a direct link between the Perspective and specific expenditure items in the government's annual budget significantly weakens the practical applicability of the medium-term fiscal consolidation plan. Moreover, although the projected budget deficit reduction depends mainly on increased tax revenues, the Perspective does not explicitly specify any changes in the tax system. In addition, the lack of any policy feedback from deviations from the

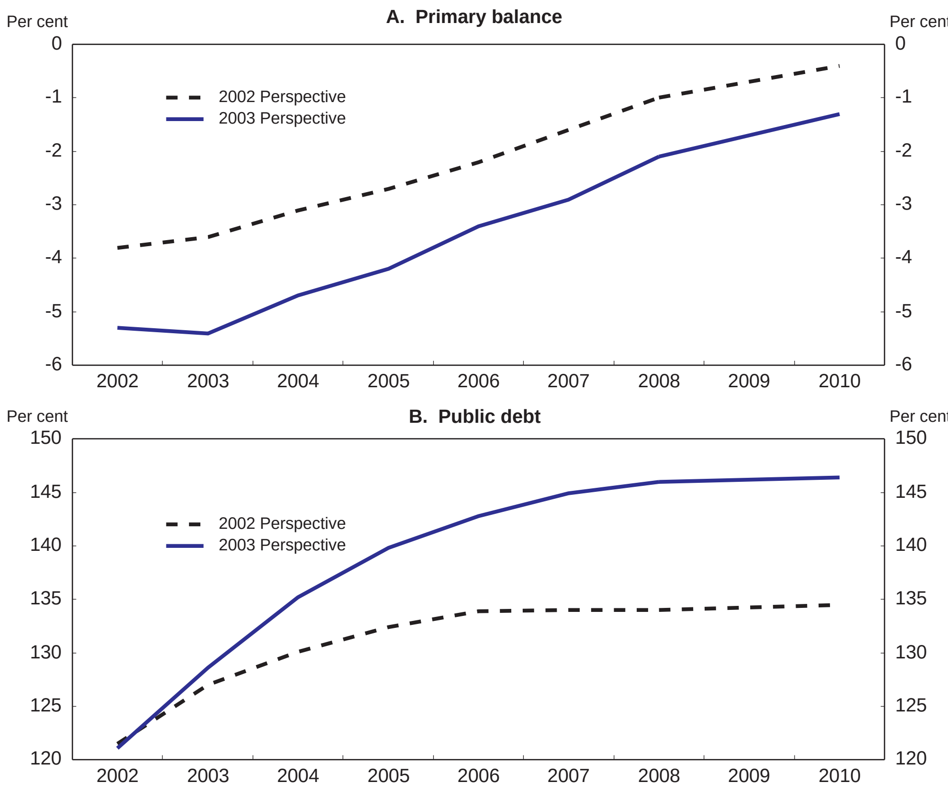
Table 14. **The government's Medium-term Economic and Fiscal Perspective**[1]

	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2010
Macroeconomy							
Growth rate of real GDP[2]	0.9	0.6	0.9	1.3	1.5	1.6	1.9
Growth rate of nominal GDP[2]	–0.6	–0.2	0.5	1.5	2.2	2.6	3.2
Nominal GDP[3]	499.6	498.6	501.1	508.7	519.8	533.5	584.6
Inflation rate (GDP deflator)[2]	–1.5	–0.9	–0.3	0.2	0.7	1.0	1.3
Unemployment rate	5.4	5.6	5.7	5.6	5.4	5.2	4.4
Nominal long-term interest rate	1.2	1.3	1.5	1.8	2.1	2.5	3.1
Balance of saving and investment[4]							
Net lending (+)/Net borrowing (–)[4]							
General government	–8.0	–8.3	–7.2	–6.5	–5.9	–5.7	–4.3
Private sector	10.6	10.9	10.0	–9.1	8.3	8.0	6.6
Rest of the world	–2.7	–2.7	–2.8	–2.6	–2.4	–2.4	–2.3
Fiscal conditions							
Balance of saving and investment[4]							
Net lending (+)/Net borrowing (–)[4]							
Central government	–6.6	–6.7	–6.3	–6.1	–5.6	–5.4	
Local governments	–1.0	–1.0	–0.6	–0.3	–0.1	0.1	
Total	–7.6	–7.7	–6.9	–6.3	–5.7	–5.3	
Public-sector primary financial balance[4]							
Central government	–5.2	–5.3	–4.9	–4.7	–4.1	–3.7	
Local governments	–0.1	–0.1	0.3	0.5	0.7	0.8	
Total	–5.3	–5.4	–4.7	–4.2	–3.4	–2.9	–1.3
Debt outstanding (central and local governments)[3]	604.8	641.3	677.3	711.0	742.5	772.8	856.0
(Per cent of GDP)	(121.1)	(128.6)	(135.2)	(139.8)	(142.8)	(144.9)	(146.4)
Size of government[3]	190.3	184.1	185.2	186.1	190.8	195.9	
Expenditure of general government[4]	38.1	36.9	37.0	36.6	36.7	36.7	

1. In this simulation, the state subsidy rate for basic pensions is assumed to remain at one-third of "Basic Pension" expenditures. Changing the subsidy rate to one-half did not make much difference to the outcome.
2. Per cent increase.
3. Trillion yen.
4. Per cent of GDP.

Source: Cabinet Office, Reference estimates presented to the Council on Economic and Fiscal Policy on 20 January 2003.

Figure 29. **Public finance in the Medium-term Economic and Fiscal Perspective**
Per cent of GDP



Source: Cabinet Office.

Perspective may encourage some slippage from the targets. Finally, there is a risk that interest payments could be significantly higher than expected if inflation turns positive as projected. Although the inflation rate is assumed to rise by 2.5 percentage points between FY 2002 and FY 2007, the Perspective assumes only a slight increase in the nominal long-term interest rate (by 130 basis points from 1.2 to 2.5 per cent), implying a significant decline in the real interest rate.

Important elements of an effective medium-term fiscal consolidation programme

To ensure fiscal sustainability, a clear strategy and decisive action will be needed in many areas. On the revenue side, broadening the tax base is necessary to reverse the declining trend in tax revenues. As discussed in past *Surveys*, the overall distortions resulting from the Japanese tax system are relatively small. The tax wedge between real labour compensation as perceived by employers and real take-home pay per worker in Japan is well below the average of OECD countries, while the corporate tax rate has been reduced to a level similar to that in many other OECD countries. On the other hand, generous allowances in the personal income tax system have significantly shrunk the tax base and weakened the government's revenue-raising capacity. However, a broader tax base alone will not be sufficient to finance increased spending on age-related expenditures. At some point, the consumption tax (VAT) rate, currently 5 per cent, will need to be raised. Given the rapid ageing of society, it is also necessary to distribute the tax burden more broadly across all age cohorts by reforming the taxation of pensions. At present, both benefits and contributions are effectively exempt from the tax base.

On the expenditure side, it is necessary to consolidate the broader public sector, including the government special status corporations, to avoid an accumulation of contingent liabilities. Although the current government's fiscal reform effort correctly focuses on this issue, the huge political pressure resisting such changes makes support at a high political level crucial to achieve success. As a first step, improving information about the net liabilities of those institutions based on more reasonable assumptions will point to areas of inefficiency. Reform should aim at effectively reducing such activities[63] rather than just changing the organisational forms.[64] There is a need for measures to improve the efficiency of public expenditures in other areas as well. Box 3 summarises recent government efforts in this area and makes some specific recommendations.

A successful medium-term fiscal consolidation programme also depends on reviewing the role and scope of the public sector, which appears overextended in view of rapid demographic changes. Such a review should lead to more efficient management of public spending. With population ageing putting upward pressure on outlays, the social security system needs urgent reform to restore its sustainability. Although the level of expenditures for health care is controlled relatively well, there is still a large scope for improvement to meet the demand of patients at minimum cost. Further strengthening the power of insurers, standardising medical treatment, and improving dissemination of information about medical services would be beneficial. The growth of health expenditures could also be contained by limiting insurance schemes for the elderly. Furthermore, the national pension scheme, which currently provides benefits well above the "national minimum", needs to be reviewed so as to ensure its sustainability.

Box 3. Assessment of recent public expenditure reforms

The government has been pursuing a number of public expenditure reforms over the past several years. This box assesses recent progress in this area based on recommendations made in past *Surveys*.

The **budgeting process** has begun to improve since the establishment of the Council on Economic and Fiscal Policy (CEFP) in 2001, which consists of the Prime Minister and key economic ministers, academics and representatives of business. The CEFP discusses the framework and priorities for the following year's budget before the budgeting process starts. Since the CEFP is chaired by the Prime Minister, its deliberations shape the subsequent budget negotiations. Consequently, the allocation of spending has changed to some extent as evidenced by the reduction in public investment. Multi-year budgeting for expenditure programmes is planned to be introduced in some pilot projects in FY 2004. Following intense debate, the framework for ear-marked taxes remains in place, though some flexibility is allowed in the use of these taxes. Policymakers are planning to reform the system of transfers from the central to local governments, which weakens the incentive of local authorities to improve the efficiency of their spending. Substantial cuts in subsidies are planned in return for shifting some tax sources from central to local governments. However, specific measures to reform the allocation of general grants (*chiho koufuzei kouhukin*) are still not clear.

The **transparency of the budget system** needs to be improved. The complex transactions between the main budget account and the 32 special accounts reduce transparency as those accounts are sometimes used to mask the underlying increase in the deficit. The recent steps to reduce these transactions, such as the decision to end borrowing from a special account for local tax transfers, are welcome and should proceed further. In addition, the lack of a consolidated general government account and the practice of having supplementary budgets every year make it difficult to judge the current fiscal position. However, in this area, no progress has been made.

The recent **reform of the Fiscal Investment and Loan Programme (FILP)**, which provides financing for government corporations, was intended to allocate funds more efficiently by utilising market forces. One of the key elements is a new financing system in which each FILP institution raises funds directly from the markets. However, such outside funding is still very limited, as the FILP reform remains at an early stage. These government corporations have begun to release a present value estimate of the cost of operations (Policy Cost Analysis) and financial statements based on accounting rules similar to the private sector (Administrative Cost Statement). To improve the operational efficiency of these institutions further, the government should encourage them to increase the use of outside funds, while more disclosure of specific information and stricter estimates of costs based on objective assumptions are needed.

The measures to **improve the efficiency of public management** have been gradually introduced in some areas but remain at an early stage. The government requires an *ex ante* cost-benefit analysis for budget requests from ministries

Box 3. **Assessment of recent public expenditure reforms** (*cont.*)

beginning in the FY 2003 budget. The Board of Audit expanded the scope of its auditing and conducts comprehensive reviews focusing on specific policy issues, such as health care, pensions and aid for developing countries. Although the perspective of auditing has shifted towards the "three Es" (economy, efficiency and effectiveness), its focus is still on accuracy and regularity.

Expenditures on **health care** have remained relatively low, both as a share of GDP and on a per capita spending basis, although this does not necessarily ensure the efficiency and effectiveness of the health care system. Fee for service payment gives doctors an incentive to pursue quantity, often at the expense of the demand for higher quality services. Poor information about the provision of services, a lack of standardisation of medical treatments, weak competition among service providers and the absence of an active role for insurers have prevented the provision of cost-effective services. Generous insurance schemes for the elderly, together with rapid population ageing, have significantly boosted spending. However, over the past several years, steady progress has been made in the health care system. Although the fee for service system remains, the use of diagnostic related groups (DRG) to standardise services has started in ten, mostly national, hospitals. Allowing private companies to check doctors' bills, which increasingly are submitted in electronic form, is making it possible to strengthen the role of insurers. Restrictions on advertising by medical service providers have been partially lifted to improve dissemination of information about their services. To limit the rapid increase in expenditures for the elderly, the eligibility age for the elderly insurance scheme, which allows lower co-payments, is to be raised eventually to 75, while the co-payment rate has been raised to 10 per cent. A reform plan is also under consideration to regroup insurance schemes currently supporting the expenses of the elderly. However, it is not clear whether these reforms are sufficient to solve this problem without further reducing the role of elderly insurance or replacing it by other social welfare services focusing on lower-income households.

Providing a sustainable income for the elderly, while ensuring the sustainability of the pension system

With the working-age population starting to fall, and the elderly population continuing to rise, public-sector pension spending is likely to absorb a growing share of national income. In this context, the challenge will be to moderate this increase and to finance the resulting expenditure in a way that maintains, or increases, incentives to earn and save. Given the reliance that individuals place on private saving to smooth consumption over time, using both individual and collective vehicles, an important further issue will be to ensure that insurance companies and private pension funds improve their solvency.

Table 15. **Performance indicators: sustainable retirement income**

	Projected increases in old-age pension spending[1]	Low income rate of the elderly[2]	Relative disposable income of the elderly[2]	Private pension funds 1999	Age of withdrawal from labour force, 1994-1999		Participation rate, 2001, per cent		
								Aged 55-64	
	Change in per cent of GDP 2000-2050	Per cent of the elderly with income less than 50 per cent of median disposable income	Per cent of the disposable income of all individuals	Per cent of GDP	Male	Female	Over age 65	Male	Female
Australia	1.6	16.1	67.6	63.8	59.7	61.3	6.0	60.0	36.9
Austria	2.2	14.9	86.6	3.6			2.8[1]	42.1[1]	17.5[1]
Belgium	3.3	13.8	77.9	6.1			1.3	36.6	15.7
Canada	5.8	2.5	97.4	111.0	62.6	61.1	6.0	61.3	41.7
Czech Republic	6.8			3.8			4.0	55.0	24.5
Denmark	2.7	9.2	73.0	24.4	62.4	61.5	4.6	65.5	51.8
Finland	4.8	7.5	79.0	10.7	59.8	60.0	3.7	51.2	49.5
France	3.9	10.7	89.7	6.3	59.3	59.8	1.2	43.8	34.1
Germany	5.0	10.4	85.6	3.2	60.5	60.8	3.0	50.6	32.4
Greece		29.2	76.8	4.6	61.7	62.2	5.0	57.0	23.6
Hungary	1.2	6.0	85.2	2.2			3.1	36.3	15.4
Iceland				86.0			19.9	92.8	81.7
Ireland		16.7	74.6	57.8			7.9	66.1	29.5
Italy	–0.3	15.3	84.1	3.0	59.3	58.4	3.4	57.8	26.6
Japan	**0.6**			**18.7**	**69.1**	**66.0**	**21.8**	**83.4**	**49.2**
Korea	8.0			3.2	67.1	67.5	29.6	71.3	47.9
Luxembourg		6.7		. .			0.0	38.1	14.3
Mexico		32.9	85.3	2.4			30.5	80.5	27.6
Netherlands	4.8	1.9	86.3	119.3	61.6	60.1	3.1	52.0	26.9
New Zealand	5.7			. .			8.6	74.6	51.7
Norway	8.0	19.1	74.1	7.4	64.2	64.7	13.2	73.6	63.2
Poland	–2.5	8.4		. .			7.5	41.5	24.1
Portugal				11.4	65.3	66.5	19.0	63.7	41.9
Slovak Republic							1.1	43.0	11.2
Spain	8.0	11.3		2.3	61.1	61.1	1.6	61.4	23.6
Sweden	1.6	3.0	89.2	. .	63.3	61.8	9.4	73.5	67.4
Switzerland		8.4		97.3[3]			11.4	82.4	56.1
Turkey		23.1	92.7	. .			18.1	50.8	18.4
United Kingdom	–0.7	11.6	77.8	84.1	62.0	61.2	4.8	64.4	44.6
United States	1.8	20.3	91.7	74.4	65.1	64.2	13.1	68.1	53.0

1. Jesuit and Smeeding (2002), *Luxembourg Income Study* and OECD (2001a). French official reports suggest a 4.4 per cent increase on unchanged labour market policies for the period 2000 to 2040.
2. Förster and Pellizzari (2000).
3. 1998.

Source: Förster and Pellizzari (2000); Jesuit and Smeeding (2002), *Luxembourg Income Study*; OECD, *Labour Force Statistics*, Scherer (2001).

Table 16. **Income and consumption of retired and working households**

Thousand yen per year in 2002

	Retired households over age 65			Working households age 20-59
	All households	One-person households	Couple households	All households
Current income	2 123	1 482	2 706	5 689
Wages and salaries	19	0	37	5 417
Social security	2 039	1 433	2 589	221
Taxation	216	136	284	927
Disposable income	1 907	1 346	2 422	4 885
Consumption	2 410	1 776	2 955	3 547
Saving	–503	–430	–534	1 338
Saving as per cent of consumption	–21	–24	–18	38
Consumption per equivalent person	1 781	1 776	1 819	1 829
Disposable income per equivalent person	1 410	1 346	1 491	2 519
Income per equivalent person	1 569	1 482	1 666	2 934
Average age of household (years)	73.5	74.3	72.9	45.1
Net financial assets (years of consumption)		6.9	7.1	1.2
Real assets (years of consumption)		23.8	16.1	7.3
Rental housing		5.1	3.6	1.0
Owner-occupied housing		18.7	12.6	6.3
Persons per household	1.5	1.0	2.0	2.8
Equivalent persons per household	1.4	1.0	1.6	1.9

Source: Family Income and Expenditure Survey, 2002 Yearly Average Survey Results, Table 9; Survey on Income and Expenditure, 1999, Tables 4 and 21; Statistics Bureau, Ministry of Public Management, Home Affairs, Posts and Telecommunications.

Household income in Japan falls considerably after the age of 65. The drop in income is moderated by a gradual transition to retirement, with a significant proportion of those over 65 remaining economically active (Table 15). Based on household surveys, about 8 per cent of heads of households aged over 65 are employed while a further 18 per cent are self-employed.[65] Continued employment of elderly workers is aided by the existence of a secondary labour market in which wages fall in line with the productivity of older workers, so that by age 65, wages are only half those at 55 (Oshio and Oishi, 2002). Once households finally move into retirement, they experience a considerable drop in income (Table 16). The income of such households is almost exclusively based on state pensions that, for a couple, provide an income equivalent to 47 per cent of the wage and salary earnings of households in the age range 20 to 59.[66] This state pension is two-tiered. A flat-rate pension is payable to all individuals and an earnings-related supplement is payable to a former employee who was previously a full-time regular worker.

Despite the fall in income, living standards are maintained in retirement. Two factors help explain this favourable outcome. First, the tax system favours elderly people through large age-related deductions. More importantly, working households save a very significant proportion of their income, lowering their consumption, whereas retired couples dissave, thus boosting consumption. The reduction in assets finances about one quarter of their consumption, maintaining it at a level similar to that of a household in the age range 20 to 59. The pace of the rundown in financial assets is slow, at around 2½ per cent annually. As the average age of a retired couple is 74, it would appear that assets would only be exhausted if the couple lived for a further 40 years, considerably beyond life expectancy at that age. For single retired people living alone, living standards are also similar to those of working-age households.

The extent of poverty among elderly people has been falling markedly. The public assistance system ensures a basic level of consumption for all retirees, who have no assets, equivalent to 60 per cent of the average per capita consumption of all households. Judged against this level, about 15 per cent of elderly couples lived in poverty in 1999, down from 22 per cent seven years earlier, with somewhat greater falls for single elderly people. Despite this fall, the incidence of consumption below the poverty level among single women living alone was over 30 per cent, though many of them had assets. Excluding those with assets equivalent to six months of consumption, the poverty rate fell to 10 per cent. Overall, about 5 per cent of elderly households receive public assistance supplements to their pensions.

The ability of retired individuals to maintain consumption at pre-retirement levels has led to a decline in the number of elderly people living with their married children and grandchildren. The proportion of three-generation households among all households with an elderly person fell from 40 per cent to 20 per cent in the period 1980 to 2000, while the prevalence of single elderly people living alone almost doubled (Statistical Yearbook of Japan, 2003). Nonetheless, the proportion of three-generation households remains higher than in OECD countries in North America and Europe (with the exception of Italy). Economic factors are significant in explaining these family arrangements with both low-income parents and low-income children the most likely to be in three-generation households.

Government spending on the elderly has risen rapidly in the past decade and is likely to surge further in the coming four decades. In the ten years ending FY 2002, pension spending jumped from 6.4 to 12.1 per cent of national income. Outlays were boosted by rapid growth in the number of people over 65 and by the maturation of the state pension scheme that only took its existing structure in 1966. Pensioners who have retired since then have received benefits in excess of contributions, resulting in the accumulation of an estimated gross liability for

Table 17. **Replacement rates for different income bases and family situations**

1999

	Thousand yen per month	Basic earnings		Total earnings	
		Gross	Net of tax and contributions	Gross	Net of tax and contributions
Single person					
Flat benefit	67	14.0	16.7	11.0	14.5
Earnings-related benefit	104	21.8	25.9	17.1	22.5
Combined benefit	171	35.8	42.6	28.1	37.0
Married couple (one earner)					
Flat benefit	134	28.1	33.4	22.0	29.0
Earnings-related benefit	104	21.8	25.9	17.1	22.5
Combined benefit	238	49.9	**59.4**	39.1	**51.5**
Marginal benefit for spouse who works[1]					
Flat benefit	0	0.0	0.0	0.0	0.0
Earnings-related benefit	104	21.8	25.9	17.1	22.5
Combined benefit	104	21.8	25.9	17.1	22.5

1. Assuming that the spouse earns the average basic wage of 477 000 yen per month (or 401 000 yen net of tax and contributions).
2. The bolded figures are the replacement rates officially quoted as representative of the Japanese system.

Source: OECD calculations based on Yamamoto and Fukawa (2003).

the pension system of 191 per cent of GDP, assuming that future contribution rates remain unchanged. However, it falls to 145 per cent of GDP once the assets held by the social security system are taken into account (Cabinet Office, 2001). The share of national income devoted to pensions is projected to grow to 15 per cent by 2025, before peaking at 17½ per cent in 2060, equivalent to 13 per cent of GDP, assuming that the replacement rate and other parameters of the pension system are held unchanged in the periodic reviews (Institute of Pension Research, 2002). On the other hand, the increase in spending could be held to 0.6 per cent of GDP, if future governments were to decide to lower the replacement rate to 36 per cent from 52 per cent currently (Dang *et al.*, 2001).

Every five years the government undertakes a review of the pension system and takes steps to ensure its long-term financial sustainability. The last set of measures was introduced in 2000. Overall, the 2000 reform reduced benefits by 20 per cent and scheduled a marked increase in contribution rates, which appeared to place the system on a sustainable footing.[67] After the changes, the expected replacement rate for a married couple with one earner was 52 per cent of total earnings after tax and contributions (Table 17). However, reliance on tax hikes might have an adverse impact on the sustainability of the economy, tending to push down the savings rate and labour force participation, according to some models of the economy (Miles and Cerny, 2002).

In the event, this reform has proved inadequate. Until 2003, falling prices were not allowed to reduce nominal pensions in view of the prevailing economic circumstances, so temporarily undoing the move from wage to price indexation. As a result, the level of pension spending, relative to national income, expected for 2008 was reached in 2002 (Ministry of Foreign Affairs, 2002). Looking ahead, the increase in the contribution rate scheduled for 2004 was postponed in view of the economic circumstances. Moreover, the population growth projection has been revised down. The authorities have announced a plan to set a ceiling on the contribution rate and allow benefits to adjust to demographic and economic trends. For a fixed contribution rate, the benefit level would depend on the growth in both average earnings and the number of employees, thus insulating the pension system from unexpected demographic developments. If the pension contribution rate were capped at 20 per cent of earnings (close to the level already planned for 2020 in 1999), the replacement rate would have to drop by 10 percentage points to 42 per cent of overall pay. Alternatively, capping the contribution rate at its current level would stabilise spending relative to national income at its 2002 level, with the replacement rate dropping to around 36 per cent, reducing the income of a retired couple by just over a quarter. In order to maintain their consumption level, such a household would have to increase the speed at which their financial assets were run down from 2½ per cent annually to 6 per cent, without taking into account the possibility of realising some value from their home.

In view of the likely reduction in public pensions in the future, the authorities should ensure sound regulation of private provision for consumption in retirement. Most employees have access to company-based pension or retirement saving vehicles. The government has announced the progressive ending of one of these funds – tax-qualified pensions – as they are subject to excessive risk. Under this system (covering 18 per cent of employees), reserves are held on the balance sheet of the company but are not secured by any specific asset and have been limited to 40 per cent of liabilities by corporate tax law. As from 2002, no new funds of this type can be created and existing reserves have to be transformed into employee pension funds (or similar institutions) by 2012. Existing employee pension funds (covering a further 28 per cent of employees) must be managed independently or made into foundations not linked to the sponsoring company. The government has not called for the pre-funding of the severance pay system, which acts as further form of retirement saving. This benefit is provided mainly to employees in larger companies and the government (Tachibanaki, 2000). These liabilities have been estimated at 12 and 10 per cent of GDP for company and government employees respectively (Goldman Sachs, 1999 and Cabinet Office, 2001).

The government has introduced some reforms aimed at lessening the risk that pension funds will default on their obligations. An accounting law reform, introduced in 2001, obliges companies to declare pension liabilities on their balance sheet and, if there is a deficit, to put in place a 15-year programme to restore the financial health of the plan. Many companies will need to do this. In 1999, according to the Pension Funds Association, 37.8 per cent of employee funds had a shortfall greater than 20 per cent of assets (Clark and Mitchell, 2002). Such a shortfall occurred despite companies typically choosing to discount liabilities at a comparatively high interest rate of 5.5 per cent, which is well above the yield of 1½ per cent on government bonds, so significantly understating liabilities. Without prompt corrective action by regulatory authorities, there is a danger that there will be insufficient funds to pay these liabilities. In addition, legislation has been introduced that permits the creation of defined contribution pension saving systems, in which individuals are free to choose the desired level of investment risk. The authorities hoped that such plans would prove popular among small and medium-sized companies. However, their spread has been slow, with most new schemes reflecting transfers from tax-qualified funds that are being wound up.

The public pension system has only limited disincentives to continued employment once an old-age pension is drawn, although they are scheduled to increase in a way that is inappropriate during a period of stress on future pensions. At the moment, the disincentives to continued work are concentrated on people in the age group 60 and 64. If they continue to work while receiving an employees' pension, the marginal reduction in benefits is equivalent to a tax rate of between 20 and 100 per cent depending on the level of an individual's earnings. In 2002, all earnings above 370 000 yen (90 per cent of average earnings) were deducted, yen for yen, from pension benefits. Until 2002, a person could work past age 65 without any reduction in the employees' pension. As a result, the cumulative loss of social security wealth between the earliest possible retirement age and 69 relative to work income in Japan was among the lowest in major countries (Gruber and Wise, 2002). About 30 per cent of those in the 60 to 64 age group who work and are entitled to an employees' pension, however, choose to work part-time in order to avoid losing their benefit. Since 2002, similar rules have been applied to those aged 65 to 69 as were applied to those five years younger. Self-employed workers, and people who have not been eligible for the earnings-related pension, have an incentive to continue working as they have low benefits. Moreover, a growing proportion of the self-employed (40 per cent in 1999) choose to not contribute to the first-tier system, with non-compliance being particularly high among young people (Oguchi and Hatta, 2001).

Government policy has become more oriented to keeping people in employment as long as possible. There has been considerable use of short-term unemployment as a route into retirement, with over a third of the people who completely retire from the labour force have previously been drawing unemployment benefits (Oshio and Oishi, 2002). This route was made less attractive in 2001, when the maximum period that older people can draw such benefits was reduced from one year to six months. In addition, a number of incentives to continued work are in effect. A re-employed worker (aged over 60) can continue to receive 30 per cent of the unemployment benefit under the Employment Acceleration Allowance introduced in May 2003. As well, older workers who are re-employed after age 60 at a lower wage than they earned at 60 are eligible for the Employment Continuation Benefit. The number of workers aged 60 to 64 who receive this benefit tripled between 1996 and 2001 to 3.1 per cent of the labour force in that age group. On the demand side, employers are now more likely to hire older workers as they have been able to offer them five-year fixed-term contacts since 1998, although these can only be renewed for a one-year period. Unlike some other OECD countries, disability benefits do not seem to provide an alternative pathway into early retirement in Japan. Strict medical criteria are used to determine eligibility for disability benefits and the number of these pensions is very low.

If further reductions in replacement rates are to be made, it will be important to introduce reforms that lower the disincentives for married women to work full-time so that they can build up pension rights. As noted above, the labour force participation of Japanese women is similar to the OECD average but an unusually high proportion of women work part-time and consequently they are not eligible for second-tier pensions. The combination of income and social security tax plays a considerable role in increasing the attractiveness of part-time work. Spouses can earn 1.03 million yen without paying income tax and up to 1.3 million yen without paying social security contributions and this leads to a clustering of incomes at the 1.0 million yen level (Ono and Rebick, 2003). Moreover, women earning over the social security limit pay the same contribution rate as men but obtain a much lower replacement rate, reflecting differences between the career paths of men and women. Policies to improve the ability of women to combine work and bringing up children appear to be effective in Japan (Higuchi *et al.*, 1997). Further implementing such policies could lead to women accumulating increased pension rights and eventually lower the extent of poverty amongst elderly single women.

Assessment

The deterioration of the fiscal situation is due to a large extent to the weakness of the economy and continued deflation. Fiscal policy is not sustainable in the sense that the current stability in financing public debt depends on the continuation of exceptionally low interest rates, weak private demand and the lack of risk-taking by households and the corporate sector. However, given the urgency of fiscal consolidation, any increase in revenue resulting from buoyant activity should be used primarily to reduce the budget deficit. Moreover, the expected ½ per cent of GDP decline in the structural budget deficit in 2004, assuming no supplementary budget in FY 2003, is a welcome development. However, a more significant tightening of fiscal policy could undermine the current recovery, further delaying a significant reduction in the budget deficit over the longer term. In addition, accelerated bank and corporate-sector restructuring is likely to have a negative impact on employment and activity in the short term. Temporary hikes in spending should be allowed to address structural problems, particularly in the financial sector. Such outlays may be necessary to unblock the credit transmission channel, which would help end deflation and facilitate reductions in the budget deficit. At the same time, efforts to improve the efficiency of public expenditures need to continue in order to enhance growth prospects and to establish the credibility of medium-term fiscal consolidation. Given the precarious state of public finances, a solid framework for fiscal consolidation over the medium term needs to be established to maintain credibility and ensure fiscal sustainability. Following through on the planned reduction in the budget deficit in 2004 is a key to building confidence. It should be accompanied by specific measures to reduce the deficit further in 2005 and over the medium term. Once the economy attains a more normal growth path, strengthening the credibility of fiscal consolidation is the key to limiting an increase in the risk premium on interest rates, which would slow the pace of deficit reduction.

A key to ensuring fiscal sustainability is reform of the pension system. Notwithstanding extensive reforms in recent years, public pensions will become unsustainable under existing rules in the face of an ageing society. Bringing the system back to financial sustainability through sharp increases in contributions should be avoided, as this might adversely affect the productive capacity of the economy by weakening work and saving incentives. Indeed, the authorities' plan to set a ceiling on contribution rates and allow benefit levels to adjust to economic and demographic trends appears to be appropriate. This plan should involve re-valuing the past earnings used to calculate benefits by the growth of total wages in the economy rather than by the growth of per capita wages and should ensure that the policy of indexing pensions, once granted, to prices is adhered to, even if prices are falling. Some reform of the tax system would also help to encourage married women to work full-time – a move that would also reduce the risk of poverty among elderly women by improving their pension entitlements. However, labour market practices, such as the age limits in recruitment, also need to be addressed to reduce obstacles to the participation of married women in the labour force. While employment of the elderly is high in Japan, the rules that lower pension benefits for older workers should be reviewed in order to increase the attractiveness of full-time work. In the context of a possible fall in public provision, individuals may have to save more for retirement. The authorities need to facilitate private saving by establishing an adequate regulatory and supervisory framework for pension funds. In this context, the solvency of each employee pension fund, using market interest rates to value liabilities, should be examined by the pension regulator and the period allowed for moving to solvency reduced from the current 15 years. Adequate information on solvency should be sent to all fund members.

IV. Product market competition and economic performance

The OECD Growth Study and other empirical work have shown that the strength of competition in product markets is likely to play an important role in the process of economic growth. In Japan, policies promoting product market competition have long been compromised by ministerial guidance and explicit exemptions from the competition law. Intense competition is thus lacking in many domestic sectors. As a result, these sectors are characterised by comparatively high prices, weak innovative activity and low levels and growth of productivity. The current allocation of resources thus seems inefficient, partly explaining why the Japanese economy has failed to come out of its quasi-stagnation of the past decade. From a positive perspective, however, this means that potential gains from more pro-competition policies are probably quite large. To realise such gains, the Japanese government has made the promotion of competitive markets one of the cornerstones of its policy to promote economic growth. For example, the resources of the Fair Trade Commission have been increased, and greater impetus has been given to regulatory reforms. However, the legacies of past policies appear difficult to dismantle and progress has been uneven.

This chapter begins with a short review of Japan's disappointing growth performance over the past decade and its possible links to weak competitive pressures. Attention is then turned to indicators of product market competition to gauge the strength of competitive pressures as well as the implications of barriers to trade and foreign direct investment. This is followed by an assessment of the general competition policy framework and its role in promoting competition. The chapter then examines a number of sectors where regulatory policies can be expected to have particularly large impacts. The chapter concludes with a set of policy recommendations.

Macroeconomic performance and indicators of competition

The economic performance has been weak over the past decade

Starting from a high level of GDP per capita, the economic performance of Japan over the past decade has been comparatively poor (Table 18). GDP growth has been less than half of the OECD average, with stagnant employment levels

Table 18. **Output, employment and productivity**

	United States	Japan	Germany	France	Italy	United Kingdom	Canada	OECD	European Union
Average GDP growth: 1992-2002	3.2	1.1	1.4	1.9	1.5	2.6	3.2	2.6	2.0
of which:									
Productivity	1.8	1.1	1.3	1.1	1.3	2.0	1.5	1.2	1.4
Employment	1.4	–0.1	0.1	0.8	0.2	0.6	1.7	1.4	0.6
of which:									
Unemployment[1]	0.1	–0.3	–0.2	–0.1	–0.1	0.3	0.3	–0.1	0.0
Labour force	1.3	0.3	0.3	0.7	0.2	0.3	1.4	1.4	0.6
Demographics,[2] 1990-2001	1.2	0.7	0.2	0.7	0.1	0.2	1.3	1.7	0.8
Participation rates,[3] 1990-2001	0.0	–0.1	0.2	–0.1	0.0	0.0	0.0	–0.1	0.3
Labour productivity growth in selected industries:[4]									
Total manufacturing	3.9	2.4	2.4	3.8	2.2	2.5	2.5	n.a.	n.a.
Electricity, gas and water supply	1.0	2.1	4.9	1.8	3.9	9.7	1.3	n.a.	n.a.
Construction	0.2	–3.0	0.0	–0.3	– 0.1	2.5	0.2	n.a.	n.a.
Wholesale and retail trade, restaurants and hotels	3.8	0.9	–0.6	0.6	1.1	2.4	2.3	n.a.	n.a.
Transport, storage and communication	2.7	1.2	7.2	3.1	3.5	4.9	3.4	n.a.	n.a.
Memorandum items:									
MFP growth,[5] 1992-2001	1.1	0.1	0.6	0.6	0.8	1.2	1.2	n.a.	n.a.
GDP per hour worked, 2001	100.0	75.1	98.2	109.9	102.6	85.1	87.6	83.1	94.9

1. A positive sign indicates that unemployment has declined and contributed to higher output growth.
2. The contribution of demographics includes changes in the size and age composition of the working-age population.
3. Measures the effect from changes in age-specific participation rates.
4. 1991-2001, except for France, which is 1991-2000.
5. Total economy.

Source: OECD.

and a falling participation rate. There has also been a deceleration in multifactor productivity growth, which was essentially flat during the 1990s. While to a large extent this reflects the ongoing adjustment to the collapse of the speculative bubble in early 1990s, structural factors seem to be playing a role as well.

