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ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

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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 Korea were reviewed by the Committee on 7 March 2007. 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 16 April 2007.

The Secretariat's draft report was prepared for the Committee by Randall S. Jones, Taesik Yoon and Tadashi Yokoyama under the supervision of Willi Leibfritz.

The previous Survey of Korea was issued in November 2005.

BASIC STATISTICS OF KOREA

THE LAND

Area (thousand km^2)	100	Major cities, 2005 (million inhabitants):	
Agricultural area (thousand km^2)	14	Seoul	10.0
Forests (thousand km^2)	65	Pusan	3.6
		Taegu	2.6
		Incheon	2.5

THE PEOPLE

Population, 2006 (million)	48.3	Civilian labour force, 2006 (million)	24.0
Per km^2, 2006	483	Civilian employment:	23.2
Annual rate of change of population, 2006	0.3	Agriculture, forestry, fishing	1.8
		Industry	4.2
		Construction	1.8
		Services	15.3

PRODUCTION

GDP, 2006 (trillion won)	847.9	Origin of GDP, 2006 (per cent of total):	
GDP per head (USD)	18 444	Agriculture, forestry, fishing	3.2
Gross fixed investment, 2006 (trillion won):	246.2	Industry	30.5
Per cent of GDP	29.0	Construction	9.1
Per head (USD)	5 355	Services	57.2

THE GOVERNMENT

Public consumption, 2006 (per cent of GDP)	14.8	Composition of the National Assembly, June 2007:	Number of seats
Central government revenue, 2006, consolidated basis (per cent of GDP)	25.0	The Uri Party	88
Central government budget balance, 2006, consolidated basis (per cent of GDP)	0.7	The Grand National Party	128
		Other	83
			299

FOREIGN TRADE

Commodity exports, 2006, f.o.b. (per cent of GDP)	36.6	Commodity imports, 2006, c.i.f. (per cent of GDP)	34.7
Main exports (per cent of total exports):		Main imports (per cent of total imports):	
Light industry products	8.3	Consumer goods	10.3
Heavy industry products	83.1	Industrial materials and fuels	56.2
Electronic products	27.6	Crude petroleum	18.1
Cars	9.4	Capital goods	33.5

THE CURRENCY

Monetary unit: Won		Currency unit per USD, average of daily figures:	
		2004	1 145
		2005	1 024
		2006	956

Executive summary

Korea remains one of the fastest growing economies in the OECD area. Strength in high-technology sectors and strong demand from China have supported export growth over the past four years despite sluggish domestic demand. This growth pattern has exacerbated imbalances between the manufacturing and service sectors and between large and small firms, thus increasing income inequality and aggravating structural weaknesses. These problems, combined with slowing inputs of capital and labour, raise concern that Korea's growth potential is declining while per capita incomes are still one-third below the OECD average. Sustaining the country's growth potential is a key theme in the government's Vision 2030 *plan.*

Monetary policy should focus on the medium-term inflation target. *Concern about house prices is one reason for the tightening of monetary policy since late 2005. However, addressing house price increases by interest rate hikes puts upward pressure on the exchange rate and reduces both domestic demand and exports. The Bank of Korea should focus on achieving the 2.5% to 3.5% inflation target, which is currently not at risk, while the government should maintain a flexible exchange rate policy.*

Housing policies should focus more on developing an efficient market than on controlling prices. *Although the rise in nation-wide house prices in Korea has been relatively small compared to other OECD countries, the steep increase, especially for apartments in certain areas of the capital region, where nearly half of the population lives, prompted five real estate policy packages over the past 18 months. To meet its objective of stabilising house prices, the government plans to boost the construction of housing in the capital region, with the public sector playing a larger role. However, the government should begin to reduce the regulations that restrict the supply of housing, as greater reliance on the private sector would better match supply with consumer preferences. The real estate packages are also aimed at reducing "speculative" demand and cutting house prices by introducing price caps on new houses. Despite the merits of the objective of stabilising housing prices, some of these policies have the potential to create substantial harm if allowed to persist in the long term as they tend to reduce the supply of housing.*

Maintaining a sound fiscal position is crucial in the face of exceptionally rapid population ageing. *Indeed, the* Vision 2030 *plan projects that public social spending will rise from 6% of GDP at present to around the current OECD average of 21% by 2030. It is important to proceed cautiously in raising spending and aim at efficiency in each area, thereby limiting the necessary hike in the tax burden. Some priorities should be:*

- *Removing obstacles to fertility, which has fallen to only 1.08, the lowest in the OECD area.*
- *Encouraging higher labour participation by women to mitigate the impact of population ageing.*
- *Shifting the focus from increased public provision of childcare and long-term care in favour of vouchers for households to boost competition and better meet consumer demands.*
- *Expanding the means-tested benefit for the elderly, while promoting the new company pension system and reforming public occupational pension schemes.*

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- *Reforming the National Health Insurance to limit upward pressure on healthcare spending.*
- *Addressing rising inequality and poverty by reducing the rising share of non-regular employees.*

Strengthening the integration of Korea in the world economy is a priority. *Despite progress during the past decade, Korea remains relatively isolated in terms of imports of manufactured products, the stock of inward foreign direct investment (FDI) and the inflow of foreign workers. Making fuller use of foreign goods and services, FDI and foreign workers is important to boost productivity growth, as well as to cope with labour shortages in small companies. Achieving this objective requires reducing barriers to FDI and imports, including agricultural products, and relaxing controls on inflows of foreign workers.*

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Assessment and recommendations

The current expansion, led primarily by exports…

Korea's economy has expanded at a 4.3% annual rate since 2002, lifting per capita income to two-thirds of the OECD average. Despite a stronger currency, growth has been primarily driven by external demand, thanks in part to the continuing development of Korea's information and communication technology sector and strong demand from China. In contrast, domestic demand has been relatively sluggish, growing at an annual rate of 2% since 2002, reflecting the collapse of the credit card bubble and a deterioration in the terms of trade. Subdued domestic demand and the appreciation of the currency have kept inflation somewhat below the Bank of Korea's medium-term target of 2.5% to 3.5% since mid-2005, despite higher oil prices.

… decelerated in the latter part of 2006…

Economic growth slowed to less than 4% (at a seasonally-adjusted annual rate) over the year to the first quarter of 2007, reflecting weaker domestic demand. It is projected to pick up gradually in 2007, resulting in growth of 4¼ per cent for the year, down from 5% in 2006. Private consumption gains in 2007 may be limited to the rise in household income, as the scope for further cuts in the saving rate and increases in debt have been largely exhausted. The downward trend in investment as a share of GDP is likely to continue, in part because housing policies are slowing construction activity. Meanwhile, export growth is projected to moderate, given some deceleration in world trade growth and the impact of a stronger won.

… in the context of a stronger currency…

The exchange rate has risen by 9% relative to the dollar since the end of 2005, driven in part by a large surplus in the capital account. Capital inflows increased during a period of rising domestic interest rates, as the Bank of Korea launched a pre-emptive tightening of monetary policy, raising the short-term policy interest rate from 3.25% to 4.5% between October 2005 and August 2006. Exchange rate appreciation was accompanied by foreign exchange market intervention intended to smooth the upward trend in the won, while accepting its trend increase. *Korea should maintain a flexible exchange rate policy, given the costs and risks of intervention. With foreign reserves of $247 billion or 27% of GDP, more than double Korea's short-term foreign debt, there is no need for continued reserve accumulation.* The upward pressure on the exchange rate may be moderated by the recent measures to relax barriers to capital outflows. *The objective should be to create a level playing field between foreign and domestic investment opportunities, while avoiding measures, such as the expansion of public support for overseas investment, which encourage outflows in the short run.*

… and the tightening of monetary policy

The surge in capital inflows has also boosted liquidity growth. The increase in the money supply (M2) accelerated to nearly 11% (year-on-year) in the fourth quarter of 2006, the highest since 2003, in part due to loan demand related to housing. To slow the growth of liquidity and bank lending, the Bank of Korea raised the reserve requirement for the first time since 1990. Monetary conditions have thus tightened considerably as a result of the interest rate hikes, the change in the reserve requirement and the stronger exchange rate. This has had an adverse impact on the highly indebted household and small company sectors, contributing to the deceleration of economic growth in the second half of 2006. Although economic growth slowed below its potential rate and inflation was below the target zone, monetary conditions tightened significantly. The tightening of monetary policy has been driven in part by concern about house prices and the Central Bank will "remain keenly alert to real estate market trends" in setting interest rates in 2007. However, monetary policy is a blunt instrument for influencing real estate prices, particularly as the largest house price increases are limited to specific areas of the capital region. Moreover, giving too much weight to house prices risks distracting the monetary authorities from their primary objective of stable prices for goods and services. *The Bank of Korea needs to take full account of recent developments in output and inflation in determining its monetary policy stance. The Bank should focus on keeping inflation, as measured by the overall consumer price index, in the medium-term target zone, while developments in the real estate market should be addressed by well-targeted measures.*

The government plans to increase housing in the capital region

The government has, in fact, introduced five real estate policy packages since August 2005, reflecting concern about a possible house price "bubble". While the increase in the average nation-wide house price in Korea since 2000 is well below the average of other OECD countries and remained moderate in 2005-06, house prices have become a very sensitive political issue because of a more rapid pace of increase in the price of apartments in the capital region, particularly in the Kangnam area. A main reason is the decline in the private supply of housing caused by difficulties in securing construction sites, in part due to persistent regulations, while demand for housing has increased in certain areas of the capital region due to favourable living conditions, including the availability of high quality education. The government fears that the large price rises in the capital region could spill-over to other parts of the country and it is also concerned about the large capital gains for some people and a widening dispersion of wealth. It is for these reasons that the government has responded to wide-spread public concern regarding house price rises by acting on a variety of fronts. It has boosted the planned increase in housing construction in the capital region from 1.48 million units over the period 2007-10 to 1.64 million units, with the public sector taking the lead. In addition, it plans to expand the number of public rental housing units over the next decade from 0.8 million to 3.4 million units, 20% of the total housing stock. This is to be partly financed by a new real estate fund that will rely on public financial institutions, such as the National Pension Fund, with investors promised a yield above that on Treasury bonds. Increasing the supply of housing that matches household preferences is the key to reducing price pressures.

Other government measures to stabilise the real estate market…

In addition to the plan to increase the supply of housing in the capital region, the government has introduced a number of other real estate policies, including steps aimed at reducing "speculative" demand and lowering house prices:

- The Financial Supervisory Service cut the ceiling on the loan-to-value (LTV) ratio – the amount of the loan relative to the value of the house – from 60% to 40% in most of the capital region.
- The Comprehensive Property Tax, a nation-wide tax introduced in 2005 on top of local property taxes, imposes progressive rates of up to 4% on real estate holdings.
- The capital gains tax has been raised to at least 50% for those owning two or more homes, compared to rates of 9% to 36% for owners of one home.
- The price of new houses provided by the public sector in new towns in the capital region is to be reduced by 25%, in part through reform of land-use regulations.
- Private construction companies are required to publicly disclose their construction costs in the capital region. Local governments throughout the country will set price caps on house prices, taking into account the cost of land and construction and allowing an "appropriate" profit. This step is expected to lower house prices by 20%.

… may reduce housing supply in the longer term

The government measures have to be seen in the context of its objective to limit the large house price swings in the short term. Despite the merits of such a policy objective, some of these policies have the potential to create substantial harm if allowed to persist in the longer term. *First*, some actions that are aimed at limiting demand for housing may have adverse dynamic affects on supply. *Second*, international experience shows that high taxes on capital gains can result in lock-in effects that also reduce housing supply. *Third*, requiring companies to disclose their construction costs and setting price ceilings will weaken incentives to increase efficiency and again reduce supply. *In sum, there is a risk that the various measures to reduce so-called speculative demand and control house prices will decrease the supply of housing from the private sector and strengthen price pressures in the longer term, despite the planned increase in publicly-provided housing. Given these considerations, the government should take a longer-term view and address other factors driving demand to live in the capital region, for example by improving the quality of education in other regions of the country. In addition, it should unwind many of the regulations on land use and housing development, thus inducing more private supply, which would better meet consumer preferences. At the same time as regulatory change is undertaken and housing supply becomes more elastic, most of the recent interventions, such as housing price controls, need to be phased-out, which would further increase housing supply. Finally, the government should ensure that there is enough competition in the market.*

Given the increase in the government budget deficit…

While the government's financial position is relatively sound, government expenditures have risen at a 9% annual rate since 2002, outstripping the 7% annual increase in revenue. Consequently, the budget deficit has widened from 0.2% of GDP in 2002 to 1.3% in 2006, excluding the social security surplus, privatisation and the cost of financial-sector restructuring, and the initial budget for 2007 projects a 1.5% deficit. The latest National Fiscal Management Plan calls for a gradual decline in the deficit to 0.8% of GDP in 2010.

… it is important to focus on balancing the budget to prepare for future spending pressures…

Given the slowdown in economic growth and the impact of monetary policy tightening, the government plans to frontload public expenditures in the first half of 2007 to help smooth the growth path during the year. Concentrating government spending in the first half of the year creates pressure for a supplementary budget to avoid a decline in outlays in the second half of the year, although the 2007 National Fiscal Act should help limit such pressures. *The priority in 2007 should be to limit the growth of public outlays to the 7.5% rate in the initial budget and achieve the 6.4% annual rate through 2010 that is targeted in the National Fiscal Management Plan.* As for revenues, the government's *Vision 2030* plan, announced in August 2006, calls for boosting revenue through tax reform. *The priority for reform should be to broaden the tax bases for the personal and corporate income taxes by reducing generous allowances and exemptions and ensuring strong and uniform tax enforcement, especially toward the self-employed. Reforming the tax system is essential to limit the cost of distortions as the tax burden rises over time.* Spending restraint combined with tax reform would help achieve a balanced budget in the medium term, thus helping prepare for future spending pressures, including the cost of greater economic co-operation with North Korea and public social spending.

… notably for public social spending, in the context of rapid population ageing

The *Vision 2030* plan projects that public social spending will rise from its current level of 6%, the lowest in the OECD area, to around the current OECD average of 21% by 2030. *However, the authorities should be cautious in boosting social spending, as significant increases in expenditure in a number of countries have led to sharp hikes in the tax burden, with negative consequences for economic growth. Instead of setting an overall spending target, it would be better to focus on developing effective programmes in each area of social spending, as included in the Vision 2030 plan.* In any case, it is clear that public social spending will have to rise during the coming decades given rapid population ageing. Indeed, the proportion of elderly in Korea's population, currently the second lowest in the OECD area, is projected to be the fourth highest by 2050.

While policies to boost fertility and labour force participation rates may mitigate the impact of population ageing…

One factor driving ageing is the steep drop in the fertility rate from 4.5 in 1970 to 1.5 in 2000 and further to 1.08 in 2005, the lowest in the OECD area. Removing obstacles that appear to discourage having children, such as the high cost of education – which is cited as the major factor by families – may help reverse the decline in fertility. *Easing the burden of education expenses would require reforming the education system to reduce reliance on private tutoring institutions and lower the out-of-pocket cost borne by families. It is also important to mitigate the impact of population ageing on the economy by raising the labour force participation rate.* If participation rates remain at their current levels, the labour force would decline by 23% by mid-century, thus increasing the burden of ageing. There is significant scope to increase the labour force participation rate of prime-age women, which is one of the lowest in the OECD area. *One priority in this regard – ensuring an adequate supply of high-quality childcare facilities – would also tend to raise fertility*. The government plans to triple the proportion of children up to age five in public childcare facilities to 30%. *However, a better approach would be to shift the focus from the public provision of childcare services to giving vouchers to families, thereby allowing more choice for parents and fostering competition among providers. This approach requires removing price ceilings on private-sector providers of childcare. Increased availability of childcare may have a limited impact on raising fertility and female labour force participation rates without the introduction of more family-friendly business practices that allow both parents to combine work and care commitments. Finally, the human capital of older workers should be better utilised by raising or eliminating mandatory retirement ages.*

… it is important to improve the public pension system…

Population ageing will have its greatest impact on the National Pension Scheme (NPS). Legislation to lower the replacement rate from 60% to 50% (for a worker with 40 years of contributions) while raising the contribution rate from 9% to 12.9%, which is expected to ensure the financial sustainability of the NPS through 2065, was rejected by the National Assembly. Moreover, there remain concerns about the coverage of the NPS, as the number of contributors has levelled off at one-third of the working-age population, well below most other OECD countries. In addition, the average contribution period of beneficiaries – projected by the NPS at 17.6 years in 2030 – suggests that many elderly will receive small pension benefits. Consequently, the ability of the NPS to reduce the relative poverty rate for households with elderly persons – which was already estimated to be 39% in 2000 – is limited. *The introduction of a means-tested benefit in 2008 that will be available to about 60% of the elderly is thus a step in the right direction* although the benefit will be relatively small at 5% of the average wage.

… and expand the new means-tested benefit for elderly persons…

Given the difficulty experienced in broadening the coverage of the NPS and raising the level of contributions among the self-employed, increasing the means-tested benefit over time toward the minimum cost of living (20% of the average wage) and widening its coverage would help reduce poverty among those over 65. *A significant expansion of the basic benefit would need to be accompanied by a scaling back of NPS benefits to limit the overall cost of providing for the elderly. In the meantime, it is essential that the means-tested social assistance programme be adequate to lower the relatively high incidence of poverty among the elderly. Finally, the public occupational pension schemes for the civil service, military and private-school teachers, which cover 6% of the population, should be reformed to reduce their reliance on government subsidies and to allow portability with the NPS.*

… while developing the new company pension system

Public pension systems should be accompanied by more private saving to prepare for retirement. One key step is the 2005 decision to allow firms to replace the lump-sum retirement allowance with a company pension system. Employers and employees must agree on whether to introduce a defined benefit or a defined contribution system. Thus far, however, very few large companies have introduced pension systems under the new law, in part due to the difficulty in reaching agreement with workers on the type of system. *Company pension systems based on defined contributions should be encouraged, in part to facilitate labour market mobility, while using the tax system to accelerate the phasing out of the lump-sum retirement allowance, which gives firms an incentive to retire older workers.*

Other priorities include the reform of the healthcare system…

Population ageing will also put significant upward pressure on public healthcare expenditure, which is relatively low at 3% of GDP, with the private sector accounting for another 3%. The OECD projects that ageing and rising income will boost public healthcare spending alone to between 6% and 8% of GDP by 2050. *While avoiding cuts in the co-payment rates borne by patients will help limit the rise in public spending, adequate access to treatment for low-income persons and those with chronic illnesses should be ensured.* Reforms to reduce healthcare spending are also needed. First, *the unified National Health Insurance (NHI) should become a more effective purchaser of healthcare services.* Second, *payment systems other than the current fee-for-service approach should be adopted.* Third, *the framework for the provision of pharmaceuticals should be reformed to reduce their relatively large share in healthcare spending.* Fourth, *the authorities should allow a greater role for the private sector in healthcare.* Allowing for-profit companies to own hospitals and permitting a larger role for private health insurance for services excluded from the NHI would increase the availability of higher quality services.

… and careful implementation of the long-term care insurance system

Developing long-term care facilities for the elderly will reduce the burden on the NHI, as well as on families, which provide most long-term care at present. Only 0.4% of the elderly received long-term care in institutions in 2004, well below the OECD average of 4.5%. The government is adding more than 1 000 long-term care facilities between 2006 and 2008. As

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with childcare, however, it would be more efficient to give vouchers to families and rely on private-sector firms to supply long-term care, thus limiting public expenditure and providing more choice for consumers. The government plans to introduce a long-term care insurance system in 2008, with the contribution rate initially set at 0.1% of wage income and the number of beneficiaries limited to 1.7% of the elderly population. *The experience of other OECD countries with similar insurance schemes demonstrates the importance of containing costs by favouring less expensive home-based care and limiting the level of care provided to those with mild disabilities.*

While social assistance spending needs to increase given the rise in the rate of relative poverty…

Alleviating poverty is becoming an important issue as the rising trend is not limited to the elderly. The rate of relative poverty, defined as an income of less than one-half of the national median, rose significantly from 9% for the entire population in the mid-1990s to 13% in 2000, a rate well above the OECD average. Tax and social spending have only a modest impact on the poverty rate in Korea, as compared to other OECD countries, reflecting the still low level of social spending. At present, only 3% of the population receives social assistance through the National Basic Livelihood Security System, reflecting strict eligibility criteria, which include an asset test and the availability of support from family members. *It is important that the coverage is broad enough to ensure that all households have income that at least reaches the minimum cost of living. The social assistance programme should be reformed by strengthening the work incentives of recipients.*

… it is also important to address the fundamental cause of widening income inequality…

The necessary rise in social assistance spending would be limited by addressing the fundamental causes of poverty. One key factor is increasing income inequality, which is explained by the widening wage gap between large and small firms and labour market dualism. Indeed, the share of temporary workers rose from 17% of employees in 2001 to 29% in 2005, the second highest in the OECD area. There is a large wage gap: non-regular workers (a category that includes temporary workers) earned almost 40% less than regular workers in 2005, with productivity differences explaining only part of the gap. Lower wage costs encourage firms to hire non-regular workers and the cost advantage is magnified by the relatively low coverage of non-regular workers by social insurance programmes. While more than four-fifths of regular workers are covered by worksite-based pension, health and employment insurance, two-thirds of non-regular workers are not covered by any of these programmes, reflecting weak compliance with the law. This helps to explain why only one in four unemployed persons receives unemployment benefits. *It is important to expand the coverage of work-based social insurance programmes, in part to reduce the incentives to hire non-regular workers.*

… by reversing the rising trend in the share of non-regular workers

In addition to lower labour costs, firms hire non-regular workers to achieve greater employment flexibility. Using non-regular workers helps companies achieve the optimal level of employment, given the difficulty of dismissing regular workers. *The new labour law, which aims at ending discrimination against non-regular workers, should not be allowed to reduce overall employment. Reversing the rising share of non-regular workers, while ensuring flexibility in the labour market, requires reducing employment protection for regular workers. In sum, it is essential to improve equity by reversing the trend to a dualistic labour market in which non-regular workers receive low wages in precarious jobs and limited coverage by the social safety net.* This would also have positive implications for productivity growth, given that non-regular workers receive less training from firms.