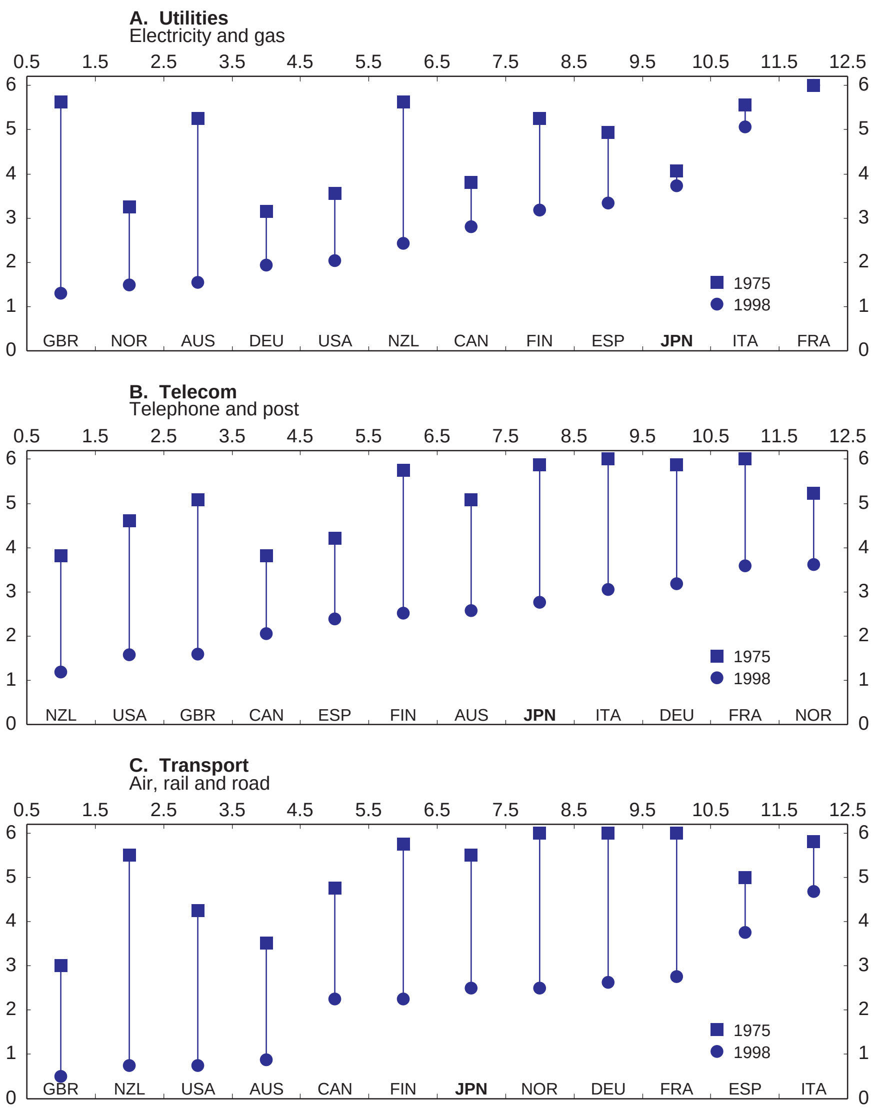
Although a number of large Japanese enterprises are among the world's most productive, the average level of productivity is well below that of most other OECD countries, indicating the dualistic nature of the economy. Productivity differentials have been maintained or even accentuated. With some exceptions – notably in export-orientated manufacturing industries – nearly all sectors have recorded lower productivity growth per worker than in other OECD countries, especially in those oriented towards the domestic market. In particular, the construction sector, which has benefited from generous government spending on infrastructure, had negative labour productivity growth, which is unusual among OECD countries (Table 18). The protected food manufacturing sector had basically no productivity growth in contrast to quite rapid expansions in other countries. The broad category of transport, storage and communication had markedly lower productivity growth than in other countries over the past decade, partly reflecting entry problems in some segments of the transport sector, although this was partially offset by an acceleration in the late-1990s of the liberalisation process in the telecommunication sector.[68] On the other hand, a relatively rapid expansion of productivity in the distribution sector reflects changes in market structures as competitive pressures have increased. The direct links between liberalisation and productivity are not always easy to draw, but relatively less comprehensive regulatory reform in some sectors, especially utilities, may be one explanatory factor (Figure 30).

A range of indicators point to a lack of competition

Measuring the strength of competition is not straightforward, but it is useful to survey available indicators that may, individually or in combination, convey some information on the strength of competitive forces in the economy. The evidence from such an exercise suggests weak competitive pressures. It is noticeable that sectors with competitive domestic markets also tend to be successful in export markets.

Estimates of *concentration* show contradictory patterns. At a relatively aggregated level, concentration is not particularly high in Japan, according to OECD estimates. On the other hand, concentration ratios at a more disaggregated level tend to be relatively high in a number of sectors, probably reflecting the legacy of an industrial policy geared on economies of scale effects (Ariga *et al.*, 1999). Moreover, there are some indications of an increase in the three-firm concentration ratio over the 1990s, and of relatively high degrees of market-share stability. These findings suggest limited rivalry in product markets, which is also supported

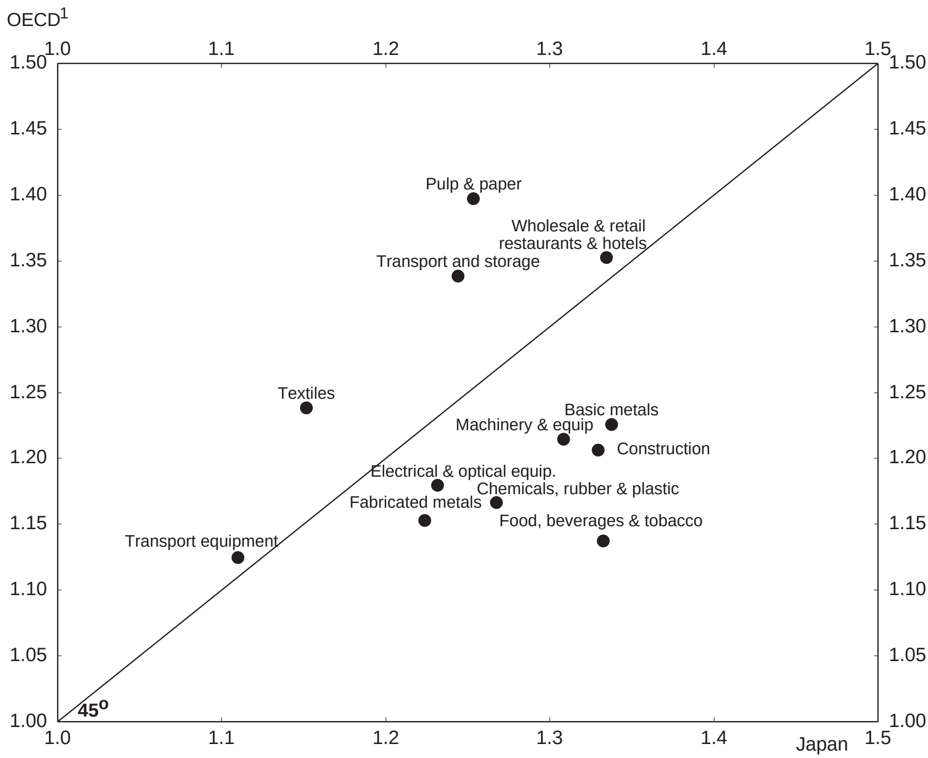
Figure 30. **Progress in liberalisation of service sectors in OECD countries**[1]



1. In each year and sector, the indicators have a 0-6 scale ranging from least to most restrictive of competition. They cover public ownership, barriers to entry, market structure, vertical integration and price controls. See Nicoletti and Scarpetta (2003) for details.

Source: OECD Regulatory Database.

Figure 31. **Industry-level mark-ups in Japan and other OECD countries**
From 1981 to the latest available year



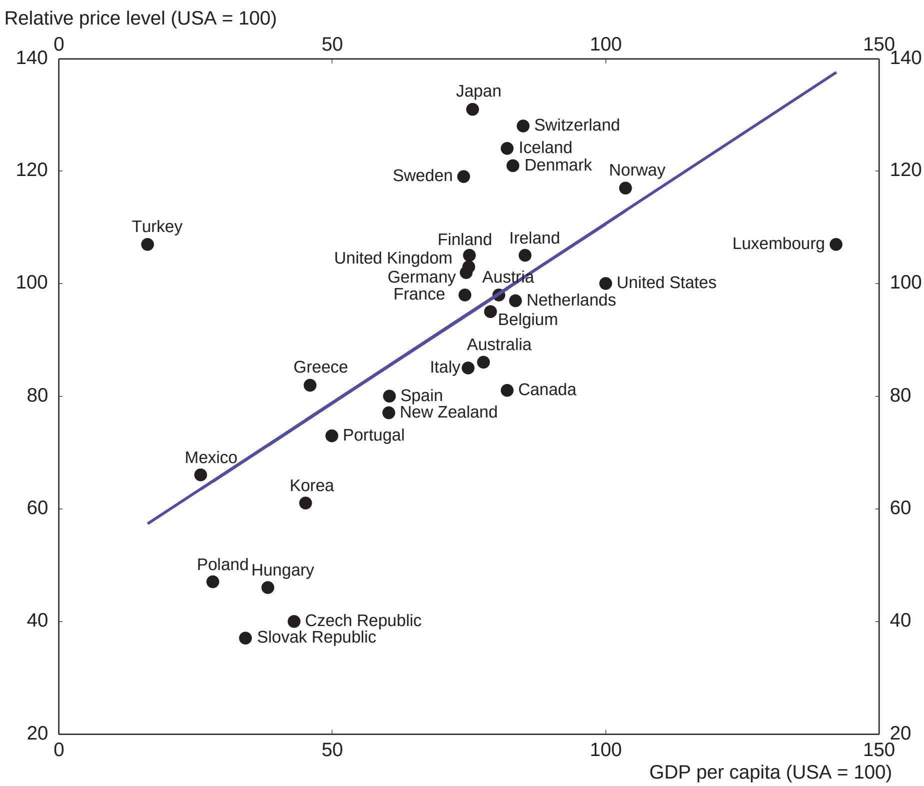
1. Average of Austria, Belgium, Canada, Finland, France, Germany, Italy, Netherlands, United Kingdom and United States. OECD estimates based on the Roeger method.

Source: OECD, STAN database.

by relatively high *mark-ups* (Figure 31). OECD work demonstrates that mark-ups are high in many industries, despite the tendency for them to decrease – unlike in other countries – in the 1990s. Compared with other OECD countries, mark-ups are significantly higher in such sectors as food and beverages and, to a lesser extent, metal processing and machinery and equipment.[69] In addition, mark-ups in the service sector, particularly in construction and utilities, are internationally high. However, mark-ups are an incomplete indicator of competitive pressures, because rent arising from market power may be partly or largely absorbed in wages or other cost elements. In this respect, price level comparisons may also be important indicators.

Figure 32. **International comparison of prices**

Real incomes and relative prices, 2001 in purchasing parities

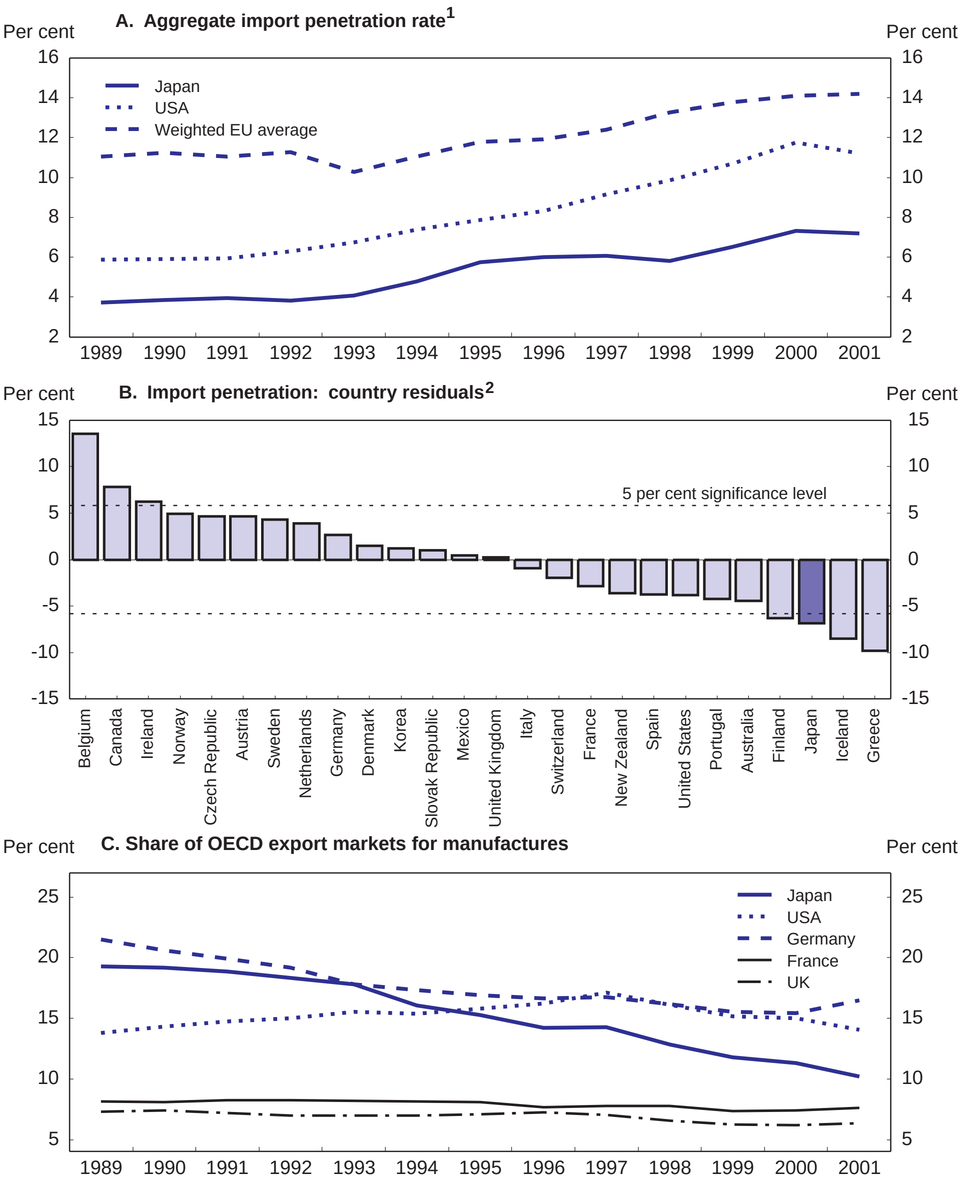


Source: OECD, *Purchasing Power Parities*.

The overall *price* level has remained relatively high (Figure 32). Direct comparisons between the price levels in the early and late 1990s are imprecise due to definitional changes, but suggest that the relative difference with prices in the OECD has not changed much, although there has been some narrowing of the differentials for a number of privately produced services.[70] This may be the result of increasing rivalry in depressed markets or the reduction of regulatory barriers in growing markets. When controlling for income per capita, average prices are about 40 per cent higher than expected.

With respect to *import penetration* and *inward* FDI, the Japanese economy is surprisingly closed, even when controlling for transportation costs and per capita income (Figure 33). The increase in the overall import-to-GDP ratio in volume

Figure 33. **Indicators of market openess**



1. Manufacturing imports relative to manufacturing imports plus GDP, excluding intra-EU trade.
2. Residuals after controlling for effects of country size, GDP per capita and transportation costs.

Source: OECD, *Monthly Trade Statistics*.

Table 19. **International comparison of import penetration by type of manufacturing industry**

	High R&D		Low R&D	
	Segmented	Fragmented	Segmented	Fragmented
Austria	51.9	42.6	27.9	29.5
Belgium	54.7	63.9	26.6	37.1
Czech Republic	43.3	41.3	25.8	25.7
Denmark	55.2	34.3	30.7	35.5
Finland	38.4	26.5	18.7	10.8
France	31.1	32.0	18.6	20.6
Germany	28.8	22.2	20.3	21.7
Italy	35.0	19.8	19.3	12.3
Netherlands	–	39.4	27.9	33.3
Spain	39.7	36.8	17.5	15.3
Sweden	34.9	30.0	25.2	17.8
United Kingdom	39.3	32.4	21.7	23.2
United States	26.4	22.7	10.2	14.4
Canada	44.2	55.9	21.0	22.9
Japan	**8.0**	**7.2**	**8.4**	**8.7**
Korea	20.0	38.5	14.4	13.7
Mexico	34.0	51.9	19.2	24.6
European average	39.9	34.1	22.3	22.9
OECD average	36.6	35.1	20.8	21.6

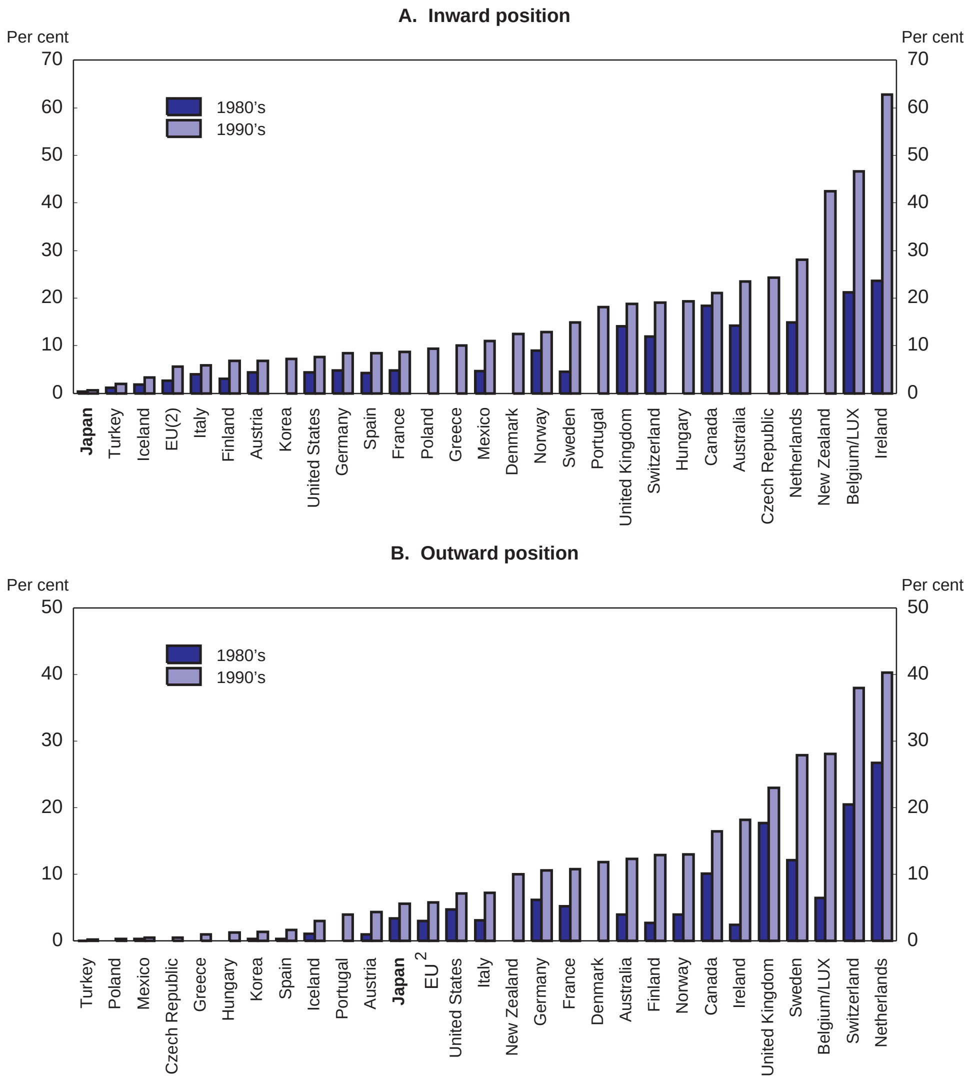
Note: Segmented market structures are characterised by large firms and significant entry barriers associated with high costs, while fragmented market structures are characterised by small firms and low sunk costs and entry barriers.
Source: See Oliveira Martins, J., T. Price and N. Mulder (2003) "A taxonomy of market structure cluster", OECD Economics Department, mimeo.

terms has been smaller than in other OECD countries. Moreover, the import share for the manufacturing industry is well below that of all other OECD countries. A further break-down by industry type reveals a particularly low import penetration ratio for industries with high R&D intensities, as well as for some low R&D spending sectors, such as food manufacturing (Table 19). In particular, import penetration in segmented industries with high R&D spending, such as pharmaceuticals, is very low, even though these industries are normally associated with a high degree of international rivalry. However, in some cases this may reflect intense domestic rivalry as in the case of cars, where Japan is also internationally very competitive. Foreign rivalry is also not forthcoming through FDI inflows: Japan has the lowest inward FDI position in the OECD area (Figure 34). This reflects, in part, the past decade's low growth performance, but also the barriers to entry facing foreign firms.

Explicit trade barriers have been largely brought into line with those of other countries, but imports in some sectors are still hampered by differences in regulatory and administrative procedures.[71] Such indirect barriers are difficult to quantify, but include factors such as the Japanese list of permitted food additives,

Figure 34. **FDI positions in OECD countries**[1]

Per cent of GDP



1. Average values over the two periods. For countries where the FDI position data are not available, values of bilateral stocks reported by their OECD partners were summed to obtain an approximate measure of multilateral FDI stocks.
2. Excluding intra-EU investment.

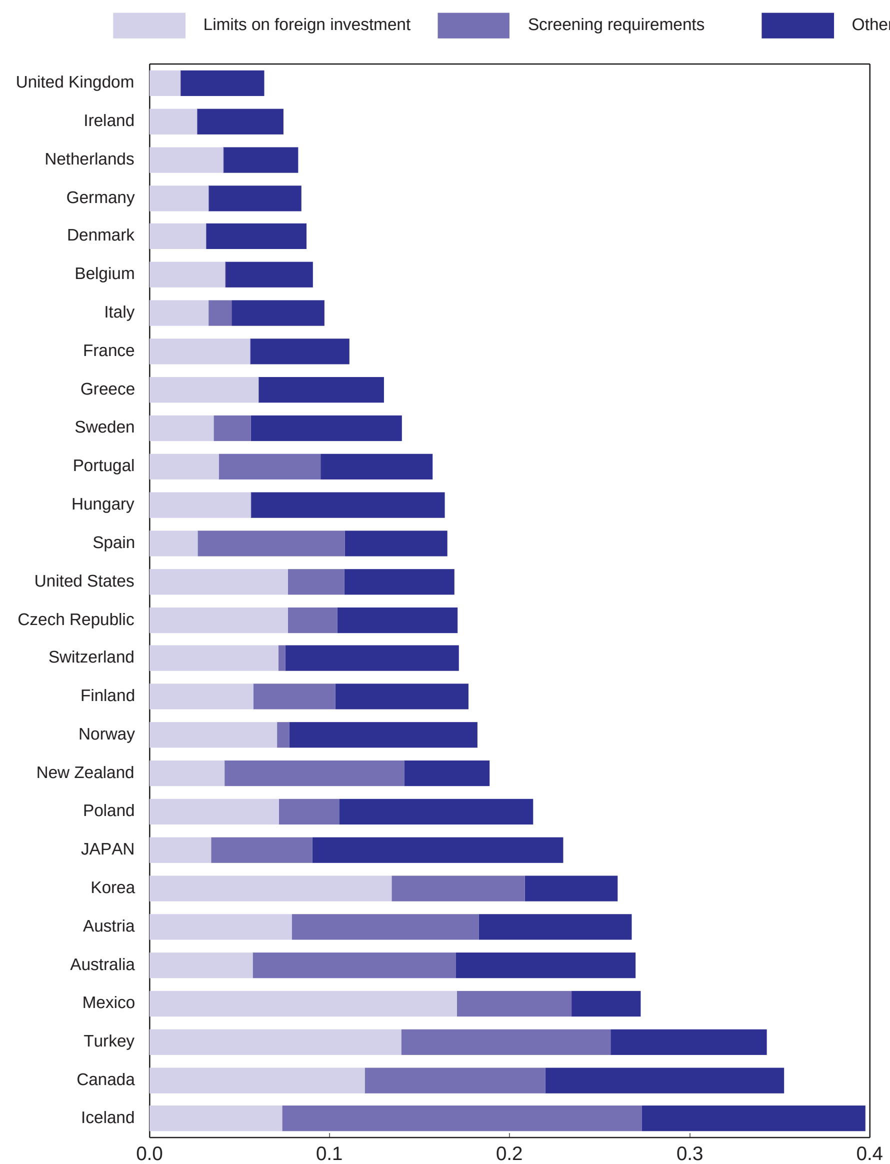
Source: OECD.

which differs from the one agreed within the FAO/WHO Expert Committee on Food Additives, and differences in cosmetic standards.[72] Empirical work on estimating the combined effects of all trade barriers and excluding unavoidable costs of international trade indicates that such barriers in Japan have pushed up average producer prices by nearly 60 per cent above the world level – more than in other countries. Prices for food are particularly high.[73] Interestingly, trade barriers were the lowest among major OECD countries in successful export industries, such as cars and office and computing equipment.

The low inward FDI position can be explained by explicit restrictions, such as ownership requirements, which remain relatively strict, although they are gradually declining (Figure 35). In addition, other features of the Japanese economy contribute to limiting inward FDI flows, including relatively high effective marginal and average taxation of inward FDI and the remaining restrictions against using foreign shares as compensation when purchasing Japanese shares.[74] Administrative regulation tends to be concentrated in certain non-manufacturing industries, such as public utilities, telecommunication, financial intermediation, business services and the retail sector (Nicoletti *et al.*, 2003). Measures have recently been taken to encourage inward FDI.[75] Recent OECD work indicates that more than half of the increase in inward FDI in Japan in the 1990s can be ascribed to an easing of explicit FDI restrictions and more pro-competitive product market regulation. Indeed, two sectors – finance and insurance and telecom – accounted for two-thirds of the rise in FDI inflows between 1990 and 2000.

The lack of competition in many domestic markets appears to have had a negative influence on Japanese exports as well. Starting from a very high base, the export market share of manufactured goods has declined by about 50 per cent over the past decade – substantially more than in any other large OECD country. Only about half of this decline can be explained by the real appreciation of the yen. Examining the export structure in more detail shows that the fall in world export market shares has been broad-based with only about 10 per cent of Japan's export industries having increased market shares and almost none were in new and significant markets in terms of technology and size (Porter *et al.*, 2001). The diminishing ability to compete in important new markets has been related to non-competitive domestic markets, as this entails higher input costs for exporters as well as a smaller base for innovation in terms of goods and production processes (Sakakibara and Porter, 2001). Indeed, the notable Japanese export successes are concentrated in relatively few industries (such as cars), which are characterised by very competitive domestic markets. The outward FDI position is relatively high, reflecting the outsourcing of production to neighbouring countries. While this has also taken place in other OECD countries, the high cost of intermediate services (see below) has increased outsourcing incentives in Japan. Combining these trends indicates that as production has moved abroad there has been limited replacement via expansion of higher value-added goods and services through

Figure 35. **Foreign direct investment restrictions**[1]
By type



1. The indicator ranges from 0 (least restrictive) to 1 (most restrictive).
Source: OECD.

innovative efforts and growth of new sectors – the very process that would make Japanese products less sensitive to price competition. The implication is that as Japan's highly innovative world leaders outsource production and foreign producers limit investment in Japan, the country is left with the less competitive and innovative sectors.

Enforcement of competition law is not strong enough

The lack of competitive pressures and disappointing performance of much of the domestic economy are consistent with the relatively low profile of competition policy and enforcement for most of the post-war period. The general competition law, the Antimonopoly Act (AMA), and the enforcement institution, the Fair Trade Commission (FTC), date from 1947. But for much of their history, central direction of investment and administrative guidance from ministries sanctioned industry-wide co-ordination and hundreds of exemptions from the AMA. Over the last decade, the FTC has become stronger and more active, but much still needs to be done.[76] The FTC tends to focus its resources on selected areas and has recently targeted bid-rigging.

The scope and coverage of the law is fairly broad

Enforcement of the AMA's many tools has been strongly influenced by policy concerns about fair, as well as free, competition. The AMA's most basic anti-trust rule, which prohibits "unreasonable restraints of trade" (Sec. 3), is used against horizontal price fixing and bid-rigging.[77] For nearly everything else, ranging from distribution restraints, discrimination and tying of products to refusals to deal and exclusion, the FTC uses the AMA's prohibition of "unfair practices" (Sec. 19). Here the burden of proof is lower, but the only sanction the FTC can impose is an order to correct the violation. The FTC mostly deals with abuse of dominance by treating large-firm abuses as "unfair practices".[78] This approach preserves enforcement resources for horizontal matters, but it may also be less effective at curbing monopolising practices than the prospects of fines or even divestiture that enforcers employ in Europe and the United States. Also, in practise, some of the FTC's interventions on dominant firm conduct seem tepid. In 1999, the FTC examined the airline industry, prompted by complaints about schedules targeted to undermine new entrants, as well as refusals to service their planes and discrimination in allocation of ground facilities. No action resulted, however, as the FTC "hoped that the three major airlines will exercise prudence … until the new airlines are able to compete equally with them". In other major jurisdictions, similar tactics by airlines have led to formal enforcement actions.

The most important limitation on the scope of the AMA is the system of exemptions for co-operative organisations of small and medium-sized enterprises (SMEs) (Sec. 22). The exemption depends upon compliance with AMA rules about the organisations' governance, and it does not extend to unfair practices or substantial restraints of competition that lead to "unjust" price increases. But enforcement against an SME co-operative for exceeding these statutory bounds is very rare.[79] Although co-ordination among smaller enterprises could improve efficiency, a habit of overly-permissive exemption could reduce competitive pressure in what should be highly competitive settings. The number of exemptions has been reduced markedly (once there were over a thousand), and remaining ones are also common in most other jurisdictions. But repealing an exemption will not by itself change industry behaviour overnight. Harbour services provide an example, where the exemption was abolished in the late 1990s, but the industry association is still trying to control entry and police competition. Recognising the particular risks of anti-competitive activity by trade associations, the FTC has paid close attention to violations by these groups, applying a provision of the AMA that prohibits them from imposing any "substantial restraint on competition". Members will be required to pay financial sanctions where the association has violated the law. In the past, some trade associations have received multiple cease-and-desist orders for repeated infringements (Box 4).

The FTC issues guidelines in line with the AMA covering trade associations' activities to specify where legal self-regulation ends and illegal activities begin, stipulating in particular that the trade associations are not allowed to restrict the functioning of the market nor individual firms' business activities. However, the FTC must still rely on case-by-case judgements, as the trade associations' primary and legal function is to establish rules and restrictions within their industry. In addition, some self-regulation came into force under ministerial guidance and with the ambiguous application of legal measures, there may be a risk that the associations are not aware of when their activities are in breach of the law. Furthermore, the role of the trade associations and their self-regulation has gained a larger role over the past years as ministerial guidance has been partially withdrawn and there has only been a relatively limited increase in the FTC's resources. Insofar as such self-regulation is confined to norm setting and other information enhancing activities, it could have a pro-competitive impact. However, when the activities of the trade associations interfere with operational activities of the firms, there is a risk that they curb competitive forces, such as when the Harbour Transportation Association has to approve the change of service providers (see below). Only an active regulatory stance by the FTC, combined with the introduction of legal measures aimed specifically at breaking cartels, can curtail such anti-competitive activities.

The FTC can enforce the AMA in the newly deregulated network industries. The exemption for "inherent monopoly" was removed in 2000 in the context of the liberalisation of the electricity sector. But the *ex post* nature of AMA enforcement makes it poorly suited to dealing with competition issues in newly deregulated network industries, in which supporting entry usually requires *ex ante*

Box 4. Organisation and activities of trade associations in Japan

There are a relatively high number of well-organised trade associations in Japan. They are organised by industry, firm size and geographical location. At the broadest level, there are umbrella associations, encompassing whole industries at the national level, that provide industry information to member firms, secure contacts with ministries (often playing an active role in the formulation and dissemination of ministerial guidance) and facilitate the building of relationships between executives from other parts of the industry. Under the umbrella, industry branches are organised in core associations with an estimated 90 per cent of all firms within an industry affiliated to the relevant association. The legal status of the trade associations can either be voluntary, incorporated (recognised as legal entities and often used by national umbrella associations) or co-operative. The latter enjoys certain exemptions from the AMA and is an organisational form that is widespread in the distribution sector. Most of the incorporated associations have retired officials from the regulating ministry among their leading staff, as compared to about half in the case of voluntary associations. This staffing pattern may create problems of regulatory capture as the law mandating a two-year cooling-off period for retired officials (before they can be employed in an industry which they previously regulated) is not applied to non-profit organisations. In the mid-1990s, there were about 15 400 notified trade associations, of which nearly 14 per cent were incorporated. At the national level, there were about 3 100 trade associations, compared to about 2 100 in the United States. Their financial resources are substantial with an average annual budget of $4 million per nation-wide association.

Political activities of the trade associations are usually left to the national umbrella associations, while economic regulation activities are normally pursued at the level of the core associations and co-operatives. In ranking their key functions, most associations consider the provision of administrative information and promoting friendship, often through social events among their members – supposedly competing companies – to be among their primary activities. Indeed, in the past the majority of cartel cases prosecuted by the FTC have involved trade associations. Most associations are organised around relatively narrowly defined activities, making interaction between competitors multi-levelled and frequent; one research project found that members of 37 associations had 1 100 employees meeting on a monthly basis. The formal points of interactions are the board meetings of the associations (consisting of directors from the leading companies), committees with middle to lower-level staff representatives from the member companies, and staff seconded to the associations. As the boards of directors have to keep minutes of their meetings, a number of the revealed price cartels have been organised at the committee level. This was the case of fee collusion in the Money Market Broker Association, where the actual fee-fixing agreement was reached in the "R&D" subcommittee (Schaede, 2000).

oversight. In telecommunication, the FTC has issued guidelines jointly with the Ministry of Public Management, Home Affairs, and Posts and Telecommunications to clarify and to describe conduct that would violate both the AMA and the telecom law. Co-ordination with sectoral regulatory authorities is evidently informal and developing. For example, guidelines for the telecommunication sector call for mutual communication between the FTC and sectoral regulatory authorities but do not establish formal protocols or rules with respect to joint action, deferral to one or the other body in particular cases, or agreement between them on findings about market power. So far, the FTC has been cautious in applying the AMA to activities in the network industries. In 2000, and again in 2001, the FTC examined claims that the incumbent telecom firms were discriminating against entrants in the provision of ADSL facilities and services, but issued only a warning. At some point, the FTC may have to treat repeat offenders sternly enough to change their behaviour.

If a government entity is involved in anti-competitive conduct, it is difficult to correct it using the AMA, unless the activity is organised through a commercial enterprise. The difficulty is illustrated by the new law about public officials' responsibility for bid-rigging. The FTC can order the procuring agency to investigate the situation, and can require the agency to take disciplinary action against the individual official involved and even to demand indemnity from the official (after the agency's own investigation). However, the FTC has no power to issue a fine or other sanction against the agency or the official, and if the local government ignores the FTC's requirement or order, the only consequence it faces is the embarrassment of bad publicity.[80] The recent reform thus still falls short of giving the competition authority the legal power to correct problems associated with public procurement. More generally, there is no unified framework in place to supervise the public tendering process.