Korea should lift productivity growth through deeper integration in the world economy through inflows of FDI…

Increasing Korea's links to the world economy is another important means of boosting productivity growth. At present, the stock of inward FDI, import penetration and the proportion of foreign workers in the labour force are relatively low in Korea compared to other OECD countries. Moreover, FDI inflows have slowed during the past few years despite policies to attract foreign investors. *A better environment for FDI could be created by: 1) fostering a foreign investment-friendly environment and thereby encouraging more cross-border M&As; 2) further relaxing FDI restrictions, notably foreign ownership ceilings in key sectors; 3) reducing product market regulation, particularly in the service sector; and 4) improving the business environment by increasing the transparency of tax and regulatory policies and addressing the problem of contentious industrial relations.* To attract foreign investors, the government has emphasised the creation of Free Economic Zones (FEZs) that offer tax incentives and preferential regulatory treatment to foreign investors. *The benefits of these zones should be regularly evaluated to insure that they justify the costs and regulatory reform should be extended beyond the FEZs to the rest of the country to create a level playing field for domestic and foreign firms. Moreover, the emphasis on special zones should not distract policymakers from the top priority of improving the business climate, which would promote both domestic and foreign investment.*

… increasing openness to trade…

The share of manufactured imports in domestic demand is among the lowest in the OECD area. *It is important to lower protection and further harmonise regulations in line with international standards. Trade liberalisation should be pursued through multilateral trade negotiations, the preferred approach to reducing barriers, and participation in regional free trade agreements (FTAs).* Although Korea is a latecomer to the worldwide surge in FTAs, it is now engaged in negotiations with a number of major trading partners. However, the high level of agricultural protection appears to be an obstacle to both multilateral agreements and FTAs. *It is essential to reduce the level of protection granted to farmers, thereby providing significant benefits to Korean consumers. Furthermore, FTAs should include the service sector in order to help boost the relatively low level of productivity in this sector.*

… and liberalising inflows of foreign workers

Making greater use of foreign workers would also have economic benefits for Korea, in part by easing labour shortages in some sectors. Foreign workers account for less than 1% of the labour

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force, one of the lowest shares in the OECD. *The number of unskilled workers allowed under the Employment Permit System should be increased and they should be permitted to work in the service sector.* There is also a need for more high-skilled foreign workers, who account for only 6% of total foreign workers in Korea. *This requires streamlining the immigration control system, which involves more than a dozen ministries. In sum, policy reforms to make greater use of goods, services, capital and human resources from abroad would help enhance Korea's growth potential.*

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Chapter 1

Facing the key challenges ahead in Korea

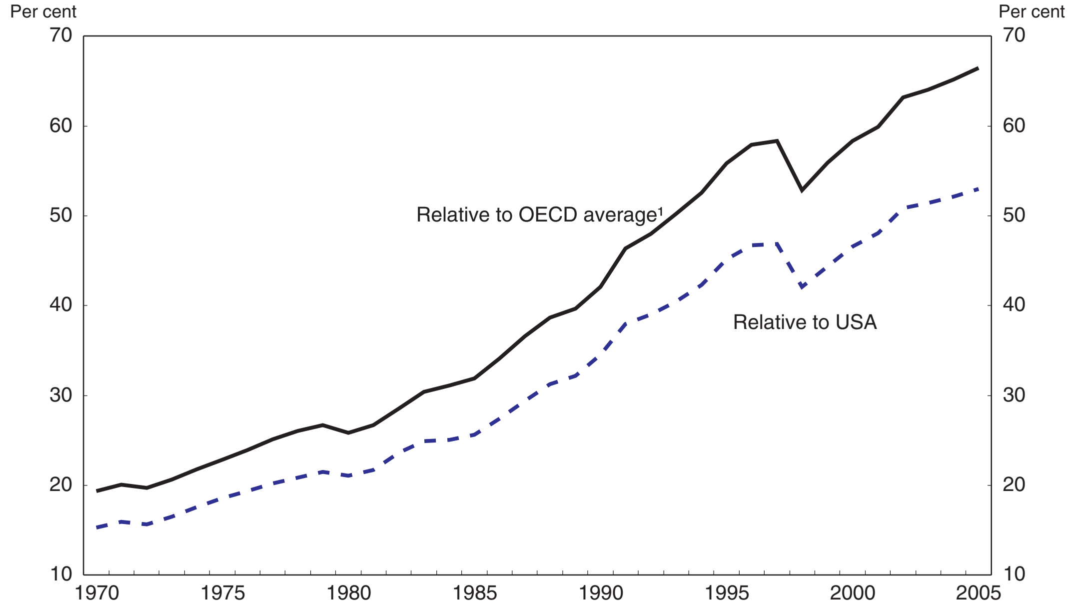
Economic growth in Korea remains one of the highest in the OECD area, led by buoyant exports. Sluggish domestic demand in recent years, though, suggests the need to address structural weaknesses in order to continue the convergence to income levels in the high-income countries. This chapter looks at five key challenges: i) *implementing appropriate monetary policy in the context of upward pressure on the exchange rate and real estate prices;* ii) *coping with rising house prices in the capital region while addressing the government's priority of balanced regional development;* iii) *maintaining a sound fiscal policy in the face of upward pressure on spending and weaknesses in the tax system;* iv) *coping with pressure for increased public social spending and addressing the issue of low fertility in the context of rapid population ageing, while limiting the increase in the tax burden; and* v) *increasing productivity growth by enhancing Korea's integration in the world economy.*

The Korean economy has expanded at a 4.3% annual rate since 2002, further lifting per capita income to two-thirds of the OECD average (Figure 1.1). This strong performance has been accompanied by low unemployment, while inflation has remained low despite the rise in oil prices. Growth has been driven largely by exports, in spite of the marked appreciation of the exchange rate. Rapid export growth reflects Korea's emergence as a leader in the information and communication technology (ICT) sector, as well as its strength in other areas of manufacturing, such as ships (the world's largest producer) and cars (fifth largest). Korea's competitiveness in manufacturing is underpinned by a high level of investment in R&D and the highest share of young adults in tertiary education in the OECD area. The continued convergence to the income levels in the most advanced countries is based, in part, on wide-ranging reforms introduced after the 1997 crisis to create a more market-oriented economy (2005 *OECD Economic Survey of Korea*). Recent progress in implementing reforms is reviewed in Annex 1.A1.

Although the expansion that began in 2003 is the longest in a decade, there is concern that Korea's growth potential is declining well before its income level reaches the OECD average. Structural problems and slowing inputs of capital and labour raise questions

Figure 1.1. **Korea's per capita income is converging to the OECD average**

Gross domestic product per capita based on 2005 purchasing power parity exchange rates



1. The OECD average is based on 26 countries (except Slovak Republic, Poland, Czech Republic and Hungary) from 1970 to 1990, 29 countries (except Slovak Republic) from 1991 to 1992 and all 30 countries are included from 1993 to 2005.

Source: OECD, *Economic Outlook* database.

about the country's growth potential. In particular, economic growth decelerated from 7.2% in the period 1998 to 2002 (albeit the period of recovery from the crisis) to 4.3% in the period 2002 to 2006 (Table 1.1). This chapter provides an overview of macroeconomic trends before identifying the key challenges to enhancing Korea's potential growth.

Table 1.1. **Economic growth trends in Korea**

	Average annual growth rates		Contribution to growth	
	1998-2002	2002-06	1998-2002	2002-06
Private consumption	8.2	1.5	4.4	0.8
Government consumption	3.8	4.3	0.5	0.5
Gross fixed capital formation	6.7	2.7	2.0	0.8
Stockbuilding	. .	. .	0.8	0.0
Total domestic demand	8.0	2.3	7.7	2.1
Exports	10.8	14.1	–0.5[1]	2.1[1]
Imports	12.6	13.1		
GDP	7.2	4.3	7.2	4.2

1. Contribution of net exports.
Source: Bank of Korea.

Macroeconomic trends in Korea

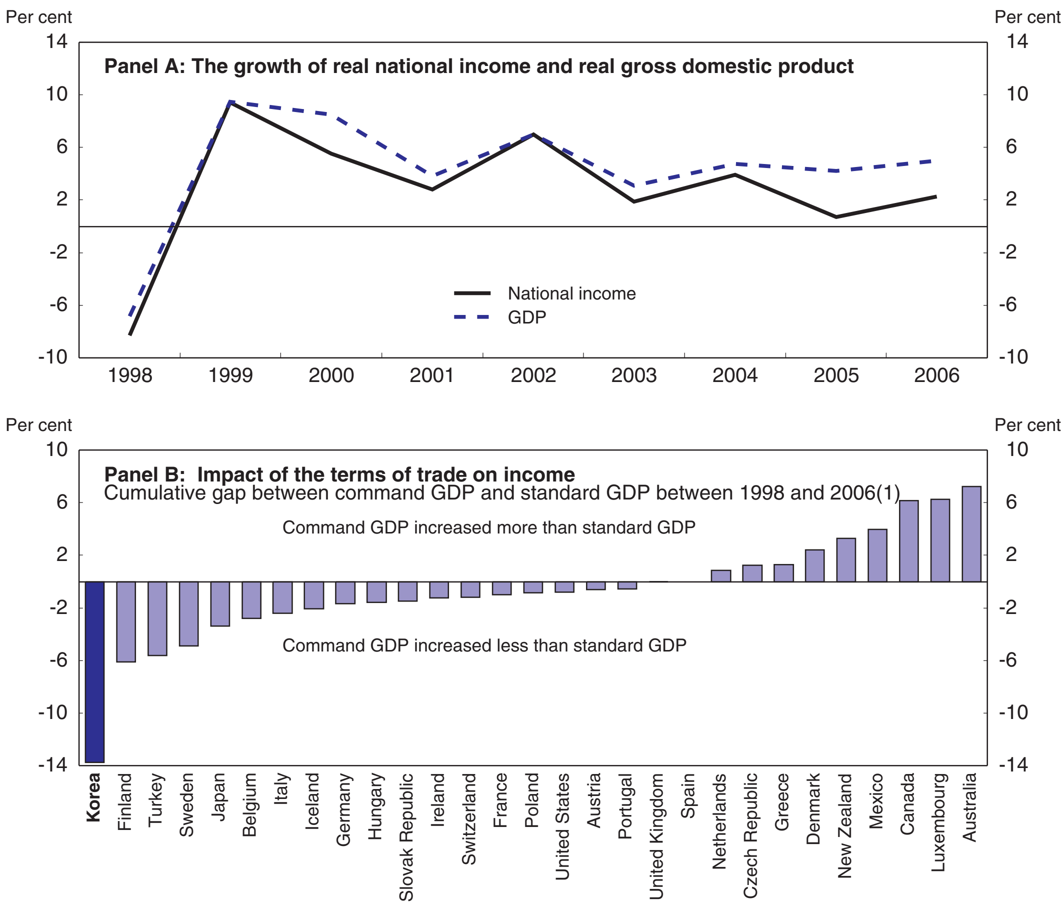
Slower growth during the past four years has been accompanied by a marked change in its composition from domestic to external demand. Indeed, domestic demand growth declined from an annual average rate of 8.0% from 1998 to 2002 to 2.3% from 2002 to 2006, despite faster growth in government consumption (Table 1.1). The deceleration largely reflects weaker private consumption. Meanwhile, export growth has accelerated. In contrast to the negative contribution during the 1998 to 2002 period, net exports accounted for half of output growth from 2002 to 2006.

The extent of the deceleration in the growth rate during the past four years has been exaggerated by several factors that artificially boosted growth during the 1998 to 2002 period. *First*, the economy bounced back sharply from the 1997 crisis and deep recession of 1998. *Second*, the worldwide ICT boom accelerated growth around the turn of the century. *Third*, as the impact of the ICT boom faded, it was replaced by another bubble – in household credit – that drove private consumption until it burst in 2002. The weaker contribution of private consumption during the past four years to output growth – less than one percentage point per year compared to more than four points from 1998-2002 – is explained by the difficulty households faced in repairing their balance sheets following the credit card bubble in 2002.

Factors explaining slower domestic demand growth

In addition to the effect of the collapse of the credit card bubble, domestic demand was slowed by significant terms of trade losses that reduced the growth of national income on an inflation-adjusted basis to a 2% average annual rate – or half of output growth – over the period 2002 to 2006 (Figure 1.2). The slower expansion of national income has narrowed profit margins and squeezed wages. Adjusted for the terms of trade loss, national income (the so-called "command GDP") increased 14% less than conventional GDP over the period 1998 to 2006, the largest gap in the OECD area (Panel B). Terms of trade losses are partly a result of the impact of higher oil prices on Korea, the world's fourth largest importer of oil. Another factor is Korea's specialisation in high-technology products, such

Figure 1.2. **National income and the terms of trade**



1. Command GDP adjusts GDP for the terms of trade effect by deflating exports by the import price deflator: Command GDP = TDDV + XGSV * (PXGS/PMGS) – MGSV where TDDV is real domestic demand, XGSV and MGSV are exports and imports in volume terms, and PXGS and PMGS are the export and import deflators. For Norway (not shown in the figure), the impact of the terms of trade was largest at 27.6%.

Source: OECD, *Economic Outlook* database.

as semiconductors and mobile telecommunications, which have experienced a downward trend in prices. Other countries where ICT is important – Sweden, Finland and Japan – also show large terms of trade losses. This does not mean that specialisation in high-technology products has been detrimental to Korea's economic performance. Indeed, the ICT sector has made a large contribution to productivity growth. Rather it demonstrates the importance of implementing structural reforms that will promote productivity growth in other sectors, notably services. Korea should also reconsider the decision to designate a number of high-technology sectors as engines of future growth and instead rely more on the market to allocate investment to its most productive uses.

Slower domestic demand growth also reflects a couple of longer-term trends. *First*, exports appear to have had less of a positive spill-over effect on the domestic economy than in the past, suggesting some de-linking of external demand from domestic demand. This may reflect the increasingly capital-intensive nature of production and the reliance on imported capital goods, particularly in the ICT sector. *Second*, there has been a secular decline in investment since the 1997 crisis. Total investment fell from 37.5% of GDP in 1996 to 28.6%

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in 2006, while spending on machinery and equipment fell from 15.2% to 10.5% of GDP over the same period. The decline was due in part to the efforts by large firms to reduce debt and thereby improve their balance sheets. The impact of lower investment rates on Korea's growth potential may be partially offset by an improved allocation of capital in the context of increased competition and improved corporate governance.

However, the combination of buoyant exports and sluggish domestic demand has exacerbated a number of imbalances in the economy (Figure 1.3).

- Exports are concentrated in goods, thus reversing the declining share of manufacturing in GDP. Labour productivity in services is one-third lower than in manufacturing, the largest gap in the OECD area (Panel A).
- While large firms have increased their exports, small and medium-sized enterprises (SMEs), which tend to be more labour-intensive, have been hurt by the appreciation of the exchange rate. The gap in profitability between large and small firms has thus widened (Panel B).
- Firms, particularly SMEs, have hired more temporary workers, which reduces labour costs while enhancing employment flexibility. The proportion of temporary workers has risen from 17% of employees in 2001 to 29% in 2005 (Panel C), the second highest level in the OECD area.
- The increasing dualism in the labour market and growing wage gap between large and small firms has widened income inequality (Panel D).

These imbalances are an important backdrop for the key challenges that are singled out for analysis in this *Survey*.

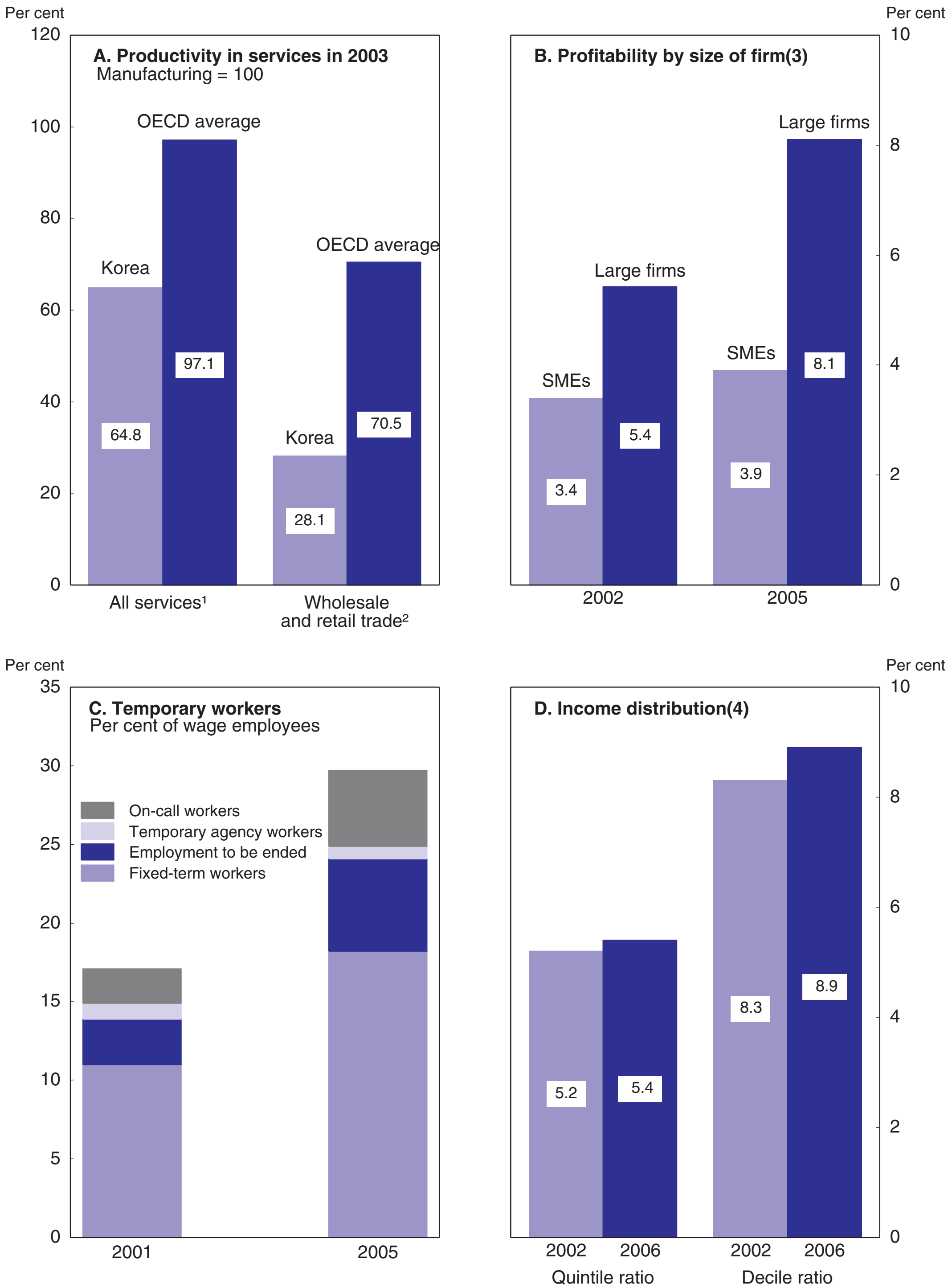
Key challenges to sustaining growth in Korea

Korea's potential growth rate is estimated at around 4½ per cent by the OECD, a rate similar to the estimate by the Bank of Korea. Potential has decelerated from 8% in the 1980s and 7% in the 1990s prior to the 1997 crisis, reflecting slower growth of labour inputs and less scope for gains in productivity as the level converges to the OECD average. Maintaining potential growth at around 4½ per cent – nearly double the estimated OECD average – will require measures to limit the fall in labour inputs in the context of population ageing and to boost the rate of productivity growth. Concern about falling growth potential was a key theme in the government's *Vision 2030* published in August 2006 (Box 1.1). Korea's per capita income is still about one-third below the OECD average despite a relatively high level of labour inputs in Korea (Figure 1.4). Labour productivity per hour worked in Korea is still only 40% of the US level, suggesting significant scope for productivity gains to boost Korea's level of income.

There are a number of challenges, which are addressed in the following chapters, to sustaining Korea's growth potential:

- Implementing an appropriate monetary policy in the context of upward pressure on the exchange rate and asset prices (Chapter 2).
- Addressing the government's priority of balanced regional development, while coping with rising house prices in the capital region (Chapter 3).
- Maintaining a sound fiscal policy in the face of upward pressure on spending and weaknesses in the tax system (Chapter 4).

Figure 1.3. **Imbalances in the Korean economy**



1. ISIC codes 50-99.
2. Including hotels and restaurants (ISIC codes 50-52 and 55).
3. Ordinary profits as a per cent of sales.
4. Quintile and decile ratios for urban salary and wage earners.

Source: OECD, *STAN Database for Industrial Analysis*, Bank of Korea and Korea National Statistical Office.

Box 1.1. **The government's *Vision 2030* plan**

In August 2006, the government announced the *Vision 2030* plan, a comprehensive long-term strategy to develop Korea into a fully advanced country by 2030. The report stressed the urgency of addressing problems, such as the declining potential growth rate, the demographic challenges of low fertility and rapid population ageing and widening income inequality, to avoid losing out in global competition. To sustain potential economic growth, the plan emphasises improving the education system and the R&D framework and investing more in R&D, the topic of the in-depth chapter in the 2005 *OECD Economic Survey of Korea*. Another major theme is expanding public social spending, the topic of the in-depth chapter in this *Survey* (Chapter 5). In particular, *Vision 2030* calls for boosting public expenditure on social welfare relative to GDP from the current level of 6% to around the current OECD average of 21% by 2030. In contrast to the emphasis on economic growth in the past, this new plan stresses the importance of government social spending. As part of social welfare, the plan calls for stabilising the real estate market, the topic of Chapter 3. Finally, the plan calls for active globalisation, which is addressed in Chapter 6.

The *Vision 2030* plan represents an effort by the government to balance the objectives of economic growth and improving social welfare. While market forces will be the main driver for economic growth, the government will focus more on social sectors such as welfare, health and human resource development. Consequently, government outlays on economic development will fall from 20% to 10% of total spending, while those for social sectors will rise from 25% to 40%.

Vision 2030 establishes three objectives: to create an innovative and vibrant economy, a secure and opportunity-providing society and a "stable and decent" country. To accomplish these objectives, the plan identifies five strategies that are to be implemented via 50 concrete action plans.

Expanding future growth engines

- Strengthen the competitiveness of the service sector.
- Reform the support system for SMEs from financial support to management consulting and training.
- Construct a new government administrative city and "innovation cities" to promote regional development.
- Raise R&D spending from 2.9% of GDP in 2004 to 5.3% in 2030.
- Increase investment in sectors identified as future growth engines.

Developing human capital

- Reform the university evaluation system and consolidate national universities.
- Give more incentive to local governments to increase spending on education and improve the curriculum.
- Effectively utilise high-skilled human capital from foreign countries.
- Adjust the retirement age and move away from seniority-based wages to a "wage peak" system.
- Strengthen links between universities, industry and research.

Box 1.1. **The government's Vision 2030 plan** *(cont.)*

Advancing the social welfare system

- Reform the National Pension Scheme and the public occupational pension system.
- Improve the National Health Insurance and rationalise the health expenditure system.
- Introduce long-term care insurance and an Earned Income Tax Credit (EITC).
- Improve social assistance programmes.
- Address the issue of non-regular workers and the self-employed.
- Stabilise the real estate market.
- Expand childcare and after-school activities.
- Revitalise rural and agricultural areas of the country.
- Improve the environment through appropriate management of air and water quality.

Expanding social capital

- Develop e-government and improve the corporate governance of public organisations.
- Improve the administration of regional and local governments.

Pursuing active globalisation

- Expand the number of free trade agreements (FTAs).
- Develop the Free Economic Zones and help Korea become a financial and logistic hub for northeast Asia.
- Improve the framework for foreign workers to protect their rights and make employment easier.
- Expand overseas development assistance from 0.09% of gross national income in 2005 to 0.25% in 2015.
- Build infrastructure for unification with the North, with spending rising from 0.1% to 1% of GDP by 2030.

The financing of this ambitious programme is to be covered initially by restructuring expenditure and reducing tax exemptions through 2010. The cost of the *Vision 2030* over the period 2006-30 is projected at 1.1 quadrillion won. Given the real growth rates assumed in the plan – 4.3% in the 2010s and 2.8% in the 2020s – such spending would amount to 2% of GDP each year. The financing – by government borrowing, tax increases or a mixture of both – will be decided by social consensus.