The AMA's merger control rule prohibits mergers whose effect may be to restrain competition substantially in any particular field of trade. The FTC, however, virtually never issues a formal decision about a merger as its enforcement process relies on advance consultation and negotiated correction.[81] When problems are worked out in advance and in a confidential manner, official public filings almost exclusively appear for mergers that the FTC approves. Keeping the parties' plans confidential until they know that the FTC will approve them probably makes the enforcement process more efficient in terms of building mutual trust, minimising costs of publicity, and reducing the risk of publishing market sensitive information. The FTC has tried to adopt transparent guidelines and its reports have tried to explain the reasons for its decisions about major transactions that become public knowledge. These steps nevertheless fall short of revealing clearly how and whether the standards in the law and guidelines are applied to block mergers; indeed, it is unclear from this process if the FTC ever actually takes that step. The FTC has published its policies dealing with the informal consultation process, by setting a timeline for advising the parties whether a merger requires more serious investigation and possibly relief. It represents a significant step toward the two-phase process that is becoming standard in other major jurisdictions.[82] The FTC devotes less attention to merger investigation than do enforcers in other jurisdictions, and the public reports of FTC action imply that it takes a more tolerant approach as well, accepting commitments or conditions that seem unlikely to provide significant assurance that competition problems from a merger will be corrected.[83]

Despite increased resources, the FTC's activities remain limited in scope

The FTC was created as an independent body by law, but the perception of its independence has been compromised by its position as an external organ of the Ministry of Public Management, Home Affairs, Posts and Telecommunications. This problem is further highlighted by the FTC's enforcement responsibilities in newly liberalised network industries, which are often regulated by the same ministry. Recently, the FTC has been moved back to a more clearly independent position, by making it an "extra-ministerial body" of the Cabinet Office. Historically, the FTC's five commissioners have been civil servants, although now two of them come from academia. Selecting commissioners from a wider range of back-grounds helps restore the perception of its independence. About 10 per cent of the staff come from other ministries, and many of them serve in rotating, temporary positions at the FTC. These personnel practices, which are also used in other parts of the government, have some advantages, such as facilitating exchanges of view, but relying too much on staff from other ministries could make it more difficult for the FTC to build up expertise and to demonstrate independence from the policy priorities of other parts of the government. The resources available for competition enforcement have steadily increased over the last decade. Even so, they may still be insufficient, in kind if not in amount, for dealing with an economy as large as Japan's. The FTC staff level for FY 2003 is 643, compared to 478 in 1991. Although the total is now exceeded only by the US antitrust enforcers and the EU (including both the staff of the European Commission and the Member country agencies), the FTC contends that it needs several hundred more people. More important than the number of staff is their expertise. The FTC now has only a few graduate-degree economists on its staff. For sophisticated economic analysis, including policy advocacy projects, it often must rely on outside experts. The FTC has begun trying to bring in experts with experience in law and economics by offering fixed-term contracts.

The enforcement process seems informal, but some of that informality represents a realistic accommodation to the delays and costs of full proceedings. Most enforcement orders and financial sanctions are imposed through "recommendation" decisions, which are issued when the parties do not contest the FTC's claims and proposed relief. If the respondent rejects the recommendation, the case goes to a hearing process, presided over by a hearing officer from the FTC (or even the FTC commissioners themselves) in order to separate the functions of prosecution and decision-making. The full hearing process typically takes too long – two years or more – for time-sensitive matters such as complaints about network access, so these must often be resolved with only a non-binding warning. To obtain criminal penalties (fines or imprisonment), the FTC must refer the case to the prosecutor's office, initiating a process that would conclude with a decision by the court. That process can take many years. The FTC appears to have adequate means to obtain evidence for its own administrative hearing processes, including dawn raids. However, to obtain evidence for criminal prosecution the FTC must refer matters to the prosecutor, who subsequently needs a search warrant issued by a judge. It might be more efficient to use the criminal investigation process in the first instance. That would require changes in law, either to authorise FTC investigators to use these criminal process methods themselves or to involve the prosecutor's office at an earlier stage of an investigation, before the FTC makes a formal referral.

In theory, a wide variety of sanctions, punishments, relief, and private lawsuits may be applied to competition law violations in Japan.[84] There are no obvious conceptual or jurisprudential constraints on the use of strong sanctions. Yet in practice, although the law seems to threaten violators with heavy damages and even imprisonment, reluctance to impose severe sanctions means that deterrence is much weaker than would appear. Most enforcement matters are resolved with a non-coercive, non-binding "warning" or even just a "caution". In the 1990s, the FTC resorted much more to stronger, more formal measures, especially in the area of serious horizontal violations, but their deterrent effect may still be inadequate. The most important remedial measure available to the FTC is a "surcharge" for violations such as price fixing, which is computed as a percentage of the firm's sales of the affected product during the period of the restraint. When the surcharge system was first adopted, the surcharge rate of only 1.5 per cent looked like a cartel license fee. The current rate, which is 6 per cent of covered commerce – but only 3 per cent for small and medium-sized enterprises and 1 per cent for retailers and wholesalers – is still low compared to fines imposed in other major jurisdictions, where the amount of the fine can be tailored more closely to the party's unlawful gains or its victims' losses.[85] Surcharges may nonetheless be a much more important deterrent in Japan than fines, which would typically be significantly smaller. Fines are criminal penalties, and thus they can only follow a conviction by a court. They only apply to restraints imposed by a trade association or in violation of Sec. 3. Even though the maximum possible fine was recently increased to 500 million yen for an organisation, such as a company, it remains much lower than similar fines in other major jurisdictions. The theoretical criminal penalties are of little practical importance. Fines of any magnitude, against companies or individuals, are almost never imposed, and prison sentences, which are even rarer, have always been suspended. No one has ever gone to jail for violating the AMA.

The FTC has been considering whether to adopt a formal leniency program, offering lower sanctions to violators who come forward early, to make enforcement more effective. A necessary prerequisite for a leniency program is discretion about bringing an action or setting the sanction, so that the enforcer can be lenient in appropriate cases, for example, by reducing or forgoing surcharges. This would require changes in the law, because the surcharge is conceived now as a fixed administrative charge that the FTC cannot vary. Japan's criminal law does not usually countenance the use of leniency in this fashion, so that any leniency program would most likely be applied only in administrative proceedings. It might be necessary to create an administrative fine under the AMA. Another measure could be to offer leniency to an individual, such as by agreeing not to recommend prosecution or offering compensation for lost income, in order to obtain evidence about corporate violations. A draft law to protect such "whistleblowers" against retribution from their employers is under preparation.[86] However, these potentially important technical aspects of an effective leniency program are ultimately less important than the enforcement climate. The promise of leniency is an effective tool only if the threatened sanction that is avoided is substantial and credible. Recognising that the enforcement "stick" in Japan has been too fragile to deter anti-competitive conduct effectively, a working group is now engaged in a comprehensive review of the entire system of administrative and criminal remedies. The likely focus of attention will be the level of surcharges and the potential for adapting the surcharge system to a leniency program, rather than increasing the criminal penalties. The implications of supplements, such as private recoveries, should also be considered. Deterrence requires that the violator face a risk of having to pay, not just the amount of its gain, but a multiple of that amount, to correct for the difficulty of detecting the violation and taking action against it.

The FTC has concentrated its attention on the violations which cause great economic harm, namely horizontal cartels and bid-rigging. The most frequent target of enforcement action is bid-rigging in the construction industry with enforcement activity appearing to have peaked in 2001 (Table 20). Visible enforcement results may have slowed because these can also be the most difficult violations to detect and prove.[87] Despite this high priority, though, and admitting the difficulty of the cases, the results have been meagre. For several years, the FTC has announced a crackdown on horizontal violations and a general policy of seeking criminal penalties against them (FTC, 2002). The FTC is now pursuing dozens of bid-rigging matters every year, but it appears that the prosecutor can only handle one case at a time, with the last filed case pending since 1999 (against 11 firms and nine individuals for rigging the bids to supply jet fuel to the Self-Defence Agency). Unless that capacity expands greatly, criminal penalties against horizontal cartels and bid-rigging cannot be applied credibly.

Table 20. **FTC enforcement activity**

	1999	2000	2001	2002
Completed investigations	111	66	101	81
Caution	41	33	32	36
Warning	29	12	21	16
Formal measures (order or surcharge)	32	18	42	23
Bid-rigging	22	9	36	17
Other cartel	3	2	3	3
Unfair practices	5	5	3	3
Private monopolisation	0	1	0	0
Other	2	1	0	0
Trade association involved	2	1	0	0
Total surcharges imposed (billion yen)	18.4	9.2	3.8	2.7
Rescinded, for hearing (billion yen)	11.7	1.9	0.8	0.3
Criminal referrals to prosecutor	2	0	0	0
Hearings initiated	7	8	18	61
Decisions after hearings	4	31	5	7

Source: FTC Annual Reports to OECD; FTC Report to the Diet (2003).

The most common complaint received at the FTC is about excessive discounts in retailing, and the FTC is particularly vigilant against "unjust low price sales" (predatory pricing strategies).[88] These issues, along with enforcing laws about misrepresentations and protection of subcontractors, occupy a considerable share of the FTC's attention – amounting to nearly 3 000 cases per year – as measured by the number of actions taken, if not by time and resources.[89] Applying the Premiums and Representations law involves a degree of industry self-regulation through nearly a hundred fair trade associations and their fair trade codes. The FTC authorises and monitors these institutions and attends their annual meetings. Such self-regulation may alleviate information asymmetries – particularly important as Japanese consumer interests are poorly organised – but the FTC's active, but uneasy, participation may make a tough stance against horizontal agreements look like a reversal of policy. The surprisingly large number of FTC actions against price cutting would not inspire confidence in consumers that competition enforcement is promoting their interests, as they risk making the FTC appear to be complicit in practices that sustain comparatively high prices. Laws and institutions protecting consumers in Japan need to be strengthened. Giving that responsibility to the FTC could help to focus competition law enforcement on consumer interests, too.

Regulatory policies at the sectoral level

Regulatory policies in domestic service sectors vary in scope. Retail distribution and professional services are inherently competitive sectors, but entry controls and self-regulation may hamper the development of competition. To increase competition in these areas, it is important to remove exemptions from the competition law and apply it forcefully. On the other hand, network industries have segments with "natural monopoly" where competition is difficult – or even impossible – to introduce, directing regulatory efforts to ensuring non-discriminatory access to networks for third parties and opening potentially competitive segments to competition. International experience has shown that the gains from regulatory reform in network industries are potentially very large, although to be realised careful attention must be paid to the design of such reforms.

Retail distribution

One of the reasons for the high price level in Japan is – despite corrections over the past decade – a relatively inefficient retail distribution sector, which is further characterised by a number of what appears to be collusive practices by producers. To be sure, structural changes in the sector have increased its productivity over the past decade, reflecting an increase in the number of relatively large stores, the replacement of mom-and-pop shops with more vertically integrated franchise systems and a strong increase in discounters.[90] New entrants are primarily found in the non-food segment of the retail sector and are an important competitive force as they often purchase directly from producers, thereby by-passing the multi-layered distribution channel. This process frequently includes applying new information technology to control stocks, requiring producers to provide frequent delivery of relatively small amounts of goods (Maruyama, 2000). Moreover, new market opportunities opened up for discounters with the easing of licensing conditions for liquor and drug sales as well as the removal of the regulation that had permitted resale price maintenance for drugs, cosmetics and other products.

The productivity level in the sector remains, nevertheless, comparatively low with a relatively high outlet density and low number of employees per establishment (Table 21). Moreover, the sector's productivity has been estimated to be about half of the level in the United States (Aoki *et al.*, 2000). In the broader distribution sector (including wholesale), the productivity level is lower than in most other countries. Despite liberalisation of entry and declining land prices, which induced a reduction in the share of small shops from 68 to 58 per cent of all establishments during the 1990s, the prevalence of large stores remains relatively low, even compared to Europe.[91] The shortage of large-scale outlets due primarily to insufficient deregulation at local levels has been identified as a key factor behind the low levels of productivity in the retail sector (Aoki *et al.*, 2000).

The Large-Scale Retail Location Law[92] to regulate entry is applied to all stores with a retail space larger than 1 000 m^2 – an internationally low threshold – inducing new entrants to establish relatively small supermarkets and discount stores. The law opens up the possibility for local incumbents to restrict entry by referring to environmental concerns (traffic congestion, waste collection, etc).

Table 21. **Key structural features of the retail distribution sector, 2000**

	Outlet density[1]	Employees per enterprise	Wholesale and retail distribution, total value added per employed person	Non-specialised stores[2]: Share of total output in real distribution (per cent)
Austria	43	7.7	90	20
Belgium	80	3.5	114	35
Denmark	47	8.1	79	39
Finland	46	5.0	82	44
France	64	4.2	87	37
Germany	35	9.0	75	23
Italy	130	2.2	101	31
Netherlands	54	8.5	81	
Portugal	150	2.5	66	31
Spain	133	2.8	71	32
Sweden	65	4.3	79	34
United Kingdom	36	14.2	68	43
European Union	71	6.3	83	35
Japan	111	5.7	74	16[3]

1. Number of enterprises per 10 000 inhabitants.
2. Includes large-format outlets such as hypermarkets and department stores.
3. Only share of large stores.

Source: Eurostat, New Cronos, Japan Statistics.

Local governments have few incentives to exercise their appeal possibilities, partly reflecting local competitors' political clout. Furthermore, certain trading practices by producers may restrict competition and reduce productivity in distribution (Box 5). Thus, to improve the retail sector's productivity requires both a further relaxation of large-store regulation and a strong regulatory stance by the FTC to remove anti-competitive practices.

Professional services

Self-regulation in *professional services* is relatively common in OECD countries as a means to alleviate information asymmetries, to protect consumers and ensure high quality services. However, self-regulation may also hamper competition's role in ensuring efficiency. In Japan, membership in self-regulating professional associations is compulsory for eight professional services, including lawyers and accountants.[93] The regulation in the latter two services used to be among the most restrictive among OECD countries (Figure 36). However, measures are being taken to ease regulations of professional services. The compulsory stipulation of standard fees in the associations' rules is in the process of being removed, which should help make fees more responsive to market developments. This is further

Box 5. Potentially harmful trading practices

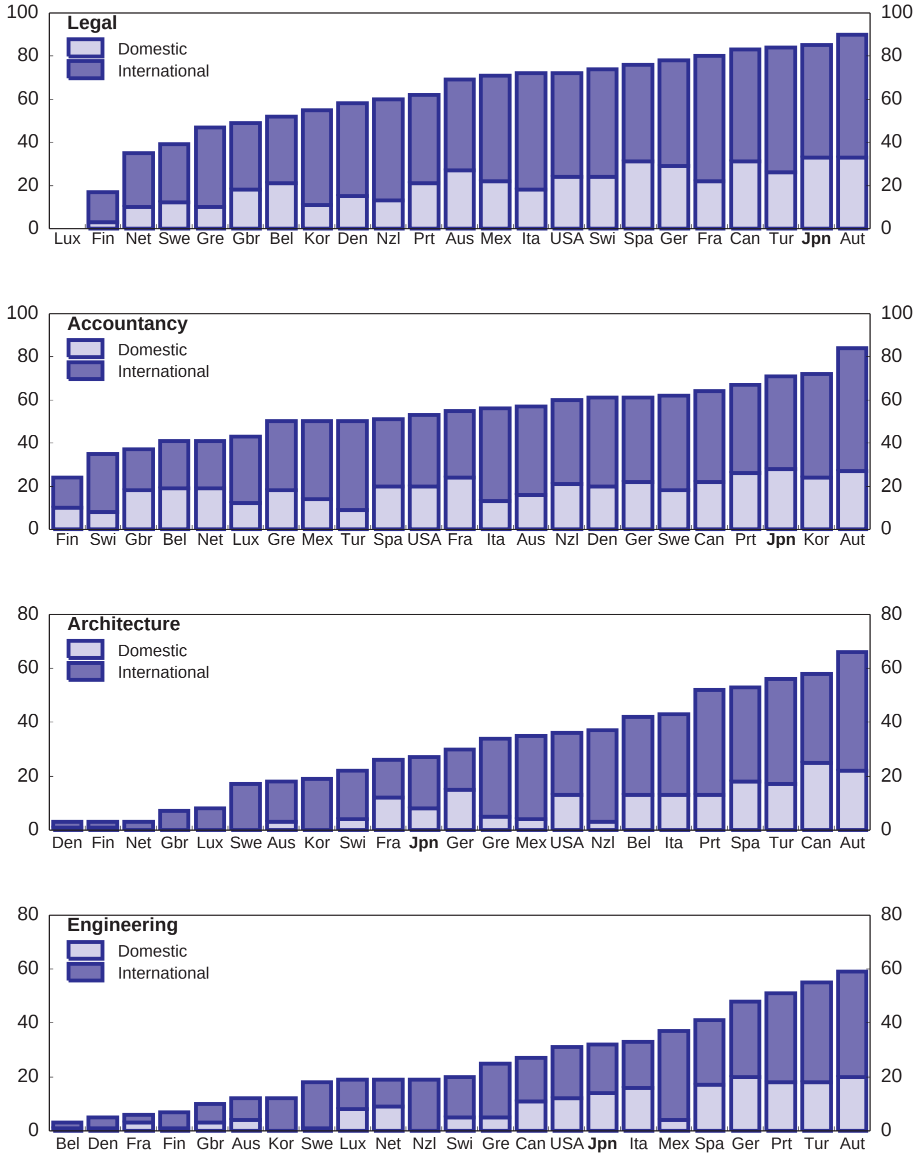
Certain trading practices, which are often embodied in the self-regulation issued by trade associations of producers, give them a set of tools to hamper competition by direct price setting, determining the allocation of retail outlets and restricting new entry. These include the "standard price system", rebates, return of unsold goods, and vertical affiliations from producers to retailers. The *standard price system* can take the form of (often binding) suggested retail prices, resale price maintenance or after-sales price adjustment, where final transaction prices are only settled when the product is sold on the retail market.* The *rebate systems* are dependent, in some cases, on the volume sold or share of turnover, which creates incentives for retailers to carry only one brand or product, restricting entry opportunities for other producers. Similar problems arise with the practice of *return of unsold goods* at no costs. Some of these practices were established during earlier exemptions from the AMA. In general, they are illegal if involving coercion, which the FTC typically has had problems in proving.

Other trading practices may restrict competition in distribution by establishing discriminatory practices and are often linked to trade associations' self-regulation. These include boycotts, vertical non-price constraints (such as customers, geographical, or advertising restrictions, etc), tie-in sales (forcing the purchase of other products) and reciprocal and exclusive dealings (excluding third parties). The actual anti-competitiveness of these measures is generally difficult to demonstrate, as coercion and a certain degree of market power have to be present (Schaede, 2000). This type of self-regulation can, when combined with the Premiums and Representations Act and the FTC's own traditional policy priority of supporting fair, as well as free, competition, lead to some curious outcomes. Reportedly, a soft drink producer in the early-1990s wanted to under-cut the soft drink industry's rules to promote its product against well-established brands. The producer asked its distributors to undercut the price-related agreements of the industry association, of which the producer was not a member. The association complained to the FTC that the producer was undermining the industry's self-regulation. Schaede (2000) reports that the FTC's observations were interpreted as meaning that even non-members are bound by the rules that the industry developed, effectively leading a non-member to abide with self-regulation. According to the FTC, non-members cannot be bound by associations' self-regulation.

* The system is stable with specialised and exclusive links between firms, whereby if profits are squeezed too much in one link of the system, then that part can impose switching costs on the other links by withdrawing.

reinforced by the expected removal of the remaining regulation restricting advertising, which continues to be relatively widespread in many other OECD countries. Nevertheless, other elements of self-regulation may continue to hinder competition in these services, such as the very high qualification requirements in the exams to

Figure 36. **Regulations of professions: restrictiveness indices for OECD countries**[1]



1. Country order ranked by restrictiveness of legal services regulation.
Source: Nguyen-Hong, D. (2000).

become lawyers (equivalent to the Anglo-Saxon bar examination) and certified accountants, leaving Japan with a very low supply of both.[94] Recent measures aim at expanding the number of graduates through easing requirements and to establish law schools (supplementing universities' law departments) but these are unlikely to improve the situation significantly in the short and medium term.

Network industries

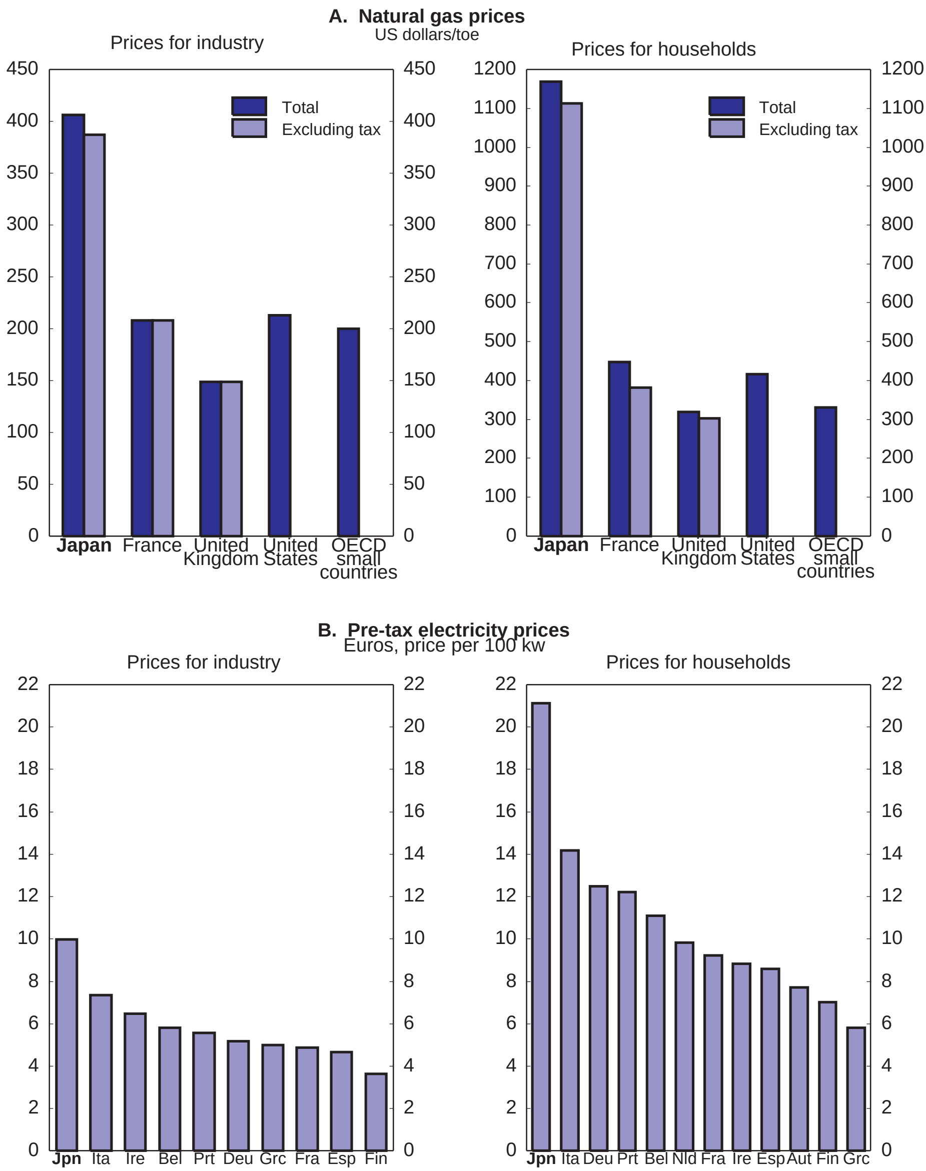
Liberalisation of network industries has become internationally widespread over the past decade, generally inducing substantial price reductions. There are examples of less successful reforms or outright failures, although these are mostly related to design problems of deregulation rather than liberalisation *per se*. In Japan too, network industries have been deregulated but remain less open to competition than in many other countries. The regulatory framework, reflecting the traditional prescriptive stance, used to be geared towards such issues as supply-demand balancing in the energy sectors and securing universal service provision. Recently, however, the policy stance has begun to change towards introducing competition.

The energy sectors

Parts of the energy markets have already been successfully deregulated with the liberalisation of oil imports in 1996. This led to a collapse of an implicit import cartel. Over the following 3½ years, pre-tax retail prices were reduced by more than one-third despite roughly unchanged crude oil prices.[95] The electricity and natural gas sectors are in the process of being opened up. Free supplier choice for very large business consumers is already allowed, and this option is being gradually extended to smaller business consumers by 2005 (electricity) and 2007 (gas). Discussion for full liberalisation will start in April 2007 based on the experience to that date. Presently, there are no concrete plans to extend the opening to household consumers. The Ministry of Economy, Trade and Industry (METI) continues to be the regulator (approving tariff increases on the basis of rate of return regulation and with a notification requirement for price decreases in place since early 2000) and is responsible for securing energy supplies as well as for technical and safety regulations, including setting standards for lowering CO_2 emissions. The economic gains from achieving fully competitive energy markets are likely to be large as energy prices in Japan are considerably higher than those prevailing in other countries (Figure 37). Part of the high energy prices are explained by very prescriptive regulation that sets internationally high standards.[96]

A characteristic of the *electricity market* is that, in response to high electricity prices, on-site generation (so-called auto-generation) in the manufacturing industry covers about a third of the sector's demand. On the other hand, liberalisation has so far only led to a limited number of new entrants and no direct competition

Figure 37. **Energy prices in an international perspective**



Source: OECD, *Energy Prices and Taxes*, 2002, Eurostat and OECD calculations.

between existing utilities has developed.[97] This is partly because market structures are not promoting competition as the industry is dominated by ten vertically integrated utilities of generation, transmission, distribution and retail supply, which each enjoy near monopoly status within their respective electricity regions. This status arises from the limited converter capacity between the two frequency areas and the restricted interconnection capacities both within and between electricity regions.[98] This has led to an extensive use of "pancaking" – adding charges on top of each other – by the incumbent, a practice that the government has taken measures to stop.

The March 2000 amendment to the Electricity Utility Industry Law allowed free supplier choice for high-voltage customers and regulated third-party access, where the utilities determine the access tariffs on the basis of METI regulations. The tariffs have to be notified to METI. Nevertheless, new entry has been prevented by high third-party access charges, amounting to more than a quarter of retail prices – a higher share than can be observed in more competitive electricity markets.[99] This approach contrasts with a system of independent transmission system operators in charge of setting access tariffs – an approach that is considered to be a prerequisite for the development of competition in most other OECD countries. An amendment to the electricity law with the purpose of increasing competition was passed by the Diet in June 2003. The amendment covers regulation for transmission, balancing, system access and operation. Moreover, measures to ensure accounting unbundling of vertically integrated utilities will be obligatory from April 2005 to secure the prohibition of cross-subsidies and prevent discriminatory treatment of new entrants. A "neutral transmission system organisation" – with representation of all market participants – will be established with many of the responsibilities of an independent network operator, such as implementing system operation, transmission and distribution rules.[100] Moreover, a spot electricity market for day-ahead delivery and forward contracts will be established, although the success of this measure obviously depends on developing interconnection.

Recent international experience has revealed the need for carefully formulated reforms, pointing to the benefits of a step-wise approach. At the same time, to realise all the benefits of reform, it is important that reforms are implemented within a well-defined time framework. Reforms in the electricity sector must be multi-facetted in order to bring about markedly lower prices. Installing market structures to promote competition requires the effective separation of presently vertically integrated utilities to avoid cross-subsidisation of competitive activities with profits obtained in monopolistic market segments. The government aims at achieving this through accounting unbundling between generation and distribution, while not excluding formal separation if fair and effective competition does not emerge. However, international experience indicates that accounting separation has not sufficed as it contains a large judgemental element and is difficult to verify because of asymmetric information, suggesting a need for legal or ownership unbundling. Similarly, separation of retailing and distribution activities must be introduced if small customers are to enjoy the benefits of liberalisation. It should be noted that problems of instability of supply and insufficient network capacity experienced in countries with formal separation were due more to defects in regulatory frameworks than the nature of separation. In addition, it would be desirable to create an independent – financially as well as politically – sector regulator in ensuring non-discriminatory access to the electricity network by potential entrants (such as auto-generators in the manufacturing industry). However, this would require an expansion of the present interconnection capacity, pointing to some need for additional infrastructure investments. Existing owners of the network have little incentive to undertake such an expansion, as enabling new entry would only increase competitive pressures. Thus, part of the strategy to install structures to promote competition should be to collect networks in a separate company. The emergence of a competitive electricity market would enhance incentives to better exploit existing generation capacity, inducing companies to increase the use of pricing strategies to reduce peak loads, as well as to improve efficiency.[101] To prevent the adoption of time consuming delay tactics, it is important to have a rapid and impartial dispute settlement framework.

Japan is one of the largest *natural gas* consumers in the world and the structure of the industry is characterised by many, mostly private, vertically integrated regional companies with little interconnection capacity among regions, as pipeline networks are not very developed.[102] The 2000 revision of the Gas Utility Law opened a bit more than one-third of the market to competition as large industrial consumers were allowed to choose suppliers and negotiate rates. Subsequently, 11 new gas suppliers have entered the market, gaining a combined market share in the liberalised segment of about 2 per cent. The amended Gas Utility Law will enter into force in April 2004, introducing regulated third party access (TPA) to gas pipelines and negotiated TPA to LNG terminals, with pipeline owners having to notify standard TPA contracts to METI and terminal owners having to publish manuals for TPA.[103] Moreover, non-discriminatory access is intended to be secured through accounting unbundling, information firewalls and a prohibition against discrimination. To stimulate investments in pipelines, new pipelines will be exempted from the TPA obligation or be allowed to have a higher rate of return in their TPA tariffs for a limited time period. The amendment also includes a time table for further opening of the gas market in two steps to reach 50 per cent in 2007. Moreover, the current *ex ante* METI approval for acquiring a client from another gas company's supply area is proposed to be changed to an *ex post* notification obligation, with the possibility of an administrative METI prohibition order if the transaction has a significant impact on prices for captive consumers.

Gas liberalisation can potentially yield very high consumer surpluses as prices converge with international prices. Moreover, the importance of gas as an input in manufacturing and in electricity generation means that the supply-side effects of liberalisation will have a ripple-through effect through direct price reductions in the manufacturing sector and indirectly as electricity becomes cheaper. However, to reap these benefits and in view of international experiences with deregulating network industries, the reform process should be reviewed. An independent sector regulator should be established to ensure pro-active *ex ante* regulation. Moreover, effective unbundling of vertically integrated gas utilities is difficult, as in the electricity sector, and should be ensured through formal, rather than accounting separation. The client notification requirement is overly prescriptive, with a potentially high regulatory cost if METI reverses a transaction. Moreover, the requirement is hardly needed as in other countries similar problems are dealt with through licenses to distributors, stipulating transparent and equal conditions for all players. International experience with negotiated TPAs is relatively limited and in some cases, like in Germany, the approach is in the process of being reconsidered as dominant incumbents have been able to maintain high access charges. The limited entry possibilities for new LNG terminals (existing terminals have ample capacity and the supply of suitable and available sites is limited) give present terminal owners a strong bargaining position, indicating that non-discriminatory access to LNG terminals should be secured through regulated TPA. Obviously the construction of an inter-connected pipeline network is the prime objective in the process of creating a competitive gas market. Allowing higher profits on new pipelines for a limited time period should stimulate this development. However, the very high construction cost is a concern and points to the need for addressing problems in the construction sector. A change in the currently very strict government safety regulation and standards in line with international experience could further reduce costs.