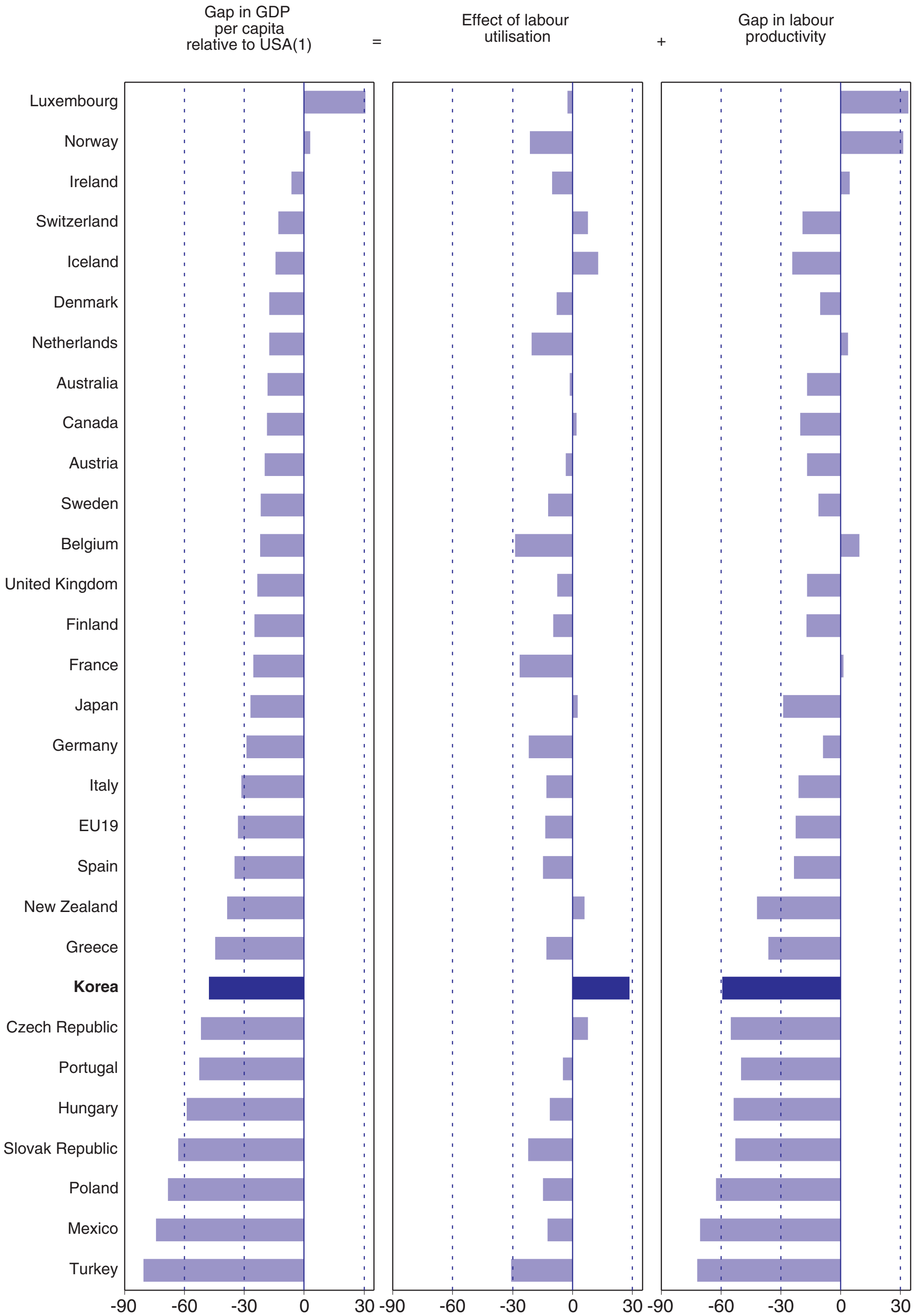
- Expanding public social spending in the context of exceptionally rapid population ageing while limiting the overall increase in the tax burden (Chapter 5). Limiting the burden of ageing depends on raising the female labour force participation rate, one of the priorities in the OECD's 2007 *Going for Growth*.
- Increasing productivity by enhancing Korea's integration in the world economy (Chapter 6). This is linked to two of the priorities – lower barriers to entry for foreign firms and reducing producer support to agriculture – in the OECD's 2007 *Going for Growth*.

Implementing appropriate monetary and exchange rate policies

The Bank of Korea raised its short-term policy interest rate five times between October 2005 and August 2006, from 3¼ per cent to 4½ per cent, in a pre-emptive move against inflation (Figure 1.5). The Bank's Monetary Policy Committee also expressed concern about an

Figure 1.4. **Explaining differences in income**

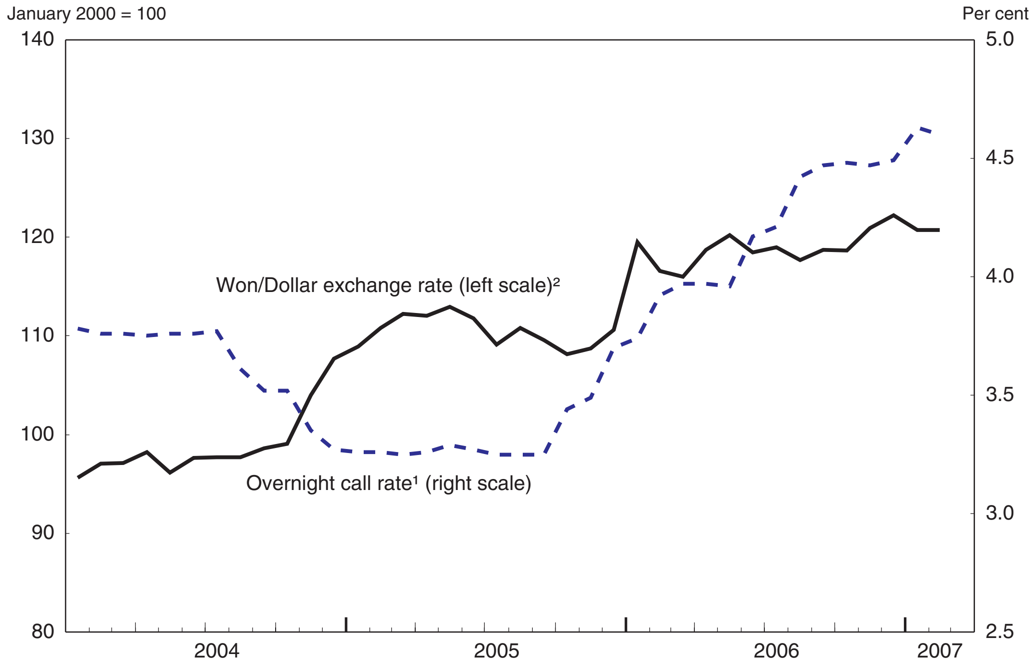
Percentage point differences in GDP per person in USD (PPP exchange rates) relative to the United States in 2005



1. The gap in GDP per capita is equal to the sum of the two components shown. The effect of labour utilisation is based on total hours worked per capita. Productivity is measured on a per-hour basis.

Source: OECD (2007), *Economic Policy Reforms: Going for Growth*, OECD, Paris.

Figure 1.5. **Interest rates and the exchange rate**



1. This rate is targeted by the Bank of Korea in setting monetary policy.
2. A rise indicates an appreciation of the won.

Source: Bank of Korea.

upward trend in housing prices in some areas of the capital region. Although the average nation-wide house price rose at less than a 2% annual rate in real terms since the end of 2003, the average increase in the Kangnam area of Seoul was nearly 7%. Higher interest rates have been accompanied by a surge in short-term overseas borrowing by Korean banks – almost \$41 billion in 2006 – more than offsetting net outflows of foreign direct investment and portfolio investment. The total inflow of capital – \$19 billion in 2006 – put upward pressure on the won, resulting in an appreciation of 9% relative to the dollar during 2006. In contrast to the period 2003-04, interventions during 2006 were primarily aimed at limiting the speed of appreciation, while accepting a trend increase. Nevertheless, Korea's foreign exchange reserves, already the second highest in the OECD area, increased another 14% during 2006 to \$239 billion (27% of GDP). In effective terms, the won appreciated 6% during the course of 2006.

Monetary conditions have thus become significantly tighter, given higher interest rates and a stronger currency. The appreciation of the won has helped keep core inflation below the 2½ to 3½ per cent target zone. Although it did not prevent double-digit export growth, the stronger currency has cut profit margins and worsened the international competitiveness of SMEs, which tend to produce more labour-intensive products. As for house prices, the nation-wide rate of increase accelerated to 9% and that in the Kangnam area to 20% in real terms by the end of 2006, despite changes in real estate policies (see below) and higher interest rates. However, the upward trend in the stock market, which had risen 54% in 2005, moderated in 2006.

In sum, the monetary and exchange rate policy challenges, which are addressed in Chapter 2, are:

- Achieving the medium-term inflation target in the context of upward pressure on the exchange rate and concerns about increases in real estate prices in the capital region.
- Coping with the economic impact of currency appreciation while maintaining the flexible exchange rate system introduced in 1997.

Housing and regional policy

The government has launched a series of real estate policy packages since August 2005, even though the rate of increase in nation-wide house prices was relatively modest. The policy stance moved in the direction of dampening the housing market, motivated by the fact that house price increases accelerated during the course of 2006. The five packages include a three-pronged effort to: 1) expand the housing supply, with the public sector taking the lead in construction and finance. At the same time, however, some new government regulations restrict supply, for example by making it difficult to redevelop buildings in areas that have experienced large price increases; 2) reduce demand, in part through restrictions on bank lending for housing and increases in property-related taxes; and 3) cut prices through regulatory changes and price ceilings on new houses.

Despite measures introduced in the 1980s to limit concentration, reflecting the high priority attached to balanced regional development, the capital region has become one of the largest urban agglomerations in the world with 22.8 million people, while its share of Korea's population has risen from 28% in 1970 to almost half (Figure 1.6). The concentration of population has created a serious air pollution problem and has raised the cost of congestion. Meanwhile, the government has launched initiatives, such as the construction of a new government administrative city and "innovation cities" and "enterprise cities" to boost development in other parts of the country.

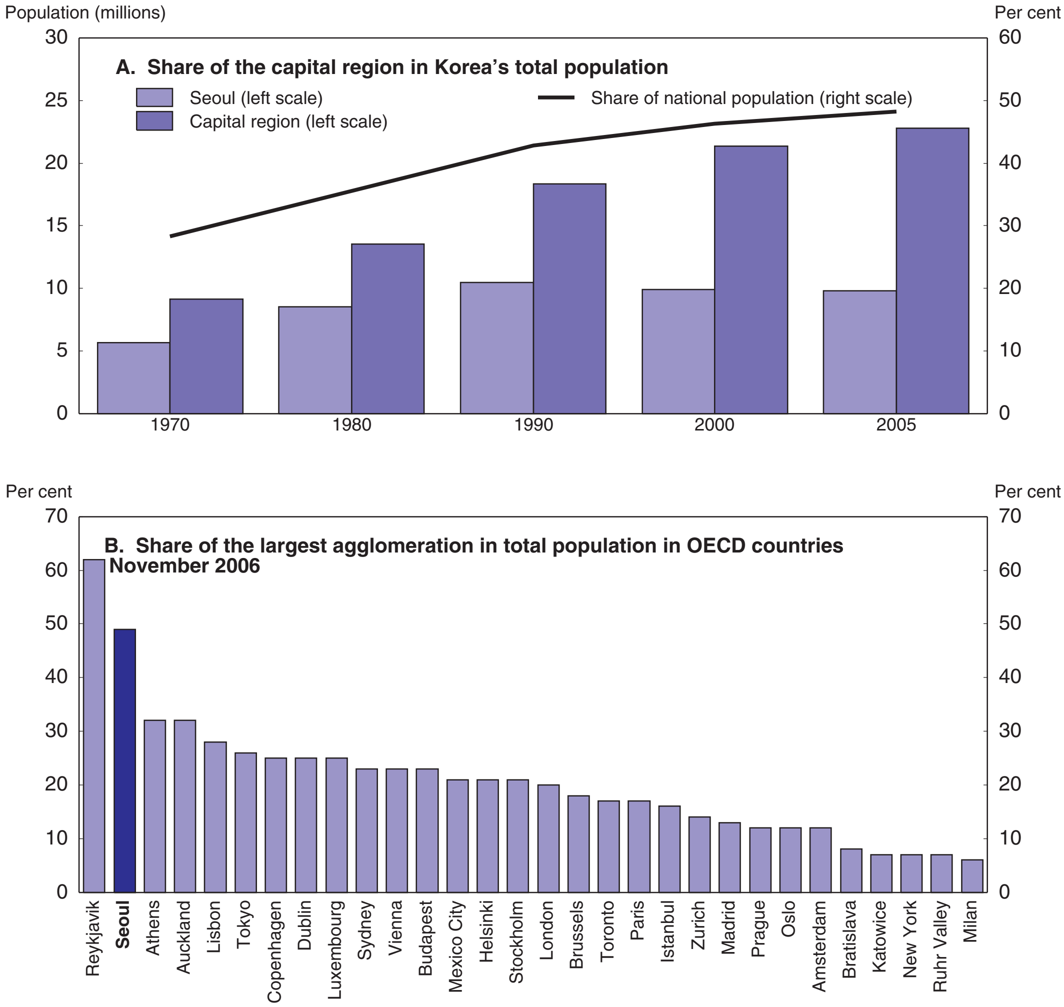
In sum, the key challenges in housing and regional policies that are discussed in Chapter 3 are:

- Realising an adequate increase in the supply of housing in the long run, while coping with pressure to stabilise real estate prices in the short run.
- Addressing the government's goal of balanced regional development, while ensuring adequate housing in the capital region and strengthening its international competitiveness as a hub.
- Coping with the environmental and congestion costs of increased concentration in the capital region.

Maintaining a sound fiscal policy

Korea's fiscal position remains sound, with low public debt and government expenditures at only 29% of GDP, the lowest ratio in the OECD area (Figure 1.7). Maintaining a sound government financial position is essential given future spending pressures related to population ageing (see below) and the potential cost of economic integration with North Korea. Chronic food shortages in the North and its economic deterioration during the past decade suggest that the cost of integration may be enormous. Indeed, it is likely to be heavier than in the case of Germany, given that the population of North Korea is one-half that of the South, while its per capita income is only about 6% as large. In comparison,

Figure 1.6. **Concentration in major cities**



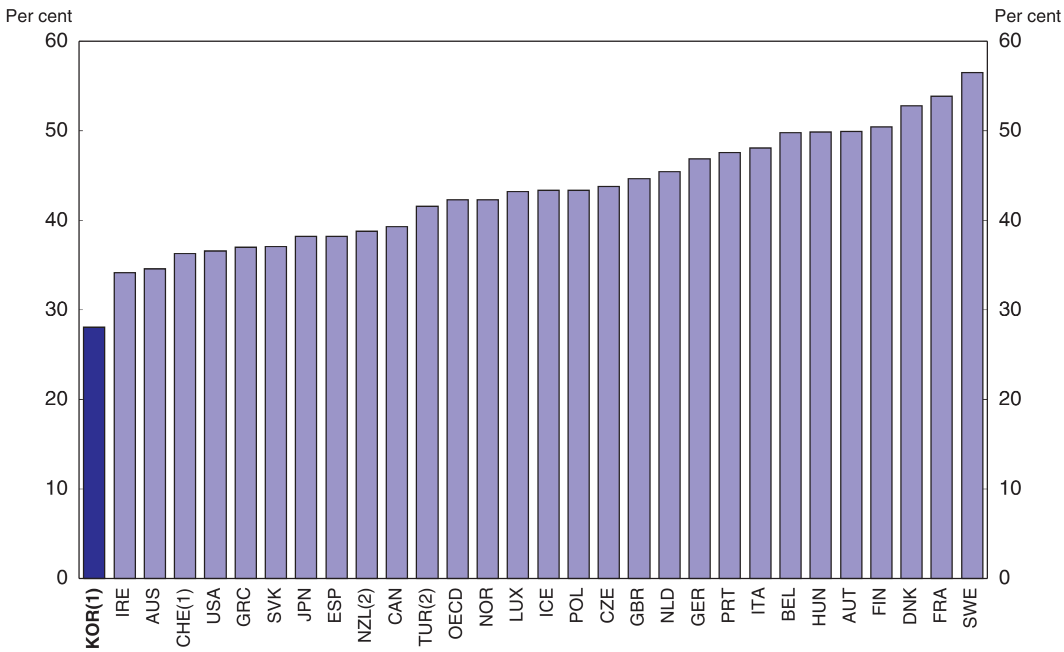
Source: Korea National Statistical Office and Thomas Brinkhoff (2006), *City Population*, *www.citypopulation.de*.

East Germany's population was less than a third of West Germany's at the time of German re-unification, while the per capita income gap was significantly smaller, with that in East Germany around half of the West.

The central government budget recorded a deficit of 1.3% of GDP in 2006, excluding the cost of financial-sector restructuring (which ended in 2006) and the social security surplus. Given slowing output growth and tighter monetary conditions, the government plans to front-load expenditures in the first half of 2007, when the economy is projected to be relatively sluggish. Frontloading, though, may create pressure for a supplementary budget to prevent a decline in government spending in the second half of the year although the 2007 National Fiscal Act should help limit such pressures. The latest National Fiscal Management Plan projects that the deficit will decline gradually to 0.8% of GDP in 2010.

The *Vision 2030* plan calls for financing increased government outlays through 2010 through improvements in the tax system by broadening the tax base through reductions in allowances and exemptions and by ensuring strong and uniform tax enforcement, especially

Figure 1.7. **International comparison of the size of government spending**
Per cent of GDP in 2005



1. Data for Korea and Switzerland refer to 2004.
2. Data for New Zealand refer to 2003 and 2002 for Turkey.

Source: OECD, *Analytical Database.*

toward the self-employed. At present, a large number of exemptions for personal and corporate income tax limit tax bases and undermine efficiency and fairness. In particular, there are generous allowances and loopholes for individuals and large-scale and wide-ranging tax preferences for enterprises. Moreover, there is a lack of strong and uniform tax enforcement, especially toward the self-employed. The impact of these distortions is relatively limited, given that Korea's tax burden is rather small. However, the increase in the tax burden to meet future spending demands will magnify the cost of these distortions.

In sum, the fiscal policy challenges, which are addressed in Chapter 4, are:

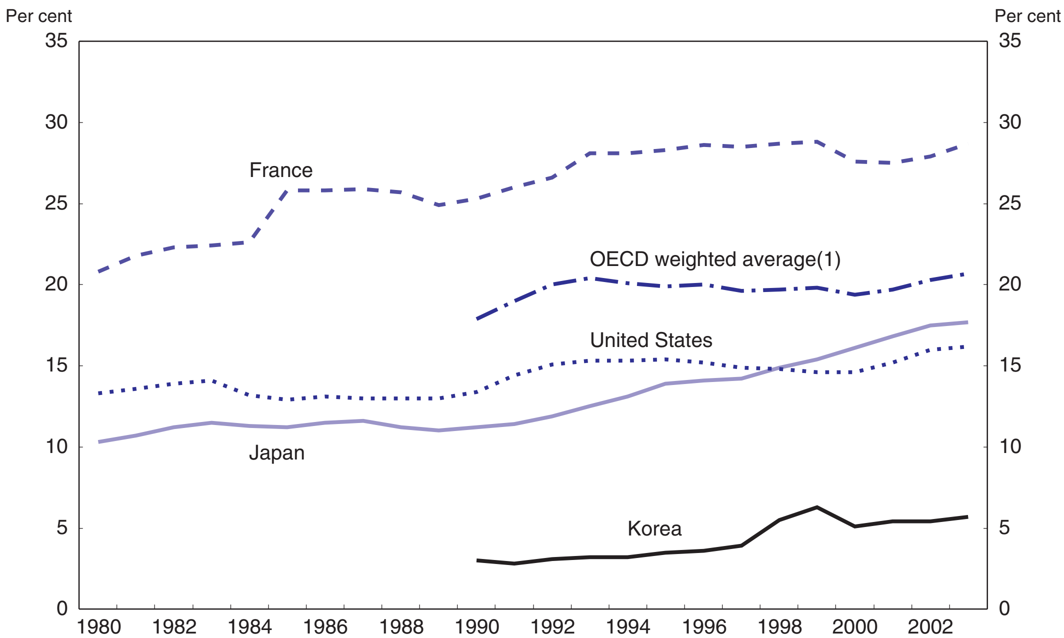
- What should be the appropriate medium-term fiscal target, given pressure for increased spending in the context of population ageing (see below) and the potential costs of economic integration with North Korea?
- How can the tax revenue increases that are included in the *Vision 2030* plan be achieved?
- Should the additional expenditure contained in the *Vision 2030* plan be financed by government borrowing or increased tax revenue?

Coping with pressure for increased social spending in the context of rapid population ageing

At 6% of GDP, public social spending in Korea is the lowest in the OECD area and well below the average of 21% (Figure 1.8), reflecting the relatively recent start to developing a social safety net and a young population compared to other OECD countries. However, the projected ageing of the population, from the second youngest in the OECD area at present to the fourth oldest by 2050, will put upward pressure on social spending. Indeed, the

Figure 1.8. **An international comparison of gross public social spending**

As per cent of GDP



1. The OECD average does not include Hungary and the Slovak Republic due to insufficient data. The national data is converted to US dollars using 2003 PPP exchange rates.

Source: OECD, *Social Expenditure Database, 1980-2003*.

Vision 2030 plan (Box 1.1) projects that it will rise from 6% to the current OECD average of 21% by 2030. If this sharp increase in social spending were largely financed by an increase in the tax burden, this would have a negative impact on the labour market and economic growth.

Population ageing is driven, in part, by the drop in the fertility rate, which fell from 4.5 in 1970 to 1.5 in 2000 and further to 1.08 in 2005, the lowest in the OECD area. Women cite the heavy burden of education, which absorbs 18% of household income, and the difficulty of combining family responsibilities with employment as key factors limiting the number of children. There is scope to mitigate the impact of demographic change on the economy by increasing the female labour force participation rate, which for women in the 25 to 54 age group, is the third lowest in the OECD area. However, a lack of suitable childcare facilities, as well as workplace practices, discourage women from working.

Employees leave firms as early as age 50, reflecting the impact of the seniority-based wage system, which makes older workers relatively expensive. Early retirement from firms results in less effective use of skilled human capital. Most workers remain in the labour force after age 50, making the participation rate for older workers high by international standards. However, two-fifths of workers over the age of 55 are self-employed, primarily in the service sector. Self-employed persons (including unpaid family workers) account for one-third of the labour force in Korea, one of the highest proportions in the OECD area.

Population ageing will have a serious impact on the three key social insurance programmes, the National Pension Scheme (NPS), National Health Insurance (NHI) and Long-Term Care Insurance. Changes in the parameters of the *NPS*, which was introduced in 1988, are needed to ensure its financial sustainability. Moreover, the capacity of the NPS to reduce the high rate of poverty among the elderly is limited by its relatively narrow coverage.