The telecommunication sector

A decade after the formal opening of the telecommunication sector, the liberalisation process accelerated in the second half of the 1990s by reorganising the incumbent into a NTT holding company of four service providers (NTT East Corporation, NTT West Corporation, the long-distance provider NTT Com and the mobile phone service provider NTT DoCoMo). This has also encouraged a sharp increase in inflows of FDI in this sector.[104] The telecommunication business law was revised during the summer of 2003 with the principal aim of abolishing *ex ante* regulation for non-dominant carriers and the prior permission system, as well as to remove the regulatory distinction between network-owning and leasing carriers, which should ease entry into the market. Prior to that, rules for (accounting) unbundling, unrestricted collocation (including physical access to facilities) and asymmetric regulation had been put in place to secure non-discriminatory interconnection. The system of asymmetric regulation implies strict rules for dominant incumbents concerning determination of tariffs (price-cap regulation), authorisation and disclosure as well as legal "firewalls" and a code of conduct, while non-dominant carriers are only subject to prior notification and disclosure requirements.[105] In addition, a dispute settlement commission has been created, which should further secure interconnection in a rapid and efficient manner.[106]

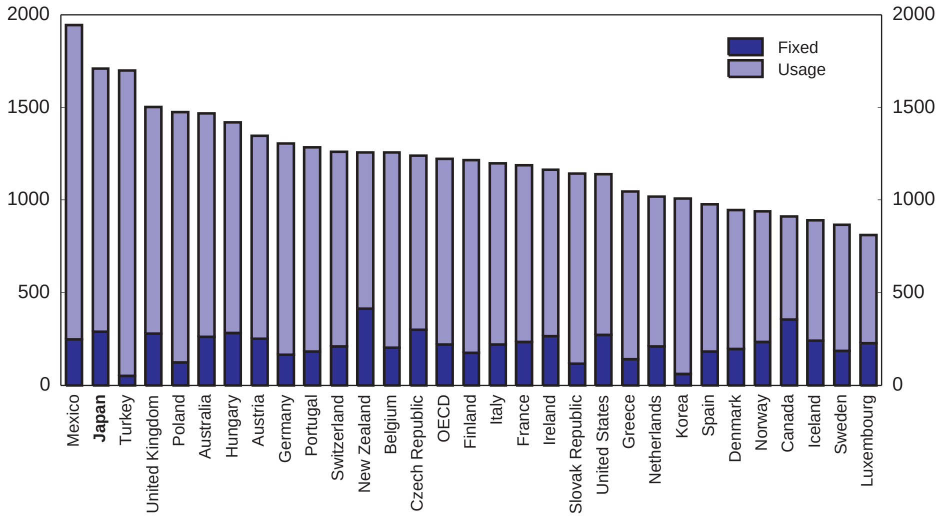
Prices for all services have declined considerably and rental charges for line sharing are even among the lowest in the OECD area, contributing together with other measures – like pre-selection (known as "My-Line" system in Japan) – to lower charges for local calls to levels at least comparable with those prevailing in other OECD countries.[107] Nevertheless, at current exchange rates, telephony prices for both business sector and residential users remain among the highest in the OECD area, while charges for mobile phone services are also in the high category in the OECD area (Figure 38).[108] The emergence of new service providers and the low rental charges for line sharing are the two factors shaping competition in the telecommunication sector. The former increases choice and allows cost-conscious consumers to obtain favourable deals, while the latter is boosting broadband penetration, bringing it from one of the lowest in the OECD area at the end of 2001 to one of the highest (Figure 39). Broadband charges are among the lowest in the OECD area, and the connections provided in Japan tend to be much faster. The latter enables broadband not only to provide fast Internet connections, but also very low cost (IP) telephony services, thereby putting further downward pressure on service prices.[109]

To further sustain these positive developments, a number of regulatory issues should be addressed. As in other network industries, the regulatory challenge is to secure non-discriminatory access to areas of the sector, such as the local loop that are difficult to subject to competition because of the incumbent's dominance. Regulatory efforts should also concentrate on setting non-discriminatory interconnection charges, which is the case when they recover associated costs for each network operator. In Japan, the Long Run Incremental Cost (LRIC) method used at present aims at achieving this objective. However, substantial pressure has emerged from special interest groups to maintain a common nation-wide telephony interconnection charge, for universal service reasons, even though this would lead to a cross-subsidy between NTT East and NTT West, which have different cost structures. This points to the benefits arising from the complete structural separation of NTT East and NTT West. Another area of concern is the termination charges for mobile phones – which are higher than best practice in Europe – where calls originating from the fixed-line network and terminating in the mobile network take place in an inherently non-competitive situation as the calling party has no alternative and the receiving party is not concerned. Reflecting this lack of competition, other countries have started to regulate termination charges. For example, the British telecommunication regulator has recently imposed price cap regulation to more than halve the termination charges over three years. Moreover, the practice of having mobile phone service providers determine all telephony charges between mobile phone and fixed-line networks was recently replaced by

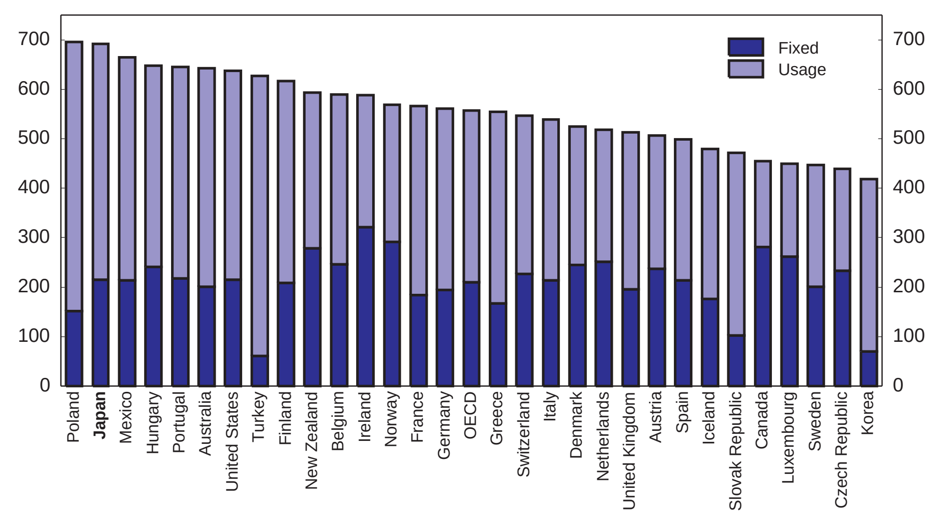
Figure 38. **Telecommunication charges in the OECD**

US dollars, August 2003

A. Charges for a basket of business services

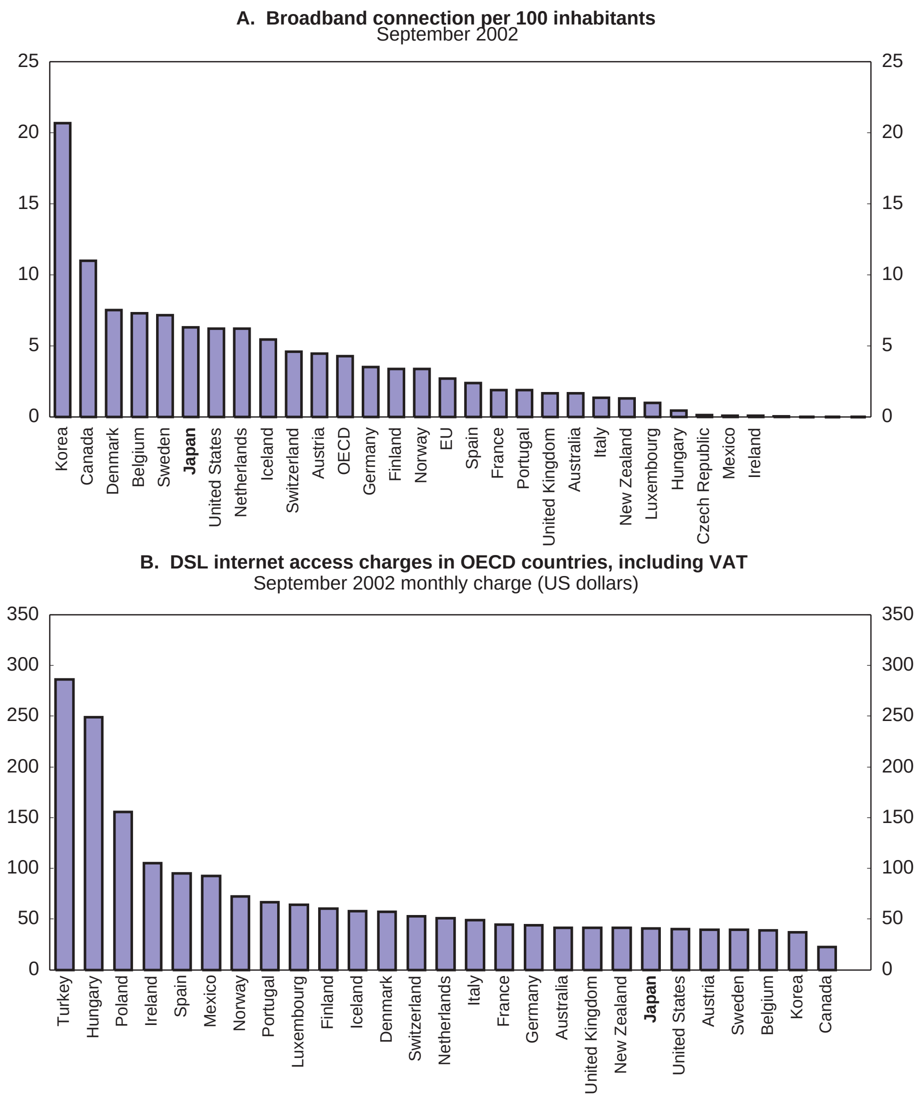


B. Charges for a residential basket



Note: Composite basket that includes international calls and calls to mobile networks.
Source: OECD and Teligen.

Figure 39. **Broadband penetration and user charges in the OECD**



Note: Commercial ADSL service was not available in the Czech Republic, Greece and the Slovak Republic. Modem rentals, where applicable, are excluded as in most countries these can be purchased by users.
Source: OECD.

the common international practice of having charges determined by the originating network's operator. This will introduce an element of competition through potential customer switching. However, experience from Europe indicates that in practice such pressures only have a limited effect on termination charges. Most of the restrictive regulations will be abolished by, at the latest, the summer of 2004. The promotion of competition in a network industry like telecommunication requires the active implementation of *ex ante* regulation, which is best carried out within an independent regulatory framework.

Ownership restrictions on NTT's share elaborated in the NTT law stipulate that the government must always hold at least one-third of all shares in the holding company.[110] The latter must in turn own all shares in NTT East Corporation and NTT West Corporation on grounds of ensuring the provision of universal services. Foreign ownership of NTT holding is restricted to a maximum of one-third of all shares. Substantial government ownership of the dominant incumbent discourages the emergence of vigorous competition, as private companies will refrain from effective price competition due to the associated political risks and as the subsidiaries of the holding company are unlikely to compete against each other. To ensure the provision of universal telecommunication services, a Universal Service Fund can be established for each area to which all carriers with a turnover exceeding 1 billion yen must contribute.[111] Similar compensation systems have been installed in other countries. However, the associated payment for providing universal services should be set as the difference between the cost of universal service obligation and associated benefits, such as brand recognition. Otherwise the transfer becomes a subsidy. The net cost of a universal service obligation can be small as is the case in the United Kingdom, where OFTEL (the telecommunication regulator) reached the conclusion on the basis of a cost-benefit analysis that the net cost was so marginal that no compensation would be made – a decision that was accepted by the incumbent. Another approach is found in Germany, where the government states that the supply situation is satisfactory, so no operator is required to provide universal services, although Deutsche Telecom is the *de facto* universal service provider.

Postal services

The market for postal services has been liberalised. There is already free entry into the parcel and special letter segments and in principle there is also free entry to the standard letter segment. However, new entrants are subject to part of the same universal service obligation as the – recently incorporated – incumbent, implying that new entrants have to install and service nearly 100 000 letter boxes across the country (European Commission, 2002).[112] Moreover, regulatory costs are high in the letter market as the ministry approves new entrants and their business plans and new entrants are obliged to provide prior notification of their tariffs.[113]

Furthermore, even if new entry took place, there would not be a level playing field as the incumbent is subject to a special, more favourable, tax regime. Some sort of a corporate tax should in principle be paid by the incumbent, but is due only every four years and can be waived if it harms the financial stability of the corporation. No new entry has taken place so far in the non-competitive standard letter segment, while 18 companies have obtained business permits for the competitive segment. Prices for standard letters in September 2003 were about one-third higher than the average of other large OECD countries. In contrast, prices in the competitive markets were on average equal to those in other large OECD countries, reflecting higher prices for inter-city handling of small packages (less than 2 kilos) and lower prices for intra-city packages.[114] This price pattern implies that benefits from further liberalisation of the postal market are likely to be substantial, particularly in terms of expanding consumer welfare. It also points to the potential risk of cross-subsidisation, particularly in view of the provision of non-postal services, through the extensive network of post offices.[115] For the provision of such non-postal services, Japan Post receives what is in principle cost-based commissions, although cost estimates are likely to be distorted as it has only been subject to commercial accounting standards since its incorporation in April 2003.

The lack of competition in postal services was pointed out in a report by the Study Group on Government Regulations and Competition Policy, which recommended that the conditions for fair competition should be secured through the application of the competition law. However, to reveal cross-subsidisation often requires substantial regulatory effort which, together with the need for *ex ante* regulations to secure non-discriminatory access, points to the need to establish an independent sector regulator. Naturally, the effective market foreclosure and *de facto* tax exemption do ensure universal services, but as indicated by the high prices for postal services this is a very costly solution. Moreover, many of the services provided could easily be delivered through other networks, such as financial retail institutions or convenience stores. Thus, the provision of universal service obligations should be evaluated in terms of the cost of provision and the benefits of a nation-wide network. In Sweden and New Zealand, for example, the benefits of owning nation-wide networks are considered to be larger than the associated costs and the incumbents receive no compensation for their obligations.[116] In case the cost is higher than the benefits, the compensation for the universal service obligation should take the form of a fiscal transfer from the government, ensuring that no cross-subsidisation would arise from the servicing of marginal areas. This would level the playing field in other segments of the postal market, removing the need for imposing the universal service obligation on all operators, as the possibility of cream skimming would no longer exist. Moreover, if competitive tendering for the universal service obligation were introduced, then a mechanism is put in place to secure increasing efficiency in the provision of such services. An additional issue is to secure unrestricted access to the incumbent's essential facilities and services, which in a number of OECD countries has led to the establishment of explicit access regimes.[117] Experiences from other countries suggest that a sector regulator is more effective in preventing incumbents from engaging in anti-competitive measures, such as selective discounting, tying or bundling.

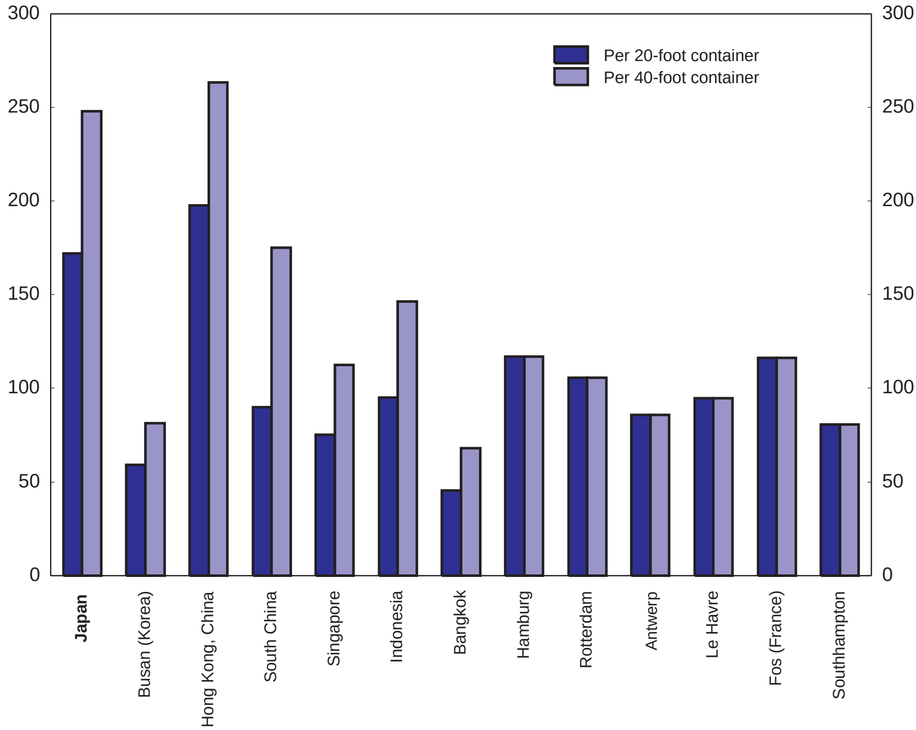
Selected issues in the transportation sector

The costs of using Japanese *harbours* are among the highest in the world. Fixed costs of services (tugging, berth rental, etc) are high, and rental cost of other infrastructure (offices, cranes, etc.) are administratively determined by the local government owners. Variable costs such as terminal handling charges are also very high by international standards (Figure 40). These high prices originate from the lack of price competition between Japanese harbours. Operation charges are subject to a prior notification requirement to the Minister of Land, Infrastructure and Transport for the largest harbours and an approval requirement for other harbours, preventing the development of flexible pricing-to-the-market strategies. The Japanese Harbour Transportation Association (comprising all service providers) coordinates – if invited – changes to operations that may significantly reduce employment or adversely affect working conditions. The association mediates in some cases, in a so-called "prior consultation" process, applications for changes to operations (including switching service providers) and, after consulting with labour unions, issues recommendations – which all involved parties must agree to abide by prior to commencement of operations. Moreover, some industry sources point out that there is a high degree of uniformity of cargo handling charges across Japanese harbours, although this is difficult to verify because of a lack of official data. Furthermore, it is pointed out that new entry is hindered by the legal minimum employment requirement of 1½ times that of existing operators, which acts to prevent competitive bidding for open tenders of harbour services. While there are no regulatory barriers that prevent the FTC from launching investigations, the authority is normally reluctant to do so without prior complaints. Industry sources have indicated that complaints are unlikely to emerge in the present environment.

In an effort to boost the competitiveness of Japanese harbours *vis-à-vis* other harbours in the region, they have been allowed to receive ships around the clock year around. However, the additional cost of services outside normal business hours is between 30 to 60 per cent and appears to be higher than warranted by for example the overtime surcharge stipulated in the Labour Standard Law.[118] The impact of the take-up of this additional service, however, is difficult to judge as no statistics are available. To further strengthen the competitiveness of Japanese harbours, the government plans to designate a limited number of "super-hub container ports" by March 2004 with the aim to lower

Figure 40. **International harbour terminal handling charges**

Index with major Europe = 100, March 26, 2003

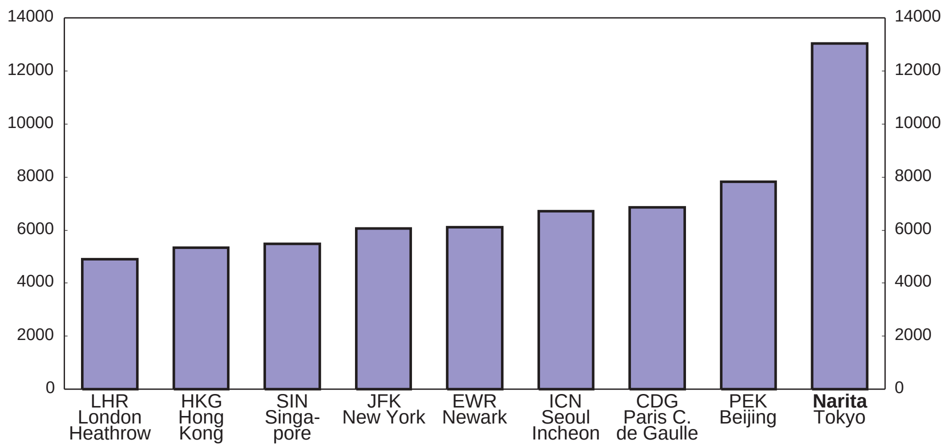


Source: Asia Westbound Rate Agreement Carriers.

charges by more than 30 per cent through better management and economies of scale effects and shorter cargo clearance time. The objectives of any reform in this area should be to improve resource allocation by aligning charges with the cost of provision. This can be achieved by introducing competition between Japanese harbours, most efficiently by encouraging local governments to privatise harbours and adopting a more pro-active competition policy.

The high cost of airports and restrictions on ticket sales drive up the cost of *air transportation*. Airport charges at Japan's main international airport (Narita) are more than twice as high as the average of other international airports (Figure 41). Moreover, following the recommendations in IATA's scheduling guidelines, slot allocation on individual runways is based on the grand-fathering principle and

Figure 41. **International airport charges**
US dollars per aircraft



Source: IATA.

unrelated to aircraft type. This prevents the free transfer of smaller aircraft to the new and shorter runway at Japan's main international hub, to free up additional slots on the old and longer runway for the aircraft used on international long-distance routes, which cannot use the short runway. Moreover, additional misallocation problems may arise once the new runway is extended to full size as by then most sought after slots will be allocated to relatively small aircraft. Consequently, available scarce capacities can be more efficiently utilised with the implementation of a market-based slot allocation system. The OECD view is that such a system should preferably be put in place before the government's planned privatisation of airports. Moreover, indirect costs are also high with import cargo-handling charges, office rents and navigation fees being among the highest in the OECD countries (FAAJ, 1999). Costs are further increased by the lack of competition in the provision of transport related services as reflected in a recent FTC investigation. It concluded that collusion was taking place in the provision of fumigation and warehouse services at Japan's main airport, leading to an internationally high cost of such services.

Additional costs are imposed on the passengers through the overly prescriptive regulation of distribution, pricing and settlement of air tickets. The regulation used to allow airlines only to advertise and sell tickets for international travel at rates fixed by the IATA and approved by the Ministry of Land, Infrastructure and Transport, although fare approval has been relaxed recently, allowing airlines to offer officially approved discount fares. Consequently, most tickets are sold at "negotiated" fares through travel agents and wholesalers, hampering the development of other sales channels, such as the Internet. This disadvantages smaller carriers without the economies of scale to establish their own distribution channels. Thus, even though list prices for tickets are well below those in other large OECD countries, the actual sale price of a ticket is about 75 per cent higher. It is difficult to identify the benefits for consumers of such highly prescriptive regulation, which should be abolished.

Highway transportation has benefited from the near doubling of highway capacity over the past couple of decades, which with the planned 60 per cent expansion will be a relatively dense highway network compared to other OECD countries. The highway system is self-financed through the "toll-pool" system, which allows cross-subsidisation between profitable and unprofitable highways, and costs are very high, leaving Japanese toll charges among the highest in the OECD area.[119] Some cost-benefit analysis of the planned expansion of the highway system was carried out, but the underlying assumptions were subsequently criticised for being overly optimistic about future traffic volumes (assuming an increase of about 20 per cent in traffic by 2020), by not fully taking into account such factors as a falling population. Already today, nearly a third of the highway system that connects the major cities needs additional subsidies to cover annual costs. An additional concern is that cost control has been rather poor as witnessed by recent bid-rigging scandals in the sector (Box 6).

The government decided to privatise the four main highway public corporations in December 2001. Following this decision, the Promotion Committee for the Privatization of the Four Highway-related Public Corporations has proposed to restructure the corporations into a holding company of assets and liabilities and five regional operating companies, with the latter being responsible for maintenance and servicing of existing highways as well as for future construction. The incorporation of the companies will require them to observe the commercial law, including the obligation to follow commercial accounting rules, which should improve cost transparency. Privatisation in itself would increase incentives for cost control. The latter is expected to be furthered by more active competition for public tenders in this sector. Privatisation should also help to reveal the true full cost of the highway system, making the subsidies more explicit. The highway construction companies must finance new projects by raising funds from the financial markets, ensuring a full financial risk assessment of new projects, which will be reflected in loan conditions. This will improve resource allocation – although only in full if the highway construction companies are completely privatised to avoid implicit government guarantees. In addition, clearer rules for toll setting would help to increase transparency. The current system for determining road charges is to recover construction costs over a

Box 6. "Family" group companies related to the government highway construction corporations

The government's four major highway construction corporations (HCCs) organise the construction, maintenance and facility operation (such as restaurants, toll collection, etc.) of highways by contracting out each element to privately owned "family" companies.

A study by the Promotion Committee for the Privatisation of the Four Highway-related Public Corporations identifies nearly 600 such companies, defined as those with close links to the HCCs (such as having two or more board members coming from the HCCs). In addition, there are 136 core family companies with very close links as defined in Japanese accounting rules and recognised by the HCCs' consolidated accounts. There are close personnel ties between the HCCs and the family companies, with more than 1 800 ex-officials from the HCCs working for the family companies and most of the family companies have an ex-HCC official as director.* The study revealed a close positive correlation among the number of ex-HCC officials employed and the share of sales with the HCCs. In addition to a substantial exchange of personnel between the family companies, there are also close financial ties among them. For example, for almost 90 per cent of the core family companies, the majority of their shares are held by other family companies. Competitive bidding for HCCs' contracts was introduced in 1997. However, in the period 1997 to 2001, only a fifth of all new contracts have been awarded to non-family companies, which presented more than half of all bids. This supports the criticism that the closed business community among family companies prevents new entry – an accusation further supported by the cease-and-desist order issued by the FTC to some of the family companies in November 2002 for being engaged in bid-rigging.

Against this background, the Committee proposed in late 2002 to ease the requirements for participating in the tendering process, as present requirements include possessing some experience in the highway business, which effectively has excluded new entrants, particularly from abroad. Moreover, the Committee proposed that some operations currently conducted by family companies should be operated directly by privatised new HCCs or their direct subsidiaries. On the recommendation of the Committee, the government has presented two bills in parliament, where they have been passed.

* The number of ex-HCC officials working for the family companies might well be much higher as the list of retired officials suggests more than 3 400 ex-HCC officials working for the family companies.

suitable payment period and ongoing maintenance costs for the entire highway system, implying subsidies from profitable to un-profitable highways.[120] An alternative way of financing the latter could be through a fiscal transfer combined with charge setting on an individual route basis. Negative external effects of highway transport, such as pollution, should be addressed through the tax system.[121]

Public procurement

Public procurement with competitive bidding for tenders is an important instrument to secure the efficient provision of public services (other measures to reach similar objectives are dealt with in Chapter III) and can in itself promote competition through the creation of new market possibilities. However, in Japan public procurement has faced a number of competition problems. Collusive bidding has been the main problem observed at the central government level.[122] At the local government level, industry sources complain of problems with securing public procurement contracts, including lack of transparency, unclear procedures and close ties between commissioning entities and incumbent firms, involving the entire process of tender specification, bid qualifications and evaluation as well as the awarding of contracts.[123] Moreover, no well-developed and transparent common framework is in place for appeals and complaints. The Office for Government Procurement Challenge System deals with complaints regarding procurement of the central government and its agencies and similar systems are in place at the local level. One of the elements contributing to the arbitrary operation of the tender process is the large degree of regional variation in requirements and processes. Given the problems in this area, clear, transparent and non-discriminatory public procurement rules that would apply to all levels of government should be established. To counter bid-rigging and to promote transparency and non-discrimination in public procurement, the government has enacted laws, which among other things empower the FTC to ask for corrective measures. Supervising compliance with contracting processes is outside the usual scope of competition law enforcement. But Japan's long-standing problems with bid-rigging and the importance of public procurement for promoting competition support expanding the FTC's responsibilities to include compliance with competitive tendering requirements. Moreover, non-conforming contracts should be declared null and void.

Potential macroeconomic effects from regulatory reform are large

The macroeconomic benefits of regulatory reform are substantial. The propagation and channels through which regulatory reform affects the economy depend on a number of factors (Box 7). Obviously, assessing the impact of regulatory reform is a complex undertaking, but at least two simple approaches are useful to provide some rough indications. First, including synthetic indicators of regulatory stance in regressions of aggregate performance variables is a relatively straightforward method that does not require assumptions about the character of reforms. Following this method, Nicoletti *et al.* (2001) estimated that

Box 7. Economy-wide effects of sectoral reforms

In general, sectoral reforms change relative prices, which improve overall resource allocation and consumer welfare – effects that are further enhanced by dynamic effects (see below). Regulatory reform within a sector improves that sector's economic performance through a number of channels.

- Reforms reduce output prices via a lowering of price-cost margins, which in turn diminishes the scope for rent sharing, putting downward pressure on wages in the sector.
- Reform forces firms to reduce slack in the use of input factors (boosting X-efficiency), enhancing labour and/or capital productivity.
- In addition to these static gains, a more competitive environment stimulates efforts to innovate and adopt new technologies, which raises productivity growth.

Quantifying the possible magnitude of reforms' effect on sectoral performance, let alone their timing, is bound to be subject to considerable uncertainty, which is only multiplied in the assessment of economy-wide effects. An example is that a sectoral reduction in wage premia may have beneficial effects on wage formation more generally. Furthermore, propagation of sectoral effects into the wider economy depends on the labour market, as the initial effects of a sectoral reform may be a reduction in employment, which has to be employed elsewhere in the economy – highlighting the importance of a flexible labour market in maximising the economy-wide effect of reforms.

A number of economy-wide evaluations of broad-based regulatory reform have been carried out. In the mid-1990s, a collection of studies showed that the economic impact of a comprehensive regulatory reform over a relatively long period would increase GDP by around 6 per cent, despite using different models and assumptions.* Kawasaki (2003) highlighted within the context of a general equilibrium model that even when regulatory reforms only have small overall effects, the change in relative prices can induce considerable variation in how individual sectors are affected. Furthermore, the Council for Economic and Fiscal Policy has estimated that the present reform process in the service sectors may create more than 5 million jobs over five years.

Several sectoral studies have indicated relatively large economy-wide benefits of sectoral reform. Bradford (2003) estimated that the welfare gains of removing all trade barriers could amount to an increase in private consumption of between 2 and 2½ per cent. The relaxation of large-store regulation in the mid-1990s is estimated by the EPA (1996) to have boosted GDP by 1 per cent. The liberalisation of oil imports in the mid-1990s has, according to Nagaoka and Kimura (1999), enhanced consumer welfare by an estimated ¼ per cent of GDP.

* Ministry of International Trade and Industry (1997), OECD (1997) and Economic Planning Agency (1997).

regulatory reforms in Japan in the 1980s and 1990s have increased the employment rate by around 1½ percentage point. Moreover, if Japan moves towards best practices for product market liberalisation in the OECD, the rate could increase by another 1 percentage point.

The second approach is to make explicit assumptions about the potential for reforms to reduce price-cost margins and to enhance productive efficiency and performance. Following this approach, Table 22 presents estimates for the possible economic effects on sectoral and aggregated economic performance of reforms in network industries, distribution and professional and community services. The presented estimates suggest that the scope for regulatory reform in these sectors may increase aggregated labour productivity by 5-6 per cent and a decline in producer prices of some 5-7 per cent – effects that tend to be somewhat larger than similar estimates for other countries. The estimates rely on judgemental assumptions about the scope for reducing price-cost margins and increasing labour and capital productivity within each sector based on realignment with practices internationally. The economy-wide effects are obtained by using the 1997 input-output tables. To avoid assessing the degree of labour market flexibility, aggregated employment was conservatively left unchanged even though dynamic effects of regulatory reform are likely to lower the NAIRU and increase the labour supply. The reported estimates do not include effects of increased dynamic efficiency and an improved resource allocation.

The above estimates are in some instances fairly conservative as compared with other studies. Bradford (2002) applies a general equilibrium model to estimate the effects of regulatory reforms, which align Japanese price margins (relative to world market prices) in the distribution sector with best practises internationally.[124] This approach takes into account the full potential gains of regulatory reforms in the distribution sector and leads to economy-wide estimates that are more than double those presented above.

Overall assessment and scope for further action

The inadequacy of competition in Japan arises from a combination of enforcement of competition policy that historically has not been strong enough and a prevalence of regulation that has been too prescriptive, originating in industrial policy objectives formulated by line ministries. The specific formulation of regulation is often influenced and implemented by trade associations, which are also often involved in various types of anti-competitive collusive behaviour. Not surprisingly, economic performance has suffered as a result. For Japan to achieve its goal of strengthening competitive pressures, the main thrust of reform must be to set up a transparent system of regulation, which is not hostage to unwarranted political pressures and vested interest groups. An important step in this direction and demonstrating independence has been the transfer of the FTC

Table 22. **Assumptions and effects of pro-competitive regulatory reform in selected industries**

Percentage change

	Energy	Post and telecom-munications	Road transport and railways	Retail distribution	Professional services[1]	Community social and personal services[2]	Total economy
Assumptions							
Costs of intermediate inputs	–10	0	0	–5	0	–5	
Labour costs							
Labour productivity	–25	–25	–15	–20	–10	–10	
Wages	–10	–5	0	0	–10	–10	
Capital costs	–30	–30	–20	–25	0	–10	
Profits	–20	–10	–10	–10	–25	0	
Price elasticity of demand	–0.5	–0.5	–0.2	–0.5	–0.5	–0.2	
Sectoral effects:							
Direct price effect	–18.1	–16.2	–8.6	–14.9	–25.7	–12.2	
Price-induced output effect	9.1	8.1	1.7	7.5	12.9	2.4	
Employment, price-induced effect[3]	–15.9	–16.9	–13.3	–12.5	2.9	–7.6	
Economy-wide effect on:							
Producer prices, direct effect	–0.4	–0.3	–0.4	–1.7	–0.9	–1.2	–4.9
Producer prices, total effect[4]	–0.7	–0.4	–0.6	–2.2	–1.6	–1.2	–6.7
Employment (after full labour market adjustment)							
Labour productivity (weighted by share in aggregate output	0.6	0.4	0.7	2.2	0.4	1.0	5.2
Output							5.2
Memorandum items:							
Share in aggregate output	2.4	1.6	4.4	11.1	3.6	10.1	

1. ISIC74, other business services.
2. Effects from improving public procurement policies and greater use of competitive tendering.
3. Resulting from the direct effect via productivity and the induced effect via higher output.
4. Combines the direct effect of the fall in prices of the sector being deregulated with that resulting from the fall in prices in other sectors due to lower input costs.

Source: OECD.

to the Cabinet Office. This approach should be extended by introducing independent sector regulators. An additional step could be to unify the sector regulators into a single regulator, covering relevant network sectors, to reduce the risk of regulatory capture and to concentrate scarce expertise in implementing pro-active *ex ante* regulation to secure non-discriminatory third party access.

For the FTC and the sector regulator(s) to carry out their task effectively, it is important to ensure their independence and provide sufficient resources and power. Independence can be further enhanced by selecting the commissioners from a wide range of representatives from the public. Resources should be evaluated both in terms of quality and quantity. The latter could be enhanced by establishing self-contained career paths within the authorities to attract talent and secure operational independence and by reducing the reliance on seconded personnel from other ministries. The introduction of some elements of private-sector remuneration could attract personnel with a broader range of experience. The evaluation of manpower requirements should be continued at the FTC and extended to the sector regulator(s). To combat wide-spread anti-competitive practices, specific measures should be introduced, including leniency and whistleblower programmes, which would create incentives both at the company level and for individuals to collaborate with the competition authorities. However, a precondition for leniency programmes to be effective is a rigorous implementation of sanctions. Other measures to create a level playing field and promote the development of competitive markets, partly through increases in foreign rivalry, include replacing prescriptive regulation and unnecessary price reporting requirements with a system of notification and licenses as well as an expansion of the government's privatisation programme. An extension of such a reform should be to eliminate indirect barriers to inward FDI, such as removing ownership restrictions and remaining obstacles to trade. In addition, the government could further level the playing field by ending implicit guarantees associated with state ownership, either financial or political, through an expansion of its privatisation programme as well as by introducing a more rigorous approach for evaluating and financing the net cost of universal service obligations. Besides these general recommendations, a summary of the more detailed recommendations is presented in Table 23.

Table 23. **Summary of recommendations**

The competition framework needs strengthening

- To enhance the independence of the FTC, its commissioners should be selected from a wider set of representatives from society, and the authority should be less dependent on seconded personnel. The authority's in-house expertise should be increased by establishing self-contained career paths within the organisation as well as by considering elements of private-sector pay.
- A more pro-active regulatory stance is required. This could be furthered by authorising the FTC to instigate criminal investigations. Alternatively, the prosecutor's office should be involved at an earlier stage of an investigation, although the office's limited capacity needs to be expanded substantially to allow criminal sanctions to be applied credibly. As part of a more pro-active stance, the FTC could be made responsible for consumer protection.
- Sanctions need to be substantial and credible to secure deterrence. Part of such a reform should be to expand the possibilities for private recoveries. This would also allow the introduction of effective measures explicitly aimed at cartels, such as leniency and whistleblower programmes.
- The reform of the merger control review process should be continued to clearly reveal standards in the law for blocking mergers. Moreover, the current approach should be evaluated in view of possible negative effects on competition.
- As a part of a comprehensive programme to expand the role of competition, remaining import barriers and implicit restrictions on inward FDI should be abolished to increase foreign rivalry.

Regulation in retail distribution should be relaxed

- Relax large-store regulation by applying it only to much larger units and by removing the possibility for competitors to block establishment of large stores.

Sector regulation needs comprehensive reforms

- The current approach to regulating network industries should be comprehensively reformed with the establishment of independent sector regulators as part of active *ex ante* regulation to secure non-discriminatory third-party access. This process could be taken further to establish one unified sector regulator, covering relevant network sectors, to reduce the risk of regulatory capture and concentrate available expertise. Moreover, a common approach to universal service obligations needs to be introduced, entailing cost-benefit analysis to determine the net cost of such obligations, which should be financed through a fiscal transfer.
- In the *energy sector*, international experience points to the need for effective unbundling through legal or ownership separation. Interconnection capacity must be enhanced both within a given region as well as between regions to allow physical access. Moreover, rapid and impartial dispute settlement frameworks should be put in place. Entry barriers in the form of high administrative costs should be lowered by streamlining all approvals into one level of government and bring infrastructure standards into line with international standards. Overly prescriptive regulation should be replaced with licensing regimes. Additional measures in the *electricity* sector should be considered to bring together the networks under a separate company to enhance infrastructure investment incentives. Additional measures in the *gas* sector should be to replace the negotiated third-party access to terminals with a regulated third-party access approach.
- In the *telecommunication sector*, government ownership restrictions should be reconsidered and preferably removed to level the playing field. Interconnection charges should be set independently in each telecommunication region to avoid cross-subsidies. Termination charges in the mobile networks should be regulated unless competitive pressures substantially lower them.
- In the *postal sector*, the universal service obligation for new entrants should be abolished. Moreover, an explicit access regime for new entrants to the incumbent's essential facilities and services should be introduced. Measures to eliminate cross-subsidisation should also be introduced.
- Introduce competition between *harbours* so as to lower high costs. This process would be most efficiently achieved by encouraging local governments to privatise harbours.
- To better exploit scarce *airport* capacity, a system of market-based slot allocation needs to be installed prior to privatisation. Prescriptive ticket regulation should be abolished.

Table 23. **Summary of recommendations** (*cont.*)

• Privatisation of the *highway* corporations should be accompanied by new toll rules, stipulating cost-recovery for each individual highway, in order to abolish cross-subsidisation and to ensure an efficient expansion of the highway system.
Public procurement can be used to promote competition
• Introduce a common nation-wide framework for public procurement with clear dispute and settlement facilities. Given the scale of problems, the FTC could be made responsible for compliance. Such a reform should also give the FTC direct sanction possibilities against agencies or officials involved in bid-rigging.

V. Further structural reforms to enhance growth

As noted above, Japan's poor growth performance during the past decade is symptomatic of the failure to adequately address structural problems. Preceding chapters have stressed the importance of reforms to improve the financial system (Chapter II) and to strengthen competition policy and improve competitive conditions in certain sectors, notably the network industries. This chapter takes up some other issues concerning Japan's growth potential, beginning with the labour market. Indeed, success in restructuring the corporate and financial sectors is contingent on flexibility in the labour market. The following sections look at progress in regulatory reform and then the new strategy of creating special structural reform zones, which are intended to overcome obstacles to reform. The fourth section looks at policies to strengthen international competition by promoting trade and foreign direct investment. The chapter concludes with an analysis of issues important to ensure that growth is sustainable in the long run. Progress in structural reform since the 2002 *Survey*, as well as a summary of recommendations in this *Survey*, are presented in Table 24, while Annex II assesses the government's structural reform programmes in detail.

The labour market

Japan faces three key problems in the area of labour. *First*, there is a growing need to re-deploy workers from declining to growing sectors. The accelerated disposal of non-performing loans implies faster re-structuring of the corporate sector, which will require greater labour mobility and greater use of labour markets external to firms. *Second*, Japan faces a challenge to maintain the supply of labour given the declining working-age population. Indeed, the number of people in the 15 to 64-age group has already fallen about 1 per cent from its 1995 peak, and the decline is projected to accelerate in the years ahead. *Third*, Japan has experienced a sharp rise in the unemployment rate of young adults (aged 15 to 34) from 3.1 per cent in 1990 to 7.2 per cent in 2001.

Meeting these challenges will be complicated by some traditional aspects of Japanese labour market practices. In particular, seniority-based wages, promotions

Table 24. **Recommendations for structural reform and assessment of progress**

Based on previous and current Surveys[1]

Recommendations in 2002 *Survey*	Action taken since the 2002 *Survey*	This *Survey*'s assessment/recommendations
I. Reform the financial sector		
i) Accelerate the disposal of non-performing loans	Major banks are required to halve the ratio of non-performing loans to total loans by March 2005. In the year to March 2003, the major banks reduced non-performing loans from 8.4 to 7.2 per cent of total lending. The FSA continues to conduct special inspections for major banks focusing on large borrowers. Major banks are required to use the discounted cash flow method to calculate the necessary loan-loss reserves.	The IRC and RCC should be used effectively to accelerate the disposal of non-performing loans. Continuation of the special inspections is a welcome move, though tighter loan classification and measures to reduce non-performing loans should also be adopted for smaller banks.
ii) Recapitalise the banking system	The major banks are requested to reduce their shareholding to the level of tier I capital. Public funds were injected into the fifth largest bank group in July. A new framework allowing more flexibility in public fund injections is now being considered. The FSA released guidelines for management at banks recapitalised with public funds.	With major bank groups obtaining more capital from investors, rules to prevent such deals from influencing their lending policies should be strictly enforced. Given the excess capacity existing in the banking sector, the government's financial assistance should be selective. The new framework for the injection of public funds should consider market signals in deciding which banks to support.
iii) Tighten regulatory oversight and boost transparency and disclosure	Capital adequacy is being checked more strictly by auditing firms, though no explicit guideline for dealing with deferred tax assets has been issued by the authorities. On-site inspections have been strengthened by introducing a system of *de facto* resident inspectors for major banks.	Capital regulations should impose meaningful standards. In particular, a stricter evaluation of deferred tax assets should be applied to all banks.
iv) Review the role of state-owned financial institutions	The Council for Economic and Fiscal Policy (CEFP) has proposed reducing the size of public financial corporations by half by limiting the scope of their activities. However, this reform will not be accomplished until 2008.	Reform in this area should be dealt with immediately. Postal savings should be obliged to pay deposit insurance and to introduce fees on all deposits to reflect costs, while the cost of universal service obligations should be compensated in an explicit and transparent manner.
v) Strengthen the life insurance sector	The Diet has passed a bill that allows life insurance companies to cut guaranteed yields on existing policies before their failure.	Allowing some flexibility to lower guaranteed returns may not be sufficient. The de-mutualisation of life insurers needs to be promoted. Caution is necessary regarding capital links between banks and insurance companies.

Table 24. **Recommendations for structural reform and assessment of progress** (*cont.*)
Based on previous and current Surveys[1]

Recommendations in 2002 *Survey*	Action taken since the 2002 *Survey*	This *Survey*'s assessment/recommendations
II. Enhance product market competition		
i) Accelerate deregulation	The Council on Regulatory Reform (CRR) has proposed an action plan to ease restrictions on entry into publicly regulated markets such as education, health, agriculture and the labour market.	Accelerate deregulation by establishing a stronger organisation to succeed the CRR when its mandate ends in 2004 and legislate a basic law on regulatory reform.
ii) Move ahead with the creation of special structural reform zones	Thus far, 164 plans have been approved as special zones for structural reform.	Use the special zones as a first step to nation-wide reform. Ensure that line ministries do not prevent the introduction of effective deregulation measures in the zones.
iii) Further strengthen competition policy.	See Chapter IV.	See Chapter IV.
iv) Take steps to encourage competition in network sectors	See Chapter IV.	See Chapter IV.
v) Eliminate use of supply/demand adjustment mechanisms, which have been used to limit entry	No development.	Supply/demand adjustment mechanisms still act as entry restrictions for port transporters, except at nine major harbours.
III. Promote industrial restructuring and boost technology and innovation		
i) Reduce barriers to exit	The corporate restructuring law (Kaisha kosei) has been revised to accelerate the process by easing the provisions for restructuring and by allowing some flexibility in the restructuring measures. The Industrial Revitalisation Corporation (IRC) was established in April 2003 to promote restructuring of viable firms by purchasing loans from all creditors except for main banks.	The revision to the corporate restructuring law is a step forward. The IRC should impose market discipline in its loan purchases and restructuring efforts in order to avoid moral hazard problems.
ii) Increase emphasis on basic research and improve efficiency of public technology spending	The Strategic Council on Intellectual Property has adopted a comprehensive programme to promote the creation of intellectual property (IP) through giving more incentives to universities, strengthening the protection of IP rights and accelerating the process of approving patent licences.	Make the relationship between industry and academia more open and transparent. Greater efforts have to be made to internationalise universities and to open opportunities for new staff. The process of patenting should be accelerated effectively.

Table 24. **Recommendations for structural reform and assessment of progress** (*cont.*)

Based on previous and current Surveys[1]

Recommendations in 2002 *Survey*	Action taken since the 2002 *Survey*	This *Survey*'s assessment/recommendations
iii) Encourage more start-ups and venture business	Minimum required capital for start-ups has been reduced to 1 yen if certain conditions are satisfied.	Reduce regulatory barriers to entry in goods and service markets as well as in the professions. The special zones for structural reform could be an important step forward to lower entry barriers.
iv) Update the commercial code and facilitate restructuring	The committee-based governance system was adopted by 36 listed companies immediately after its introduction in the new commercial code in April 2003. The government plans to draft a new code for corporate entities by 2005, which will equalise the obligations of corporate board members of firms with committee-based governance systems and those with traditional systems using auditors. To facilitate corporate realignment, the new law will also allow the acquiring firm to pay compensation in the form of cash rather than their shares.	The influence of outsiders should be increased further, not simply by having more outside directors, but also by enforcing shareholders' rights.
IV. Liberalise the agricultural sector		
i) Promote competition and encourage large-scale operation	Joint stock corporations are allowed to engage in agriculture by leasing agricultural land in the approved special zones. A provisional safeguard measure was introduced on beef in August 2003.	The entry of corporations into agriculture should be allowed nation-wide.
ii)		Reduce protection of agricultural sector to benefit Japanese consumers, facilitate Japan's inclusion in regional trade agreements and to boost trade, which will help a number of developing countries.
V. Use market-based instruments to improve environmental outcomes	The recent emphasis of policies to reduce air pollution has been to further cut emissions from vehicular sources. A stricter limit on the sulphur content of diesel fuel will be introduced in 2005.	The use of road pricing, which is under consideration by the government, would reduce congestion as faster traffic flow reduces pollution.
VI. Boost public sector efficiency		
i) Introduce multi-year budgeting and a medium-term fiscal plan	Multi-year budgeting is planned to be introduced in some pilot projects in the FY 2004 budget. The *Medium-term Fiscal and Economic Perspective* has been revised.	The introduction of multi-year budgeting is a step forward. The Perspective should spell out specific policy requirements to guide current and future policy decisions.

Table 24. **Recommendations for structural reform and assessment of progress** (*cont.*)

Based on previous and current Surveys[1]

Recommendations in 2002 *Survey*	Action taken since the 2002 *Survey*	This *Survey*'s assessment/recommendations
ii) Reduce importance of earmarked funds	No progress.	Reduce reliance on earmarked revenues.
iii) Increase use of vouchers and user charges	No progress.	Use more vouchers in job training and vocational education.
iv) Promote greater use of cost-benefit analysis	*Ex ante* cost-benefit analysis has been required for budget requests. Government corporations must provide estimates of future operational costs and financial statements.	*Ex ante* cost-benefit analysis should be based on more realistic assumptions to prevent inefficient infrastructure construction. The estimates of future costs should be used in making policy decisions.
v) Improve the bidding system, especially at the local level	A law which prevents the involvement of government officials in bid-rigging has passed the Diet.	Clear, transparent and non-discriminatory procurement rules should apply to all levels of government. Expand the FTC's responsibilities to include enforcing compliance with competitive tendering requirements and granting it power to declare non-conforming contracts to be null and void.
VII. Reform the pension system		
i) Overhaul the public component to put it on a sustainable basis	Discussions concerning the pension reform planned in 2004 are continuing.	Lower the average level of annual pensions further and earlier than currently programmed, while avoiding sharp increases in contribution rates. Pension and employment income should be taxed in the same fashion.
ii) Ensure the corporate pension system is adequately funded	The government is considering a measure to make defined benefit pensions portable.	Increase the portability of corporate pensions. The solvency of each employee pension fund, using market interest rates to value liabilities, should be examined by the pension regulator. Adequate information on solvency should be sent to all fund members.
VIII. Reform the health care system		
i) Health insurance funds should be integrated to form a larger unit	The government proposes a plan to integrate health insurance funds and to form a unit in each prefecture. It also proposes several options for changing the method of supporting the elderly insurance scheme.	The integration of insurance funds is a welcome step. Consider reducing the scope of insurance for the elderly and supporting poor elderly in a more efficient way.
ii) The payer role of health insurance funds should be strengthened	The service of reviewing bills submitted by doctors, which was monopolised by a public corporation, has been opened to private agents. An increasing number of the bills are submitted in electronic form.	The governance mechanisms of health insurance funds should be strengthened to make management accountable for its performance.

Table 24. **Recommendations for structural reform and assessment of progress** (*cont.*)

Based on previous and current Surveys[1]

Recommendations in 2002 *Survey*	Action taken since the 2002 *Survey*	This *Survey*'s assessment/recommendations
iii) Payment system needs to move further away from fee for service	Inclusive payment type system has been introduced in 82 hospitals with specific functions for hospitalised patients whose illness and injuries correspond to the approved 1 860 diagnostic related groups. The government plans to revise the official fee schedule to reflect the cost of hospitalisation and advanced medical techniques.	Move further towards inclusive payments of various kinds.
iv) Regulatory reform of health service provision is necessary	Joint-stock corporations have been allowed to run hospitals in the approved special zones, though their scope is limited to services not covered by national health insurance. A public institute for hospital evaluation is aiming at assessing 2000 hospitals by FY 2004, with results to be publicly available on its website.	Entry restrictions should be further eased to promote the restructuring of supply. Third-party evaluation of hospitals should be made compulsory.
v) Balance-billing restriction should be eased with prudence.	No progress.	A gradual expansion of the list of allowable services should be envisaged in tandem with the formation of a consensus on the minimum package of socially-financed services, advances in the practice of informed consent and the development of private health insurance.
IX. Increase the flexibility of employment and improve active labour market policies		
i) Allow temporary employment agencies to play a larger role	The ban on having workers from temporary employment agencies (dispatched workers) in manufacturing plants has been lifted. Maximum contract term for dispatched workers has been extended to three years except for those in manufacturing plants.	Liberalise the use of dispatched workers in the remaining areas, notably health care, construction and ports.
ii) Make corporate pensions portable	See the reform in corporate pension.	Reform is important to promote labour mobility.
iii) Permit private job-placement firms to play a more important role	Government approval is no longer been required to establish certain categories of private job-placement agencies. The government is considering a measure to lower the existing income threshold for job seekers, who can be charged by such agencies.	Further relax restrictions on private job-placement agencies and use more private agencies. The exclusion of port and construction workers from their services is not justified.

Table 24. **Recommendations for structural reform and assessment of progress** (*cont.*)

Based on previous and current Surveys[1]

Recommendations in 2002 *Survey*	Action taken since the 2002 *Survey*	This *Survey*'s assessment/recommendations
iv) Evaluate the effectiveness of all active labour market policies	Eligibility conditions for employment subsidies have been eased by accepting applicants not only from public job-placement services but also from private agents.	Need to evaluate the efficiency and effectiveness of the projects using public employment and the improvement in the employability due to training programmes. Subsidies for employment need to be reviewed for displacement effects and dead-weight costs. Ex *post* performance evaluation is poor and needs to be improved.
v)	Conditions for dismissal, which were indicated only by case law, have been spelled out in law.	This increases transparency, though employment protection remains strong and should be reduced.
vi)	The period of fixed-term contract has been extended from one to three years.	This is a welcome step for allowing flexible working arrangements.
X. Increase labour force skills		
i) Improve the quality and availability of training outside of firms	Due to budget constraints, the subsidy for training to individuals contributing to the Employment Insurance System has been cut by limiting the amount and the period of the benefit.	Consider reducing employment subsidies in order to support training, particularly that outside of firms. Making the loan programme for training available to a larger proportion of the labour force should be considered.
ii) Improve the education system	More funds are being allocated to universities that have been selected as a Center of Excellence (COE) to enhance competition in research in higher education.	Monitor how this is implemented and whether selection of CEOs is made at arm's length.
iii)	The entry of joint-stock corporations and NPOs into formal education, together with eased requirements for schools to own land, has been allowed in the approved special structural reform zones.	Extend such deregulations nation-wide.

1. Recommendations related to competition policy and network industries are reported in Table 23.
Source: OECD.

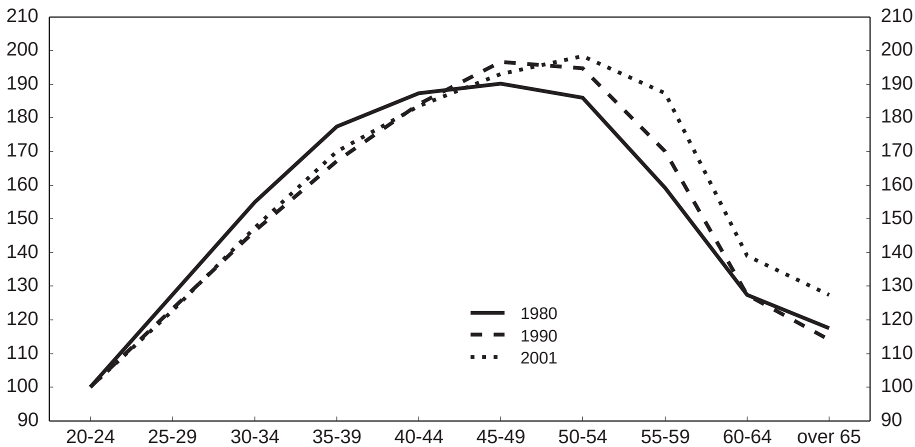
based on age, a lack of information about jobs and the non-portability of corporate pensions have tended to reduce labour mobility. The payment of wages based on age, rather than performance, also discourages the labour force participation of older workers once they reach the mandatory retirement age of 60. In addition, certain aspects of labour market policies contribute to the problems cited above. In particular, strict employment protection for regular workers tends to limit labour flexibility, forcing downsizing firms to curtail recruitment, with a negative impact on younger persons. The need for new employees is increasingly met by temporary workers, whose share of the labour force is increasing despite the limits on fixed-term contracts and the use of workers from temporary employment agencies (dispatched workers). In addition, regulations limiting the operations of private-sector job placement agencies have a negative effect on mobility.

Enhancing labour-market flexibility

The existence of labour markets external to firms helps to enhance flexibility. However, such markets appear underdeveloped in Japan, perhaps as a result of the traditional seniority-based wage system, which tends to discourage workers from changing firms. Indeed, a male employee with thirty years of tenure would lose nearly of a third of his income if he were to move to a different company. There appear to have been a few changes during the past two decades in the age-earnings profile in Japan (Figure 42), which nonetheless remains relatively steep compared to some other OECD countries.[125] The main changes are that the peak wage level occurs five years later – in the 50 to 54-age category – and the fall in wages for older workers is somewhat steeper.

However, Japan's difficult economic conditions have put downward pressure on real wages, which have declined in five of the last six years. Achieving falling real wages in the context of deflation requires cutting nominal wages, which labour unions have accepted in order to limit reductions in employment. Until 2002, this was accomplished primarily through cuts in bonus payments, keeping the annual wage hikes based on years of service off the bargaining table. However, this element of employee compensation, which forms the basis of the seniority-based wage system, will become subject to negotiations in future wage rounds. In sum, the need to reduce nominal wages is putting the seniority-based wage system under increasing pressure, which could accelerate the shift to more performance-based wage systems. Such an approach, according to some observers, is necessary to unleash the hidden talents of Japanese workers. However, a performance-based system requires that workers have clearly defined tasks and that there be an effective evaluation system, thus requiring a major change in management practices. There is evidence that firms that have adopted performance-based pay have wider wage dispersion within age groups and a higher separation rate for young workers (Rebick, 2001). This suggests that linking pay more closely

Figure 42. **The evolution of the age-earnings profile**
20 to 24-age group = 100



Source: Ministry of Health, Labour and Welfare.

to performance tends to increase labour market turnover. However, as noted above, external labour markets are weak in Japan, which may tend to make performance-based pay less attractive. Consequently, the use of performance-based pay is likely to develop in tandem with external labour markets.

Another factor contributing to low labour market flexibility is the high level of employment protection for regular workers, which was ranked as the seventh strictest in the OECD area. While the law was similar to that in the United States – allowing employment at will and firing without cause – case law from the judicial system established restrictions on dismissing workers for economic reasons.[126] As a result, firms had no way of knowing *ex ante* if efforts to rationalise their labour force would be accepted by judges, who were generally sympathetic to workers. To establish more transparency, the Ministry of Health, Labour and Welfare, in response to a request from the Regulatory Reform Committee, has reformed the Labour Standards Law to establish clear and general rules governing dismissals for economic or other reasons. Although the criteria are essentially the same as those established by court cases, the enhanced transparency should help firms and also facilitate any changes in employment protection, which remains restrictive.

Restrictions imposed on the use of temporary workers are another factor that tends to limit labour market flexibility. Until recently, only indefinite contracts or fixed-term contracts of less than one year have been allowed. The maximum length has now been extended to three years and five years in the case of workers over the age of 60. This change also applies to dispatched workers. Moreover, such workers have been allowed to work on one-year contracts in manufacturing plants, although no decision has been reached regarding the other sectors where they remain prohibited, notably health care, construction and ports.

Since labour market flexibility is fostered by information, job-placement agencies have an important role to play. The controls on private agencies have been eased only gradually due to concerns about equity (see 2002 *Survey*). The past year has seen a few more marginal changes, such as allowing entry to specified non-profit agencies on the basis of notification and granting approval for other non-profit and fee-charging firms in one step rather than for each individual office. The proposal by the Council for Regulatory Reform to allow the outsourcing of public employment services to private-sector firms should be implemented. The need for better placement services is illustrated by the fact that the rise in the job offer/job seeker ratio from 0.5 to 0.6 in 2002 was not followed by a decline in unemployment. The problem of mismatch may also suggest the need for better training to develop general human capital that is transferable between firms. Indeed, global competition and the development of a more information-based economy is likely to boost demand for specialised skills. In May 2003, the scheme that allowed participants in the Employment Insurance System to draw up to 300 000 yen to cover 80 per cent of training costs was scaled back to 200 000 to cover 40 per cent and the number of eligible courses was reduced. The downsizing reflects the fact that the high rate of unemployment has reduced the available resources for training. Unfortunately, this programme continues to exclude people outside the Employment Insurance System, such as new graduates. Rather than a subsidy limited to a subset of the labour force, it would be better to make loans available to finance training for a broader range of people. Moreover, the long-term training necessary to obtain specialised skills would be better supported by a loan programme than by the relatively small subsidy now offered.

These factors suggest devoting greater resources for training, which could be financed by reducing subsidies for employment. Indeed, Japan spends more than twice as much on subsidies as on training. Approximately 125 000 persons were included in such schemes, a figure far lower than envisioned (Table 25). However, low participation may be desirable, given that the dead-weight costs associated with wage subsidies tend to be high, reaching 90 per cent in some other OECD countries (Martin, 2000). However, no assessment of these schemes has been conducted in Japan. It is essential to determine their effectiveness, given the growing resources devoted to wage subsidies.

Table 25. **Grants for private-sector employment remain underutilised**

Measures	Budget and targeted increase in jobs	Actual results	Ratio of target achieved
Special grants for creating employment in the "New and Growth Sectors"	Approx. ¥109 billion, 168 000 jobs (August 1999 to March 2005)	81 000 people (subsidies applied for: 91 000) (August 1999 to January 2003)	Ratio to targeted numbers: 48.2%
Special emergency grants for job creation	Approx. ¥27 billion,73 000 jobs (January 1999 to March 2005)	24 000 people (subsidies applied for: 28 000) (January 1999 to January 2003)	Ratio to targeted numbers: 32.9%
Special subsidies for the transfer of human resources[1]	Approx. ¥7.6 billion, 106 000 jobs (January 1999 to October 2002)	20 000 people (January 1999 to October 2002)	Ratio to targeted numbers: 18.9%

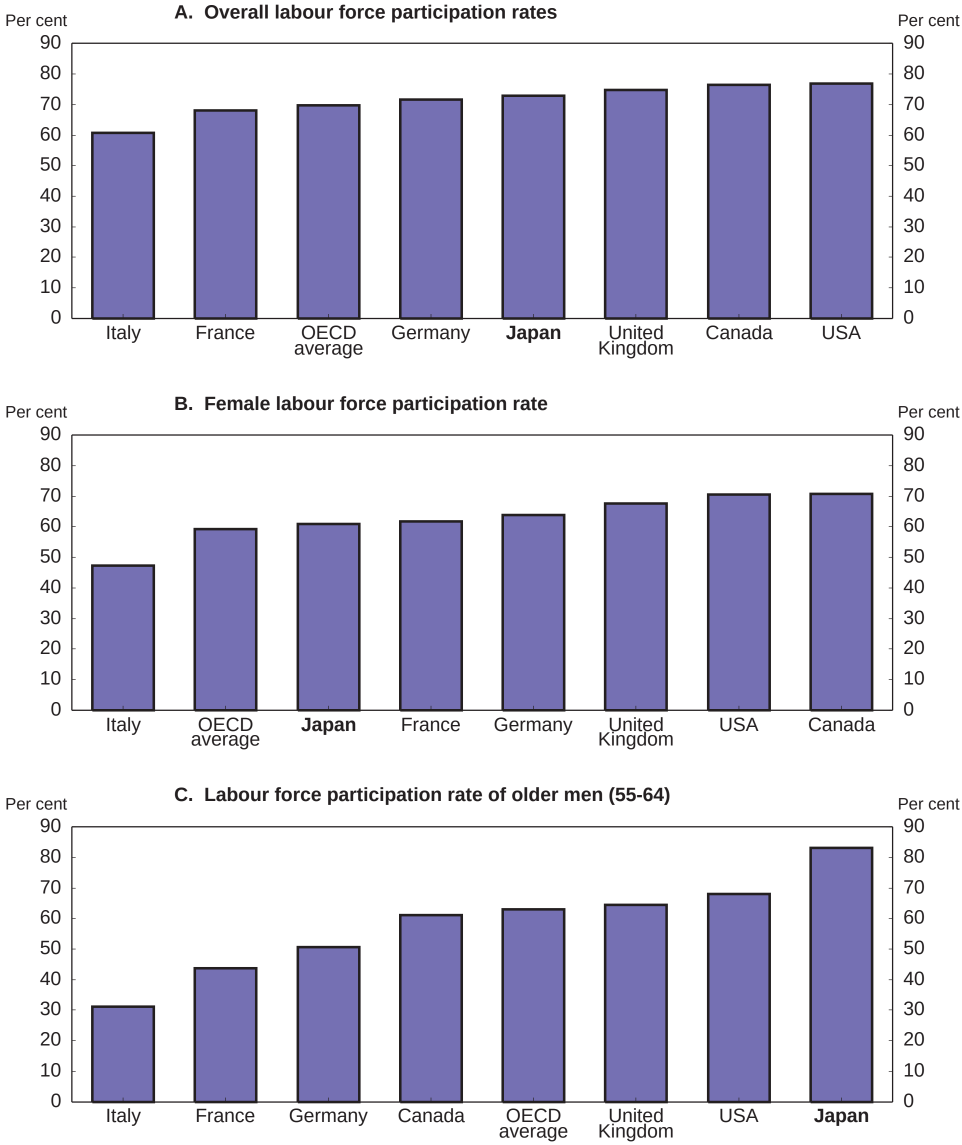
1. This scheme was terminated in October 2002.
Source: Ministry of Health, Labour and Welfare.

Encouraging labour force participation

Japan's labour force participation rate is several percentage points above the OECD average and on a slight upward trend, increasing from 71.5 per cent in 1995 to 73 per cent in mid-2003 (Figure 43). However, given that Japan is one of only five OECD countries with a declining working-age population, maintaining or boosting participation rates is a priority. The two population groups identified as potential sources of additional labour supply are women and older men (see 2002 *Survey*). Although the rate for women is slightly above the OECD average (Panel B), it is well below some other high-income countries, largely because of relatively low participation by prime-age women (aged 25 to 49). The introduction of long-term care insurance in 2000 has already had a positive impact on female participation, by facilitating the hiring of outside help to reduce the burden of caring for elderly relatives. This can be further helped by the government's plans to increase nursery facilities, though additional efforts to create family-friendly policies are necessary.[127] Moreover, the exemptions from contributions to the pension and health insurance systems up to a threshold number of hours and earnings encourage women to work part-time.[128] The exemption from contributions to the pension system for those working part-time is under review as part of the pension reform.

As for men in the 55 to 64 age group, the participation rate is well above the OECD average (Panel C). However, the rate falls off sharply from 93 per cent for the 55 to 59 age category to 72 per cent for the 60 to 64 age group, reflecting the fact that 60 is the mandatory retirement age in 90 per cent of firms with such limits.

Figure 43. **Labour force participation rates**
2001[1]



1. The data for Japan is for 2003.
Source: OECD and Statistics Bureau.

After age 60, workers must take significant pay cuts to remain employed and the nature of work often changes. This implies that the job assignments and wages of older workers prior to mandatory retirement do not match their abilities. It is important that employment practices, including the wage system, better reflect productivity to make better use of older workers. In addition, the sudden and sharp fall in wages after mandatory retirement make unemployment benefits – which provide 45 to 80 per cent of the final wage – an attractive option. However, the reduction of the benefit period from 300 days to 180 days reduces the incentive for taking this route to retirement. In addition to changing employment practices and the wage system, reducing employment protection for regular workers would encourage firms to boost their retirement age in line with the hike in the eligibility age for public pensions from 60 to 65 years.

Under-employment of young adults

With the prolonged period of low economic growth, labour market conditions for young adults aged 15 to 34 have deteriorated markedly over the past decade. In addition to a higher level of unemployment, the number of so-called "freeters", defined as young adults engaging in temporary work, has increased from 1.8 million to 4.2 million (21 per cent of the age cohort) between 1990 and 2001. The increase in unemployed youth and the number of freeters largely reflects intensified restructuring efforts by firms, which tend to reduce new recruitment rather than dismiss existing workers, and to accelerate the replacement of regular employees with temporary workers. With job opportunities significantly reduced, a growing proportion of youth accept temporary jobs while searching for good jobs. However, for young people who remain in temporary work or unemployed for extended periods, access to primary job markets is restricted because their human capital often diminishes in the absence of good working experiences. The limited access to job training and the absence of a public loan scheme for such training also exacerbates the problem. Consequently, the probability of exit from unemployment for those unemployed for one month dropped from 32.1 per cent to 19.6 per cent between 1990 and 2001, while the exit rate for those unemployed for more than two years increased from 5.7 per cent to 10.8 per cent. The youth under-employment problem also raises equity concerns as they have limited access to the social security system, including unemployment benefits and private pension schemes. To address this issue, the government has adopted measures to improve the transfer from school to work, to strengthen the role of the public employment service and to improve opportunities for training. Specifically, the government provides subsidies to firms that hire youth as apprentices for trial periods, although this has not been widely adopted by firms. Job counselling capacity at the public employment service has been expanded, while enhancing co-ordination with training. The government is also establishing advanced vocational training courses at colleges. Such policies point in the right direction and should be developed further.

Regulatory reform

The regulatory reform movement is driven by the Council for Regulatory Reform (CRR), which was established in the Cabinet Office in 2001. It consists of 15 private-sector experts designated by the Prime Minister, who are organised into 13 working groups. In case of disagreements, the members of the Council, as well as the minister responsible for the Council, negotiate directly with the relevant ministries. The CRR's "Action Plan for Deregulation" in February 2003 focused largely on social welfare issues, such as health care, education and labour, as well as agriculture (Table 26). The focus on so-called "social regulations" reflects progress in reducing economic regulations, such as demand-supply balancing provisions controlling entry, and the fact that these social regulations can significantly reduce business opportunities.

After negotiations with the relevant ministry, the original recommendations of the CRR were modified in many cases in the report of the CEFP. For example, the CRR's proposal that the sale of high-demand general medications should be allowed in some retail outlets in addition to pharmacies is to be left to the judgement of the Ministry of Health, Labour and Welfare, which argues that this poses a threat to public health. Other recommendations were delayed, such as the proposal to allow joint nursery schools and kindergartens, which will not be considered at present. In other areas, the outcome is uncertain. For example, the rules governing the establishment of new tertiary educational institutions will remain unchanged but will be applied more flexibly. Perhaps the most significant development was the willingness of some ministries to allow reforms in "special structural reform zones" (see below) while delaying any decision on nation-wide reform.

The somewhat disappointing results reflect the difficulty that an advisory institution consisting of private-sector experts like the CRR faces in persuading powerful government ministries to change their policies. This suggests that the CRR, following the end of its mandate in March 2004, should be succeeded by a stronger institution with formal legal power drawn from a basic law on regulatory reform. Moreover, the burden of proof should be on the ministries to explain why a proposed reform should not be accepted. Finally, the institution responsible for regulatory reform should have the power to screen newly proposed regulations.

Special structural reform zones

The realisation that regulatory reform measures in many sectors are not being implemented as planned led to the decision to allow the establishment of special zones as proposed by the CRR. The objective is to relax regulations in specific regions in order to remove obstacles to growth. In contrast to the typical pattern of relying on central government initiatives for reform, the special zones depend on the initiatives of local governments and private firms, which are better

Table 26. **Regulatory reform**

Recommendations by Council for Regulatory Reform[1]	Decision by Council on Economic and Fiscal Policy[2]
I. Health care	
Allow sales of certain drugs at general retail stores	Ministry of Health, Labour and Welfare will draw up a list of products after safety checks
Allow entry of joint-stock companies into hospital management	Results in special structural reform zones will be reviewed
Allow entry of joint-stock companies into the nursing home business	Results in special structural reform zones will be reviewed
Allow hospitals offering treatment covered by public health insurance to provide non-covered services	Only "state of the art" treatment is allowed along side covered treatment
II. Education	
Allow entry of joint-stock companies into school management	Government panel to review this issue
Allow the unification of nursery schools and kindergartens	To be considered by FY 2006 as part of a new system for child rearing
Liberalise rules on establishing new colleges and universities	Issue to be dealt with in a flexible manner under existing legal framework
III. Agriculture	
Allow joint-stock companies to operate farms nation-wide	Results in special structural reform zones will be reviewed
Allow joint-stock companies to own farms	Restrictions on corporations in agriculture to be relaxed
IV. Labour	
Review the role of the public employment service	Allow more outsourcing of job-placement services to the private sector
Allow dispatched workers in the health care field	Such workers are allowed on condition that hospitals pre-screen candidates
V. Other	
Deregulate floor area ratio standards in high-rise apartments	Issue to be dealt with in a flexible manner under existing legal framework

1. These recommendations were initially announced in the Action Plan for Deregulation in February 2003.
2. Established by the new government in 2001. It is chaired by the prime minister and includes several senior ministers. These guidelines for regulatory reform were included in the economic management programme for 2003 released in June.

Source: Cabinet Office.

placed to identify precisely the problems that limit growth.[129] These zones allow social experiments in limited geographical areas, thus establishing the principle that regulations are allowed to vary between regions based on local characteristics. This has the potential to promote the development of clusters of businesses within zones. Although reducing regulations in special zones is a second-best approach relative to nation-wide reform, competition between regions should ensure that successful reforms spread to other areas anxious to realise the same benefits. Moreover, the central government will evaluate the results in special zones and then decide whether they should be extended nation-wide. In sum, the authorities hope that the special zones act as a trigger to accelerate regulatory reform across Japan.

The creation of special zones was allowed beginning in April 2003, following the passage of legislation at the end of 2002. The process is initiated by local authorities, who submit proposals to the Headquarters for Special Zones for Structural Reform, where they are examined by committees that include private-sector experts. Proposals accepted by the Headquarters must then gain the approval of the relevant ministry.[130] It is encouraging that some ministries have shown a willingness to allow certain reforms in limited areas, even though they reject their introduction on a nation-wide basis. The discussion with the relevant ministry is open to the public, thus putting pressure on special interest groups that oppose the creation of special zones. This process has also added transparency to the regulatory framework since it has been revealed that some of the requests from local authorities were already permitted. Once a proposal is approved, other local governments are allowed to adopt it as well, as long as they notify the authorities and agree to accept responsibility for the results. Rejected proposals can be resubmitted to the government, thus initiating a consultative process. The creation of special zones does not involve government subsidies or tax concessions.

A total of 117 special zones were approved in April and May, with an additional 47 in August (Table 27). One of the most popular categories has been the promotion of links between business and academia. A special zone in Sendai,

Table 27. **Special zones for structural reform**
Number of proposals accepted

Proposals by topic	First round		Second round	Total
	April	May		
International transport	11	4	0	15
Business-academic links	17	8	8	33
Revitalisation of industry	6	7	0	13
IT-related	2	2	0	4
Agriculture	5	9	2	16
Links between urban and rural areas	6	8	7	21
Education	3	14	16	33
Childcare	4	2	5	11
Social welfare	6	7	6	19
Environment	0	0	3	3
Total	**57**	**60**	**47**	**164**

Source: Headquarters for Special Zones for Structural Reform.

for example, allows private companies to use the facilities of national universities. Some of the zones authorise new types of businesses, such as the production of ethanol from cotton for use as automotive fuel. The success of the firm beginning this activity will depend on how quickly this liberalisation is extended nation-wide. Many of the proposals accepted thus far relate to social welfare, such as allowing joint-stock companies to run hospitals and open schools in special zones.

Agricultural special zones, in which joint-stock companies have been allowed to engage in farming on agricultural land leased from municipalities, are also popular, with 16 created thus far.[131] The Ministry of Agriculture, Forestry and Fisheries allowed this proposal in the hope of improving the efficiency of the agricultural sector and reducing the amount of idle farmland. According to one survey, unused farmland increased by 50 per cent between 1995 and 2000, to account for about 10 per cent of total arable land. A number of companies, including food stores and restaurant chains, have already leased farmland in the zones, although some have complained that the type of land that they want is not available in the zones. The cancellation of contracts requires the approval of prefectural governments. Farm groups predictably oppose this liberalisation and the ban on allowing joint-stock companies to purchase agricultural land remains in force. Nevertheless, the government has announced that it would consider extending the right of joint-stock companies to lease land throughout the country by the end of 2004, demonstrating the potential for special zones to trigger nation-wide reform.

Openness to international competition

The Japanese economy is surprisingly closed even after taking into account transportation costs and per capita income (Figure 33). This may reflect the fact that, except for the Free Trade Agreement (FTA) with Singapore that went into effect in November 2002, Japan has not been included in the surge of regional trade agreements. The disadvantage for Japanese firms is illustrated by the case of Mexico, an important trading country that has FTAs with 31 countries. As a result, imports from the United States and Canada enter duty free, while duties on EU goods will be eliminated in 2007. In contrast, Japanese products face a 16 per cent average tariff, resulting in a significant negative effect on exports.[132] While the multilateral approach under the World Trade Organisation (WTO) remains the priority, FTAs are an important secondary strategy to achieve liberalisation beyond the levels possible under the WTO.