Indeed, the number of contributors has levelled off at around one-third of the working-age population and the amount of contributions, particularly among the self-employed, is low. It is also necessary to address rising deficits in the public occupational pension schemes, which cover about 6% of the labour force. Ageing is also putting strong upward pressure on healthcare spending and strains on the *NHI*, although the impact is mitigated by large co-payments that limit the government's share of such spending to around half of the total. The large share of private spending tends to restrict access to healthcare for low-income households and persons with chronic illnesses. Meanwhile, measures to contain costs have reduced satisfaction with the quality of healthcare. The *long-term care* insurance programme to be introduced in 2008 should reduce some of the burden on the NHI. However, the small initial number of beneficiaries – amounting to less than 2% of the elderly population – will reduce its impact. Moreover, the capacity in long-term care institutions, at only 0.4% of the population over the age of 65, limits the scope for reducing the burden on families.

As noted above, Korea also faces increasing income inequality and relative poverty. One factor is labour market dualism – the share of temporary workers has risen to nearly one-third of employees (Figure 1.3). Their growing role creates concern about long-term growth prospects, as they receive less training, and equity concerns, given the fact that they are paid significantly less, after adjusting for their qualifications, than regular workers. Moreover, they are excluded from aspects of the worksite-based social safety net. Indeed, two-thirds are not covered by worksite-based pension, health or employment insurance, thus helping to explain why only a quarter of unemployed persons receive unemployment benefits. In addition to their lower cost, employers tend to prefer temporary workers since they increase employment flexibility compared to regular workers, who are difficult to dismiss. The disproportionate share of women among temporary and other types of non-regular workers limits employment opportunities for women. Finally, the ability of social assistance programmes to cope with rising poverty is limited by strict eligibility criteria. Consequently, as many as half of the persons with income below the minimum cost of living do not receive social assistance.

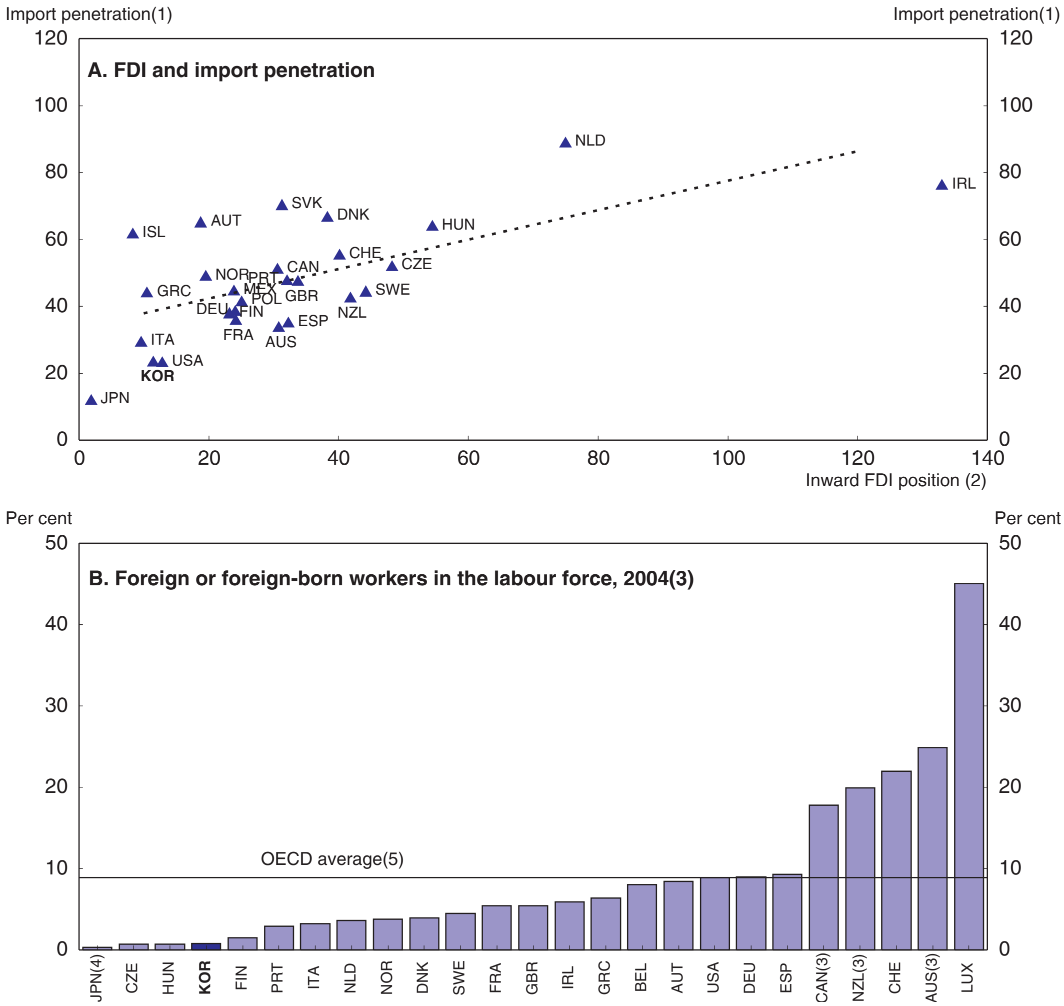
In sum, the key challenges in the area of public social spending, which are addressed in Chapter 5, are:

- How can the obstacles to childbearing be reduced in order to boost the fertility rate?
- How can the labour force participation rate be increased, particularly for prime-age women, while raising the effective age of retirement from firms?
- How can the social insurance systems for pensions, health and long-term care be improved to provide adequate coverage while ensuring their financial sustainability?
- How can the rising share of temporary and other types of non-regular workers be reduced to address widening income inequality, while expanding the effective coverage of the social safety net?

Raising productivity growth by enhancing the globalisation of Korea

One key to raising productivity is to increase Korea's integration in the world economy, given that rising flows of foreign direct investment (FDI), international trade and movements of labour are key forces driving economic growth. Although Korea has become more integrated in the world economy over the past decade, it still ranks low in terms of the stock of inward FDI relative to GDP, import penetration and foreign workers as a share of the labour force (Figure 1.9). Moreover, there is some opposition in the Korean population to capital inflows and the negotiation of free trade agreements with major trading partners.

Figure 1.9. **Indicators of Korea's integration in the world economy**



1. Imports of manufactures as per cent of domestic demand in 2003.
2. Stock of inward FDI as per cent of GDP in 2002.
3. Data for Australia, Canada and New Zealand (which refer to 2003) are for the foreign-born labour force. The data source is the Labour Force Survey or census in all countries except Japan and Korea, where the source is work permits.
4. Foreign residents with permission for employment. Excludes permanent and long-term residents, whose labour activity is not restricted.
5. Unweighted average of the 25 countries shown in this figure.

Source: OECD (2005), *Economic Globalisation Indicators*; OECD (2006), *International Migration Outlook: SOPEMI 2006 Edition*; and Ministry of Justice.

After increasing in the wake of the 1997 crisis, as a result of the liberalisation of barriers and the restructuring of the corporate and financial sectors, the stock of FDI inflows amounted to 11.5% of GDP in 2002. Nevertheless, it was still the sixth lowest in the OECD area, and inflows of FDI have declined during the past few years, both in absolute terms and as a share of world flows. FDI in the service sector is limited by restrictions on foreign ownership in some areas, such as telecommunications and electricity, and product market regulations. As a result, the share of services in the total stock of FDI in Korea is one of the lowest in the OECD area. Boosting FDI in this sector would help narrow the gap in labour productivity with manufacturing by triggering transfers of technology, facilitating restructuring of firms and strengthening competition. The government has launched a number of special schemes, such as foreign investment zones and free economic zones, to attract foreign investors. Although such zones offer significant tax incentives, preferential regulatory treatment and cash transfers, the impact of such schemes appears limited thus far. Foreign investors appear more concerned with the business and investment climate, including industrial relations and the transparency and predictability of taxation and regulations.

The low level of FDI limits intra-firm trade, thus helping to explain the low level of manufactured imports relative to domestic demand, despite the increasing economic integration with China noted above. Tariff rates in Korea are relatively high, reflecting the significant level of protection accorded to agriculture. In addition, Korea is a latecomer to the wave of regional free trade agreements (FTAs), with only three broad agreements – Singapore, Chile and the European Free Trade Association – in effect at present. Although Korea is negotiating additional FTAs with major trading partners, the high level of support to agriculture – with a Producer Support Estimate nearly double the OECD average – appear to hinder the scope for comprehensive agreements.

The share of foreign workers in the labour force was the fourth lowest in the OECD area in 2004 (Panel B). Low-skilled workers with work permits amount to only 0.8% of the labour force, despite labour shortages at SMEs, and are not allowed to work in the service sector. While the environment for high-skilled foreign workers is more open, the total number – only 6% of all foreign workers in Korea – is limited by the immigration system and the general business and living environment. Unregistered workers account for almost half the total foreign labour force, raising concern about the labour rights and social protection granted to unregistered persons.

Chapter 6 considers policies to deepen Korea's integration in the world economy by examining the following questions:

- How can Korea become a more attractive location for inflows of FDI?
- How can Korea become more open to trade, in part by overcoming obstacles to comprehensive FTAs?
- To what extent should the scope for inflows of foreign labour be increased, given labour shortages in some areas and the projection of a declining working-age population from 2016?

Conclusion

Korea's economic growth rate of 4.3% since 2002 is close to its potential growth rate of around 4½ per cent. However, growth has been unbalanced, with buoyant exports offsetting sluggish domestic demand. While this has been due in part to external shocks and the impact of the collapse of the credit card bubble, it also suggests that there are significant structural problems in the Korean economy. Addressing the structural weaknesses and the various imbalances discussed in this chapter is a key to sustaining rapid output growth through productivity gains as the growth of inputs of labour and capital slow. The following chapters analyse the key challenges presented above.

ANNEX 1.A1

Taking stock of structural reforms

This annex reviews actions taken on structural policy recommendations in the 2005 *OECD Economic Survey of Korea*. Recommendations made in this *Survey* are shown in the boxes at the end of each chapter.

Recommendations in the 2005 *Survey*	**Actions taken or proposed by the authorities**
A. FISCAL DECENTRALISATION	
Allow greater responsibility for taxes and spending to local governments	
Facilitate personnel exchanges between different levels of government and with the private sector.	Personnel exchanges were expanded in terms of the number of cases and the coverage of officials between 2005 and 2006.
Provide incentives for local civil servants to accept more responsibility.	Incentives for local civil servants to reduce expenditure and find new sources of revenue were strengthened in 2005.
Enhance the autonomy of local governments and increase efficiency in spending programmes	
Establish a clear division of responsibilities between levels of government and minimise "delegated functions".	Since 1999, 1 087 functions have been permanently delegated thus far, of the 1 371 targeted.
Facilitate the creation of voluntary associations of local governments.	The revised Local Government Act, which is pending in the National assembly, introduces a new autonomous organisation among local governments.
Transform earmarked grants to block grants.	The creation of the special account for balanced national development (SABND) in 2005 expanded flexibility for local governments.
Relax the conditions attached to earmarked grants.	No action taken.
Allow local authorities to carry over grants to the future and permit some scope for shifting funds between projects.	Part of the SABND grants can be carried over to the future and shifted to other purposes.
Make the definition of standard fiscal needs and standard fiscal revenue in the formula for the Local Shared Tax simpler, transparent, and based on objective criteria.	Transparency and objectivity were enhanced in 2006 by simplifying the assessment criteria and by disclosing related data on the Internet.
Strengthen linkages between the local education governments and local general governments.	A 2006 law established "Local education policy co-ordination committees" that link local education governments and local general governments.
Increase local governments' revenue powers	
Simplify the complicated local tax system and avoid the creation of new local taxes.	No action taken.
Encourage the use of existing flexibility to set tax rates and make it clear that changing tax rates does not influence the level of transfers from the central government.	No action taken.
Reduce reliance on taxes on property transactions, notably the registration and acquisition taxes.	The registration tax was reduced from 3% to 1% in 2006, while the acquisition tax was cut from 2% to 1%.
Accelerate the plan to raise the effective tax rate on property holding, in part by bringing the tax base closer into line with the assessed value.	The government announced in 2006 that the ratio of the assessed price used to set the tax base for the local property tax will be raised from 50% in 2006 to 100% by the mid-2010s. The Comprehensive Property Tax (CPT) was strengthened in 2006.

Recommendations in the 2005 *Survey*	Actions taken or proposed by the authorities
Use property holding taxes as the primary source of additional local tax revenue.	The CPT was strengthened in 2006 and the central government distributes all of the revenue to local governments.
Ensure adequate public services by marking sure that the transfers to poor local governments are sufficient.	The assessment system of standard fiscal needs was improved to better reflect the cost of providing public services.
Ensure fiscal discipline of local governments	
Design appropriate fiscal rules for local government.	The approval system for individual local bonds was replaced by a total ceiling on bond issues in 2006.
Reduce local governments' reliance on loans from the central government.	The central government distributes the rapidly rising revenue from the CPT to local governments.
Phase out the use of compulsory bonds.	No action taken.
Strengthen accountability of local governments and increase transparency about their financial position.	The approval system for individual local bonds was replaced by a total ceiling on bond issues in 2006.
Separate regional development policies from fiscal decentralisation	
Increase the tax autonomy of local authorities while using well-designed intergovernmental transfers.	The government reduced the share of the discretionary Special Local Shared Tax in total Local Shared Tax from 9% in 2004 to 4% in 2005.
Finance local public services through block grants that take account of the fiscal capacity of local governments.	No action taken.
Shift away from regulations to limit concentration in the capital region in favour of market-based measures that address the externalities of pollution and congestion.	No action taken. The lifting of such regulations will not be considered until the early 2010 when regional development initiatives have taken effect.
B. INNOVATION	
R&D system	
Better coordinate policies concerning science and technology, education and industry and integrate them more fully.	The government expanded its support for the corporate R&D cluster project, in part by increasing the number of R&D centres combining government science and technology institutes, education and industry from 30 in 2005 to 370 in 2007.
Maintain flexibility in setting priorities for R&D and innovation activities.	Public R&D spending on sectors identified as future growth engines is less than 1.5% of the total and subject to change through an on-going assessment of technology demand in the future.
Increase the responsiveness of public R&D expenditures to the private sector.	The government strengthened the performance-based R&D evaluation system to enhance the efficiency of government R&D expenditure.
Strengthen linkages in R&D among business, universities and government research institutes.	The government allowed industry and universities to establish "technology holding companies" in 2006 to commercialise technology held by universities. It has also taken initiatives to foster innovation clusters where education, industry and science and technology are integrated, such as Daedeok Innopolis in 2005.
Upgrade the R&D role of the universities.	The number of university research centres receiving government subsidies was increased from 85 in 2006 to 92 in 2007.
Promote technological operation between domestic and foreign players.	The government established guidelines in 2006 for the management of foreign R&D centres and eased immigration controls on the inflow of foreign researchers.
Follow through on plans to encourage the diffusion of knowledge.	The government allowed industry and universities to establish "technology holding companies" in 2006 to commercialise technology held by universities.
Promote private-sector R&D activities	
Ensure that tax incentives are effective in boosting R&D.	The "Roadmap for National R&D projects" was created in 2006 to minimise deadweight losses.
Further improve enforcement of intellectual property rights and increase public awareness of their importance.	The "Co-ordination Committee for Property Rights" involving related ministries was established in 2006.
Regulatory reform and the framework for encouraging innovation	
Improve product market regulation by lowering entry barriers, streamlining regulations and replacing multiple contacts points and administrative procedures by one-stop shops.	The Regulatory Reform Committee improved 1 413 of the targeted 8 043 regulations during 2006.
Continue to deregulate and foster competition in services.	The government announced a new initiative in 2006 to develop the service sector through deregulation and the provision of tax incentives.

Recommendations in the 2005 *Survey*	**Actions taken or proposed by the authorities**
Simplify the regulatory framework for land.	The Framework Act on Land Use Regulations was introduced in 2006 to limit new regulations on land use and require the government to review existing regulations on land use every five years.
Use the Regulatory Reform Committee (RRC) to eliminate unnecessary regulations.	The RRC improved 1 413 of the targeted 8 043 regulations during 2006.
Effectively implement the new unified insolvency law to provide more efficient ways for firms to reorganise or exit.	The Corporate Restructuring Promotion Act currently pending in the National Assembly is aimed at facilitating the corporate restructuring process.
Abolish remaining policies that discriminate in favour of manufacturing.	The 2006 initiative to develop the service sector includes narrowing the gap between manufacturing and services in terms of incentives and regulations.
Concentrate the government's role in the risk capital market on leveraging private-sector participation.	The government eased regulations on private equity funds in 2006, notably by lowering the minimum investment amount by investors and expanding the scope of investment.
Restore investor confidence in the second tier stock market through strengthened screening procedures, disclosure requirements and delisting conditions.	In 2006, the government strengthened technology assessment for venture firms listing on KOSDAQ while facilitating the exit of distressed firms.
Abolish the government certificate system for venture business in 2005 as scheduled.	The certificate system for venture business was revised in 2006 but not abolished.
Development of human capital	
Improve the quality of education at the primary and secondary level.	"Open-ended self-regulated schools" are to be introduced in 2007 as models for public schools, allowing more autonomy and accountability.
Enhance the autonomy of individual schools and diversify the types of schools and curricula at the secondary level.	The government announced plans to liberalise options for textbooks from 2009 and enhance the flexibility of curricula to meet changing demand.
Continue to diversify the university entrance system.	The college admission system will be revised starting in 2008, giving more weight to performance in school and less weight on the standardised test.
Restructure the tertiary education sector through competition by disclosing performance information for each university and developing a transparent mechanism, such as an independent national body, to asses the quality of educational services.	The government established a performance-based university management system by strengthening public disclosure of information and assessment of universities in 2006.
Allow the entry of foreign institutions.	Foreign investment in the education sector is allowed in the three Free Economic Zones.
Further deregulate tertiary education.	Between 2004 and 2007, 63 actions were taken to enhance the autonomy of universities in accordance with the 2004 plan.
Re-balance financial resources in favour of tertiary education.	No action taken.
Increase scholarships and loans for low-income students.	The government-guaranteed student loan programme was introduced in 2005 and the number of recipients was increased from 0.3 million in 2005 to 0.5 million in 2006.
Encourage efforts by universities to diversify with an aim of establishing centres of excellence.	In 2005, 18 universities were consolidated into nine universities to encourage them to establish centres of excellence.
Expand lifelong learning opportunities.	The government designated 15 "lifelong learning cities" in 2006, in which local governments actively support lifelong learning, raising the total number of cities to 48.
Encourage vocational training through co-operative efforts among social partners.	The government supported nine labour-management training projects in 2006.
C. LABOUR MARKET	
Reverse the trend toward increasing labour market dualism	
Reduce employment protection for regular workers.	The prior notice period for dismissal was shortened from 60 to 50 days in January 2007.
Increase compliance with the Employment Insurance System.	A special organisation under the NTS is planned to impose and collect four social insurance charges from 2009.
Expand the coverage of non-regular workers in social insurance systems.	The Employee Competence Development Card System and the E-card System for construction workers were introduced in 2006.

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Recommendations in the 2005 *Survey*	Actions taken or proposed by the authorities
Develop more co-operative industrial relations, in part by implementing the roadmap proposed by the Research Committee for Advancement of Industrial Relations Systems.	Labour laws were revised in 2006 based on the 2003 "Roadmap for Industrial Relations Reform" to promote more harmonious industrial relations.
Resist pressure to level the playing field between regular and non-regular workers by imposing regulations on non-regular employment.	The 2006 labour law reform imposes new regulations on non-regular employment by limiting fixed-term contracts to two years. A clause forbidding discrimination allows non-regular workers to complain to the Labour Relations Commission.
Enhance labour force participation, particularly of women and older persons	
Encourage greater labour force participation by women by introducing more family-friendly policies.	The government announced a five-year plan (2006-10) to increase support for childcare and expand work leave before and after childbirth.
Raise the effective retirement age.	The government revised a law in 2006 to penalise companies that set the retirement age below 54.
Reduce the importance of seniority in setting wages.	The government announced in 2006 that it will introduce a subsidy to encourage adoption of the "wage peak system".
Encourage the replacement of the retirement allowance system with a company pension system.	The company pension system is to be extended to workplaces with four or less employees. The government proposed making a company pension system mandatory for new start-ups.
Ensure that the public pension system does not create incentives for older workers to leave the labour force before the normal retirement age.	The pension scheme was changed to provide more incentives for working beyond the eligibility age.
Cut wage subsidies to avoid high deadweight costs and make sure that other active labour market policies are cost effective.	The government set up an inter-ministerial task force in 2006 to enhance the cost-effectiveness of active labour market policies, including employment services and the private sector's role in job creation.
D. CORPORATE AND FINANCIAL SECTORS	
Corporate sector	
Streamline and reduce the programmes to assist small and medium-sized enterprises (SMEs).	The number of programmes was reduced from 237 to 174 between 2005 and 2007, while the total budget was lowered from 7.3 trillion won to 7.2 trillion won.
Scale back credit guarantees for SMEs.	Credit guarantees for SMEs were reduced from 40.8 trillion won in 2005 to 39.4 trillion won in 2006.
Shift the focus of credit guarantees from preserving existing weak firms to assisting start-ups.	Credit guarantees gave more priority to start-ups with growth potential that use high technology.
In the loans guaranteed by the Korea Credit Guarantee Fund, reduce the proportion of the loans that are guaranteed from the current 80-90% and raise the price of guarantees.	The Fund reduced the guaranteed proportion from 84.9% to 83.3% and raised the price of guarantees from 1.11% in 2006 to 1.25% in 2007.
Further improve corporate governance practices.	An amendment to the Commercial Code is planned in 2007 to make managers and controlling shareholders more accountable to minority shareholders.
Ensure openness to foreign investment.	Foreign investment in lifelong business education facilities was allowed in 2006.
Concentrate *chaebol*-regulating functions that are related to finance and corporate governance in regulators responsible for financial and securities matters.	No action taken.
Phase out the 25% ceiling shareholding ceiling imposed on chaebol-affiliated firms.	A bill to reduce the coverage of the regulation by changing the eligibility criteria and raising the ceiling from 25% to 40% passed the National Assembly in April 2007.
Financial sector	
Continue the privatisation of government-owned banks.	The government sold 6.22% of its share in Shinhan Financial Holding Company in 2006.
Avoid nationality restrictions on the directors of banks.	The restriction was not imposed.
Encourage banks to improve their capacity for credit analysis.	The government approved the establishment of individual and corporate credit bureaus in 2006 to encourage credit-based financial transactions.
Discourage banks from automatically rolling over their loans to distressed SMEs.	No action taken.
Continue the restructuring of non-bank financial institutions.	Since 2005, 21 "prompt corrective actions" were taken for savings banks and 608 for credit co-operatives.

Recommendations in the 2005 *Survey*	**Actions taken or proposed by the authorities**
Promote the development of the capital market by upgrading law enforcement and sanctions.	The government improved regulations on issuing stock overseas in 2006 and extended the coverage of class action suits to all listed firms in 2007.
Strengthen the credit rating agencies to provide more accurate and timely information to creditors.	The internal monitoring system of credit agencies was strengthened in 2006 and an approval system for changes in large shareholders was introduced.
Increase the supply of long-term financial instruments, beginning with government bond issues.	Government bonds with a maturity of 20 years were issued for the first time in 2006.
Avoid introducing new schemes that support delinquent borrowers without resolving the problem and limit debt write-offs to prevent moral hazard problems.	No additional schemes have been introduced.
Discourage discrimination against delinquent borrowers.	The Registration System for Delinquent Borrowers was abolished in 2005.
E. OTHER AREAS	
Reform the National Pension Scheme to ensure its sustainability while constraining the hike in contribution rates to limit the negative impact on the labour market.	No action taken. Legislation to cut the replacement rate to 50% and raise the contribution rate to 12.9% was rejected by the National Assembly in April 2007. The political parties agreed to a compromise in April 2007 that would reduce the replacement rate from 60% to 40%, while keeping the contribution rate unchanged at 9%.
Further reduce the number of special accounts and funds to increase budgetary transparency and efficiency.	The number of special accounts and funds was reduced from 76 to 61 between 2005 and 2007, in part through the consolidation of seven special accounts into the SABND in 2005.