Building on the agreement reached with Singapore last year, the Prime Minister has made FTAs an important strategy complementing multilateral trade liberalisation under the WTO. The immediate objective is to conclude, in substance, FTA negotiations with Mexico, which were launched in the fall of 2002. In addition, Japan has been having discussions with Thailand, the Philippines, Malaysia, Korea and Indonesia. Japan has also been working with ASEAN, which

Table 28. **International comparison of average tariff rates**

	Average in per cent
Japan	2.9
United States	3.6
European Union	4.1
China	10.0
Malaysia	14.5
Korea	16.1
Philippines	25.6
Thailand	25.8
Indonesia	37.5

Source: WTO.

will be a building block to an Asian Free Trade Area. Such agreements are intended to draw on the economic dynamism of Asian countries, which tend to have high tariff rates (Table 28) to help revitalise the Japanese economy. However, there are some stumbling blocks, including agriculture, to Japanese participation in FTAs, creating the risk that Japan will be excluded from regional integration, even though some FTAs exclude sensitive products. In the case of Thailand, the demand to remove tariffs on all agricultural products has prevented the launching of negotiations to create a FTA. Strong political leadership will be required to realise the potential gains from regional trade agreements.[133]

The stock of foreign direct investment (FDI) in Japan is also exceptionally low at about 1 per cent of GDP as compared to more than 10 per cent in a majority of OECD countries (Figure 34). From a record high of 3.1 trillion yen in FY 2000, FDI on a notification basis fell 30 per cent in FY 2001 and remained flat in FY 2002. The decline reflected a general decline in FDI flows in the OECD area since 2000 and the recession in Japan in 2001. However, given that attracting more foreign investors was a key part of the new government's economic plan, the decline was disappointing. Nevertheless, the stock of FDI has increased substantially from 5.8 trillion yen in 2000 to 9.4 trillion yen in 2002.

The government has set an objective of doubling the stock of FDI in Japan over a five-year period. To meet that goal, it has drawn up an action plan that covers 74 items in the following categories:

- Expand the dissemination of information about investment opportunities.
- Improve the legal and business environment, such as lifting the ban on equity swaps between Japanese and foreign companies.
- Reform administrative processes, such as making them available electronically.

– Ease restrictions on employment to allow a greater inflow of foreign technicians and managers.
– Bolster co-operation and co-ordination between local and central governments.

While such measures should have a positive impact, the fundamental obstacles to foreign investment will be difficult to overcome. *First*, perhaps most daunting is the task of improving the general business environment, which tends to discourage potential foreign investors. *Second*, the generally wary attitude toward FDI at the local level will need to change for Japan to compete with countries that are actively competing for foreign investment. *Third*, stronger economic growth demonstrating the potential gains from investment in Japan is essential.

Sustainable development in Japan

There is growing concern in OECD countries that long-run sustainable development may be compromised unless measures are taken to achieve balance between economic, environmental and social outcomes. This section looks at two specific issues that are of particular importance for Japan: reducing air pollution and helping developing countries to improve living standards.[134] In each case, indicators are presented to measure progress and the evolution of potential problems, and an assessment is made of relevant government policies. The section also considers whether institutional arrangements are in place to integrate policy-making across the environmental aspects of sustainable development (see Box 8).

Air pollution

Main issues

In addition to damaging ecosystems and buildings, air pollution is a threat to health and quality of life. Substantial gains have been made in the control of emissions of air pollutants in Japan. However, atmospheric concentrations of pollutants, which are more important for public health, remain above the average for the OECD area and the challenge is to improve air quality with cost-efficient methods using more economic instruments.

Performance

The geographically concentrated nature of economic activity has resulted in poor air quality in a number of areas, despite an impressive reduction in emission intensities. Although concentrations of sulphur dioxide in the air in Tokyo were well below national environmental quality standards in 1996, they were above the concentrations in continental Europe and much the same as in London and New York. For nitrogen oxides, concentrations in Tokyo were above those in other major metropolitan areas suffering from air pollution such as Los Angeles, Athens

Box 8. The integration of policies across environmental aspects of sustainable development*

The principal framework for the integration of environmental policies with other policies is contained in the revised Basic Environmental Plan, issued in December 2000. All ministries agree to shape their policies in accordance with this plan. In addition, the Basic Plan requires each ministry to establish a "Policy for Environmental Consideration". For example, in the "Infrastructure Priority Plan", particular attention was paid to environmental protection. An inter-ministerial conference has been established to exchange information and consult on the relevant issues. The Central Environmental Council monitors progress towards achieving the goals of the plan of each ministry and those of the overall revised basic plan.

At the project level, a new Environmental Impact Law was introduced in 1997. It stipulates that the largest projects will automatically be subject to an environmental impact study, but smaller projects will be screened to see if a study is needed. Major projects financed by the Ministry of Land, Infrastructure and Transport and the Ministry of Agriculture, Forestry and Fisheries are subject to cost-benefit analysis. While in principal such studies should include environmental damages and pollution, they are often ignored for road projects because of the concern that to admit possible damage and place a pecuniary valuation on it would create demands for indemnification (Fukanuma, 1997). Moreover, studies generally use domestic market prices, which are distorted by policy and thus give misleading results, especially when applied to projects of the Ministry of Agriculture, Forestry and Fisheries, which had the second largest public works budget in the late 1990s.

* The sections in this report, dealing with air pollution, helping developing countries achieve sustainable growth and retirement income policies (included in Chapter III), are inputs into the Organisation's follow up on Sustainable Development as mandated by the Ministerial Council decision in May 2001.

and Seoul. Moreover, the number of days when ozone concentrations were above the levels set in environmental quality regulations did not fall in the 1990s. Such results have occurred despite emission intensities for sulphur dioxide and nitrogen dioxide being only one-fifth and one-quarter, respectively, of those in the OECD area (Table 29). The electricity industry's emissions per kilowatt-hour of electricity generated are only 5 to 15 per cent of the levels found in countries such as the United States, Canada, Germany, the United Kingdom and Italy (Higuchi, 2001). Nevertheless, the level of particulates in the air has been declining only slowly. In 1998, only a small proportion of the roadside monitoring stations recorded pollution levels below the environmental quality standard – 3 per cent in the Tokyo Metropolitan area and 30 per cent in the Kansai area (Tanaka, 2002).

Table 29. **Main indicators: air pollution**

	Change in emissions per unit of GDP, 1990-99[1]			Level of emissions, 1999[2]			Improvement in productive efficiency, 1990-1999	
	Sulphur dioxide	Nitrogen dioxide	VOCs	Sulphur dioxide	Nitrogen dioxide	VOCs	Sulphur dioxide per unit of electricity output	Nitrogen dioxide per vehicle
	Per cent per year			Grams per dollar of GDP				
Australia	3.1	–1.9	–2.9	3.9	5.5	4.1	n.a.	n.a.
Austria	–10.2	–3.5	–6.5	0.2	0.9	1.2	–77.2	–32.5
Belgium	–9.2	–3.6	–4.8	0.8	1.2	1.1	–64.4	–22.6
Canada	–5.3	–2.8	–2.9	3.2	2.6	3.5	n.a.	n.a.
Czech Republic	–19.1	–6.6	–5.7	2.1	3.0	1.9	n.a.	**n.a.**
Denmark	–14.2	–4.9	–5.2	0.4	1.6	1.0	–79.8	–38.9
Finland	–13.0	–3.8	–4.1	0.7	2.1	1.4	–65.3	–28.7
France	–8.3	–3.8	–5.1	0.5	1.2	1.4	–52.0	–37.8
Germany	–20.1	–7.1	–8.8	0.4	0.9	0.9	–85.2	–43.7
Greece	–1.4	–0.3	–0.2	3.6	2.5	2.6	–4.6	–22.3
Hungary	–6.1	–1.1	–3.8	5.5	2.1	1.4	n.a.	n.a.
Iceland	–1.1	–1.7	–4.9	3.7	3.9	1.4	n.a.	n.a.
Ireland	–8.1	–6.3	–7.9	1.7	1.3	1.0	–35.8	–19.0
Italy	–7.6	–4.3	–4.4	0.8	1.2	1.4	–52.8	–31.3
Japan	**–1.7**	**–1.3**	**–2.4**	**0.3**	**0.5**	**0.6**	**n.a.**	**n.a.**
Korea	–8.9	–3.3	–9.7	1.6	1.9	0.2	n.a.	n.a.
Luxembourg	–18.7	–9.1	–7.9	0.2	0.9	0.9	n.a.	n.a.
Mexico	–0.4	–0.9	–9.3	1.6	1.6	1.4	n.a.	n.a.
Netherlands	–10.1	–6.5	–8.8	0.3	1.1	0.7	–50.2	
New Zealand	–0.4	–0.5	–1.6	0.7	3.0	2.6	n.a.	n.a.
Norway	–9.7	–2.8	–1.8	0.2	2.0	3.0	n.a.	n.a.
Poland	–10.0	–6.6	–4.8	5.1	2.8	2.2	n.a.	n.a.
Portugal	–2.1	–0.9	0.1	2.4	2.3	3.1	–17.7	–18.3[3]
Slovak Republic	–13.7	–7.4	–5.6	3.3	2.4	2.0	n.a.	n.a.
Spain	–5.8	–2.1	–3.5	2.2	1.7	3.6	–39.4	–14.4
Sweden	–8.3	–4.3	–3.9	0.3	1.3	2.1	–26.0	
Switzerland	–6.0	–5.4	–6.3	0.1	0.5	0.9	n.a.	n.a.
Turkey	3.2	1.0	0.0	3.4	2.3	1.6	n.a.	n.a.
United Kingdom	–13.9	–7.9	–6.6	1.0	1.3	1.4	–72.8	–51.0
United States	–5.5	–2.5	–4.7	2.0	2.7	1.9	n.a.	n.a.
European Union	–11.1	–5.0	–5.3	0.8	1.2	1.5		
OECD Europe	–10.1	–4.8	–5.0	1.2	1.4	1.5		
OECD	–6.7	–2.9	–4.4	1.5	1.9	1.6		

Note: For countries with missing data for either 1990 or 1999, data for the latest year has been substituted to calculate the OECD average. Estimated data for 1999 represents about 5 per cent of the area total. GDP is measured in 1995 prices. Cross-country aggregations use 1995 purchasing power parity exchange rates.

1. Australia: 1995-99 for sulphur dioxide; New Zealand: 1990-98; Mexico: 1994-98 for sulphur dioxide and VOCs and 1990-98 for nitrogen dioxide; Slovakia: 1990-98 for sulphur dioxide and nitrogen dioxide and 1990-97 for VOCs.
2. 1998 for Mexico, New Zealand and sulphur dioxide and nitrogen dioxide in Slovakia; 1997 for VOCs in Slovakia.
3. Between 1990 and 1997 for Portugal.

Source: Cooperative Programme for Monitoring and Evaluating of Long-Range Transmission of Air Pollutants in Europe (EMEP); World Health Organisation; OECD.

Policy

Much of the poor performance on particulate pollution has been linked to a reluctance to reduce the sulphur content of diesel sufficiently to make possible the use of particulate filters. As recently as 1997, the limit on the sulphur content of diesel fuel was 500 ppm and it was possible to sell diesel fuel mixed with heavy fuel oil – a particularly polluting fuel. The recent emphasis of government policy has been to obtain further reductions in emissions from vehicular sources. In part, this may have stemmed from the growing success of citizen groups using class-action suits to win significant compensation in the courts from central and local governments for failing to ensure adequate protection to public health from traffic pollution, notably from particles. The limit on sulphur content is now being reduced and will drop to 50 ppm in 2005, with the Central Environmental Council recommending that there should be a further decline to 10 ppm by 2007. If implemented, by that date, diesel fuel would be cleaner than in the United States and Europe.

The government also speeded up the introduction of new emissions standards. For gasoline-fuelled vehicles, these will be the same as prospective US limits but stricter than in Europe. However, for heavy-duty diesel vehicles, the new standards for particulates are less severe than those that will be introduced in the United States in 2007. Further progress in Japan will require the introduction of ultra-clean diesel fuel. Before 2001, emission standards for existing vehicles concerned only NO_X, and so the government introduced legislation, in 2001, to limit the particulate emissions of existing vehicles in major urban areas. As from October 2003, vehicles that exceed the legislated limit will not be allowed to register in major urban areas. In addition, oil companies started to supply low-sulphur fuel nation-wide, on a voluntary basis, in April 2003. In a further move, from October 2003, the Tokyo Metropolitan government has banned diesel vehicles that do not conform to local emission limits from driving in the greater Tokyo area. This regulatory approach in major urban areas was coupled with a nation-wide change in vehicle taxation. As from 2001, the vehicle tax for older vehicles (11 years old for diesels and 13 years old for gasoline vehicles) was raised by 10 per cent. The tax for vehicles that were certified to have both low emissions and low fuel consumption was reduced by 50 per cent. In addition, vehicles fuelled by alternative power sources (electricity, natural gas, methanol and hybrid vehicles) were eligible for a 50 per cent reduction in the vehicle tax.

There is less of a problem concerning fixed point sources of air pollutants. Controls have been rigorous, especially for larger plants. The Air Pollution Control Act mandates the use of best available technology. In the electricity sector, this has resulted in nearly all coal-fired power stations being equipped with recent technology, in contrast to Europe and the United States where a large fraction of plants are not equipped with advanced pollution control (Smith, 2001). The systematic use of best technology and retrofitting of existing plants is estimated to have raised the cost of electricity generated from coal by 19 per cent (Wu, 2001). While no estimates of the benefits from avoiding air pollution from coal power plants are available, European estimates suggest that such costs are likely to be less than the benefits. Large manufacturing plants are also subject to these limits and regular inspections are made to ensure that the standards are being met. Some limited attempts have been made to use economic instruments by favouring a number of pollution control technologies.

Conclusions

For stationary sources of pollution, further reductions in emissions should be achieved by using cost-efficient economic instruments. Further use of economic instruments to reduce pollution from transport was envisaged in a government report in 1999 and a number of steps have been taken in this direction, notably the linking of the vehicle tax to pollution characteristics. A further move in the direction of using economic instruments would give marked incentives to lower pollution, and might be particularly useful in reducing emissions of fixed point sources at a lower cost. The use of road pricing is being considered by the Central Environmental Council and could have environmental benefits as reduced congestion could result in less pollution. With vehicle monitoring possibilities becoming more sophisticated, it should be possible in the future to charge for all roads and not just toll roads, so avoiding traffic diversion. In addition, road pricing could take into account the pollution characteristics of vehicles using data from vehicle inspections. Road pricing should thus be explored actively. More immediate improvements are likely to stem from increased regulatory action, where further reductions in truck emissions limits might be considered and the move to ultra clean diesel fuel should be implemented quickly.

Helping developing countries to achieve sustainable growth

Main issues

A reduction in poverty in the non-OECD area will contribute to the achievement of globally sustainable development. Although developing countries themselves have the major responsibility to improve their living standards, trade and aid policies of OECD countries can help to reduce poverty in developing countries. For Japan, the challenge is to orient its trade and assistance polices towards enabling the rural areas in developing countries to benefit from integration into the world economy, in the same way that its policies have benefited large parts of the urban population in Asian developing countries.

Performance

The Japanese economy has become markedly more open to trade with developing countries over the past decade. Imports from these countries were

Table 30. **Imports of non-energy goods from developing countries**

	All developing countries		Least-developed countries	Other low-income countries	Lower-middle income countries	Upper-middle income countries
	US$ millions	Per cent of GDP	Per cent of GDP			
Australia	11 935	3.24	0.03	1.92	0.69	0.60
Canada	17 174	2.47	0.04	1.45	0.52	0.47
Czech Republic	2 569	4.49	0.06	2.39	0.77	1.28
Hungary	3 329	6.42	0.07	3.15	1.34	1.87
Iceland	204	2.69	0.03	1.14	0.66	0.87
Japan	**106 624**	**2.55**	**0.02**	**1.64**	**0.52**	**0.38**
Korea	25 848	6.12	0.03	3.62	1.14	1.33
Mexico	6 526	1.06	0.00	0.16	0.22	0.68
New Zealand	2 066	4.09	0.03	2.41	0.93	0.72
Norway	2 803	1.67	0.07	0.82	0.36	0.42
Poland	4 179	2.37	0.09	1.25	0.40	0.63
Slovak Republic	667	3.26	0.02	1.63	0.58	1.03
Switzerland	4 266	1.74	0.04	0.82	0.47	0.42
Turkey	4 469	3.07	0.04	1.38	1.08	0.57
United States	234 573	2.33	0.05	1.28	0.53	0.47
European Union	226 504	2.86	0.14	1.28	0.72	0.71
OECD	653 736	2.59	0.07	1.37	0.60	0.56

Source: OECD International Trade Database.

equivalent to more than 2.5 per cent of GDP in 2001, with the market penetration doubling in the previous decade (Table 30). Such an increase is the reflection of Japan's growing integration with countries in South-east Asia and China. The growth of manufacturing imports from these countries has been particularly rapid, noticeably for textiles and clothing, where imports from low-income developing countries now represent three-quarters of total imports in this category (Table 31). Food imports from developing countries are also significant, especially from the least developed countries, and are equivalent to one-fifth of the value added in the agricultural and fishing sectors in Japan, with fish representing the largest commodity grouping. Overall, imports from developing countries, relative to GDP, are slightly above those in the United States but below those in the European Union.

In contrast to its mid-ranking position in trade, Japan was the largest official development assistance (ODA) donor in the 1990s in terms of the absolute level of aid. However, net disbursement started to decline in 2001, and government budgets for 2002 and 2003 brought further cuts, bringing aid spending to its lowest level for a decade. By 2002, development assistance represented 0.23 per cent of Gross National Income compared to 0.22 per cent for all members of the Development Assistance Committee of the OECD. Almost 17 per cent of bilateral

Table 31. **Japanese non-energy imports from developing countries**

Per cent of total imports in 2001

	Low-income countries		Middle-income countries		All developing countries	Rest of world	World	Annual nominal growth, 1991-2001
	Least developed	Other	Lower	Upper				
By commodity								
Food and beverages	0.7	19.2	10.0	4.7	34.6	65.4	100	–4.3
Raw materials[1]	0.4	16.6	9.2	14.7	40.9	59.1	100	–1.1
Textiles and clothing	0.5	76.9	2.5	1.0	80.9	19.1	100	13.3
Other manufacturing	0.1	19.2	8.0	5.4	32.7	67.3	100	14.2
Total	0.2	24.6	7.9	5.7	38.3	61.7	100	9.6
By area								
Food and beverages	47.7	12.1	19.7	13.0	23.1			
Raw materials[1]	14.4	5.6	9.7	21.5	12.8			
Textiles and clothing	20.0	30.3	3.0	1.8	13.8			
Other manufacturing	18.0	52.0	67.6	63.8	50.3			
Total	100.0	100.0	100.0	100.0	100.0			

1. Except energy products.
Source: OECD International Trade Database.

aid was tied in 2002.[135] Japan's bilateral ODA spending has been concentrated on Asian developing countries (55 per cent), especially members of the ASEAN group and China (32 per cent). Such an emphasis has led to a relatively low proportion of aid being directed to the Least Developed Countries (16 per cent) relative to the flow from members of DAC (26 per cent). The structure of outlays is oriented towards loan finance of major infrastructure projects (including a number of small-scale rural projects), with more than half of all loans being in this category (Table 32), against less than 10 per cent in other countries.[136] The annual gross inflow of Japanese ODA loans into six Asian countries (China, Indonesia, Malaysia, Philippines, Thailand and Vietnam) amounted to around 0.6 per cent of the capital stock of these countries in the 1990s (Kawasaki, 2002).

Policy

In the manufacturing sector, trade policy has maintained an open stance (Table 33). The principal exception to this general pattern is concentrated in the textile and footwear sector where tariffs and tariff equivalents of quotas remain high and well above those in Europe and the United States. Moreover, tariff peaks for these products are much more pronounced than in other major countries. For other manufactured goods, the stance of policy is reversed, with the average tariff being lower than for the European Union and the United States and the impact of tariff peaks being less than in other major trading countries. Anti-dumping measures are used less than in other major trading countries and the duties applied are

Table 32. **Structure of Japan's Official Development Assistance**
Per cent of total ODA in 2000

	Grant aid	Technical co-operation	Loans (gross)	Total
Social infrastructure	3.0	9.3	12.5	24.8
Education	1.0	5.4	0.0	6.4
Health	1.0	1.2	0.0	2.2
Water supply and sanitation	0.7	0.6	12.2	13.5
Other social infrastructure	0.3	2.1	0.4	2.8
Economic infrastructure	2.7	1.8	27.2	31.7
Transport and storage	2.4	0.7	19.6	22.7
Energy	0.2	0.3	5.6	6.0
Other economic infrastructure	0.1	0.9	2.0	3.0
Production sectors	2.3	4.4	1.7	8.4
Agriculture, forestry, fisheries	2.3	2.4	1.5	6.2
Other production sectors	0.0	2.0	0.2	2.2
Multisector assistance	0.2	0.7	5.1	6.0
Subtotal of above	8.1	16.3	46.6	70.9
Other	5.3	10.9	12.9	29.1
Total	**13.4**	**27.1**	**59.5**	**100.0**
Total (per cent of GDP)	0.04	0.08	0.17	0.29

Source: Ministry of Foreign Affairs, *Japan's Official Development Assistance* 2001.

lower than elsewhere (Bouët *et al.*, 2001). There is little geographic dispersion in the tariffs, given the absence of regional or bilateral preferential trading agreements until recently.

Japan grants significant tariff concessions to developing countries. In 1999, its Generalised System of Preferences (GSP) for developing countries reduced the average most favoured nation (MFN) tariff by 2 percentage points (Table 33), but the extent of this concession is often limited by quotas. In many cases, these quotas have not been completely filled, perhaps reflecting the cost of complying with rule of origin regulations relative to the gain from entering at a tariff rate lower than the MFN rate. The regime for manufactured products was slightly eased in April 2003 with a reduction in the number of concessions limited by quota ceilings and cuts on tariffs on 28 products. At the same time, the number of agricultural products eligible for GSP treatment was raised considerably. Moreover, the government has also reduced tariffs applied to imports from the Least Developed Countries (LDCs), with only 1 per cent of their manufactured imports now being subject to a tariff or a quota. It has also widened the concessions offered to LDC agricultural and fishery products. Because of these concessions, the duty and quota free portion of LDCs' imports has risen to 93 per cent from 83 per cent.

Table 33. **Tariff rates in major trading areas**
1999, per cent

	Japan	Canada	EU	United States
Panel A				
Average Most Favoured Nation rate	4.3	8.3	7.4	5.0
Average Least Developed Country rate	1.7	4.4	0.9	1.8
Average Generalised System of Preferences rate	2.3	6.2	3.6	2.4
Panel B				
Average peak tariff	27.8	30.5	40.3	20.8
Share of total imports subject to peak tariffs	4.9	4.6	3.4	4.6
Share of total imports from GSP and preferential countries subject to peak tariffs	2.8	4.8	4.9	6.6
Tariff revenue from peak tariff products ($ billion)	6.3	1.6	8.9	5.4
Share of revenue from preferential and GSP country	22	44	48	85
Panel C				
Number of tariff quotas[1]	20	87	54	21
Average out of quota tariff rate	235	169	60	42
Average anti-dumping duty	9.9	35.6	29.1	22.2
Number of tariff lines with anti-dumping duties	42	339	260	566
Country most frequently subject to anti-dumping	Pakistan	United States	China	Japan

1. Excludes textiles and clothing.
Source: Panels A and B, Hoekman *et al.* (2002); Panel C, Bouët *et al.* (2001).

Trade policy in Japan for agricultural products pursues goals that are markedly different from those for the manufacturing sector. The average (unweighted) tariff applied to farm products was 23 per cent in April 2002, but other weighting schemes can generate higher averages (Walkenhorst and Dihel, forthcoming). In addition, there are 95 tariff lines where tariffs vary between 47 and 1 739 per cent (WTO, 2002). Such high protection led to overall support to producers of over 1 per cent of GDP in 2001, representing 59 per cent of the value of domestic agricultural output, against 35 and 21 per cent in the European Union and United States, respectively. This degree of support has been fairly constant over the past 15 years. However, its real value has dropped some 20 per cent, as agricultural imports rose and as value-added in the agricultural sector fell 25 per cent in the five years to FY 2001. The government has accepted the need to further change its farm policies with the aim of improving their market orientation. In addition, Japan has already reduced the aggregate measure of domestic support (AMS) to less than 20 per cent of the level bound in WTO agreements, as domestic rice markets moved towards a market-oriented price-formation process.

From the perspective of the market opportunities of some developing countries, one problem stems from the rice market. The principal rice exporters

Table 34. **Principal rice exporters: production and income indicators**

	Production	Net exports		Agricultural GDP	Agricultural employment	Agricultural value-added per person
	Million tonnes	Million tonnes	Per cent of production	Per cent of total		$ per day, 1995 prices
	2001			1999		
Thailand	27.0	7.7	28.5	11.3	48.5	2.5
Vietnam	32.0	3.7	11.7	25.4	70.0	0.7
Pakistan	5.8	2.4	41.4	25.2	47.3	1.7
United States	9.8	2.2	22.7	1.4	2.6	92.3
India	139.7	2.2	1.6	23.9	60.0	1.1
China	179.3	1.7	1.0	17.6	47.5	0.9
Myanmar	21.9	0.9	4.2	n.a.	62.7	. .
Uruguay	1.0	0.8	78.7	5.6	3.9	22.8
Egypt	5.2	0.7	13.5	16.3	29.8	3.5
Australia	1.6	0.6	33.9	3.0	4.9	95.1
Italy	1.3	0.5	38.2	2.8	5.5	71.5
Argentina	0.9	0.3	40.5	4.4	0.8	28.3
Guyana	0.5	0.2	42.2	29.7	n.a.	10.2
Spain	0.9	0.2	22.5	3.5	7.3	60.1
Ecuador	1.3	0.1	6.2	12.2	7.3	4.8
Surinam	0.2	0.1	29.9	9.4	5.6	5.8
Venezuela	0.8	0.0	5.6	4.7	n.a.	14.0
Greece	0.2	0.0	26.1	6.9	17.8	37.4
Japan	**11.3**	**–0.1**	**–0.8**	**1.5**	**5.2**	**82.5**

Source: FAO, Agricultural Production and Trade Database; World Development Indicators and national sources.

are developing countries with high proportions of low-income employment in agriculture (Table 34). However, the ability of these countries to access the Japanese rice market is limited by the marginal tariff rate that, in August 2002, amounted to 380 per cent for short-grained rice and 660 per cent for other qualities of rice,[137] and due to the fact that many of these countries are currently unable to produce the variety of rice consumed in Japan. In principle, developing countries could benefit from market access concessions that apply on a non-discriminatory basis, as required by national and international principles. Japan agreed to allow imports equivalent to 7.2 per cent of base year domestic consumption by 2000. The largest exporters under this scheme in the period 1995 to 2001 were the United States, Thailand, Australia and China, with Japan capturing the quota rent on imported rice by using a state-trading organisation, approved under WTO rules, to manage the market.[138] The growth of these imports has not placed full pressure on domestic markets as one quarter of the foreign rice has been used to fulfil food aid commitments. According to data from the Food and

Table 35. **Welfare impact of full agricultural liberalisation by developed countries**

	Whole economy	Rural sector	Urban sector	Whole economy	Rural sector	Urban sector
	$ million, 1997 prices			Per cent change		
United States	5.0	5.5	–0.5	0.05	4.8	–0.01
Western Europe	17.0	–28.8	45.8	0.17	–15.5	0.47
High-Income Asia	22.1	–34.4	56.5	0.34	–36.6	0.88
Canada	4.2	2.1	2.1	0.55	15.4	0.28
Australia and New Zealand	7.7	7.8	–0.1	1.23	41.5	–0.02
Argentina	3.6	6.6	–3.0	0.79	15.5	–0.73
Brazil	3.2	5.7	–2.5	0.32	7.0	–0.27
China	–0.7	7.9	–8.6	–0.04	2.0	–0.63
India	1.6	4.9	–3.3	0.23	3.3	–0.60
Rest of East Asia	0.6	1.5	–0.9	0.07	1.4	–0.12
Rest of Latin America	9.2	15.3	–6.1	0.72	15.2	–0.52
Eastern Europe and Central Asia	3.2	7.7	–4.5	0.22	10.8	–0.33
Sub-Saharan Africa	1.8	3.4	–1.6	0.57	6.3	–0.61
Rest of World	3.6	10.3	–6.7	0.22	6.8	–0.45
Low and middle income	26.0	63.4	–37.4	0.27	5.5	–0.44
High income	56.1	–47.7	103.8	0.20	–11.2	0.38
World	82.1	15.7	66.4	0.21	1.0	0.18

Note: Changes are measured from a baseline world economy in 2015.
Source: Beghin *et al.* (2003).

Agricultural Organisation, exports of rice had grown to the equivalent of 90 per cent of imports by 2001, though this ratio fluctuates markedly from year to year. Thus, while Japan is the ninth largest gross importer of rice among net importing countries as a result of the market access programme, it is only the 51st largest net importer. Abolishing the quotas and the state-trading organisations and imposing an equivalent tariff, estimated at 120 per cent by Kagatsume (2000), might result in more improvement of market access, though setting a precise equivalent tariff would be difficult.

At one extreme, complete liberalisation of agricultural markets, in Japan, as well as other high-income areas, would have a profound impact on developing countries, as it would transform world agricultural markets, including that for rice, and raise incomes in the rural areas of developing countries. Reform by developing countries of their own agricultural markets would further add to the benefits that could be achieved by a liberalisation in high-income countries. Income gains would be concentrated on the rural sector in these countries and urban dwellers in Western Europe and Japan (Table 35).[139] Part of the gains for low-income farmers might be offset by losses amongst the urban groups in developing countries as world market prices increase. The rural sectors in Western Europe and high-income countries in Asia would also be losers. The scale of decline in rural incomes and land prices in Japan, even though farmers there only obtain 20 per cent of their income from agricultural activities, suggests that liberalisation of agricultural markets might require an offsetting increase in income transfers for some farmers in order that they could provide a number of environmental services. Any aspects of multifunctionality in agriculture, such as protecting the environment, should be dealt with by adopting well-targeted policy measures that minimise trade distortions.

Japanese foreign assistance policy is heavily influenced by its own development process in the period between 1946 and the early 1960s. A strong emphasis is placed on the need for aid to be a supplement to a self-help strategy in each recipient country. High loan content in the aid programme is seen as giving incentives to ensure that funds are used effectively. In terms of the benefit to recipients, the value of these loans depends on their terms and the extent to which private capital markets are open to the country concerned. No estimates are available on the extent of concessionary terms. More recently, the proportion of aid given as loans has decreased. Programmes such as support for the G8 Africa action plan and the Okinawa Infectious Disease Initiative are likely to raise the share of aid devoted to social goals.

A major effort is being made to improve the efficiency with which aid is used. The impetus for such changes came from concerns that the decision as to whether to finance a given project was not being taken in a transparent fashion. Consequently, the government has chosen a more open system for deciding on priorities. In addition, the effort devoted to evaluation of projects, once they are completed, is being increased. Outside experts are being involved in all evaluations, with site visits being undertaken. Moreover, as aid is disbursed by a number of institutions under the policy guidance of the Ministry of Foreign Affairs, the evaluation efforts of the different agencies are to be better co-ordinated. Finally, greater effort is to be made to ensure that the lessons from the evaluations influence the setting of policy. However, the impact of other government polices, notably in the agricultural sector, on the development process need to be given more attention.

Conclusions

Incomes of developing Asian countries have been helped by a more open trade policy in manufactures. However, further action is required to reduce tariffs in the areas of textiles, clothing and footwear. In addition, opening the agricultural market would help rural development in the rest of Asia and increase the coherence of Japanese government policies in the area of development. In particular, the coupling of concessional market access regimes with high marginal tariffs should be replaced by an equivalent tariff that could be progressively reduced over time, though quantifying a precise equivalent tariff would be difficult. As for development assistance, Japan's acceptance of the Millennium goals is to be welcomed. It is important to build public support for aid policies by increasing the transparency and effectiveness of the programmes as only this will permit a quick restoration of past cuts in development aid that is necessary if the Millennium goals are to be met. Moreover, some re-orientation of aid flows towards the Least Developed Countries could be considered.

Notes

1. In the United States, current profits averaged more than 5 per cent of sales in the manufacturing sector in 2002.
2. This dichotomy is evident in the increased variance of profitability between industries. The Bank of Japan calculates current profits as a share of sales for thirteen manufacturing and non-manufacturing industries. The standard deviation of this measure has risen from 1.7 in FY 1997 to 3.1 in FY 2002.
3. This is the so-called "Tobin's q". A low ratio tends to discourage investment.
4. The capital to output ratio increased from 1.9 to 2.5 during the 1990s, while the ratios in the United States and Germany were steady at around 1.4 and 2.5, respectively. However, given the large number of non-viable firms, as reflected in the high level of non-performing loans, official figures may overestimate the size of the capital stock.
5. With both employment and compensation falling, labour's share of nominal GDP declined in 2002 to 54.1, its lowest share since 1996. However, it is still substantially above its 52.9 per cent share in 1991.
6. Both deflation (the private consumption deflator) and real private consumption are expressed as the change in the first half of 2003 compared to the second half of 2002 at an annual rate.
7. The labour force participation rate (the entire labour force divided by the population between 15 and 64) declined from 78.1 per cent in 2000 to around 77.5 per cent in the first half of 2003. An unchanged participation rate, with the employment level constant, would have resulted in an unemployment rate that was more than 0.8 percentage point higher.
8. Health care costs jumped 5.2 per cent in April 2003 as the share paid by heads of households was raised from 20 to 30 per cent at the beginning of the fiscal year for the two major social health insurance schemes.
9. In August, the core measure declined 0.5 per cent year-on-year, after taking out regulated prices.
10. However, the cumulative fall in the GDP deflator, at 6.9 per cent since the end of 1999, is relatively close to that of the private consumption deflator at 5.2 per cent.
11. Details on the construction of this diagram are presented in Annex II.
12. In addition, there was a small decline in household savings from 6.2 per cent of GDP in the first half of the 1990s to 5.2 per cent in the second half. However, this was offset by a rise in the savings of financial corporations from 1.2 per cent of GDP to 2.4 per cent over the same period.

13. The decline in the business investment deflator was driven by a 30 per cent fall in ITC products. The authorities are examining whether the deflator, which is based on a Paasche-type index with fixed-year weights (1995), is exaggerating the fall in the deflator. They plan to introduce a chain-linked index with 2000 as the base year.
14. This compares working hours for dependent employment. Data are available for 17 OECD countries.
15. Negative real interest rates have occurred in about half of the post-war recessions in the United States (R. Jones, 2003).
16. The BOJ purchases shares held by banks at the market price. The maximum amount of purchase was originally set at 2 trillion yen and subsequently raised to 3 trillion yen. Eligibility conditions determine which shares the BOJ may buy in order to limit its potential losses. The central bank plans to sell all the shares purchased under this scheme between 2007 to 2017.
17. To be eligible, securities must be rated BB or higher, which implies that the BOJ can purchase rather risky assets. The scheme is planned to last until March 2006.
18. Given the increased risks, the BOJ is allowed by the fiscal authority to retain larger internal reserves this year than usual.
19. The participation of the newly established National Postal Corporation in the BOJ's settlement system is thought to have pushed up the total of the current account balances at the central bank by at least 2 trillion yen. Although the BOJ raised the target range by 2 trillion yen from the beginning of April, the actual amount of the current account far exceeded its target range.
20. However, Resona did not use the BOJ's special lending scheme as it could continue to raise funds from the markets. Consequently, the BOJ announced a termination of this scheme in July when the Deposit Insurance Corporation re-capitalised Resona.
21. For example, in September 2002, uncollateralised overnight call rates suddenly jumped up from .001 to .067 reflecting increased demand at the end of the first half of the fiscal year. The BOJ increased injections of liquidity beyond its target to stabilise the markets.
22. This effect works as follows. The purchase of relatively illiquid assets, such as long-term bonds, by the BOJ increases the amount of liquid assets held by private agents relative to other assets. The resulting rise in the stock of money changes the marginal utility of money relative to that of other assets. As money holders attempt to restore equilibrium by equating the ratios of the marginal utilities to the relative prices of each asset, this induces them to acquire other assets such as bonds, shares, real assets and durable goods, leading to higher prices for those assets. Such a rise in asset prices can stimulate the economy through higher investment and consumption.
23. With regard to the effectiveness of portfolio rebalancing, it is argued that if no saturation point exists in the demand for liquidity, then any increase in liquidity may not be able to change the portfolio of private agents since they are satisfied with having more liquidity (liquidity trap). However, Kimura *et al.* (2003) suggests that such a saturation point exists. Hence, the weakness of the portfolio effect may reflect a higher risk premium for real assets due to uncertainty about the non-performing loan problem. Meltzer (2001) also argues that Japan may not be in a liquidity trap since there is still some room for price adjustment in long-term bonds and other financial assets.