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Chapter 2

Macroeconomic developments and policies affecting monetary conditions

Economic growth slowed to less than a 4% annual rate in the second half of 2006, largely due to weak private consumption and a decline in housing construction. The economy is projected to pick up gradually, with growth of about 4¼ per cent in 2007. Korea should pursue a flexible exchange rate policy by limiting intervention in foreign exchange markets. The liberalisation of controls on capital outflows should aim at improving long-run efficiency rather than moderating upward pressure on the won in the short run. The Bank of Korea should focus on achieving its new medium-term target for overall CPI inflation and avoid using monetary policy as a tool to stabilise real estate prices in some parts of the capital region, as further hikes in the short-term interest rate would have a negative impact on the increasingly indebted household and small and medium-sized enterprise sectors.

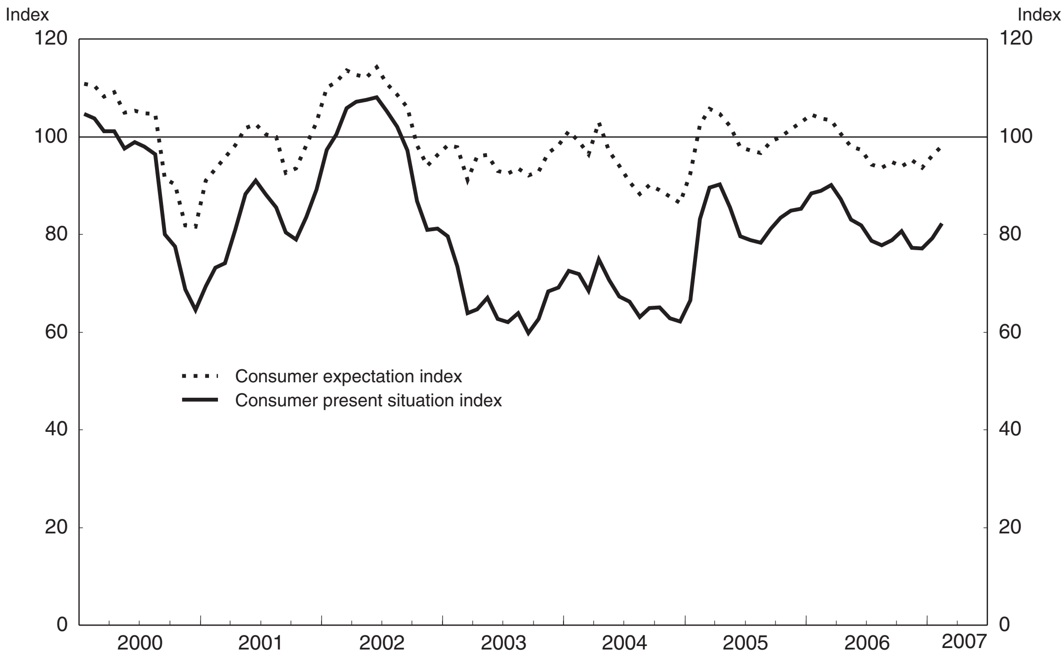
Following the slowdown during the course of 2006, the Korean economy is likely to gain strength gradually in 2007. Given the risk to export-led growth from a further appreciation of the won, the government has attempted to moderate pressure on the exchange rate by liberalising controls on capital outflows. The upward pressure on the won has occurred in the context of a significant hike in interest rates by the Bank of Korea, even though inflation has been below the target zone. This chapter begins by looking at Korea's recent economic performance and its short-term prospects. The following sections analyse exchange rate and monetary policies. Recommendations are summarised in Box 2.1.

Recent economic trends and prospects

After a hesitant recovery from the collapse of the credit card bubble in 2002, output growth accelerated to a 6% annual rate between the first quarters of 2005 and 2006. The pick-up in growth was led by stronger exports and a rebound in private consumption growth to almost 5%. However, the economy cooled to a 3.9% annual rate in the year to the first quarter of 2007, despite a recovery in business investment. The key factor in the deceleration of growth was private consumption, which slowed to 3.8% during that period, reflecting the impact of rising interest rates on the increasingly indebted household sector and modest wage gains. Although the unemployment rate has remained low at around 3½ per cent since early 2006, wage growth has been constrained by structural changes in the labour market, notably the increasing proportion of lower paid non-regular workers (see Chapter 5) and low bonus payments as a result of a decline in corporate profits. The profits of exporting firms were squeezed by the significant appreciation of the won during 2006.[1] In addition, terms of trade losses during the first three quarters of 2006 slowed the growth of gross national income to only 1.1% (compared to 4.1% for GDP), putting downward pressure on domestic demand. There was a negative impact from both falling export prices and higher oil prices, given that petroleum imports account for about 5% of GDP. These adverse developments resulted in a decline in consumer confidence during 2006 (Figure 2.1).

A second reason for the growth slowdown during 2006 was a significant contraction in housing construction, which fell at a 4% annual rate during the first three quarters of 2006 (Figure 2.2). The decline is primarily due to the real estate policy packages introduced in August 2005 and March 2006 to calm the housing market (see Chapter 3). Although the aim was to discourage "speculation" in certain areas of the capital region, the policy changes have had a negative effect on overall construction activity. There has also been an adverse influence from the tightening of monetary policy (see below). Indeed, short-term interest rates increased by 125 basis points,[2] even though core consumer price inflation – the indicator targeted by the Central Bank until the end of 2006 – remained below the medium-term target zone of 2.5% to 3.5% (Figure 2.3).

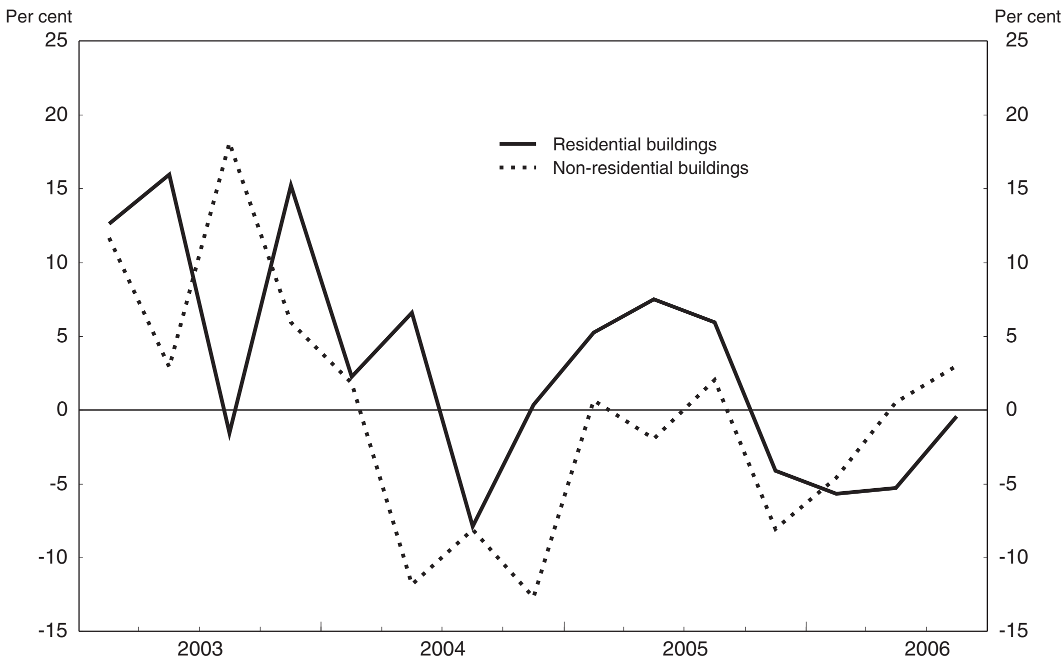
Figure 2.1. **Consumer confidence**



Source: Korea National Statistical Office.

Figure 2.2. **Construction activity has declined markedly**

Seasonally-adjusted quarterly growth at an annual rate[1]

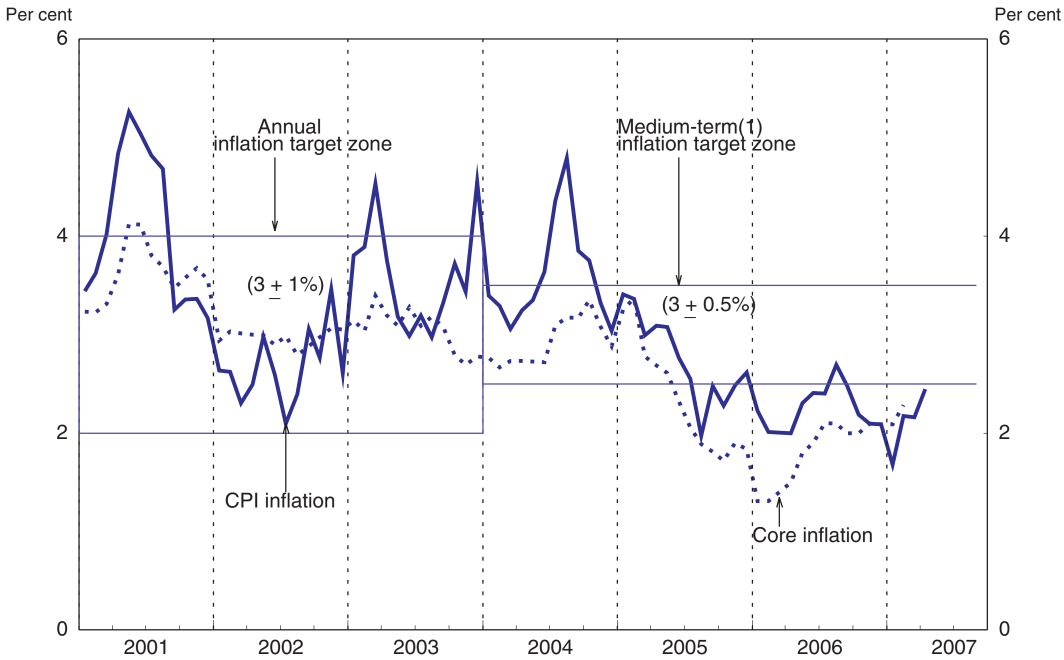


1. Smoothed over three quarters. No data are available for 2007.

Source: Bank of Korea.

Figure 2.3. **Inflation targets and outcomes**

Year-on-year percentage changes



1. In 2004, the Bank of Korea changed the target to a medium-term objective. In 2007, the target was changed from core CPI to the overall CPI.

Source: Bank of Korea.

The outlook for private consumption in the context of rising household debt

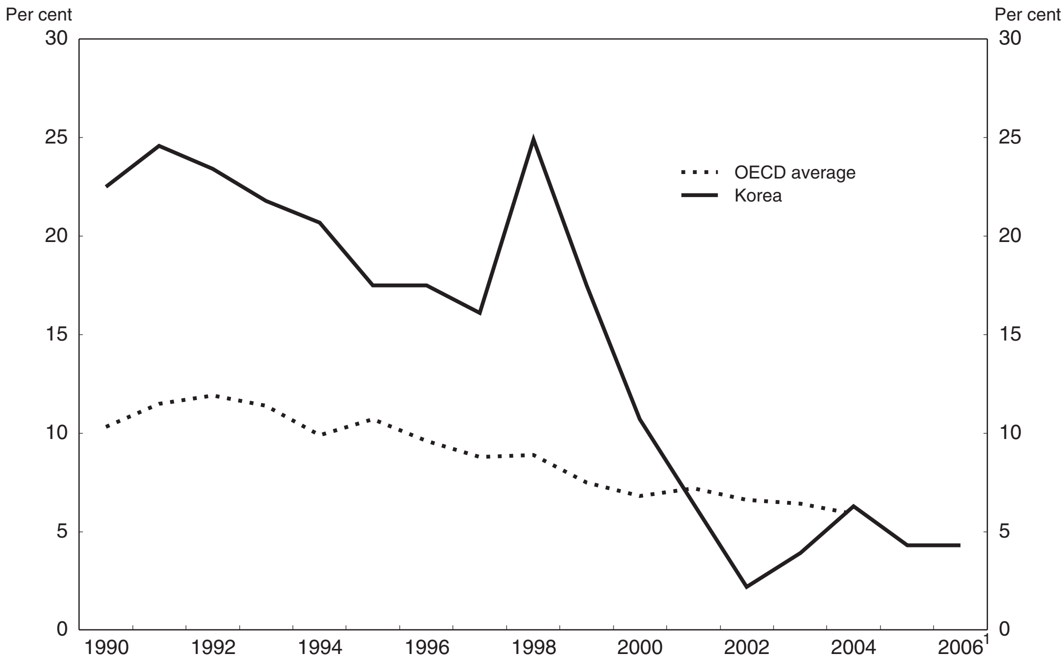
With the slowdown in private consumption and decline in housing investment during 2006, the outlook for 2007 depends importantly on these two components, which together account for 60% of the economy. As for housing, the outlook remains weak following the real estate policy package of January 2007 (see Chapter 3), which is likely to reduce housing construction by the private sector.[3] Indeed, building permits issued for housing during the last quarter of 2006 fell to a low level on the basis of total floor space.[4] The outlook for private consumption depends in part on the household saving rate, which had plunged from an average rate of 20% during the 1990s to only 2% in 2002. It has rebounded modestly since then, as households focused on repairing their balance sheets in the wake of the collapse of the credit card bubble (Figure 2.4).

Household saving behaviour has been closely linked in the past to developments in household debt. Financial liabilities rose from 32% of GDP in 1985 to 74% in 2002 before levelling off (Figure 2.5). The ratio edged up again in 2005, to 76% of GDP,[5] as credit to the household sector began to pick up from the post-bubble collapse, driven in part by mortgage lending. Household debt in Korea has thus converged to the average of OECD countries, where it ranges from 40% to 120% of GDP (Panel B). The future direction of the saving rate is highly uncertain as it depends on a number of factors:

- The impact of higher debt is mitigated by the upward trend in household financial assets. Net financial assets of the household sector have thus stabilised at around 68% of GDP (Panel A), somewhat above the pre-crisis level in the 1990s.

Figure 2.4. **The household saving rate**

As per cent of household disposable income



1. OECD estimates for 2006.

Source: OECD, *Economic Outlook* database.

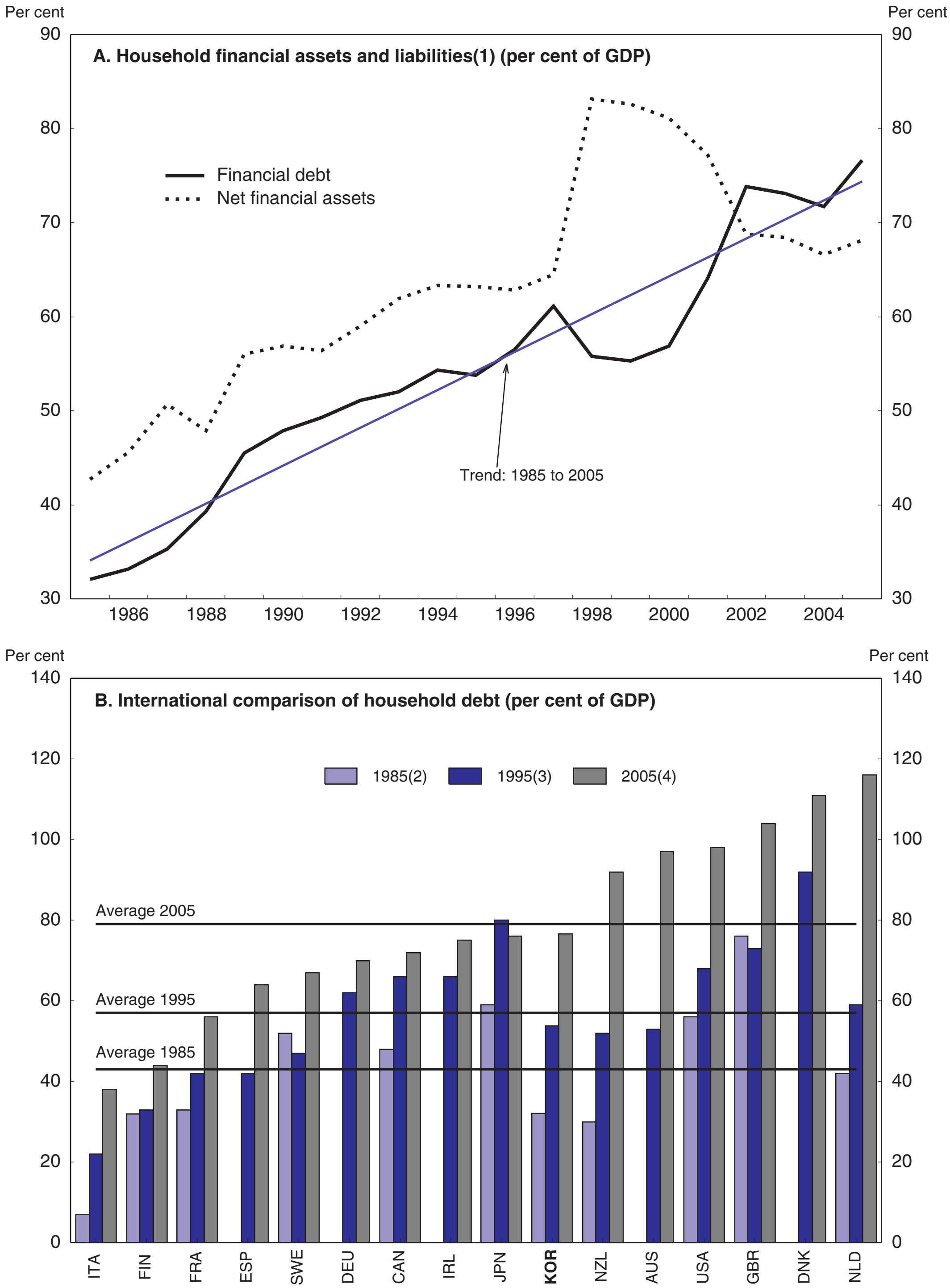
- Nation-wide house prices have risen during the past two years following a decline in 2004, thus increasing households' total net wealth. This will stimulate consumption and reduce saving.
- On the other hand, lower-income households, which have higher levels of debt, face a financial squeeze and will be constrained to limit consumption and raise their saving rate.
- Contributions to the social security system, one of the factors that may explain past declines in the saving rate, are likely to rise further.[6] At the same time, uncertainty about the public pension scheme and the plans to scale back the benefit replacement rate may encourage more saving.

Given these factors, which imply different directions for the household saving rate, the projection for 2007-08 assumes a slight fall, from an estimated 4¼ per cent in 2006 to around 4% in 2007-08.

Why has export growth remained so strong in the face of an appreciating currency?

With annual growth of 14% in volume terms since 2002, exports have proven to be resilient to the appreciation of the won, which rose 23% in effective terms over the same period. The steady improvement in product quality has made exports less sensitive to the movements in the exchange rate.[7] In addition, there has been a shift toward knowledge-based products that tend to be less price-sensitive. Indeed, exports of high and medium-high technology products increased from less than half of total exports in 1992 to three-quarters in 2004 (Table 2.1). Korea's revealed comparative advantage (RCA) in ICT products rose

Figure 2.5. **Household debt**



1. For the "Individual Sector" in the Bank of Korea's flow of funds data.
2. 1987 for the United Kingdom.
3. 1999 for Ireland.
4. 2004 for Japan, Denmark and Spain.

Source: Bank of Korea; OECD (2006), *OECD Economic Outlook*, No. 80, OECD, Paris; and OECD *Analytical Database*.

Table 2.1. **Composition of Korea's exports**

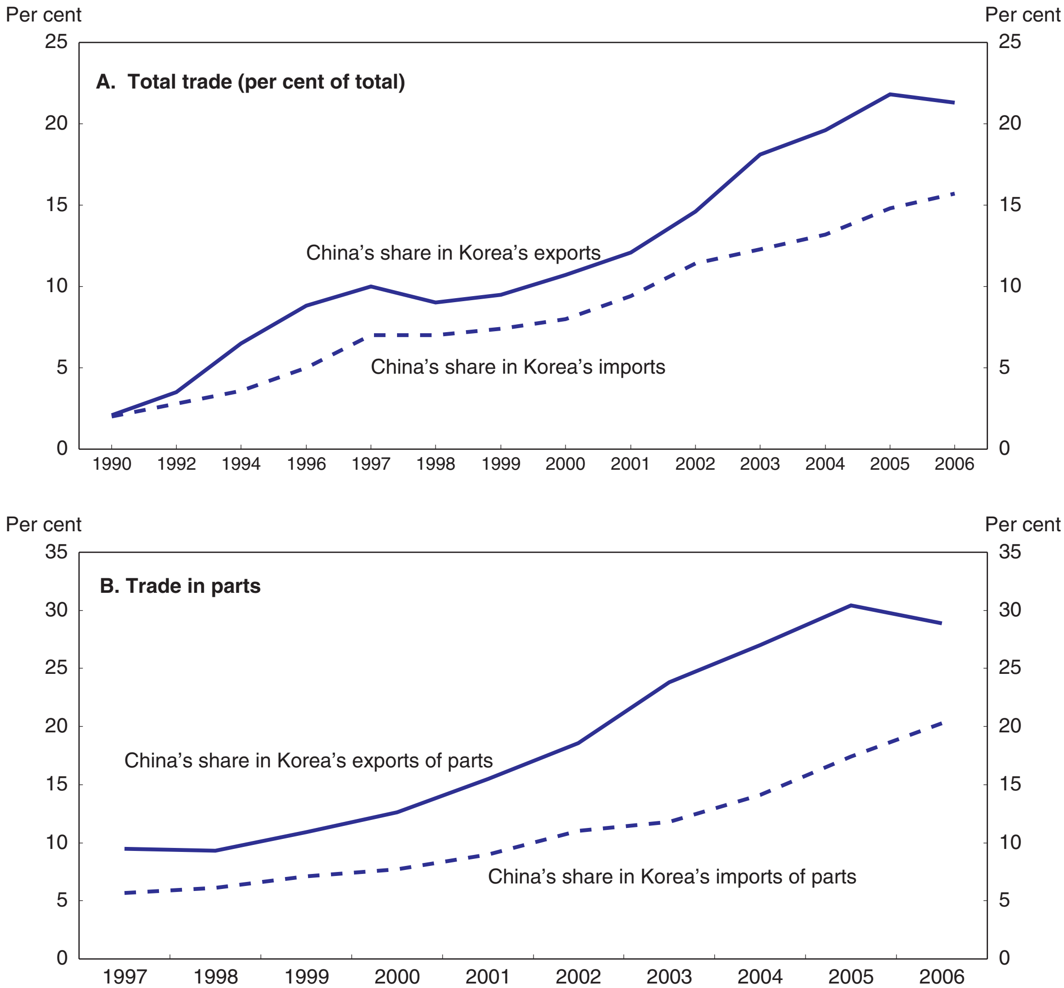
	Share (per cent)		Revealed comparative advantage	
	1992	2004	1992	2004
Manufacturing				
High technology and ICT products	***25.8***	***39.2***	***1.33***	***1.63***
Aircraft and spacecraft	0.9	0.2	0.28	0.11
Pharmaceuticals	0.4	0.3	0.26	0.11
Computers and office products	4.0	9.0	0.91	1.73
Semiconductors and electronic valves	10.6	11.0	3.62	2.30
Radio, TV and communication equipment	8.5	15.3	2.31	3.19
Precision, medical and optical instrument	1.3	2.4	0.39	0.65
Medium-high technology	***20.4***	***35.2***	***0.60***	***1.10***
Electrical machinery	2.2	3.2	0.59	0.77
Chemical products	7.2	10.2	0.99	1.26
Motor vehicle and trailer	5.8	13.6	0.50	1.33
Other transport equipment	0.2	0.2	0.35	0.29
Home appliance and machinery equipment	3.0	8.0	0.46	0.91
Medium-low technology	***18.7***	***17.3***	***1.45***	***1.43***
Shipbuilding and repairing	5.4	6.4	5.77	8.45
Coke and petroleum products	0.2	0.1	0.30	0.20
Rubber and plastic products	2.8	2.4	1.15	0.96
Non-metallic mineral products	0.8	0.6	0.52	0.44
Basic and fabricated metal products	9.7	7.7	1.30	1.12
Low technology	***31.6***	***8.8***	***1.44***	***0.49***
Textile, apparel and footwear	25.4	6.1	2.99	0.92
Food, beverages and tobacco	2.1	1.1	0.35	0.20
Wood and paper products	1.0	0.6	0.22	0.19
Other misc. manufacturing products	3.2	1.0	1.03	0.35
Non-manufacturing	**1.5**	**0.4**	**0.18**	**0.03**

Source: Joon-Kyung Kim, Yangseon Kim and Chung H. Lee (2006), *Trade, Investment and Economic Interdependence between South Korea and China*, Korea Development Institute and East-West Center, University of Hawaii.

sharply, while that for medium-low technology products was constant, reflecting continued strength in shipbuilding. In contrast, the RCA of low-technology products fell, in part due to the sharp decline in the textile industry, which still accounted for a quarter of Korea's exports in the early 1990s. In sum, Korea gained export market share for high-technology products in the United States, Japan and the European Union, while losing market share for low-technology products.

Strengthening economic ties with China are another important force sustaining export growth. China's share of Korean exports soared from 2% in 1990 to 15% in 2002 and further to 21% in 2006 (Figure 2.6), making China the largest trading partner of Korea. The trade relationship has been underpinned by Korea's FDI in China. Indeed, China accounted for nearly a quarter of Korea's total stock of overseas FDI in 2005, and 36% in the manufacturing sector.[8] Korea's investment in China is mainly motivated by efforts to create integrated global production networks that include China, taking advantage of its cheap labour cost and geographical proximity, as well as it huge domestic market. Nearly half of manufacturing output by Korean affiliates in China was exported to third markets while local sales accounted for a third. Exports to Korea accounted for the remainder. Investment in China has also boosted trade in intermediate parts to supply Korean affiliates operating there; China's share of Korea's total part exports rose from 10% in 1995 to 29% in 2006 (Panel B). Notable increases were recorded in telecommunication equipment, making China a major assembler of Korea's

Figure 2.6. **Growing trade between Korea and China**



Source: Korea International Trade Association and Korea Association of Machinery Industry.

high-technology products. However, the positive impact of FDI on Korean exports to China is weakening as local procurement is increasingly replacing shipments from Korea. For Korean affiliates in China in the manufacturing sector, the share of imports from Korea decreased from 65% to 37% between 1996 and 2003 while the share of local procurement increased from 26% to 46%.[9]

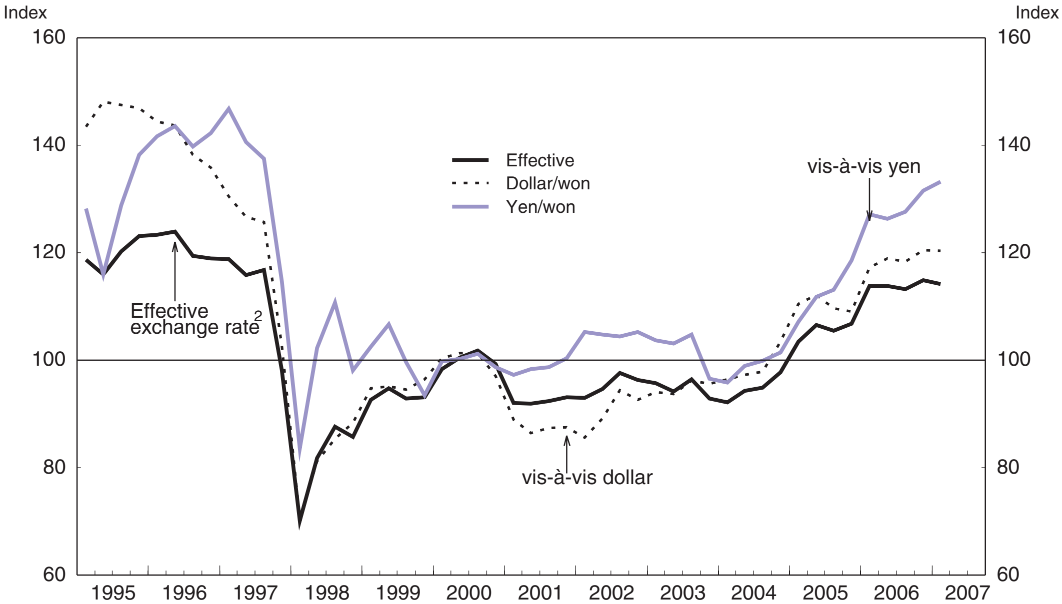
The further rise of the won in 2006 (Figure 2.7) and the slowdown projected in Korea's export markets, from 8.9% in 2006 to 8.3% in 2007 will put downward pressure on the pace of export growth. While the won appreciated 6% in effective terms during 2006, it rose 9% against the dollar and 10% against the yen. The strength of the won relative to the yen is particularly important, as about two-thirds of Korean exports compete with Japanese products in third markets.

Economic outlook for 2007 and 2008

Economic growth is projected to pick up during the course of 2007 from the 3.6% annual rate in the first quarter of 2007 (Table 2.2). On an annual basis, growth is expected to reach

Figure 2.7. **Exchange rate trends**

2000 = 100[1]



1. A rise indicates an appreciation of the won.
2. Calculated *vis-à-vis* 41 trading partners.

Source: OECD, *Economic Outlook* database and Bank of Korea.

Table 2.2. **Short-term economic outlook for Korea**

As published in *OECD Economic Outlook*, No. 81, May 2007

	2004	2005	2006	2007	2008
	Percentage changes, volume (2000 prices)				
Private consumption	–0.3	3.6	4.2	4.4	3.6
Government consumption	3.7	5.0	5.8	5.0	5.0
Gross fixed capital formation	2.1	2.4	3.2	4.2	3.0
Final domestic demand	1.0	3.4	4.1	4.4	3.6
Stockbuilding[1]	0.5	–0.2	–0.3	–0.6	0.0
Total domestic demand	1.5	3.2	3.7	3.8	3.6
Exports of goods and services	19.6	8.5	12.4	10.0	12.2
Imports of goods and services	13.9	7.3	11.3	10.3	11.6
Net exports[1]	3.3	1.3	1.6	0.9	1.6
GDP at market prices	4.7	4.2	5.0	4.3	4.8
GDP deflator	2.7	–0.2	–0.4	1.1	0.7
Memorandum items:					
Consumer price index	3.6	2.8	2.2	2.5	3.0
Core consumer price index	2.9	2.3	1.8	2.5	3.0
Private consumption deflator	3.5	2.6	2.1	2.5	3.0
Unemployment rate	3.7	3.7	3.5	3.4	3.4
Household saving ratio[2]	6.3	4.3	4.3	3.9	3.9
Current account balance[3]	4.2	1.9	0.7	–0.0	–0.4

1. Contributions to changes in real GDP (percentage of real GDP in the previous year).
2. As a percentage of disposable income.
3. As a percentage of GDP.

Source: OECD, *Economic Outlook* database and Bank of Korea.

4¼ per cent in 2007 and accelerate to 4¾ per cent in 2008, a rate roughly consistent with Korea's potential growth rate. The recent decline in oil prices and a more stable exchange rate (on a trade-weighted basis) should relax the squeeze on corporate profitability, thus sustaining business investment during 2007. Improved profitability would also allow higher wage increases. Combined with a modest fall in the saving rate, this would support private consumption growth of around 4%. Meanwhile, exports are projected to decelerate somewhat in 2007, while still maintaining double-digit growth, in the context of slower growth in world trade and the cumulative impact of the won's appreciation. The 9% appreciation of the won relative to the dollar during 2006 lowered inflation by about one percentage point, according to the Bank of Korea. Assuming a stable exchange rate in 2007, core inflation may rise from 1.8% in 2006 toward 2½ per cent in 2007. Slower export growth, continued terms of trade losses and the rising deficit on the service account are likely to bring the current account into deficit in 2007 for the first time in a decade.

However, there are a number of risks to both domestic demand and exports. On the positive side, Korea's increasing concentration on ICT products and growing trading links with other Asian countries, notably China, may result in faster-than-expected growth in exports. In addition, wages may accelerate more than expected in the context of a tight labour market, leading to stronger growth in private consumption. On the other hand, the substantial hike in interest rates over the past year could have a stronger than expected impact on the highly indebted small and medium-sized enterprise sector, as well as on households. The increased level of debt has raised the sensitivity of the household sector to changes in interest rates, asset prices and income, making it more vulnerable to adverse shifts in these variables. As for the construction sector, the most recent real estate policy packages increase downside risks in the housing market and a continued decline in residential construction. Moreover, if the real estate policy packages achieve their stated objective of a 20% to 25% decline in the price of new houses, there may be a negative wealth effect that would weaken private consumption. Price declines of that magnitude might also have a negative impact on the soundness of financial institutions. As for the external sector, a sharper slowdown in world trade or a marked appreciation of the won may slow Korea's export growth from double-digit levels.

Exchange rate policy and the liberalisation of capital outflows

Upward pressure on the exchange rate and foreign exchange market intervention

The won's appreciation by 9% relative to the dollar during the course of 2006 (Figure 2.7) was the largest of any Asian currency. While the current account surplus narrowed significantly in 2006, a large increase in the capital account maintained upward pressure on the exchange rate (Table 2.3). The large capital account surplus occurred despite a sharp rise in overseas portfolio investment to a record $22.6 billion deficit (inflows minus outflows) in this category (see below). In addition, there was a record deficit of $3.5 billion in FDI, as outflows exceeded inflows for the first time since 2002. However, the deficits in these categories were more than offset by a surge in short-term borrowing by banks to $40.7 billion (5% of GDP). Overseas borrowing was stimulated in part by rising interest rate differentials, as interest rates rose in Korea (see below) relative to other countries, notably Japan. In addition, forward sales of dollars to local banks by Korean shipbuilders with long-term contracts have reportedly prompted overseas borrowing by those banks to cover their exchange rate risk.

Table 2.3. **Balance of payments**
$ billion

	2005			2006 (preliminary)		
	Exports	Imports	Balance	Exports	Imports	Balance
Trade in goods	289.0	256.3	32.7	331.9	302.6	29.2
Trade in services	45.1	58.8	–13.7	51.9	70.6	–18.8
Investment income	10.4	12.0	–1.6	13.6	14.1	–0.5
Transfers	10.0	12.5	–2.5	9.3	13.2	–3.8
Current account	354.5	339.6	15.0	406.7	400.5	6.1
	Inflows	Outflows	Balance	Inflows	Outflows	Balance
Direct investment	6.3	4.3	2.0	3.7	7.1	–3.5
Portfolio investment	8.9	10.7	–1.7	0.0	22.6	–22.6
Other investment	9.5	2.7	6.8	56.4	8.8	47.7
of which: Short-term bank loans	–2.1	–5.7	3.6	40.7	3.5	37.2
Sub-total	24.7	17.6	7.1	60.1	38.5	21.6
Other[1]	..	..	–2.3	..	..	–3.0
Capital account	..	..	4.8	..	..	18.6
Basic balance	..	..	19.7	..	..	22.1
Errors and omissions	..	..	0.1	..	..	–2.6

1. Primarily capital transfers.
Source: Bank of Korea.

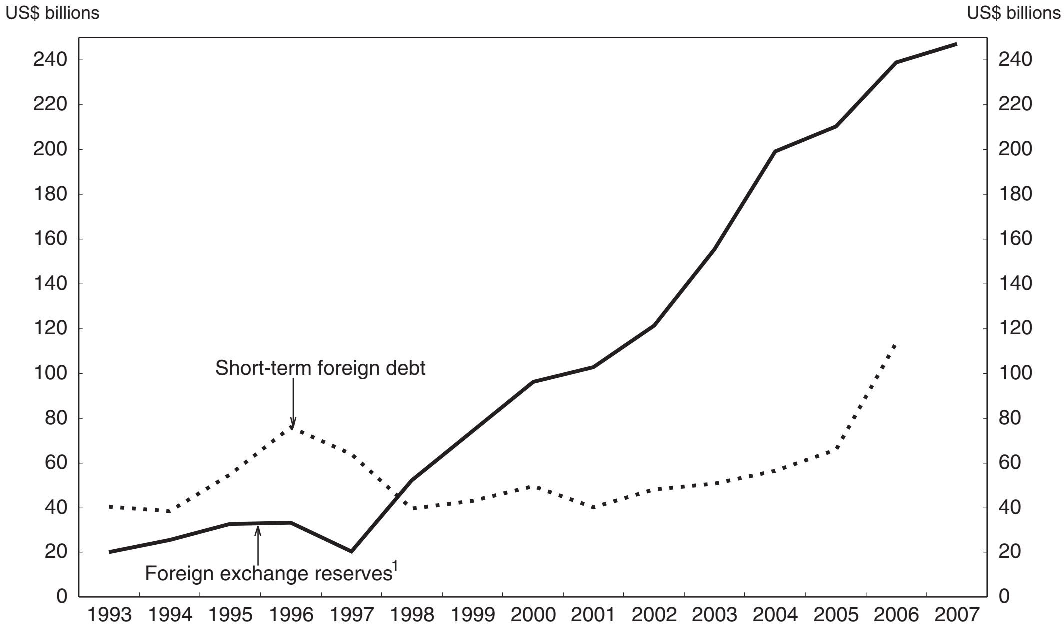
The appreciation of the won was accompanied by intervention in the foreign exchange market aimed at smoothing the currency's upward trend. This contributed to a 14% rise in Korea's foreign exchange reserves during 2006 to $239 billion (27% of GDP) at the end of the year (Figure 2.8), and further to $247 billion in April 2007, the second highest in the OECD area. It has been argued that higher reserves are justified by the rise in short-term debt as a result of the overseas borrowing by Korean banks noted above. While short-term debt rose from $66 billion at the end of 2005 to $114 billion at the end of 2006, foreign exchange reserves are still more than twice as high, suggesting that there is no need for continued reserve accumulation. The flexible exchange rate system adopted in 1997 has been beneficial for the economy by helping to re-balance growth from external to domestic demand by providing income gains for households and firms, thus offsetting the large terms of trade losses (see Chapter 1). In addition, the flexible exchange rate approach avoids the cost of intervention, given that the cost of raising funds for intervention generally exceeds the return on the assets purchased. Moreover, it limits the risk of concentrating a large share of national wealth – already more than a quarter of GDP – in assets that may depreciate significantly.

Liberalising controls on overseas investment

Capital outflows from Korea had been small until recently. Portfolio investment in 2003 was only $3.6 billion (0.6% of GDP), while the stock of outward FDI was 4.1% of GDP, reflecting the legacy of controls on capital outflows. The government limited such flows in order to reduce the risk of capital flight, secure sufficient foreign exchange and prevent negative economic impacts, such as reduced investment, the "hollowing-out" of the manufacturing sector and job losses. However, since 2004, restrictions on capital outflows have been relaxed, in part in an effort to balance the capital account,[10] and thereby ease the appreciation pressure on the won. This has contributed to an upward trend in overseas investment since 2003 (Figure 2.9). The six-fold rise in overseas portfolio investment, from

Figure 2.8. **Foreign exchange reserves and short-term foreign debt**

At year-end



1. Useable reserves only; *i.e.* excludes illiquid deposits at offshore Korean banks.
2. April 2007.

Source: Bank of Korea and Ministry of Finance and Economy.

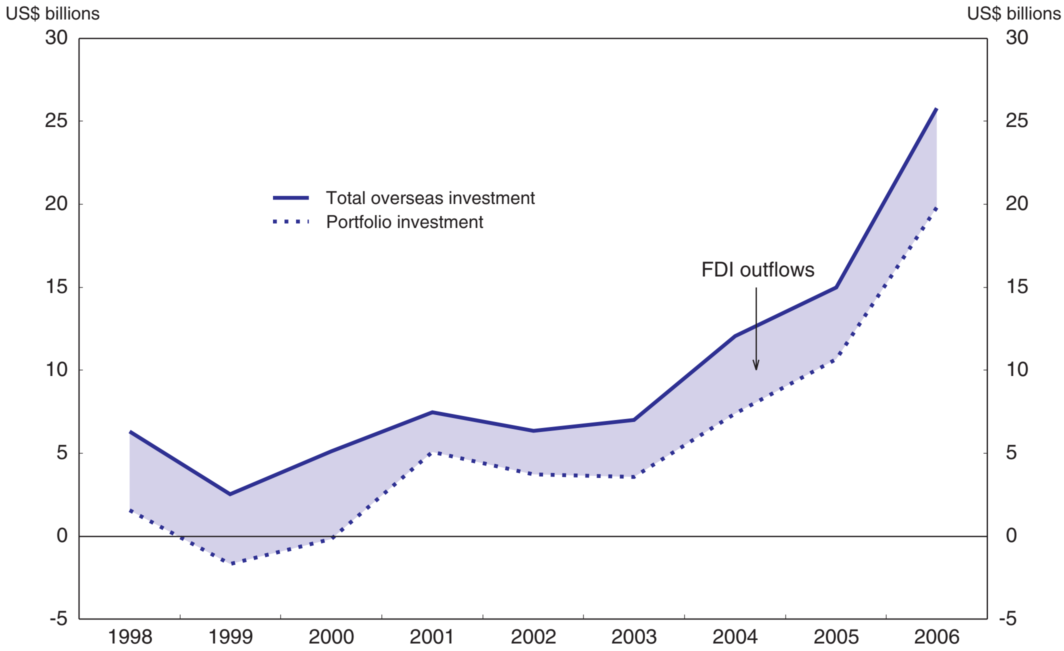
$3.6 billion to $22.6 billion between 2003 and 2006, and the more modest increase in FDI outflows reflect other factors as well. *First*, asset management companies and major public funds, such as the National Pension Fund (NPF), have expanded overseas investment in order to diversify their investment portfolios to meet investors' growing demand for higher returns. For example, the NPF plans to raise its share of overseas equity investment from 0.6% in 2006 to 2.8% in 2007. *Second*, Korean companies are developing global strategies to cope with intensified competition in the context of rising labour and land costs and to increase access to large markets abroad. Indeed, China accounted for a little more than half of Korea's FDI outflows in the manufacturing sector in 2006.

Faced with upward pressure on the won, the government announced steps in January 2007 to further relax barriers on capital outflows. The main measures include:

- Exempting overseas equity investment made through domestic investment companies from the capital gains tax. However, the exemption is not granted to offshore funds, which account for almost half of Korea's overseas investment by investment funds, as taxing these funds is administratively difficult.
- Expanding financial support, such as export loans and insurance, from public institutions for overseas investment by companies.
- Changing the registry system for outward FDI from approval to notification in practice.
- Relaxing regulations on overseas investment by asset management companies and public funds.

Figure 2.9. **Korea's overseas investment**

Actual basis



Source: Bank of Korea.

- Raising the limit on purchases of overseas real estate by individuals for investment purposes from $1 million to $3 million.
- Easing the requirements on the establishment of foreign branches by financial institutions.

According to the government, these measures could generate as much as $10 billion to $15 billion of capital outflows this year, thus helping to stabilise the exchange rate in addition to enhancing the competitiveness of private firms.[11]

There is scope for greater outflows, in part as Korea's stock of outward FDI is still small at 4.6% of GDP in 2005, compared to 39% in the European Union, 16% in the United States and 8% in Japan. According to UNCTAD, Korea's "Outward FDI Performance Index" ranked 59th between 2003 and 2005, suggesting room for a significant increase. The potential gains from overseas FDI are large, as it enhances the competitiveness of companies through efficiency gains and market expansion, thereby providing benefits to Korea. A greater stock of outward FDI will also tend to boost trade.

However, as in the case of FDI inflows, offering special benefits, particularly of a temporary nature, to encourage outflows risks distorting the allocation of capital. Measures to boost capital outflows should focus on increasing efficiency in the long run by reducing barriers rather than on influencing the exchange rate in the short run, as a temporary tax exemption might distort the allocation of capital. Tax exemptions and financial support should thus be pursued cautiously. In addition, there is a need for adequate prudential supervision to ensure that overseas investment does not expose domestic financial institutions to large risks that can threaten their soundness.

Monetary policy considerations

The easing phase of monetary policy, which lowered the short-term policy interest rate (the overnight call rate) from 4.25% to 3.25%, ended in October 2005. During the following ten months, the Bank of Korea raised the overnight rate five times, reaching 4.5% in August 2006, even though core consumer price inflation remained below the target zone (Figure 2.3). The pre-emptive move against inflation focused on pressures from oil prices and house prices. For example, the Central Bank's explanation of the February 2006 hike stated:

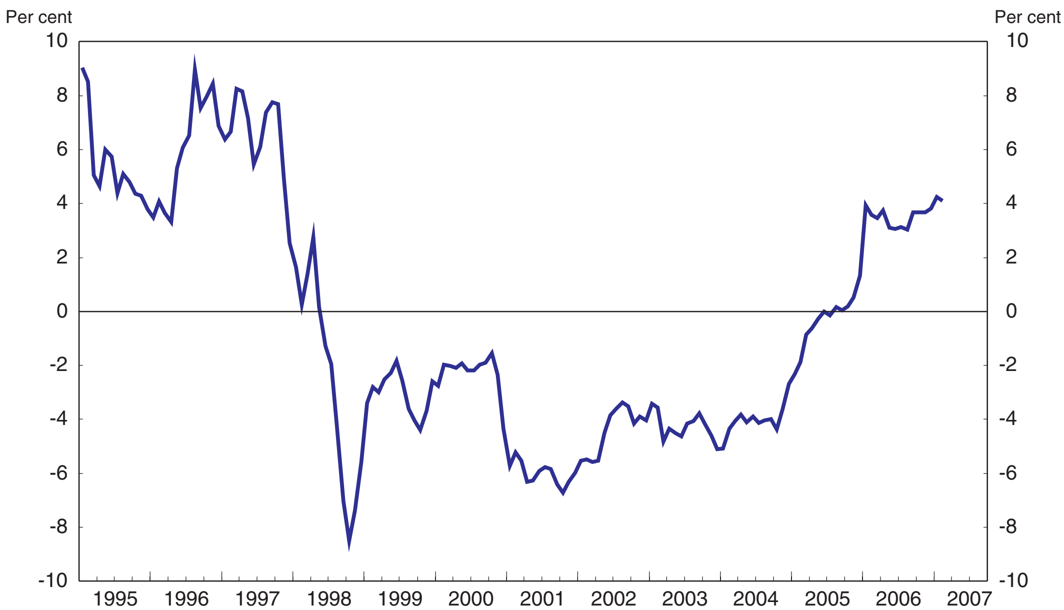
> "Both consumer price inflation and core inflation maintain overall stability. Nevertheless, there are latent inflationary pressures due to the economic recovery and persistently high oil prices. Real estate price have shown a rebound centering on certain areas."