24. Half of the increase in net investment in foreign securities between FY 2001 and FY 2002 was accounted for by the banking sector, whose purchases of foreign securities were, in many cases, backed by the foreign assets already owned by the banks. Thus, such purchases of foreign securities by the banks did not affect the foreign exchange market.
25. Matsuoka (2002) suggests that not only the rebalancing effect but also the wealth effect of liquid assets, which is assumed to be higher than that for illiquid assets, may have contributed to the resilience of private consumption. According to his estimate, a 1 per cent increase in base money held by households could push up their consumption by 0.05 per cent.
26. The BOJ (2003b) argues that the relationship between nominal GDP and the money supply broke down in late 1997 when the failure of major financial institutions raised precautionary reserve holding, while it drove down the growth of nominal GDP. It also suggests that the decline in prices for some financial assets outside the definition of M2, such as Investment Trust and Money Market Funds, caused a shift of funds from those assets to M2.
27. The central bank currently holds 60 trillion yen (12 per cent of GDP) of long-term government bonds, while private banks hold 80 trillion yen. The BOJ is introducing a method to value government bonds at amortised cost, adjusting the value by a fixed amount each period so that it gradually converges to par at maturity. This ensures that changes in the market prices of bonds will not affect its balance sheet as long as bonds are held until maturity. However, if the BOJ is forced to sell those bonds when it faces the task of absorbing the huge amount of liquidity, losses will be realised.
28. See Reifschneider and Williams (2000), and Orphanides and Wieland (1999).
29. The first condition is that the trend of core CPI inflation needs to register zero or above over a period of a few months. The second condition is that a majority of the BOJ's board members should forecast core CPI inflation at a rate above zero over the projection period.
30. An estimate of the policy reaction function of the BOJ by Jinushi *et al.* (2000) suggests that the policy stance may have changed so as to put higher priority on stability of prices since the end of the 1980s.
31. Hunt and Laxton (2003) use a stochastic model simulation to show that an economy with a zero per cent inflation target has a 9 per cent probability of falling into a zero bound problem. In contrast, with a 2 per cent target, the probability is only 1 per cent.
32. As discussed in Box 1, the Phillips curve tends to become flatter when inflation is low, due to less frequent price and wage adjustment. A flattening of the Phillips curve would have important implications for policy because it suggests that nominal demand shocks would have relatively less impact on prices, and more on output (or unemployment) as inflation slows. Consequently, the short-run costs of aiming at lower inflation would thus become progressively greater as an economy approaches zero inflation. However, the findings of studies on other OECD countries are somewhat mixed. Edey *et al.* (1995) looked at the experiences of OECD countries in the low inflation environment of the 1950s and 1960s and found that disinflation was in many cases accompanied by an increase in unemployment, though the position of short-run Phillips curves appear to shift over time. Stark and Sargent (2003) also finds nominal rigidity in the Canadian Phillips curve, while Yates' (1998) study of several countries indicates less significant results. More recently, Kuroda and Yamamoto (2003) argues that nominal rigidity in Japanese labour market exists when the inflation rate is in the

range of 1 to 2.4 per cent, though it disappears when inflation falls below 1 per cent, since firms actively try to reduce wages by cutting bonuses.

33. The increased lending to weak firms also reflects the fact that they are unable to obtain direct financing from the capital markets.

34. The FSA has been conducting regular inspections based on the inspection manual since 2000 and is now in the third round of such inspections for major banks. In October 2003, the FSA announced that the gap between the amount of classified loans according to the banks' self-assessment and the result of the FSA's inspections narrowed to 6.0 per cent in the third round, compared to 35.9 per cent and 10.1 per cent in the first and second rounds, respectively.

35. For the 11 major banks, deferred tax assets rose from 48 per cent of tier I capital in FY 2001 to 57 per cent in FY 2002.

36. In November 2002, the FSA proposed measures to expand the tax advantages for disposing of non-performing loans. *First*, it favours doubling the permitted time span for carrying losses forward from five to ten years. *Second*, it proposes lifting the suspension on loss carrybacks and expanding it from one to 15 years. This provision was suspended in 1992 in order to boost government tax revenues. Lifting the suspension and extending the period to 15 years could reduce tax revenues by nearly 10 trillion yen (*Nihon Keizai Shimbun*, 18 March 2003). However, no action has been taken on these proposals. The issues related to the necessity of setting a ceiling on deferred tax assets in banks' regulatory capital are being discussed by experts in a working group under the Financial System Council. In the United States, for example, deferred tax assets are limited to a ceiling of 10 per cent of tier I capital or one year of profits.

37. Resona Bank was created in 2003 by the merger of the Daiwa Bank and Asahi Bank, both of which received public funds totalling 1 trillion yen in 1999. With the latest injection, the government's voting share is now over 70 per cent.

38. This requires a bank to estimate the present value of an ailing firm's future revenue over the upcoming five years based on the cash-flow projections in its restructuring plans, using the lending rate as the discount rate. If that value is below the bank's loans to the firm, the bank would have to cover the difference with reserves.

39. Borrowers are categorised into six categories: normal, need attention, need special attention, in danger of bankruptcy, *de facto* bankrupt and bankrupt. The loans provided to borrowers in the last four categories are defined as non-performing loans.

40. *First*, the FSA introduced a system of *de facto* resident inspectors for each of the major bank groups. *Second*, a group of experts, the "Special Team for Examination of Reconstruction Plans", was established in the Inspections Bureau in December 2002 to check the adequacy of bank reconstruction plans.

41. The RCC, which is owned by the Deposit Insurance Corporation, functions as a collection company that sells the collateral backing non-performing loans.

42. One of the principles of London Rules is equal sharing of responsibility, and hence the amount of debt forgiveness, among creditors. However, in the Japanese context, the main bank is supposed to carry greater responsibility. For this reason, it is often quite difficult for all the creditors to come to agreement in out-of-court workouts.

43. Adjusted for non-performing loans, lending is falling at a 2 per cent rate. Of course, to the extent that the decline in total lending is due to the removal of non-performing loans, thus would help achieve the target.

44. According to one article in the press, the manager of a machine parts company complained that they were asked by their main bank to purchase shares despite the company's weak financial condition. The manager was concerned that the bank would stop lending to the company if it turned down the request.
45. These estimates are cited in T. Callen and M. Mühleisen (2003), "Current Issues Facing the Financial Sector", in *Japan's Lost Decade*, (Washington: International Monetary Fund).
46. This report presents various points of view. One opinion is that the current framework has been successful in stabilising the financial system under the threat of a crisis. However, it is possible to have a framework for re-capitalisation using public funds for financial institutions that could reform their management so as to strengthen their profitability and ensure their soundness. The Council included as one option the introduction of a new scheme for the injection of public funds. The goal of this scheme would be to allow injections before banks become under-capitalised.
47. Indeed, the FSA issued a Management Improvement Order to Mizuho Bank for falling short of its target to increase lending to SMEs. The FSA justifies these requirements on legal grounds. SMEs could be an important source of potential profit if pricing to risk were implemented.
48. Between 1998 and 2002, nearly 10 trillion yen of public funds were injected into Japanese banks. About two-thirds of this amount was used to acquire preferred shares, which do not carry voting rights, but pay higher dividends than common shares.
49. The FSA can issue an order for corrective action when a bank's profit falls by 30 per cent or more below the estimates in business rehabilitation plans or when a bank fails to pay dividends on preferred shares. In August 2003, the FSA issued a management improvement order to a number of banks, including three major ones, which failed to achieve the targets in their restructuring plans.
50. The risk of double-gearing was recognised in the annual report of the Bank for International Settlements, which stated that, "These interlinkages increase systemic risk, particularly considering the weaknesses in the Japanese insurance sector" (BIS, 2002, page 135).
51. Although the 30 trillion yen ceiling on the issuance of public bonds in FY 2001 was achieved, actual borrowing exceeded the target when off-budget items are included. Specifically, the second supplementary budget included a public investment programme financed through a special account (Sangyo Toushi Tokubetsu Kaikei), whose funds were originally obtained from selling shares of Nippon Telecom and Telegraph (NTT) several years ago. Since this revenue had been previously included in the national accounts, their use increased government net lending on a national accounts basis in FY 2001.
52. The nominal level of pension benefits for current recipients has been cut by about 1 per cent in accordance with the law, which indexes benefits to the consumer price index, though such adjustments were not implemented during the past few years of deflation. Co-payments for medical services have been raised for the elderly and those insured by SMEs and fees for doctors have been reduced despite political resistance, especially against the latter. Nominal wages for public servants have also been cut by 2 per cent.
53. These changes are related to the special accounts for the mint and transfers to local government.
54. To broaden the income tax base, the special allowance for spouses will be abolished. In addition, the favourable treatment for SMEs in the consumption tax (VAT) will be curtailed. Specifically, the tax exemption threshold for small vendors will be cut from

30 million yen to 10 million yen and the use of the simplified tax scheme will be reduced by lowering the ceiling from annual sales of 200 million yen to 50 million yen. These measures have been already legislated, together with the tax cuts.

55. Public bonds are zero risk-weighted in the calculation of banks' capital.
56. Debt dynamics are calculated as follows: $b_t = d_t + b_{t-1} * [(1 + r)/(1 + g)]$, where b is the debt to GDP ratio; d is the primary deficit to GDP ratio; r is the nominal interest rate; and g is the nominal growth rate. The required primary surplus to stabilise the debt to GDP ratio at time t is calculated as $d_t = b_t * [(r - g)/(1 + g)]$.
57. Major tax changes during the past decade include: *a*) a 5.5 trillion yen cut in personal income tax in 1995; *b*) a partial reversal of the earlier reduction by 2 trillion yen in 1997; *c*) a special reduction in personal income tax by 4 trillion yen in 1998, with this feature becoming permanent in 1999; and *d*) a corporate tax reduction of 2.5 trillion yen in 1999. The net tax cut from these changes is around 10 trillion yen.
58. Among the 27 OECD countries for which data on general government current tax and non-tax receipts are available, only Korea is lower.
59. Even if nominal GDP were to grow at a 2 per cent annual average rate, social security spending as a share of GDP would rise to 19 per cent by FY 2010. However, its share would increase to 22 per cent if nominal GDP, which has fallen 3 per cent since 1998, were to remain constant through the end of the decade.
60. This estimate based on generational accounting shows the cumulative amount of benefits and contributions that each generation receives or pays to the government during their lifetime. If the difference is positive, that generation receives more benefits from the government than they pay. The estimate of net burden on future generations includes the cost of eliminating the existing debt, as well as financing newly generated debt (Cabinet Office, 2001).
61. Doi and Hoshi (2002) argue that the expected net liabilities of the FILP institutions could amount to around 75 trillion yen (15 per cent of GDP).
62. The coverage of public debt in the government's Perspective is narrower than that on a national accounts basis as some borrowing in special accounts is excluded.
63. The cabinet adopted a plan for reform of government corporations in December 2001. It identified 17 to be abolished, 45 to be privatised and 38 to become independent state agencies. However, of the 17 institutions to be closed, only one is to be dissolved completely and many of the activities of the remaining 16 institutions are to be carried on by other organisations.
64. In some cases, privatisation or corporatisation of government corporations requires them to abolish unprofitable operations. One example is the Employment and Human Resource Development Organisation. Although it was established to provide public training to the unemployed as well as to workers, it also used unemployment insurance funds to build and manage a number of recreation facilities. The Organisation is forced to sell those unprofitable facilities before its planned corporatisation in 2004. The gap between the building cost and the expected revenue from their sale is said to reach nearly 400 billion yen.
65. Many of the self-employed are small farmers.
66. The theoretical replacement rate, based on income at retirement, is somewhat higher (see below).
67. The principal changes involved an increase in the retirement age to 65; a 5 per cent cut in new pensions; linkage of pensions after retirement to prices rather than wages;

contribution rates were to be raised to 14.6 per cent in 2004, from 13.6 per cent, with an increase to 19.8 per cent scheduled for 2020. However, these increases were suspended. Benefits and contributions are now based on total wages and no longer exclude bonuses. The proportion of the basic first-tier pension to be financed by a state contribution was to be raised to one-half in 2004, by securing a stable financing source. The required revenue would be equivalent to an increase of 1.0 percentage point in the consumption tax.

68. The markedly faster productivity growth in the telecommunication sector in the latter part of the 1990s reflects sharply falling prices. See also *The OECD Science, Technology and Industry Scoreboard* (OECD, 2001).

69. These results are confirmed by OECD (2002a) and Ariga *et al.* (1999).

70. Comparing prices across countries is complicated by exchange rate movements. Using purchasing power parity (PPP) equilibrium exchange rates is a way to avoid being misled by short-term fluctuation in actual exchange rates. On the other hand, the current exchange rate for the yen has been over-valued against its PPP equilibrium rate for almost two decades. In 2002, it was about 20 per cent higher. An additional issue is that the price effects of exchange rate movements vary depending on whether the goods in question are internationally traded. For example, an appreciation of the yen would *ceteris paribus* lower energy prices in Japan relative to other countries, while for a non-traded good, the price differential would increase.

71. Nicoletti *et al.* (2003) indicates that Japan has a relatively low average tariff and non-tariff barriers. Even in the relatively highly protected agro-food sector, applied tariffs are on average lower than in the EU, though higher than in the United States. However, tariff peaks for some important commodities, such as rice and dairy products, are much higher than in other places (Walkenhorst and Dihel, 2003). Taking into account the importance of different commodities, the producer support estimate (PSE) in Japan is considerably higher than in the EU and the United States (OECD, 2003a). Domestic agricultural support as contained in the aggregate measurement of support (AMS) has been reduced to less than 20 per cent of the bound level.

72. Other OECD countries also have lists that differ from the FAO standard [European Business Community in Japan (2002) and European Commission (2002)].

73. See Bradford (2003). It could be argued that the price differences reflect variations in market power, but the latter can only be maintained in the presence of trade barriers.

74. European Business Community in Japan (2002) also mentions non-transparent tax rules and benefit taxation, such as favourable taxation of stock options, which is not applied to foreign stocks. Other issues include the absence of tax relief for contributions to foreign pension plans and limited refunding of mandatory contributions paid to the public pension system upon leaving Japan.

75. To further promote inward FDI flows, a government committee proposed in its spring 2003 report specific measures to raise the attractiveness of Japan for foreign companies, such as the establishment of a streamlined support organisation for inward FDI with, for example, one-stop service centres to improve information flows and measures to satisfy foreigners' educational and medical needs, as well as to impose conditions for developing growth clusters. As a pilot project, five local areas have been selected to promote inward FDI mainly through public relation campaigns. On the other hand, support for outward FDI is mostly financial and is more generous and broader in scope than in other large OECD countries (Solis, 2003).

76. The Japanese Prime Minister Junichiro Koizumi stated in his general policy speech on 7 May 2001 that, "We will strengthen the structure of the Fair Trade Commission, which should serve as the guardian of the market, thereby establishing competition policies appropriate for the 21st century".
77. However, it may be relevant whether the restraint has been significant or whether it has had some actual effect. This factor makes enforcement more difficult in Japan than it is in jurisdictions with a true *per se* rule against horizontal price fixing. On the other hand, the rule prohibiting "unreasonable restraints" of trade is similar to the basic rule under the US Sherman Act.
78. Restructuring and divestiture of monopoly firms appear to be authorised, but this part of the law is never applied. Other means for regulating industry investment structures are vestiges of the AMA's recently-repealed ban against holding companies.
79. SMEs also benefit from an exemption that permits agreements to prevent "excess competition" in personal services such as hair cutting and from another that permits agreements in the liquor business.
80. The official might face prosecution, if the misconduct amounts to corruption.
81. There has only been one formal FTC decision rejecting a merger in more than 35 years. Only large mergers are subject to prior notification. After a size threshold was added to the AMA in 1998 (combined assets or turnover over 10 billion yen, and 1 billion yen for the acquired party), the number of mergers requiring prior FTC notification dropped by 90 per cent.
82. Another merger processing proposal pending in early 2003 would shorten the examination period for reviewing certain acquisitions under the Act for Special Measures on Industrial Revitalisation.
83. In a recent merger case, the FTC accepted the involved parties' pledge to admonish their staff to obey the law in the future.
84. Experiences with private suits for damages have been disappointing. A new kind of private suit has been introduced, where consumers or businesses may seek an order to correct or prevent unfair practices by firms and restraints imposed by trade associations. Citizens can also bring actions to recover losses due to practices such as bid-rigging.
85. In other jurisdictions, actual fines are much larger, with the largest fine ever issued by the EU set at nearly 900 million euros (imposed on the vitamins cartel in 2001). Moreover, the maximum fine in the EU is considerably larger than in Japan, as it can reach 10 per cent of the previous year's world-wide turnover.
86. This issue was highlighted in a recent case in the food industry, where imported meat was re-labelled as domestically produced meat. A participating company revealed the scandal and received an order to stop operation for one week from the relevant ministry. Furthermore, the firm was considered as a "traitor" and boycotted by other firms, and eventually went bankrupt.
87. An econometric study of the FTC's enforcement instruments found that only targeted warnings about particular products had some effects on lowering mark-ups (Ariga, K. *et al.*, 1999).
88. Most of these cases are about sales below invoice price and are usually resolved by warnings. Most cases involve liquor sales – in 2001, there were 2 500 cases in that sector alone – and gas stations. In addition, the FTC still brings over 100 cases per year about "premiums", as well as about 300 per year against other kinds of misleading advertising. The FTC's strongest remedy against misrepresentations is an order. The

criminal law about unfair competition is enforced by the police and prosecutor, and applies only to trademark or country of origin violations.

89. The assiduous attention to unfair competition from discounting in the liquor industry is oddly inconsistent with the toleration of European geographic terms in the marketing of Japanese-produced alcoholic beverages.

90. Official data may not fully cover new entrants as the Census survey is only published every three years and may thus underestimate the sector's productivity increases.

91. In the large-store segment, it is only recently that a few foreign companies have entered the Japanese market, although franchises entered much earlier. For example, the 7-Eleven franchise came to Japan in 1973 and subsequent strong growth made it considerably larger than in the United States. The American parent was bought by the Japanese licensee in 1995 and subsequently revived it through the implementation of marketing strategies developed in Japan, focusing on such factors as cleanliness, freshness of products and improved stock management (Sparks, 2000).

92. The full name of the law is the Law Concerning the Measures by Large-Scale Retail Stores for Preservation of the Living Environment.

93. The self-regulating professional services comprise certified public accountants, administrative scriveners, lawyers, judicial scriveners, land and house investigators, licensed tax accountants, public consultants on social and labour insurance, and patent attorneys.

94. For example, relative to the population there are five times more lawyers in France and ten times more accountants in the United States than in Japan (OECD, 2002b). The situation is further compounded by the barriers placed on foreign lawyers trying to establish businesses in Japan.

95. The Temporary Law on the Import of Specific Oil Products was abolished in March 1996, which removed a regulation that only allowed oil refining firms located in Japan to import gasoline, kerosene and diesel oil (Nagaoka and Kimura, 1999). Another example of successful deregulation in the energy area was the decision to allow self-service in petrol stations in the mid-1990s.

96. For example, maintenance regulation requires that natural gas turbines are completely disassembled for inspection every 30 months – a regulation not duplicated elsewhere and not recommended by the manufacturers. Maintenance regulation for nuclear power is also more restrictive than in other countries. Additional factors increasing energy prices include internationally high construction standards even when compared with other countries affected by seismic activity, as well as time consuming land purchasing procedures and multi-layered permit collection processes at several level of government (IEA, 2003).

97. As with most newly liberalised markets in other countries, new entrants have been subjected to a number of discriminatory practises, including problems of accessing supply, high access tariffs, lack of dispute settlement mechanisms and rigid balancing rules. In addition, new entrants face problems such as regulatory uncertainty, ineffective unbundling and a lack of independent transmission system operators.

98. The northern part of Japan is served by electricity at a frequency of 50 Hz as compared with the 60 Hz used in the western part of the country. Moreover, interconnection was historically only established for security of supply reasons as each utility was required to be self-supplied within its supply area. Moreover, most of the existing transmission capacity is reserved for the utilities (IEA, 2003).

99. An element of competition has been introduced in electricity generation, where the incumbents must allow independent power producers to participate in a tendering for ten-year contracts. Such contracts have delivered electricity prices 10 to 40 per cent below the tenders' maximum upper limit.
100. Current balancing rules constitute an entry barrier because of potentially high cost. The rules require new entrants to balance supply and demand in every 30-minute slot with a maximum tolerance of 3 per cent. In case of a shortfall, the incumbents are allowed to charge 1½ times the normal price for supplying the additional energy. Surpluses above 3 per cent are not compensated for by the incumbents. In case of more prolonged imbalances, the new entrants risk paying a fixed annual fee, which in some cases can reach 2.4 billion yen.
101. The May 2000 Action Plan for Economic Structural Reform identified load factor levelling as a key measure to reduce the high cost of electricity. The reform's line of action includes new technologies in air conditioning and load levelling, adjustable electricity tariffs, and public information campaigns.
102. See IEA (2003) for a more detailed discussion of the energy situation.
103. METI and FTC will establish joint guidelines to facilitate voluntary negotiations for TPA to LNG terminals.
104. Inflows of FDI increased from only 2.1 billion yen ($19 million) in 1996 to around 800 billion yen (about $7 billion) in 2000 and 2001.
105. The code of conduct and the legal firewalls are put in place principally to prevent abuse of proprietary information from competitors so as to ensure equal treatment of outside companies seeking interconnection.
106. The Telecommunications Business Dispute Settlement Commission was established as an independent body in late 2001 and consists of five commissioners appointed by the Ministry of Public Management, Home Affairs, Posts and Telecommunications, subject to Parliamentary consent. The Commission's functions include mediation and arbitration in industry disputes as well as interaction with the above ministry with respect to administrative rulings. In addition, the Commission can make recommendations to the minister with respect to changing regulation to further competition.
107. The background for the very low line-sharing charges is to be found in a previous high once-in-a-lifetime connection charge that customers paid the first time upon becoming a NTT customer. It has been argued that this has financed NTT's infrastructure and consequently line-sharing charges should only reflect maintenance and other variable cost.
108. Measuring telecommunication prices at purchasing power parity exchange rates indicates lower prices for Japan. See also footnote 70.
109. One provider is offering international calls for an internationally low 7½ yen per minute. Moreover, the incumbent NTT has a smaller share of this market segment than in other large OECD countries.
110. Currently, the government holds 46 per cent of all shares in the holding company NTT Corporation.
111. No universal fund is presently in operation as neither NTT East nor NTT West have applied to become the designated carrier. The scope of universal services includes subscriber line access, emergency bulletin services and public telephone services. The latter is defined as one public telephone for each 500 m in urban areas and 1 km outside urban areas.

112. The incumbent (Japan Post) must provide a wider range of services, including services requiring special handling such as mail for the blind.

113. The borders between various mail services are defined in the guidelines issued by the ministry rather than specified in the law. Thus, an additional concern is that the ministry – in connection with a revision of the guidelines – can extend its regulatory powers to areas that are presently less regulated, such as business mail for advertising new products.

114. See *www5.cao.jo.jp/seikatsu/koukyou/towa/to07.html*. There are some indications that these price differentials have narrowed somewhat recently.

115. There are nearly 25 000 post offices which provide post, postal savings and life insurance services as well as a wide range of other government services (such as payment of pensions, issuance of resident cards and lottery tickets) and even some private-sector services like compulsory liability insurance for motorcycles. As in some other OECD countries, post offices in less densely populated areas are operated by private operators as "franchises", who often also provide other commercial services (OECD, 1999).

116. Specific requirements for universal service are different between countries. For example, in the case of Spain, accessibility to the postal service is ensured, while higher charges are required in remote areas.

117. These may include the right of access to post-office boxes on the premises of the incumbent and establishing centralised arrangements for change-of-address and mail forwarding. In some countries (Australia and New Zealand), the explicit access regime includes access to the incumbent's delivery services.

118. The additional cost of custom services outside normal business hours varies between 7 800 to 8 300 yen (between $65-70), while the Labour Standard Law stipulates an overtime pay surcharge of 25 to 35 per cent, depending on job category. The tugging surcharge can be between 20 and 120 per cent.

119. The average Japanese toll per kilometre is 27.8 yen as compared with Italy 8.48 yen, France 10.37 yen, Korea 7.75 yen, and the United States 12.48 yen. All prices are measured in PPP. S*ource*: Japan Highway Corporation.

120. A possible consequence of introducing the cost recovery principle in the toll-setting system may be to make it difficult to privatise low-usage highways. However, this reflects past disregard for whether individual highways were economically viable and the associated sunk cost is only making the former implicit cross-subsidy explicit. Furthermore, this general principle would allow the highway construction companies to implement toll schemes that take into account different demand conditions, such as higher charges during rush hours, which would enhance capacity utilisation.

121. See European Council of Ministers of Transport (2003) and OECD (2001b).

122. This is a problem not only in highway construction, but also in public procurement of jet fuel for the Self-Defence Force, which since 1985 has incurred an additional cost of 48 billion yen.

123. EBC (2002) and European Commission (2002).

124. The price margin relative to world market prices measures, in essence, the cost of moving one dollar's worth of a good (valued at world prices) from the factory to the shop shelf. The advantage of this approach is that if producer prices are artificially

high because of trade barriers then a simple *ad valorem* calculation of margins in distribution would be misleadingly low. Indeed, studies using the simpler approach tend to show that Japanese margins are *at par* with those in the United States.

125. Such a profile may reflect the emphasis on company-based training, which boosts workers' marginal productivity over time. Other explanations include long-term implicit contracts to motivate workers and the vestiges of compensation patterns that pay workers according to their life-cycle consumption patterns (Rebick, 2001).

126. The four conditions on firms were: 1) they had to demonstrate the necessity of dismissals, showing that they faced bankruptcy otherwise; 2) they had to have taken other actions previously, such as cutting bonus payments and dismissing non-regular workers; 3) there had to be a reasonable criteria for deciding which workers would be dismissed; and 4) they had to go through "reasonable procedures", such as obtaining the approval of unions or discussing the dismissals at length with the unions.

127. A recent report, *Babies and Bosses, Volume 2, Reconciling Work and Family Life in Austria, Ireland and Japan* (OECD, 2003c), made a number of recommendations aimed at improving the situation of working mothers; *i)* Reform employee health and pension insurance system by extending coverage to non-regular workers and ensuring that spouses do not face significant financial disincentives to work; *ii)* Enforce more actively gender equity and equal pay for equal work legislation; *iii)* Reduce barriers to "mother returnees" by enhancing the role of performance assessment in pay and promotion decisions; *iv)* Address the issue of age limits in recruitment, which acts as another barrier to re-entry by mothers.

128. Contributions to health and public pension contributions are waived for spouses working less than three quarters of the time worked by full-time employees and earning less than 1.3 million yen.

129. For example, the Kurume Research Park, a public-private joint venture that includes Fukuoka Prefecture and Kurume city, is pushing companies to propose specific reforms to remove rules that are blocking the realisation of promising business ideas (*Nikkei Weekly*, 11 August 2003). However, proposals from individuals or firms must be sent by local authorities to the central government.

130. In principle, proposals consistent with the "Basic Policies in Special Zones" must be accepted by a ministry. Other proposals that are accepted are then added to the "Basic Policies".

131. Outside of the special zones, joint-stock companies face strict requirements in the farming sector. For example, they must establish an agricultural corporation of which more than half of the directors are farmers.

132. According to a government study, Japan loses 400 billion yen ($3.4 billion) annually in exports compared to the case assuming that Japan's import share remained unchanged at the level recorded before NAFTA was created.

133. However, Japanese delegations to free trade talks include officials from four ministries – Finance, Foreign Affairs, Economy, Trade and Industry and Agriculture, Forestry and Fisheries – without clear leadership.

134. A third issue, ensuring sustainable retirement incomes, is discussed in Chapter III.

135. Of this, completely tied aid represented 8 percentage points of total bilateral aid and an additional 9 per cent was partially tied, being open to developing country bidders but not to bidders from other developed countries. Fully tied aid is, generally, of less

value to a beneficiary than untied aid and so partially opening bidding to developing country bidders might be an effective route for ensuring lower prices in cases where the most competitive companies come from developing countries.

136. The grant content of an ODA loan is, according to the DAC, calculated as the difference between the present value of the interest and capital repayments of the loan, discounted at 10 per cent, and the value of the loan. The grant content must be greater than 25 per cent of the face value of the loan for it to qualify as development assistance. On the other hand, under the OECD Arrangement on Guidelines for Officially Supported Export Credits, the concessional element of a loan, with a length of over 30 years, is calculated using a discount rate that is equal to 2.25 percentage points above the average government bond rate in the currency in which the loan is granted and for a specified reference period. In October 2003, this rate was set at 2.9 per cent for yen credits. In FY 2001, the average interest rate on development assistance loans from Japan was 1.45 per cent, with an average maturity of 35 years and a grace period of 10 years. If ODA loans were discounted at this rate, their grant content would be much lower than the current estimate.

137. The Japanese rice tariff is a specific duty amounting to 341 yen per kilo. Based on the prices seen in the Simultaneous Buy and Sell auction held by the Japan Food Agency in Tokyo on 20 August 2002, the average price of imported short-grained rice was US$743 per tonne, while the price of all other rice was US$433 per tonne.

138. Thailand and China accounted for almost 35 per cent of the total.

139. Experience in Asian countries shows that increasing the income of poor rice farmers has significant impact on the educational opportunities of the children of such families and reduces the extent of child labour (Edmonds and Pavcnik, 2002).

Bibliography

Akerlof, G. and J.L. Yellen, (1985), "A Near Rational Model of the Business Cycle, With Wage and Price Inertia", *The Quarterly Journal of Economics*, Vol. 100.

Akerlof, G., W. Dickens, G. Perry, R. Gordon and G. Mankiw (1996), "The Macroeconomics of Low Inflation", *Brookings Papers on Economic Activity*, Vol. 1996, Issue 1142.

Aoki, M., A. Garber, and P. Romer (2000), "Why the Japanese Economy is not Growing: Micro Barriers to Productivity Growth", McKinsey Global Institute, Washington.

Ariga, K., Y. Ohkusa, and K.G. Nishimura (1999), "Determinants of Individual-Firm Markup in Japan: Market Concentration, Market Share, and FTC Regulations", *Journal of the Japanese and International Economies*, Vol. 13.

Ball, L., G. Mankiw and D. Romer (1988), "The New Keynesian Economics and the Output/Inflation Trade-Off", *Brookings Papers on Economic Activity*, No. 1.

Bank for International Settlements (2002), *Annual Report*, 2001, Basel.

Bank of Japan (2002), "Developments in Profits and Balance Sheets of Japanese Banks in Fiscal 2001", *Quarterly Bulletin*, November.

Bank of Japan (2003a), "Market Operation in FY 2002", *Market Review*, June.

Bank of Japan (2003b), "The Role of Money Supply in Managing Monetary Policy", *The BOJ Monthly Report*, January.

Beghin, J.C., D. Roland-Holst and D. Van der Mensbrugghe (2003), "How Will Agricultural Trade Reforms in High-Income Countries Affect Developing Countries?" in *Agricultural Trade and Poverty*, OECD, Paris.

Bernanke, B. (1995), "Inside the Black Box: The Credit Channel of Monetary Policy Transmission", *Journal of Economic Perspectives*, Vol. 9, Fall.

Bouët, A., L. Fontagné, M. Mimouni and X. Pichot, (2001), "Market Access Maps: A Bilateral and Disaggregated Measure for Market Access", CEPII *Working Paper*, No. 18, December.

Bradford, S. (2002), "The Welfare Effects of Distribution Regulations in OECD Countries", unpublished working paper, Economics Department, Brigham Young University.

Bradford, S. (2003), "Paying the Price: Final Goods Protection in OECD Countries", *The Review of Economics and Statistics*, 85(1).

Cabinet Office (2001), *Annual Report on Japan's Economy and Public Finance* 2000-2001, Government of Japan, Tokyo, December.

Callen, T. and M. Muhleisen (2003), "Current Issues Facing the Financial Sector", in *Japan's Lost Decade; Policies for Economic Revival*, T. Callen and J. Ostry, (eds.), IMF.

Calomiris, C. and J. Mason (2003), "How to Restructure Failed Banking Systems: Lessons From the US in the 1930s and Japan in the 1990s", NBER *Working Paper*, No. 9624, April.

Clark, R.L. and O.S. Mitchell, (2002), "Strengthening Employment-Based Pension Plans in Japan", NBER *Working Paper*, No. 8891, April.

Dang, T., P. Antonin and H. Oxley (2001), "Fiscal Implications of Ageing: Projections of Age-Related Spending", *Economics Department Working Paper*, No. 305, OECD, Paris.

Dell'Ariccia, G. (2003), "Banks and credit in Japan", in *Japan's Lost Decade; Policies for Economic Revival*, T. Callen and J. D. Ostry, (eds.), IMF.

Doi, T. and T. Hoshi (2002), "Paying for FILP", NBER *Working Paper*, No. 9385, December 2002.

Economic Planning Agency (1996), "Provisional Estimates of the Economic Effects of Recent Deregulations", Tokyo, unpublished; Quoted in Bradford, S. (2002), "The Welfare Effects of Distribution Regulations in OECD Countries", unpublished working paper, Economics Department, Brigham Young University.

Economic Planning Agency (1997), *Impact of Structural Reforms including Deregulation*, Tokyo.

Edey, M., N. Funke, M. Kennedy and A. Palerm (1995), "Monetary Policy at Price Stability: A Review of Some Issues", *Economics Department Working Paper*, No. 158, OECD, Paris.

Edmonds, E. and N. Pavcnik (2002), "Does Globalization Increase Child Labour? Evidence from Vietnam", NBER *Working Paper*, No. 8760, January.

Eggertsson, G. (2003), "How to Fight Deflation in a Liquidity Trap: Committing to Being Irresponsible", IMF *Working Paper*, WP/03/64.

European Business Community in Japan (2002), *Challenges to Growth and Investment – The EBC Report on the Japanese Business Environment*, Tokyo.

European Commission (2002), EU *Priority Proposals for Regulatory Reform in Japan*.

European Council of Ministers of Transport (2003), *Efficient Transport Taxes and Charges*, OECD, Paris.

FAAJ (1999), *The Sky High Cost of Civil Aviation in Japan, A Position Paper prepared by the Foreign Airlines Association in Japan*, Tokyo.

Fair Trade Commission (2002), *Annual Report*, Tokyo.

Förster, M. and M. Pellizzari (2000), "Trends and driving factors in income distribution and poverty in the OECD area", OECD, *Labour Market and Social Policy Occasional Papers*, 42, Paris.

Fukanuma, H. (1997), "Current Status and Problems of Cost-Benefit Analysis in Japan", *Monthly Report of the Institute for Posts and Telecommunication Policy*, December.

Fukao, M. (2002), "Financial Sector Profitability and Double-Gearing", NBER *Working Paper*, No. 9368, December.

Fukao, M. (2003), "Financial strains and the Zero Lower Bound: the Japanese Experience", Keio University, mimeo.

Goldman Sachs (1999), "Unfunded Liabilities of Japanese Corporate Pensions", *Pension Group Services Report*, Tokyo.

Gruber J. and D.A. Wise (2002), "Social Security Programs and Retirement around the World: Micro estimation", NBER *Working Paper*, No. 9407, December.

Hattori, R. and E. Maeda (2000), "Japanese Employment System", *The BOJ Monthly Report*, January.

Higuchi, T. (2001), "Environmental Regulation", paper presented to the International Symposium on Clean Coal Technology, Ministry of Economy, Trade and Industry, Tokyo, September.

Higuchi, Y., M. Abe and J. Waldfogel (1997), "Childcare and Maternity Leave Policies and Women's Employment in Japan, US and UK", *Journal of Population Problems*, Vol. 53 (in Japanese).

Hoekman, B., F. Ng., and M. Olarreage (2002), "Eliminating Excessive Tariffs of Least Developed Countries", *The World Bank Economic Review*, Vol. 16, No. 1.

Hunt, B. and D. Laxton (2003), "The Zero-Interest-Rate Floor and Its Implications for Monetary Policy in Japan", in *Japan's Lost Decade: Policies for Economic Revival*, T. Callen and J. Ostry, (eds.), IMF.

IEA (2003), *Energy Policies of IEA Countries: Japan*, OECD, Paris.

Institute of Pension Research (2002), *Pension Data Book*, Nikko Financial Intelligence, Inc., Tokyo, December.

Ito, T. and K. Harada (2003), "Market Evaluations of Banking Fragility in Japan: Japan Premium, Stock Prices and Credit Derivatives", NBER *Working Paper*, No. 9689, March.

Jinushi, T., Y Kuroki and R. Miyao (2000), "Monetary Policy in Japan Since the Late 1980s: Delayed Policy Actions and Some Explanations", *Japan's Financial Crisis and Its Parallels to US Experience*, R. Mikitani and A. Posen, (eds.), The Institute of International Economics, Washington.

Jones, R. (2003), "Deflation, Depression and the Zero Bound", *Global Economics*, Lehman Brothers, 26 March 2003.

Kagatsume, M., C.C. Chang and C.H. Wu (2000), "Rice Tarification in Japan: a General Equilibrium Analysis", paper presented at the 5th Annual Conference on Global Economic Analysis, Taipei, June.

Kamada, K. and N. Hirakata (2002), "Import Penetration and Consumer Prices", Bank of Japan, *Research and Statistics Department Working Paper*, No. 02-1, Tokyo.

Kashyap, A. (2002), "Sorting Out Japan's Financial Crisis", NBER *Working Paper*, No. 9384, December.

Kawasaki, K. (2002), "The Impact of Japanese Economic Cooperation on Asian Economic Development", *Discussion Paper*, No. 16, Economic and Social Research Institute, Tokyo, October.

Kawasaki, K. (2003), "A US-Japan Free Trade Agreement Simulation", Research Institute of Economy, Trade and Industry (RIETI), Tokyo.

Kimura, T., H. Kobayashi, J. Muranaga, and H. Ugai (2003), "The Effect of the Increase in the Monetary Base on Japan's Economy at Zero Interest Rates: An Empirical Analysis", in *Monetary Policy in a Changing Environment*, BIS Conference Series.

Krugman, P. (1998), "It's Baaack! Japan's Slump and the Return of the Liquidity Trap", *Brookings Papers on Economic Activity*, No. 2.

Kunieda, S. (2002), "Japanese Pension Reform: Can we get out of intergenerational exploitation?", *Hitotsubashi Journal of Economics*, 43.

Kuroda, S. and I. Yamamoto (2003), "The Impact of Downward Rigidity in Nominal Wages on the Unemployment Rate", IMES *Discussion Paper*, No. 2003-J-10, Institute for Monetary and Economic Studies, Bank of Japan, June.

Martin, J. (2000), "What Works Among Active Labour Market Policies: Evidence from OECD Countries' Experiences", OECD *Economic Studies*, No. 30, Paris.

Maruyama (2000), "Distribution: Structural Changes Driven by Information and Communication Technology", in *How to Restore Efficiency of the Japanese Economy*, Research Institute of Ministry of Finance.

Matsuoka, M. (2002), "Monetary Policy, Wealth Effect and Private Consumption", Deutsche Bank Group, May 2002.

McCallum, B. (2001), "Inflation targeting and The Liquidity Trap", NBER *Working Paper*, No. 8225, April.

Meltzer, A. (1995), "Monetary, Credit and (Other) Transmission Processes: A Monetarist Perspective", *Journal of Economic Perspectives*, Volume 9, Fall.

Meltzer, A. (2001), "Monetary Transmission at Low Inflation: Some Clues from Japan in the 1990s", *Monetary and Economic Studies*, Vol. 19, No. S-1, February 2001, Institute for Monetary and Economic Studies, Bank of Japan.

Miles, D. and A. Cerny (2002), "Alternative Pension Reform Strategies for Japan", paper presented to the Collaborative Projects Conference, Cabinet Office, Tokyo, January.

Ministry of Foreign Affairs (2002), "*Budget Program by Function*", *www.mof.go.jp/english/budget/brief/2002/2002-09.htm*, Tokyo, September.

Ministry of International Trade and Industry (1997), *Economic Impact of Deregulation*, Industry Policy Bureau,Tokyo.

Mourougane, A. and H. Ibaragi (2004), "Is there a change in the trade-off between output and inflation at low or stable inflation rates? Some evidence in the case of Japan", *Economics Department Working Paper* (forthcoming), OECD, Paris.

Nagaoka, S. and F. Kimura (1999), "The Competitive Impact of International Trade: The Case of Import Liberalization of the Japanese Oil Product Market", *Journal of the Japanese and International Economics*, Vol. 13.

Nguyen-Hong, D. (2000), "Restrictions on Trade in Professional Services", Productivity Commission, Staff Research Paper, AusInfo, Canberra.

Nicoletti, G., A. Bassanini, E. Ernst, S. Jean, P. Santiago and P. Swaim (2001), "Product and Labour Market Interactions in OECD Countries". OECD *Economics Department Working Paper*, No. 312. Paris.

Nicoletti, G. *et al.* (2003), "Policies and International Integration: Influences on Trade and Foreign Direct Investment", OECD *Economics Department Working Paper*, No. 359, Paris.

Nicoletti, G. and S. Scarpetta (2003), *Regulation, Productivity and Growth*, *Economic Policy*, April 2003.

Nishizaki, K. and T. Watanabe (2000), "Output-Inflation Trade-Off at Near-Zero Inflation Rates", *Journal of the Japanese and International Economies*, Vol. 14.

OECD (1997), *The OECD Report on Regulatory Reform*, Vol. II, Paris.

OECD (1999), *Promoting Competition in Postal Services*, Paris.

OECD (2001a), *Ageing and Income: Financial Resources in nine OECD countries*, Paris.

OECD (2001b), *Sustainable Development: Critical Issues*, Paris.

OECD (2002a), "Product Market Competition and Economic Performance", OECD *Economic Outlook*, No. 72, December, Paris.

OECD (2002b), *Economic Survey of Japan*, Paris.

OECD (2003a), *Agricultural Policies in OECD Countries. Monitoring and Evaluation*. Paris.

OECD (2003b), *Agricultural Trade and Poverty*, Paris.

OECD (2003c), *Babies and Bosses: Reconciling Work and Family Life*, Vol. 2 (Austria, Ireland and Japan), Paris.

Oguchi, N. and T. Hatta (2001), "Switching the Japanese Social Security System from Pay as You Go to Actuarially Fair", *Oxford Institute of Ageing Working Paper*, No. 13, June.

Ono, H. and M. Rebick (2003), "Constraints on the Level and Efficient Use of Labour in Japan", NBER *Working Paper*, No. 9484, February.

Orphanides and Wieland (1999), "Efficient Monetary Policy Design Near Price Stability", *Federal Reserve Board, Working Paper*.

Oshio, T. and A.S. Oishi (2002), "Social Security and Retirement: An Evaluation using Micro Data" in Jonathan Gruber and David A. Wise, (eds.), *Social Security Programs and Retirement around the World: Micro-Estimation*, University of Chicago Press.

Oyama, T. (2003), "Estimating Time Series for Excessive Firm Debt in Japan: Analysis of the Interrelation Between Bad Loans and the Macroeconomy", Bank of Japan, mimeo.

Oyama, T. and H. Tanaka (2003), "Macroeconomic Factors behind the Rapid Increase in Japanese Banks' Loan Losses: Analysis of the Interrelation Between Bad Loans and the Macroeconomy", Bank of Japan, mimeo.

Peek, J. and E. Rosengren (2003), "Unnatural Selection: Perverse Incentives and the Misallocation of Credit in Japan", NBER *Working Paper*, No. 9643, April.

Porter, M.E., H. Takeuchi, and M. Sakakibara (2001), *Can Japan Compete*? London, MacMillan.

Rae, D. and D. Turner (2001), "A small global forecasting model", *Economics Department Working Paper*, No. 286, OECD, Paris.

Rebick, M. (2001), "Japanese Labor Market: Can we Expect Significant Change?" in *Japan's New Economy: Continuity and Change in the Twenty-First Century*, M. Blomstrom, B. Gangnes and S. La Croix (eds.), Oxford.

Reifschneider, D. and J. Williams (2000), "Three Lessons for Monetary Policy in a Low-Inflation Era", *Journal of Money, Credit, and Banking*, Vol. 32, No. 4, November, Part 2.

Sakakibara, M. and M.E. Porter (2001), "Competing at Home to Win Abroad: Evidence from Japanese Industry", *The Review of Economics and Statistics*, May, Vol. 83(2).

Schaede, U. (2000), *Cooperative Capitalism – Self-Regulation, Trade Associations, and the Antimonopoly Law in Japan*, Oxford University Press.

Sherer, P. (2001), "Age of Withdrawal from the labour force in OECD countries", OECD *Labour Market and Social Policy Occasional Papers*, 49, Paris.

Smith, I. (2001), "Trends in Environmental Control for Coal Powered Generation in Europe", paper presented to a conference on Clean Coal Technology, Ministry of Economy, Trade and Industry, Tokyo, September.

Solis, M. (2003), "The Politics of Self-Restraint: FDI Subsidies and Japanese Mercantilism", *The World Economy*, Vol. 26, No. 2.

Sparks, L (2000), "Seven-Eleven Japan and The Southland Corporation: A Marriage of Convenience", *International Marketing Review*, Vol. 17, No. 4/5.

Stark, A., and T.C. Sargent (2003), "Is there Downward Nominal Wage Rigidity in the Canadian Phillips Curve", *Department of Finance Working Paper*, 2003-01.

Svensson, L. (2000), "The Zero Bound In An Open Economy: A Foolproof Way Of Escaping From A Liquidity Trap", NBER *Working Paper*, No. 7967, October.

Tachibanaki, T., (2000), "The Role of Firms in Welfare Provision", paper prepared for the JCER-NBER conference on Labour Markets and Firm Benefits, Hawaii, January.

Tanaka, N., (2002), "Urban Air Pollution in Japan", in *Air pollution the Megacities of Asia*, Korea Environment Institute, Seoul.

Taylor, J. (2001), "Low Inflation, Deflation, and Policies for Future Price Stability", *Monetary and Economic Studies*, Vol. 19, No. S-1, February, Institute for Monetary and Economic Studies, Bank of Japan.

Walkenhorst, P. and N. Dihel (2003), "Tariff Bindings, Unused Protection and Agricultural Trade Liberalisation", OECD *Economic Studies*, Paris, forthcoming.

Woodford, M. and G. Eggertsson (2003), "The Zero Bound on Interest Rates and Optimal Monetary Policy", mimeo.

World Trade Organisation, (2002), *Trade Policy Review: Japan*, Geneva, December.

Wu, Zhangfa, (2001), "Air Pollution Control Costs for Coal-Fired Power Stations", IEA *Clean Coal Centre Paper*, No. 33, October.

Yamato, K. and T. Fukawa (2003), "The Future Prospects of Japanese Employees Pension Insurance", paper presented to the 4th International Research Conference on Social Security of the International Social Security Association, Antwerp, May.

Yates, A. (1998), "Downward Nominal Rigidity and Monetary Policy", *Bank of England Working Paper*, No. 82.

Annex I

The Phillips curve in Japan: estimating the relationship between output and inflation at low inflation rates

This annex examines whether the relationship between output gaps and inflation has changed in the context of low inflation in Japan. For this purpose, a core-price Phillips curve is estimated using a number of indicators of excess capacity or labour market slackness and the stability of the coefficients of these variables is tested.

Phillips curve equation

The Phillips curve is expressed in terms of core inflation, which excludes food and energy. Core inflation is corrected for the rise in the consumption tax rate (VAT) in 1989 and 1997.* Expected inflation is backward looking and proxied by lags of the dependant variable, though the introduction of forward-looking expectations does not change significantly the results. A variety of demand indicators are used to measure demand pressure and the extent of slack in the labour market: the unemployment gap (ugap), the output gap (gap), capacity utilisation in the manufacturing sector (cap), the production capacity index of the BOJ's Tankan Survey (pcim), and the business condition index of the Tankan Survey (bim). Supply shock effects are proxied by the variation in non-energy import prices in the short run and by a de-trended measure of real import prices in the long run. The estimated Phillips curve has the following specification, which is similar to other Secretariat work (Rae and Turner (2001):

$$\Delta\pi_t = c_0 + c_1\Delta\pi_{t-1} + c_2\Delta\pi_{t-2} + c_3(1-\theta_1(L)) * (indic_t) + c_4 * (1-\theta_2(L))\omega^m * \Delta\pi_t^m \\ + c_5 * (1-\theta_3(L))(\omega^m(\pi_{t-1}^m - \pi_{t-1}^{ulc})) + \varepsilon_t^\pi$$

Δ is the first difference operator and subscripts denote lags, while θ is the operator for the lag (L);

π_t core-price inflation, *i.e.* excluding food and energy;

π^m non-energy import prices inflation;

π^{ulc} unit labour costs in the manufacturing sector;

indic indicator of demand pressure (in level or in some cases both in level and first difference);

ω^m the weight of non-oil imports in total imports.

* Results are not sensitive to this correction.

Table A.1. **Co-efficients of the demand pressure indicator in standard Phillips curves**
Core inflation (corrected for VAT hikes) is the dependent variable[1]

	Co-efficient[2]	t-statistics	Sacrifice ratio
Capacity utilisation in manufacturing sector[3]	0.06	3.14	1.52
Output gap	0.04	2.17	2.30
Change in output gap	0.12	1.73	
Business conditions index[4]	0.02	1.61	4.62
Production capacity index[4]	0.04	1.65	2.61
Unemployment gap[5]	0.06	1.77	1.47
Change in the unemployment gap	0.34	2.30	

1. Estimation period is quarterly data from 1975 to 2002.
2. Variables of demand pressure indicators are re-scaled so that the coefficients are comparable.
3. Capacity utilisation in manufacturing is inverted so that its coefficient becomes positive.
4. From the Bank of Japan's Tankan Survey.
5. Unemployment gap is defined as the difference between the unemployment rate and the NAIRU. This parameter is inverted so that its coefficient becomes positive.

Source: OECD estimates.

Estimation results

In all of the estimated equations, the indicator of demand pressure is significant with the expected sign (Table A.1). For the unemployment and the output gap, both the level and the first difference were significant determinants of inflation, signalling the presence of speed limit effects in the economy. The equations pass standard in-sample diagnostic tests. One common way of assessing the relevance of the Phillips curve is to check the implied sacrifice ratio, which is measured as the cumulative output gap that is required to permanently decrease the inflation rate by one percentage point. The equation that includes the output gap leads to a sacrifice ratio of between 2.3 and 2.6. The sacrifice ratio is somewhat lower for the specification using the unemployment gap and capacity utilisation (around 1.5) and higher when the business index is included (around 4.5).

Does the slope of the Phillips curve become flatter at low rates of inflation?

The next step checks whether the slope of the Phillips curve changes when inflation is low. Phillips curves are re-estimated, allowing the coefficient associated with demand pressure indicators to differ depending on whether inflation is above or below certain thresholds. Two inflation thresholds were tested: 0 per cent and ½ per cent (quarter-on-quarter, non-annualised growth rates). The estimations show several interesting results. *First*, in most cases, the coefficient associated with the demand indicator is halved when inflation falls below the threshold and the demand indicator looses significance (Table A.2). This corresponds to an increase (in absolute terms) of the sacrifice ratio, meaning that the slope of the short-run Phillips curve is flatter at low levels of inflation. This result is true for the two examined thresholds. *Second*, the coefficient associated with the demand indicator is statistically different whether inflation is above or below ½ per cent as indicated by a Wald test (Table A.3). These results hold independently of the indicator used and whether or not inflation is corrected. By contrast, a threshold of zero does not imply significant change in the relationship except for the equation making use of capacity utilisation. This lack of evidence might stem from the lower number of observations associated with negative inflation rates, which renders the outcome of the test very sensitive to every single observation. The

Table A.2. **Asymmetry in the relationship between the output gap and inflation**
Core inflation (corrected for VAT hikes) is the dependent variable

	Inflation (π) threshold	Co-efficient	t-statistic	Inflation (π) threshold	Co-efficient	t-statistics
Capacity utilisation in manufacturing sector	π < 0	–0.10	–1.25	π < ½	0.01	0.23
	π > 0	0.08	3.74	π > ½	0.09	4.30
Output gap	π < 0	0.02	0.17	π < ½	0.01	0.23
	π > 0	0.04	2.17	π > ½	0.06	2.51
Change in the output gap	π < 0	0.02	0.09	π < ½	–0.02	–0.16
	π > 0	0.14	1.95	π > ½	0.18	2.29
Business conditions index[1]	π < 0	0.01	0.43	π < ½	0.00	0.01
	π > 0	0.02	1.70	π > ½	0.07	3.33
Production capacity index[1]	π < 0	0.03	0.75	π < ½	0.02	0.62
	π > 0	0.05	1.76	π > ½	0.10	2.94
Unemployment gap	π < 0	0.02	0.45	π < ½	0.02	0.58
	π > 0	0.12	2.52	π > ½	0.18	3.36
Change in the unemployment gap	π < 0	0.25	0.84	π < ½	0.10	0.55
	π > 0	0.42	2.43	π > ½	0.81	3.70

1. From the Bank of Japan's Tankan Survey.
Source: OECD estimates.

existence of a sequential break is also tested in 1990 and 1998. The result of the re-estimation allowing for different demand indicator coefficients before and after 1990 and 1998 suggests that there is a break in 1990 but not in 1998.

Does a low level of inflation rate or low variance of inflation matter?

As discussed in Box 1, the slope of the Phillips curve can become flatter as a result of price rigidity, due to less frequent adjustments, or nominal wage rigidity. While nominal rigidity in wages implies a non-linearity in the Phillips curve only at inflation rates near zero, the possibility of less frequency in price adjustments suggests a stabilisation of inflation that can change the slope of the Phillips curve at any rate of inflation. In order to check this hypothesis, the coefficient on demand indicators is tested for asymmetry relative to the variation in the rate of inflation. The results of the re-estimation of the Phillips curve show that its slope becomes steeper if the absolute value of the variance of inflation changes exceeds a certain threshold. A Wald test also confirms the asymmetry, though the evidence is a bit weaker than in the case of the level of inflation. On the other hand, a test on the evolution of the coefficient on demand indicators over time indicates that there appears to be breaks at the beginning of both the 1980s and the 1990s. The econometric tests, together with the observation of the development of inflation over time, imply that the flattening of the Phillips curve in the 1980s can be explained by a lower variance in the inflation rate compared with that in the 1970s, while the further flattening in the slope of Phillips curve in the 1990s is likely to be associated with the low level of the inflation rate.

Table A.3. Wald tests[1] for asymmetry and breaks

Core inflation[2] (corrected for VAT hikes) is the dependent variable

A. Asymmetry	If inflation[2] exceeds ½% dummy = 1	If inflation[2] exceeds 0% dummy = 1
Capacity utilisation in manufacturing sector	0.00*	0.04*
Output gap	0.02*	0.55
Business conditions index[3]	0.00*	0.55
Production capacity index[3]	0.01*	0.51
Unemployment gap	0.00*	0.17
B. Sequential breaks	Break in 1990	Break in 1998
Capacity utilisation in manufacturing sector	0.16	0.01*
Output gap	0.06*	0.27
Business conditions index[3]	0.02*	0.14
Production capacity index[3]	0.01*	0.12
Unemployment gap	0.01*	0.03*

1. The Wald tests check whether the co-efficients associated with the demand indicator differ depending on whether they are above or below the inflation threshold. At a probability above 10 per cent, it cannot be concluded that the co-efficients are significantly different. An asterix indicates significance at the 10 per cent level.
2. The rate shown is the quarter-on-quarter, non-annualised growth rate.
3. From the Bank of Japan's Tankan Survey.

Source: OECD estimates.

Annex II

Assessment of the government's structural reform programmes

This annex reviews the government's reform programmes in detail so as to supplement the overall assessment in this *Survey*. The subject of the review includes the measures announced in the *Outline of Basic Policy for Macroeconomic Management and Structural Reform*, which was released in 2001, 2002 and 2003, and the 2002 October package. The focus, though, is on more recent measures (see Annex I in the 2002 *Economic Survey* for a fuller assessment of earlier measures).

What are the aims of structural reform?

Since the announcement of the first *Outline* in June 2001, the government has been actively implementing structural reform. The goals are to promote economic growth ("no growth without reforms") and to support devolution of power from the government to private agents and from central to local government. Consequently, reform should contribute to smaller and more efficient government, while improving the allocation of resources. To achieve these goals, the reform programme includes major initiatives in the following areas:

- Deregulation.
- Financial-sector reform (non-performing loans, rehabilitation, securities markets).
- Improved human capital and a more flexible labour market.
- Stronger competition, more openness and entrepreneurship.
- Social security reform.
- Changes in the budget process and better public management (including privatisation).
- Devolution of power from central to local government.

How are the reform measures assessed?

The reform programmes are assessed from the following three perspectives:

Policy design. Policies are rated on the extent to which their design maximises their effectiveness, while minimising the associated costs that have negative side effects on other policy goals. The rating ranges arbitrarily from 0 to 3.

Stage of implementation. This simply compares what has been done relative to the announced programme. A rating of zero is given for reforms still in the discussion stage, 1 for having a concrete plan, 2 for a preparatory stage of necessary legislation, and the maximum 3 for the passage of legislation. Partial implementation is rated 1 or 2 depending on the degree.

Effectiveness. This assesses to what degree reform measures are compatible with the original policy goal. Since planned measures may change considerably during the process of negotiation, implementation is not necessarily regarded as proof of successful reform. The rating ranges from 0 for plans and legislation that are not compatible with original goals (all reforms at a discussion stage are automatically rated zero) to the maximum 3 for those that broadly meet original objectives.

To what extent has progress been made in each area of reform?

Deregulation

In the past few years, the government's Council for Regulatory Reform (CRR) continued to focus on promoting the entry of business into publicly regulated sectors, including medical services, education, agriculture and employment services. However, the success in these areas has been limited so far. The difficulty in opening up these markets on a nation-wide basis, together with the aim of promoting devolution, led to the idea of establishing "*Special Zones for Structural Reform*", which allows local governments to ease specific regulations in order to promote local business. As of August 2003, 164 plans for such zones, including deregulation in public services, had already been approved. Another important focus of the Council is deregulation in planning in urban areas, which has improved the efficiency of land use in those areas. The overall initiative for promoting deregulation is currently led by the CRR, which consists of representatives of business and academia supported by a government secretariat. However, in the absence of strong political commitment, its power has proven to be very weak, especially in dealing with politically sensitive areas. Another drawback is that the scope of the CRR's activities does not cover deregulation of network industries. Instead, regulatory issues in these industries are discussed by their own committees and the progress tends to be very slow, especially in energy.

Table A.4. **Deregulation**

	Policy design	Implementation	Effectiveness	Average
Establish "special zones"	3	3	2	2.7
Allow entry into publicly regulated services	2	1	1	1.3
Ease planning and zoning in urban areas	3	3	3	3.0
Strengthen the framework for deregulation	1	2	1	1.3
Average	**2.3**	**2.3**	**1.8**	**2.1**

Financial-sector reform (non-performing loans, rehabilitation, securities markets)

The government is promoting the rehabilitation of the financial system in line with the programme announced in October 2002 (see the postscript in the 2002 *Economic Survey* and Chapter II). The government's plan, which aims at halving the ratio of non-performing loans to total loans by major banks by the end of FY 2004, calls for ensuring adequate provisioning of non-performing loans, reinforcing banks' capital base and strengthening the governance of banks to improve their performance. Since last October, progress has been made in a number of areas. To improve the assessment of loan quality, the Financial Services Agency (FSA) has continued its special inspections of large borrowers, while major banks have introduced a new method based on discounted cash flow to ensure appropriate provisioning. The assessment of the adequacy of capital has become somewhat tighter as accounting firms now enforce rules concerning deferred tax assets more strictly. The FSA decided to inject public funds into Resona in June 2003 and committed itself to improving the governance at this bank by purchasing voting shares. However, a number of issues remain unresolved. There is no explicit guideline for restricting the inclusion of deferred tax assets in banks' capital, leaving such judgments to accounting firms. No change is planned at present for taxation on the deduction of provisions for doubtful loans and a loss carry-back. With regard to the collection of non-performing loans, the measure to allow the Resolution and Collection Corporation (RCC) to buy them at a market price has succeeded in increasing its purchases substantially. The Industrial Revitalisation Corporation (IRC) has been established to purchase loans classified as "requiring special attention" and to support their rehabilitation, though it still remains at an early stage. Taxation on dividends and capital gains from shares of listed companies has been consolidated, with lower tax rates to encourage investment in shares. The reform of major public financial institutions and postal saving has been effectively postponed, delaying a reduction in their large presence in domestic financial markets.

Table A.5. **Financial-sector reform**

	Policy design	Implementation	Effectiveness	Average
Ensure stricter assessment of loan quality and adequate provisioning	2	2	2	2
Reinforce capital adequacy	1	1	1	1
Strengthen the governance of banks	2	2	1	1.7
Change tax system to promote NPL resolution	2	0	0	0.7
Support rehabilitation of distressed debtors	2	2	1	1.7
Encourage the collection of NPLs	2	3	3	2.7
Change taxation related to investment in equities	2	3	2	2.3
Consolidate public financial institutions	1	1	1	1
Average	**1.8**	**1.8**	**1.4**	**1.6**

Improving human capital and making the labour market more flexible

The government has been actively trying to introduce competition among universities by allocating funds to better performing universities (Center of Excellence) and by corporatising national universities, while allowing universities more flexibility in managing courses. Universities are also encouraged to expand courses for vocational training. Since 2001, the government has been advocating an indicative target of creating 5.3 million jobs in the service sector, including publicly regulated services such as medical and professional services. However, no visible progress has been achieved so far. On the other hand, the flexibility of labour markets has been increased by easing restrictions on temporary workers and fixed-term contracts, while the focus of training schemes is shifting from firms to individuals. Explicit conditions for dismissal by firms have been legislated. The scope of private job-placement services is also being expanded, though restrictions on charges still remain tight. To alleviate the increase in unemployment among young people, consultation, training and job-search functions at the public employment service is being integrated, while the government is also promoting wider use of apprenticeships. However, these measures remain at an early stage.

Table A.6. **Human capital and the labour market**

	Policy design	Implementation	Effectiveness	Average
Introduce competition among universities	2	2	2	2.0
Encourage education for workers	2	2	2	2.0
Create 5.3 million jobs in service sector	2	1	1	1.3
Increase labour mobility	2	2	2	2.0
Reduce unemployment rate for youth	3	1	1	1.7
Average	**2.2**	**1.6**	**1.6**	**1.8**

Competition, openness and entrepreneurship

The government is now using Free Trade Agreements (FTAs) as an important instrument to open up the market. An FTA with Singapore was signed at the beginning of 2002 and negotiations to establish an FTA with Mexico began in November 2002. In addition, preparatory discussions continue with Korea, Thailand, the Philippines, Malaysia, Indonesia and ASEAN. However, one of the stumbling blocks is the agricultural sector, where political pressure against liberalisation is strong. The government has also tried to promote inward FDI by simplifying administrative procedures and by facilitating M&As. To encourage start-ups, the minimum requirement for capital has been tentatively reduced to 1 yen when certain conditions are satisfied (permanently abolishing this requirement is under consideration). Although the government's reform programmes include commitments to promote competition in network industries, notably energy and telecommunications, and in publicly regulated services, the measures proposed are far from ambitious. Moreover, progress has been very limited except for some changes in regulations for telecommunication. The measures to strengthen the role of the Fair Trade Commission (FTC), including an increase in staff and ensuring its independence from the line ministries, have been implemented, though further measures are being considered.

Table A.7. **Competition, openness and entrepreneurship**

	Policy design	Implementation	Effectiveness	Average
Promote FTAs and FDI	2	2	1	1.7
Ease barriers to start-ups	2	2	2	2
Promote competition in network industries and other publicly regulated sectors	1	1	1	1
Strengthen the role of Fair Trade Commission	2	2	2	2
Average	**1.8**	**1.8**	**1.5**	**1.7**

Social security reform

As discussed in Chapter III, several common elements have emerged from on-going official discussions concerning the pension reform that is planned in 2004. *First*, it aims to introduce a mechanism to cap contributions at a certain proportion of income by adjusting benefits in response to changes in demographic and economic trends. *Second*, it plans to reduce distortions in work incentives for the elderly and women by removing the favourable treatment of second earners and by reviewing benefits for elderly who are working. With regard to health care reform, the government has already implemented some measures to improve efficiency through standardising services, strengthening the role of insurers, and disseminating information (see Box 3 for more details). As a next step, the government plans to review the health insurance system and the official fee schedule over the next five years. The objectives are to integrate health insurance funds to form a larger unit, raise the age eligibility of insurance schemes for the elderly to above age 75 and change the official fee schedule to reflect the costs of hospitalisation and advanced medical techniques. Although specific measures are still being discussed, this is a step in the right direction. Finally, the government is studying the introduction of individual social security accounts, which integrate information about the flow of funds between individuals and social security funds. This may produce budget savings by reducing the duplication of benefits.

Table A.8. **Social security reform**

	Policy design	Implementation	Effectiveness	Average
Pension system reform	2	1	0	1.0
Limit contribution rate by adjusting benefits	2	2	2	2
Remove disincentives to work	2	0	0	0.7
Health care reform	2	1.0	0.7	1.2
Integrate insurers, limit the scale of elderly insurance, and review fee schedule	2	1	0	1.0
Improve the efficiency of medical services	2	2	2	2
Introduce individual social security account	2	0	0	0.7
Average	**2**	**1.0**	**0.7**	**1.2**

Fiscal reform

The government plans to introduce some pilot projects in which programmes will be required to aim at achieving certain identified targets rather than merely spending the budget. Multi-year budget allocation is to be allowed for these pilot projects. The government has revised its *Medium-term Economic and Fiscal Perspective* but, as discussed in Chapter III, its effectiveness remains weak. The Council for Economic and Fiscal Policy (CEFP) has been playing an important role in prioritising spending and changing budget allocations. Earmarked taxes still remain, though some flexibility has been introduced. Despite the announced measure for privatisation of government corporations, it may not lead to substantial reduction of the scope of those corporations. See Box 3 for more details about fiscal reform.

Table A.9. **Fiscal reform**

	Policy design	Implementation	Effectiveness	Average
Introduce pilot projects to encourage output oriented implementation of the budget and to allow multi-year budget allocation	3	1	1	1.7
Ensure fiscal sustainability by introducing a medium-term consolidation plan	1	2	1	1.3
Improve the budget process by prioritising budget programmes	2	2	2	2
Reduce public investment to the level of the early 1990s	2	2	2	2
Reallocate earmarked road taxes	3	0	0	1
Privatise government special status corporations	1	1	0	0.7
Average	**2**	**1.3**	**1.0**	**1.4**

Devolution of power from central to local governments

The government has announced a plan to reform subsidies to local governments (around 4 trillion yen) over the next several years, while shifting tax sources from the central to local level. The allocation of general grants (Local Allocation Tax) to local governments will also be reviewed, though specific measures have not been identified. Some financial incentives are to be given to promote the merger of local governments. The introduction of the *Special Zones for Structural Reform* is expected to give local governments more responsibility in managing regulations.

Table A.10. **Devolution**

	Policy design	Implementation	Effectiveness	Average
Review tax allocation, subsidies and general grants	2	1	0	1.0
Promote mergers of local governments	2	2	1	1.7
Introduce special zones for more responsible local governments	2	2	2	2.0
Average	**2**	**1.7**	**1**	**1.5**

Annex III

Chronology of main economic events

2002

November

The Free Trade Agreement (FTA) with Singapore went into effect.

December

The government drafted a supplementary budget for FY 2002, which includes measures for strengthening the social safety net and increasing public investment, while revising downwards the estimate of tax revenue.

The government adopted the draft initial FY 2003 budget, which limited general expenditure (*i.e.* total expenditure less debt servicing and transfers to local governments) to the level in the previous year's initial budget, while allowing 1.8 trillion yen of tax cuts.

2003

January

The government adopted the revised *Structural Reform and Medium-term Economic and Fiscal Perspective* for FY 2003 to FY 2007, which outlines a scenario of fiscal consolidation.

The Diet passed the supplementary budget for FY 2002.

February

The Council for Regulatory Reform proposed an action plan to open up publicly regulated markets such as health, education and agriculture.

March

The Diet passed the initial budget for FY 2003.

April

The Bank of Japan (BOJ) announced a plan to purchase from banks Asset Backed Securities (ABS) and Asset Backed Commercial Papers (ABCP), which are mainly backed by receivables held by, or loans to, small and medium-seized enterprises. The plan went into effect in July.

The postal saving system was transformed into an independent corporation.

The Industrial Revitalisation Corporation (IRC) was established to support corporate restructuring and to accelerate the disposal of non-performing loans.

The BOJ raised the target for the outstanding balance of current accounts at the BOJ by 5 trillion yen to the range of 22 to 27 trillion yen.

The Financial Services Agency announced the results of the second special inspection of troubled borrowers of the major banks. It showed that the gap between the FSA and the banks' own self-assessment had narrowed compared to the first special inspection.

The Headquarters for Special Zones for Structural Reform approved the first 57 proposals for special economic zones in response to requests from local governments, followed by another 60 in May.

May

The BOJ raised the target for the outstanding balance of current accounts at the BOJ to the range of 27 to 30 trillion yen.

Resona, the fifth largest financial group, requested an injection of public funds from the government.

June

The government adopted the *Basic Policy for Economic and Fiscal Policy Management and Structural Reform* 2003, to update and revise the structural reform plan adopted in June 2001 and June 2002.

July

The Diet passed a law which allows life insurers to cut promised returns on existing contracts before the companies fail.

August

The Ministry of Finance announced a guideline for FY 2004 budget requests, maintaining almost the same framework as in the FY 2003 budget.

The Headquarters of the Special Zones for Structural Reform approved another 47 proposals for special economic zones, bringing the total to 164.

The IRC announced the first three companies that it will help to restructure.

September

Following his re-election as president of the Liberal Democratic Party, Prime Minister Koizumi restruffled the Cabinet, including the Minister of Finance and the Minister of Economy, Trade and Industry.

October

The BOJ raised the upper end of its target range for the outstanding balance of current accounts at the BOJ from 30 to 32 trillion yen.

OECD PUBLICATIONS, 2, rue André-Pascal, 75775 PARIS CEDEX 16
PRINTED IN FRANCE
(10 2003 18 1 P) ISBN 92-64-01975-8 – No. 53295 2004
ISSN 0376-6438