Similar concern about house prices was expressed in the decision to raise interest rates in December 2005 and June 2006.

The rising trend in interest rates was accompanied by a surge in short-term overseas borrowing by banks (Table 2.3) and upward pressure on the won as noted above. Given higher interest rates and a stronger currency, monetary conditions have tightened considerably since 2004 (Figure 2.10). Indeed, monetary conditions are now judged to be tighter than at any time since the 1997 financial crisis, while the pace of economic activity slowed and inflation remained low and stable. Additional monetary tightening appears unnecessary in such an environment.

However, the rise in capital inflows also increased liquidity during the course of 2006, leading to the Central Bank's decision to raise the reserve requirement in November. The money supply (M2) accelerated to almost an 11% year-on-year rate in the fourth quarter

Figure 2.10. **Monetary conditions index for Korea**[1]



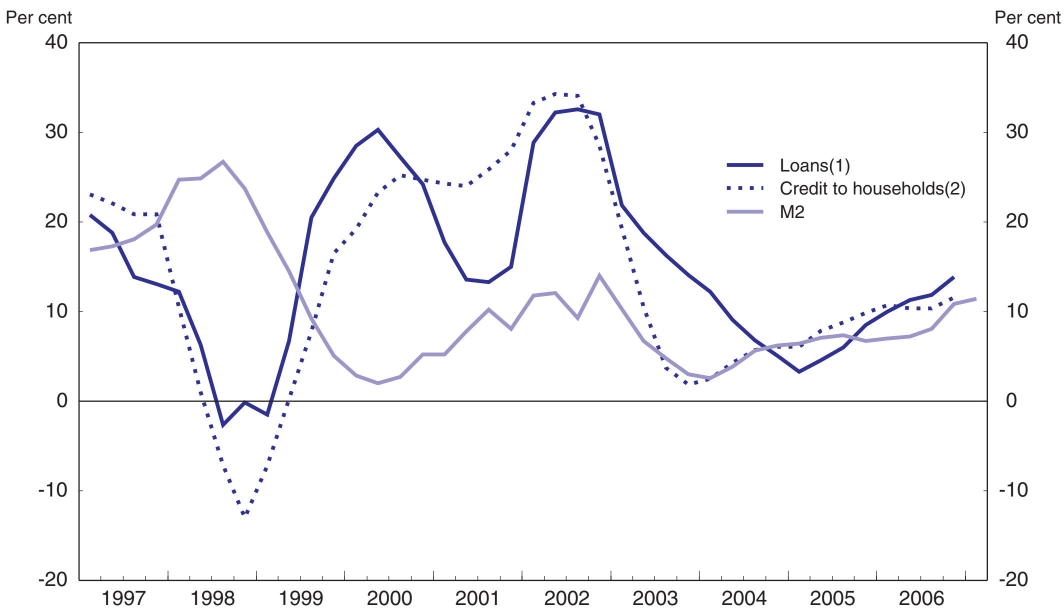
1. An increase indicates a tightening of monetary conditions. The OECD calculates the index using a weight of 1 on the real short-term interest rate (overnight rate), deflated with core inflation and a weight of 0.3 on the real effective exchange rate. Levels of monetary conditions are expressed with respect to the average since 1995.

Source: OECD, *Economic Outlook* database.

of 2006, the fastest rate since 2003 (Figure 2.11). Total lending by banks and credit to the household sector also picked up and the Bank of Korea was concerned about the share that was being funnelled into the real estate market. According to the Financial Supervisory Service, mortgage lending grew at between 12% and 13% in 2005 and 2006. The Bank of Korea sees several risks in the rise of mortgage lending. *First*, there is a possibility of a house price bubble that could lead to a collapse that would threaten the soundness of financial institutions. *Second*, abundant liquidity would further boost household debt (Figure 2.5).

Figure 2.11. **Trends in liquidity and lending**

Year-on-year percentage change



1. Total loans and discounts of commercial and specialised banks.
2. From all financial institutions, as well as credit from department stores, automobile companies, etc.

Source: Bank of Korea.

Although the impact of the five recent interest rate hikes has not been fully felt, the Central Bank is concerned that the impact of higher overnight rates on bank lending rates is weaker than in the past. Indeed, the 75 basis-point hike in the overnight rate between February and August 2006 resulted in only a 21-point increase in bank lending rates. In contrast, the 50 basis-point rise in the overnight rate between October and December 2005 resulted in a 33-point hike in lending rates. The Central Bank argues that increased competition among financial institutions to increase the size of their assets has thus limited the impact of changes in the overnight rate on bank lending rates. Given the reduced effectiveness of interest rate hikes, the Bank of Korea raised reserve requirements in December 2006 for the first time since 1990, while decreasing the amount of policy loans for small and medium-sized enterprises. The increase had an immediate impact on interest rates. Bank lending rates rose by 15 basis points in December after the increase in the reserve requirement, while the mortgage lending rate rose by 50 points to 6.2% between November 2006 and March 2007, its highest level since 2004. By January, the overnight call rate was 10 to 20 basis points over the 4.5% target and has since remained at that level.

A number of factors suggest that the Bank of Korea's concerns about excess liquidity have been overstated. *First*, the growth in mortgage lending is to some extent a healthy result of recent structural changes. The total stock of mortgage lending by private financial institutions increased at a 41% annual rate between 2000 and 2004, reflecting changes in regulations and banks' efforts to expand their assets by lending to the household sector. In this context, the 12-13% growth in mortgage lending in 2005-06 does not appear excessive. *Second*, the risk to the financial sector from a collapse of real estate prices appears small as the extent of the price increase is relatively modest. Indeed, the average nation-wide housing price increased at less than a 2% annual rate in real terms since the end of 2003. Moreover, the decision of the Financial Supervisory Service to impose lower ceilings on the loan-to-value ratio and the debt-to-interest ratios limits the risk (see Chapter 3). In addition, the default ratio on housing loans is low and banks have large provisions. *Third*, the risk of rising household indebtedness is moderated by the increase in their net financial assets noted above.

Looking ahead, the Bank of Korea changed the monetary policy framework in January 2007 in consultation with the government. The medium-term inflation target was changed from core to headline consumer price inflation, while leaving the target zone unchanged at 2.5% to 3.5% for the period 2007-09. The success of monetary policy will be judged according to the three-year annualised rate of inflation over that period. The rationale for the change in the target is that the CPI more closely reflects the public's perception of prices, as agricultural and energy prices, which are excluded from the core measure, account for an important share of living expenses. Consequently, most OECD countries that target inflation focus on the overall CPI. The Bank of Korea hopes to conduct monetary policy so as to create a "harmonious policy mix with fiscal and foreign exchange policies".

The Central Bank's plan for monetary policy in 2007 raises several concerns. *First*, the Bank will "remain keenly alert to real estate market trends", a policy consistent with the rationales given for interest rate hikes during 2005-06. However, monetary policy is a blunt instrument for coping with house prices increases, especially when they are concentrated in a specific area of the capital region. Moreover, house prices in Korea are quite volatile and influenced by frequent changes in real estate policies. House prices can thus diverge from underlying economic conditions, making them an inappropriate guide for monetary policy. *Second*, overall CPI is more volatile than the core measure, given Korea's heavy reliance on oil imports. Consequently, there may be times when it is inappropriate or impossible to keep inflation in the target zone. Judging the success of monetary policy by the average rate over the three-year period grants considerable leeway for allowing inflation to over or undershoot the target zone during some part of the 2007-09 period. This suggests that a good communication strategy is necessary to explain monetary policy, in particular when current inflation diverges from the target zone.

Conclusion

The economy is expected to gradually reverse the slowdown experienced during 2006, with growth of around 4¼ per cent in 2007, despite the tightening of monetary conditions. Maintaining a flexible exchange rate policy will help boost domestic demand, while export growth appears increasingly resilient to currency changes. The liberalisation of capital flows should be pursued to help globalise the Korean economy and increase the efficiency of its firms, rather than stabilise the exchange rate. The Bank of Korea's pre-emptive move against inflation significantly raised interest rates, despite slowing growth and inflation below the target zone. It was affected by concern about the real estate market and price increases in some areas of the capital region but the upward trend in interest rates has contributed to the slowdown in the pace of economic activity and risks undermining the recovery. The recommendations are summarised in Box 2.1.

Box 2.1. **Summary of recommendations for exchange rate and monetary policies**

Exchange rate policy

- Maintain a flexible exchange rate policy, while limiting intervention in foreign exchange markets.
- Liberalise restrictions on capital outflows to enhance efficiency and to help globalise capital markets, while avoiding measures, such as the expansion of public support for overseas investment, which encourage outflows in the short run.

Monetary policies

- Avoid using monetary policy as a tool to stabilise real estate prices, as it is a blunt instrument.
- Take full account of recent developments in output and inflation in determining the stance of monetary policy, such as the slowdown in economic activity in 2006 and the undershooting of the inflation target.
- Focus on achieving the new medium-term inflation targeting framework introduced for the period 2007-09.

Notes

1. The Ministry of Finance and Economy estimates that a 10% appreciation of the won relative to the dollar will decrease the operating income to sales ratio by 3 percentage points in the manufacturing sector. The won appreciated 9% relative to the dollar between the end of 2005 and the end of 2006.
2. In Korea, almost half of the loans for housing have a maturity of less than ten years. Moreover, housing loans usually have variable interest rates, making them sensitive to interest rate trends.
3. The private sector has accounted for about 70% of housing construction during the past five years. However, the government plans to increase the role of the public sector.
4. During the past five years, building construction permits for dwellings averaged around 4.5 million m^2 per month. In the last two months of data available (October and November 2006), it averaged 3 million m^2.
5. These data, which are based on 1968 SNA, stop in 2005. A new series, based on 1993 SNA, is available for the period 2002-06. It follows the same pattern as the 1968 SNA data for the period 2002 to 2005, although it is about 3.5 percentage points of GDP higher. The financial liabilities of the household sector, according to the 1993 SNA, jumped from 80% of GDP in 2005 to 85% in 2006.
6. Indeed, social security contributions nearly doubled in nominal terms between 2000 and 2005 as the effective coverage of the National Pension Scheme increased.
7. According to a survey by the Korea International Trade Association, 47% of big companies reported that the quality of their products was at least as good as rivals in advanced countries, while 19% replied that the same was true of their product design.
8. China accounted for 38% of Korea's overseas FDI between 2003 and 2006.
9. The data in this paragraph are from Joon-Kyung Kim, Yangseon Kim and Chung H. Lee, *Trade, Investment and Economic Interdependence between South Korea and China*, Korea Development Institute and East-West Center, University of Hawaii, 2006.

10. These measures were implemented as part of the 2002 Medium and Long-term Foreign Exchange Liberalisation Plan, which aimed at full liberalisation by 2011. In 2006, the completion date was advanced to 2009 as part of the goal of making Korea an international hub. Major measures include internationalising the won, liberalising overseas investment, easing restrictions on capital transactions, developing the foreign currency market and relaxing the obligation to recuperate external credits. Measures to liberalise capital outflows include abolishing the $1 million ceiling on individuals, lifting the $300 million ceiling per case on investment in the financial sector by non-financial firms, providing information on investment opportunities and establishing overseas offices that offer marketing, legal and administrative services.
11. For example, abolishing the $0.3 million ceiling on purchasing overseas properties for residential purposes in 2005 helped boost investment in overseas real estate from $23 million in 2005 to $780 million in 2006.

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Chapter 3

Reforming housing and regional policies in Korea

The government has introduced five policy packages since August 2005 to stabilise house prices, mainly due to concerns about possible spill-overs from the capital region to other parts of the country, even though the increase on a nation-wide basis has been modest compared to other OECD countries. The planned expansion in housing construction in the capital region will reduce upward pressure on house prices. However, other policies aimed at reducing "speculative" demand and lowering house prices, such as the price ceiling on new houses, are likely to constrain supply and result in stronger price pressures in the longer term. The government should shift its focus from short-term price fluctuations in house prices to creating an efficient housing market, relying more on private-sector supply. Concern about increasing concentration in the capital region should be dealt with through economic instruments to address externalities, such as pollution and congestion, while phasing out the restrictions on construction in the capital region.

There is widespread concern about a possible real estate price "bubble" in Korea.[1] The government is sensitive to increases in real estate prices in certain areas of Seoul, reflecting concern about possible spill-overs to other parts of the country and a deterioration in wealth distribution. The government has pledged at the highest political levels to stabilise real estate prices. On a nation-wide basis, however, the rise in real house prices in Korea has been moderate compared to other OECD countries. Korea has a long history of using interventionist policies to control short-term fluctuations in property prices. Real estate policies have been relaxed to stimulate construction activity during sluggish periods and tightened when prices increase (see the 2005 *OECD Economic Survey of Korea*). However, frequent policy changes have tended to exacerbate price volatility.[2]

The government has introduced five comprehensive real estate policy packages since August 2005. The packages have boosted the planned increase in housing supply in the capital region, with the government taking the leading role. Other new measures have aimed at reducing "speculative" demand, for example by changing the tax system and setting stricter ceilings on mortgage loans by financial institutions. Other policies aim at reducing house prices through price caps on new houses. The government measures have to be seen in the context of its objective to limit the large house price swings in the short term. Despite the merits of such a policy objective, some of these measures may reduce housing supply and increase price pressures in the longer term. In addition, supply is restricted by rules that limit the reconstruction of old apartments in areas where prices are rising the most rapidly. The average nation-wide house price index, which increased at a 1% real annual rate during the first half of 2005 prior to the introduction of the first real estate policy package in August 2005, accelerated to 9% in 2006.

Housing policies are also linked with the goal of balanced regional development, which the government expects would reduce housing demand in the capital region. This would, however, contradict the government's aim of developing that region as an international economic hub. The recent plans to boost housing supply in the capital region will accommodate the expected population increase of one million persons in the capital region by 2011, bringing the total to around 24 million, according to the government's long-term plan.

This chapter examines the housing market and regional development policies. The first section analyses the recent development of property prices. The second section assesses the government policies aimed at stabilising property prices, followed by an evaluation of the government's regional policies. The chapter concludes with a set of recommendations, shown in Box 3.4, to improve housing and regional policies in Korea.

Is there a real estate price bubble in Korea?

Over the past 20 years, Korea has experienced wide fluctuations in its real house prices, with sharp increases at the end of the 1980s (Figure 3.1). The government initiative to build 2 million housing units during the period 1989-92 resulted in an extended period of house price decline, exacerbated by the 1997 crisis. There have been two periods of rising prices since then: 2001-03 and again in 2006. Nevertheless, the nation-wide house price index at the end

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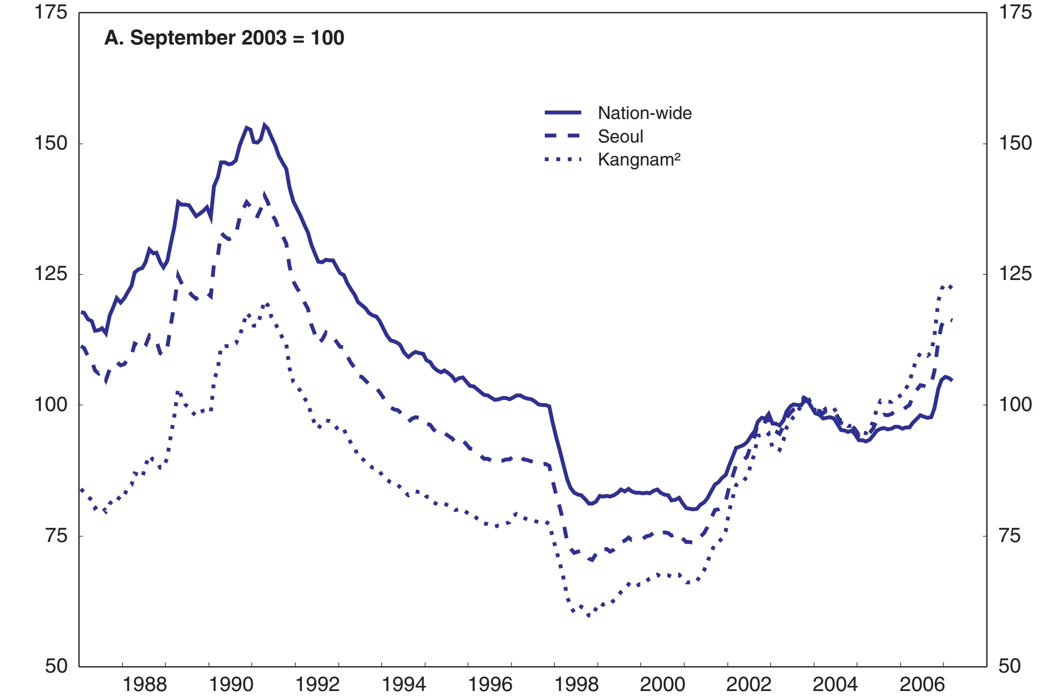
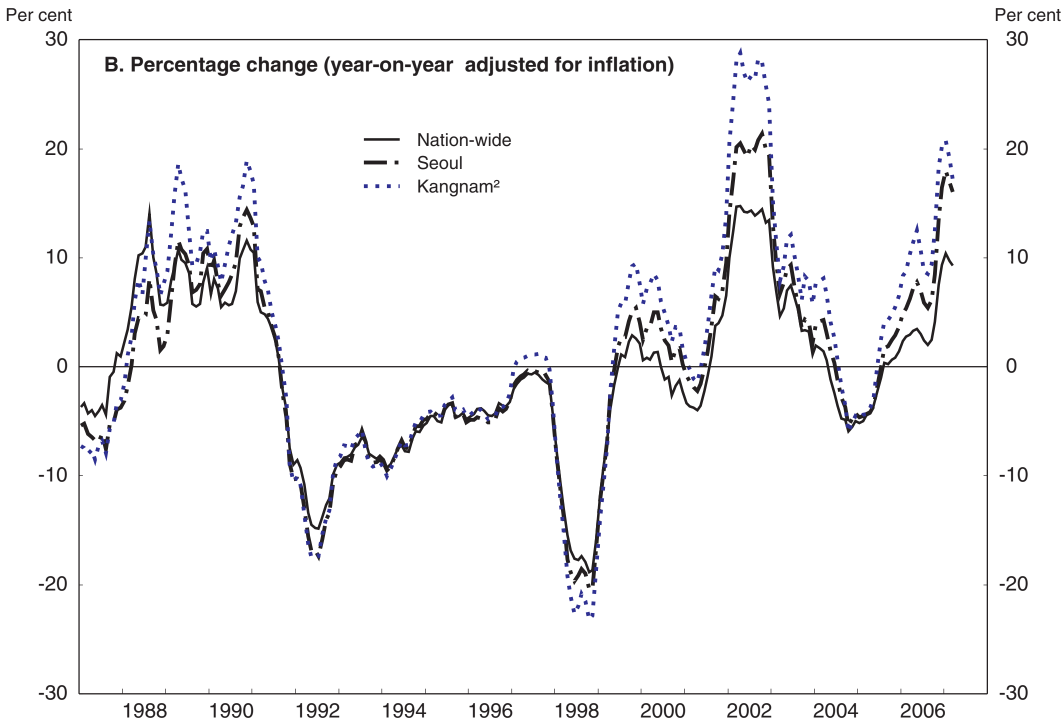
Figure 3.1. **Trends in house prices**

House purchase price composite index in real terms[1]



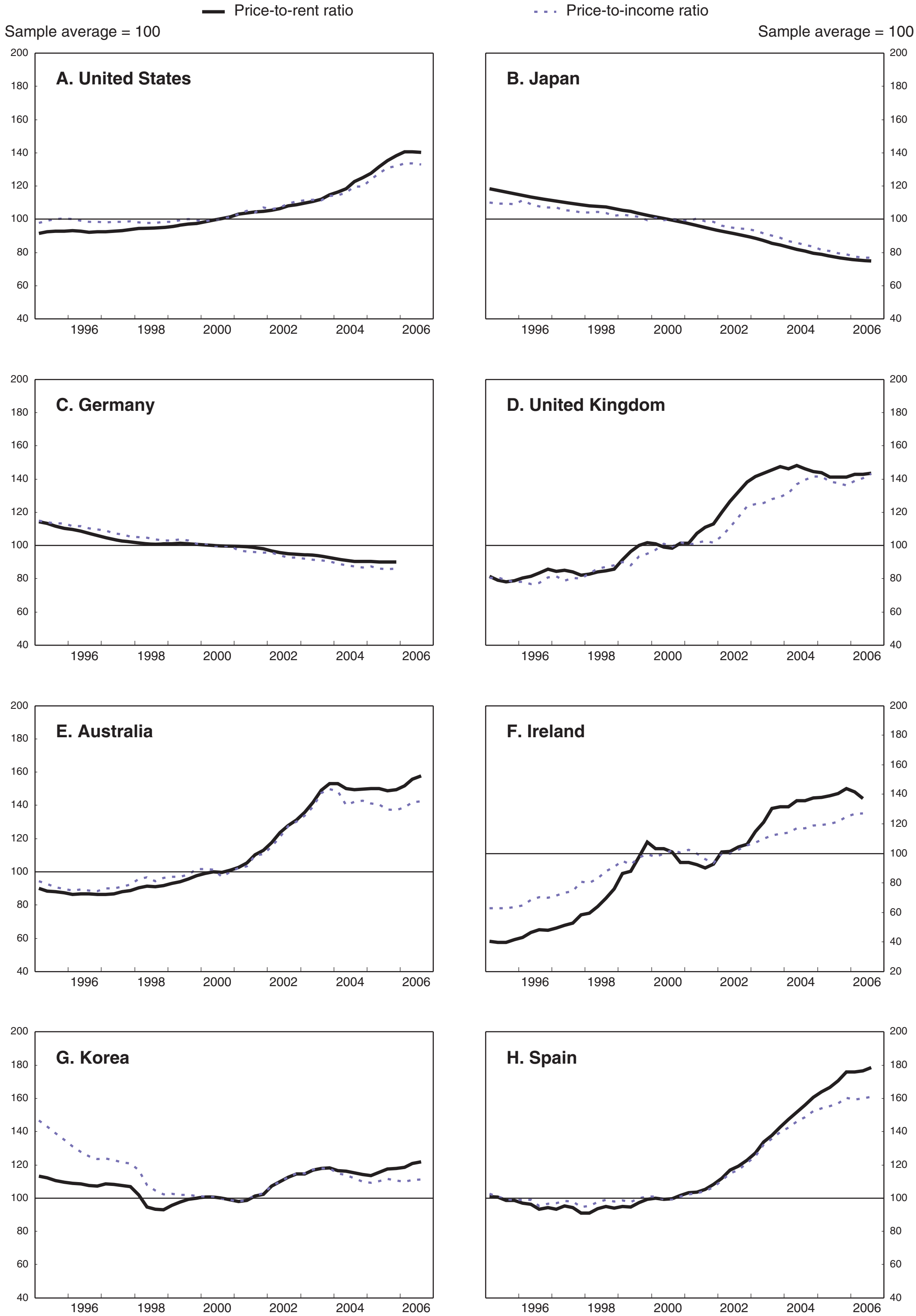


1. Includes single-family houses and apartments. The index is deflated by the overall consumer price index.
2. An area of Seoul.

Source: Kookmin Bank, *National Housing Price Survey*.

Figure 3.2. **Price-to-income and price-to-rent ratios in OECD countries**

Sample average = 100



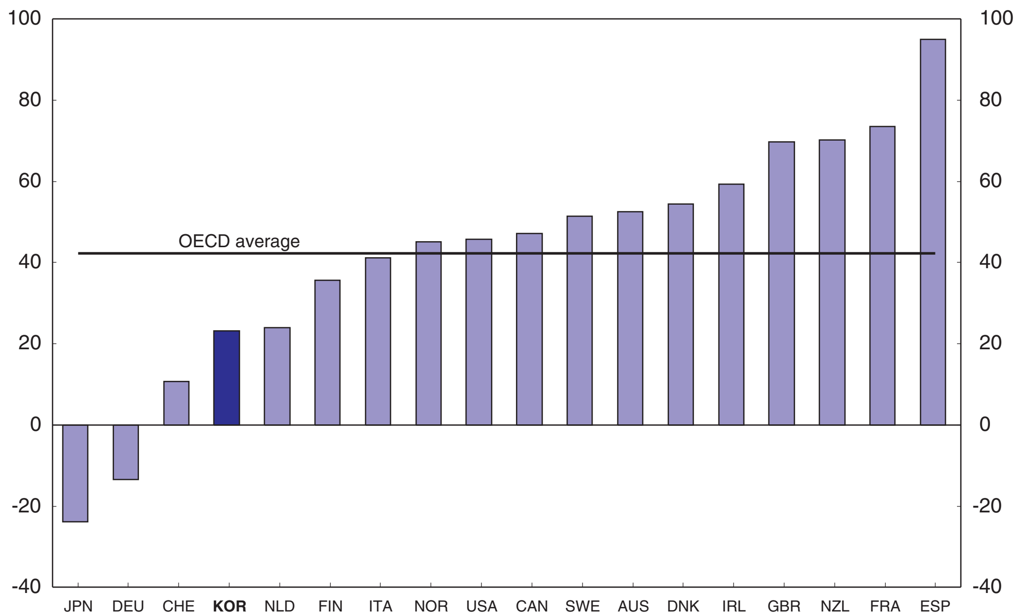
Source: Girouard, N., M. Kennedy, P. van den Noord and C. Andre (2006), ''Recent house price developments: the role of fundamentals'', Economics Department Working Paper No. 475, OECD, Paris.

of 2006 was 18% lower in real terms than in 1986, making Korea one of only four OECD countries to experience real price declines over that period. In nominal terms, the nation-wide house price has increased at a 3.7% annual rate over the past 20 years, one percentage point below the 4.7% inflation rate, as measured by the consumer price index. Other measures commonly used to assess housing market conditions, such as the price-to-income ratio and the price-to-rent ratio, also indicate that house prices in Korea have not risen very much over the past decade compared to other OECD countries (Figure 3.2).

Moreover, recent increases in house prices have been relatively small compared to other OECD countries. A number of OECD countries have experienced a housing boom since 2000. The rise in real house prices since 2000 is 42% on average in the OECD area, almost double the increase in Korea (Figure 3.3).[3] After declining in 2004, nation-wide real house prices rose at a 5% annual rate in 2005-06 in Korea. However, steep increases in apartment prices in some areas of Seoul had spread to other parts of the capital region by the end of 2006.

Figure 3.3. **House price developments in OECD countries**

Percentage change in real terms between 2000 and the latest quarter available[1]



1. Nominal house price deflated by the overall consumer price index. Data for Korea includes the fourth quarter of 2006.

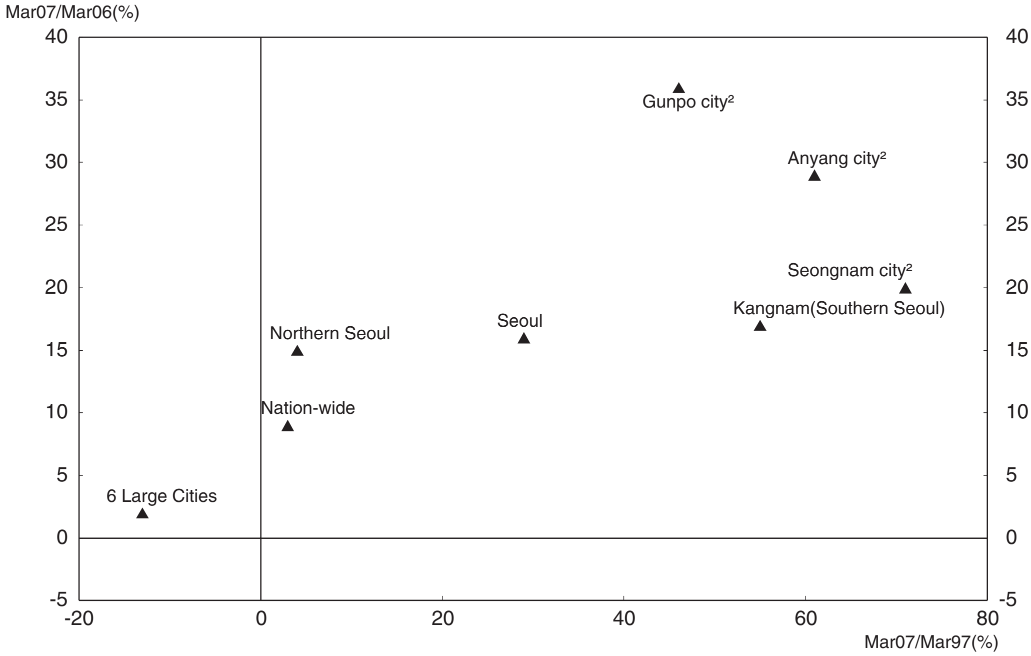
Source: Girouard, N., M. Kennedy, P. van den Noord and C. Andre (2006), "Recent house price developments: the role of fundamentals", Economics Department Working Paper No. 475, OECD, Paris.

While nation-wide house prices are stable, some areas have experienced larger increases

The concern over a possible real estate bubble stems from rising prices in a geographically limited area in the southern part of Seoul, known as Kangnam, and some suburban cities (Figure 3.4).[4] After declining 5% in 2004 in real terms, the average house price in Kangnam began rising in 2005. By the time of the first real estate package in August, it was up 4% (year-on-year) in real terms and the pace accelerated to 20% by the

Figure 3.4. **Regional trends in house prices in Korea**

Adjusted for inflation[1]



1. Housing purchase price composite index deflated by the overall consumer price index.
2. Anyang, Gunpo and Seongnam cities are all located in the southern suburbs of Seoul.

Source: Kookmin Bank and OECD, *Economic Outlook* database.

end of 2006. House price increases in Kangnam have been relatively strong over the past few decades. Indeed, they have risen 26% in real terms since 1986 compared to a 9% fall in Seoul and an 18% decline nation-wide.

The relatively rapid rise in property prices in the southern part of Seoul results from several factors. *First*, there have been strong employment gains in Kangnam Ward, which is the centre of the Kangnam area, in sectors such as business services, finance and information and communication technology (ICT). Indeed, Kangnam Ward is the only one of the three major business centres in Seoul that has recorded employment growth since 1993, thanks to its central location, well-planned urban infrastructure and the government's past policies to induce industries into this area. The growth of employment had a positive impact on house prices (Kim and Lee, 2004). *Second*, Kangnam attracts families because of its high quality education. The government's policy of randomly allocating students to schools within each district encourages families to move to districts where the average performance of schools is higher. Kangnam also has a large number of outstanding after-school institutes (*hakwon*), further increasing its popularity. Upward pressure on prices was magnified by government regulations introduced in March 2006 that made it difficult to redevelop apartments constructed 20 to 30 years ago in Kangnam, thus reducing supply.

Many other countries have also experienced sharp price increases in central districts of major cities, reflecting agglomeration economies and a low supply elasticity of housing due to space constraints. This trend seems to have accelerated in recent years due to the development of business services, ICT and financial services, which benefit significantly from agglomeration economies.[5] Studies of urban housing in the United States have found

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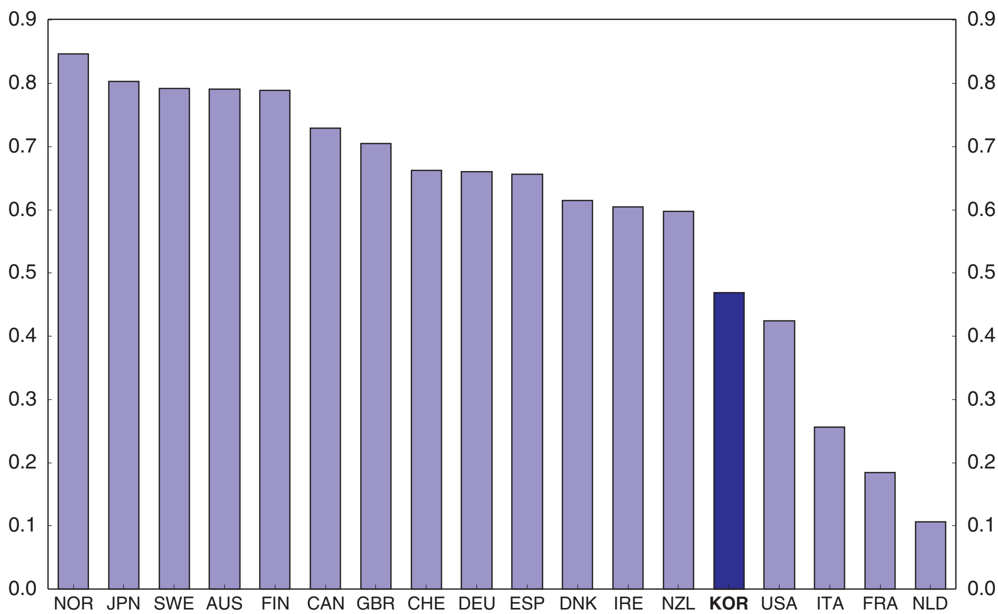
that the low supply elasticity of housing units is an important factor behind recent large price increases (Girouard *et al.*, 2006). House prices in some US cities have increased twice as fast as the nation-wide average during the past decade. Indeed, house prices in the New York City region increased 26% in real terms between mid-2004 and mid-2006. The history of rapid price gains creates expectations of future capital gains, thus effectively reducing the cost of buying houses in major cities.

Volatility has been exacerbated by frequent policy changes and supply restrictions

According to some studies, real house price movements are affected by structural factors, including institutional and tax changes, as well as by business cycles and interest rates. Frequent changes in real estate policies are thus a source of house price volatility.[6] In addition, international experience shows that house prices are subject to larger swings in countries where housing supply is relatively inelastic (Catte *et al.*, 2004).

Korea has been characterised by both frequent policy changes and inelastic housing supply. The authorities have been concerned that house price hikes in some areas will worsen income distribution by allowing "speculators" to benefit.[7] This has led to a wide range of policies that are adjusted frequently to limit house price swings in the short run (see the 2005 *OECD Economic Survey of Korea*). In addition, land use is controlled by various regulations. For example, environmental rules and measures restrict construction to limit the concentration of population and economic activity in the capital region. Consequently, the relationship between house price variability and macroeconomic fluctuations, as measured by the output gap, is weak in Korea compared to other countries (Figure 3.5), suggesting that the supply elasticity is weak.

Figure 3.5. **Correlation between real house prices and the business cycle**



Note: Correlation is between de-trended real-house price levels and the output gap. It is calculated for the period 1986-2006, based on quarterly data.

Source: Girouard, N., M. Kennedy, P. van den Noord and C. Andre (2006), "Recent house price developments: the role of fundamentals", Economics Department Working Paper No. 475, OECD, Paris and OECD, *Economic Outlook* database.

Given the impact of frequent changes in real estate policy and the low supply elasticity of house prices, Korea has experienced relatively large house price fluctuations. Indeed, the standard deviation of house price changes was the fifth highest among the 17 OECD countries for which data are available in the 1993-99 period and fourth highest in the 2000-06 period (Figure 3.6), even though the rate of price increase was relatively low in Korea (Panel B).[8] Greater volatility is generally observed in countries that have experienced higher price increases (Panel C). Korea thus stands out by having both relatively low price increases and high volatility. In sum, frequent real estate policy changes and limits on land use in the capital region have amplified fluctuations in house prices, thus magnifying the capital gains that the government wanted to avoid. To stabilise the housing market, the government launched a series of packages beginning in August 2005.

Policies to stabilise property prices

The five government real estate policy packages during the past 18 months are outlined in Annex 3.A1. Despite the August 2005 and March 2006 packages, house price increases accelerated during 2006, prompting another package in November. However, the pace of increase picked up even further during the last two months of 2006, leading to additional policy measures in January 2007. The main features of the real estate policy packages are summarised in Box 3.1.

Increasing supply and providing financing

The increased emphasis on expanding the supply of housing in the November 2006 package is welcome. While the large increase in supply in the early 1990s led to a long period of declining prices in real terms, the smaller pace of housing construction in recent years puts upward pressure on prices. According to the plan, new houses will be built in the capital region, while the government maintains its objective of balanced regional development.

The most recent initiative to build public rental housing will significantly boost the supply of housing. In 2005, 56% of Korean households owned residences, while 19% had monthly rental contracts.[9] The government's plan will boost public rental housing from 6% of the country's total housing stock, which is below the level in some advanced OECD countries, to 20%. The government believes that the private rental housing market does not function well, thus requiring the public sector to ensure housing for low-income persons. The rental housing fund, which is to finance 0.5 million rental housing units, will be financed by public financial institutions, such as the National Pension Fund, Postal Savings and agricultural co-operatives, and private investors. The rental housing fund will guarantee a return that is slightly above that on government bonds. The risk-free premium available on such investment may crowd out investment in private bonds, thereby driving up the corporate bond rate in the longer term. The leading role assigned to the public sector in increasing housing supply creates other concerns. In particular, the government's plan to supply such a large amount of rental housing in the capital region will absorb a significant share of the available land and crowd out private-sector rental housing. While the stock of public rental housing is relatively low and the demand for rental housing is rising, the increase in the public rental housing stock may be too sharp in the context of rising income and the preference for house ownership.

The government also plans to expand its role in providing land for housing construction, given the regulations on land use. For example, "public-private joint projects" announced in January 2007 utilise the government's expropriation power to obtain land.

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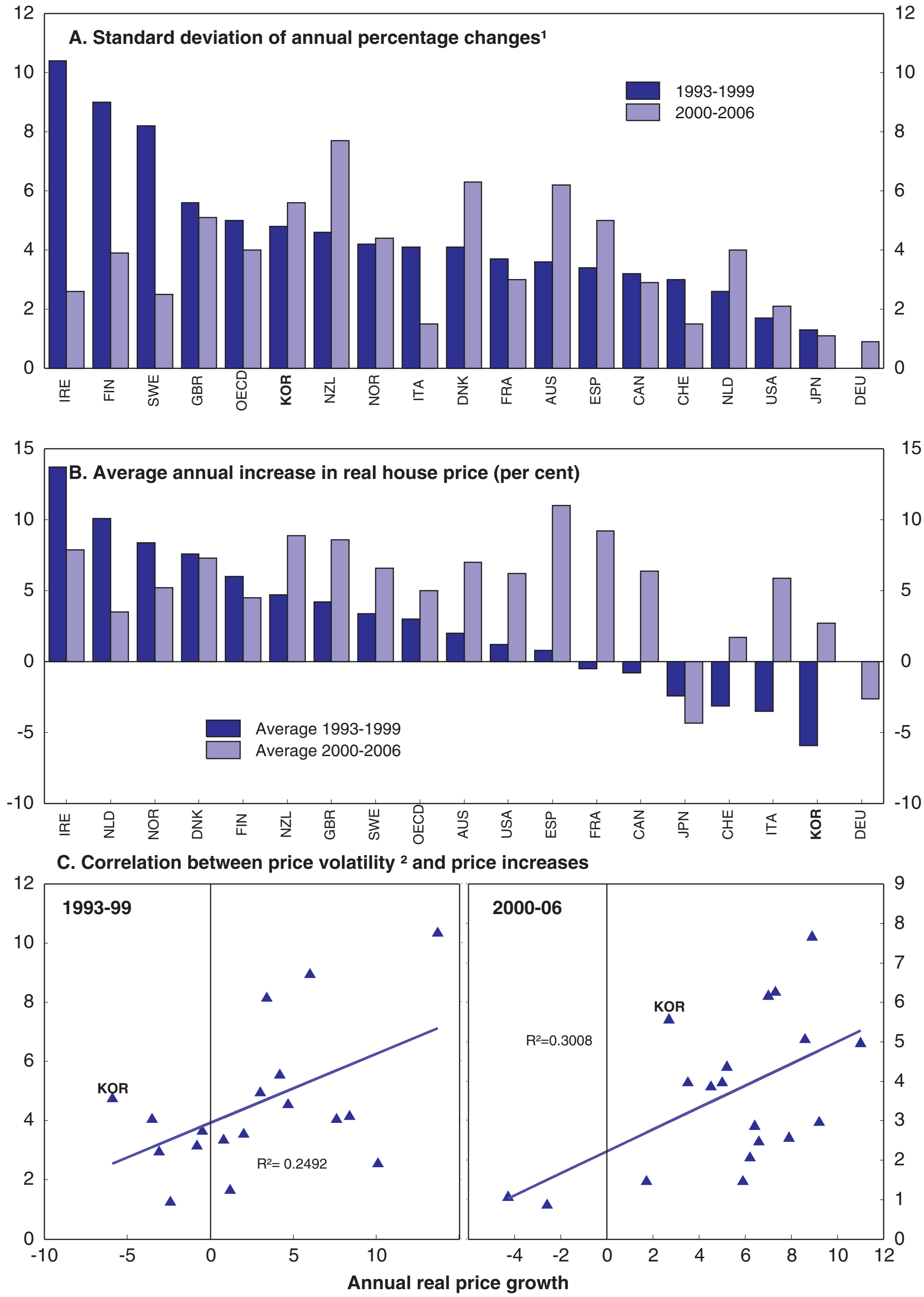
Figure 3.6. **International comparison of variability in house prices**

House prices deflated by the overall consumer price index[1]



1. Countries are ranked by the level of variability in house prices (Panel A) and the overall increase in house prices (Panel B) over the period 1993-99.
2. Price volatility measured as standard deviation of annual price growth (Y axis).

Source: Girouard, N., M. Kennedy, P. van den Noord and C. Andre (2006), "Recent house price developments: the role of fundamentals", Economics Department Working Paper No. 475, OECD, Paris.

Box 3.1. **Key elements of the real estate policy packages since 2005**

Increase the supply of housing

- Build 2.6 million public rental housing units over the next decade, increasing the stock from 0.8 million in 2006 (6% of the total housing stock) to 3.4 million in 2017 (20%). This will be partly financed by a rental housing fund that will amount to 90 trillion won (10% of GDP).
- Expand the planned supply of houses for sale from 1.515 million units to 1.64 million units by 2010 by increasing public-sector construction by 125 thousand units. In sum, 867 thousand housing units are to be built on public land and 773 thousand units on privately-owned land.
- Secure additional land for housing by relaxing regulations, such as the floor-space to land ratio.
- Expand the National Housing Fund from 22.4 trillion won to 31 trillion won (4% of GDP) in order to help low-income households rent or purchase houses.
- Increase the supply of public rental housing by building additional National Rental Housing Complexes.
- Use regulatory changes and tax incentives to encourage private-sector supply of rental housing.

Reduce demand for housing

- Tighten restrictions on home-backed loans from financial institutions to reduce lending for homes valued at more than 600 million won (about $650 000):
  - *a)* Lowering the ceiling on the loan-to-value (LTV) ratio from 60% to 40% for loans by banks and insurance companies and to 50% for non-bank financial institutions in "speculation zones".*
  - *b)* Expanding the coverage of the debt-to-income (DTI) ratio of 40% to loans for the purchase of an apartment valued at more than 600 million won in the capital region and in the speculation zones.
- Limit mortgage loans in speculation zones to only one per person.
- Require purchasers of homes in certain areas to report to local governments how they will finance the purchase and whether they will live in the home.
- Ban the re-sale of all new houses in the capital region for five to seven years after purchase, depending on the size of the unit. Previously, this regulation applied only to homes built by the public sector.
- Strengthen monitoring by the National Tax Service (NTS) of owners of more than three properties.
- Impose charges (a quasi-tax) of up to 50% on redevelopment gains.
- Disperse housing demand by promoting balanced regional development throughout the country by creating innovation cities and enterprise cities and encouraging the development of lagging regions in urban areas.

Cut the price of housing

- Lower the prices of new apartments in the capital region by 25% by increasing the ceiling on the floor space to land ratio, changing the land price calculation method to lower its price and shortening the housing construction period.

Box 3.1. **Key elements of the real estate policy packages since 2005** *(cont.)*

- Reduce housing prices nation-wide by around 20% by:
  - *a)* Requiring private-sector builders to publicly disclose their construction costs for housing projects in the capital region (such a requirement is already applied to government-run housing projects). Price Audit Committees under local governments will review the information on construction costs.
  - *b)* Having local governments set price ceilings on new houses nation-wide based on the construction costs, the assessed value of the land and a proper level of profit, in the view of the local government.
- Tighten regulations on the re-construction of apartments, which typically leads to an increase in their price.

Reform the property-related tax system to curb speculative demand by increasing the tax burden on high-priced houses and multiple home owners

* Speculation zones are designated by the Ministry of Finance and Economy after review by the "Property Price Review Committee". To be designated as a speculation zone: 1) the monthly house price increase must be 30% more than the inflation rate; and 2) the house price increase during the past two months must be 30% more than the nation-wide average or the annual price increase is more than the average nation-wide price increase during the past three years. Currently, 92 regional districts (37% of the total) are designated as speculation zones, covering most of the capital region and urban areas elsewhere in the country. In speculation zones, the LTV ceiling is set at 40%, the DTI ceiling of 40% is applied to houses that cost more than 600 million won, housing loans are limited to one per person, taxation is heavier and transactions are subject to a reporting requirement.

This will contribute to increasing housing supply in the capital region. The government intends to use this land for low-cost housing but at the same time it allows private construction companies to build houses of their own choice. However, the equity concerns that emphasise low-cost housing create risks of failing to match consumers' preferences, as reflected in the fact that prices are increasing most rapidly for houses at the upper end, rather than the lower end of the market. In sum, while the government has a role to play in providing housing for low-income households and overcoming regulations that limit the availability of land, relaxing regulations on land use and emphasising the role of the private sector is essential to meet consumers' preferences.

A greater role for the private sector in the housing market would increase the responsiveness of supply to changes in price. A unique feature of Korea's situation is that rising house prices during the past 18 months have coincided with a downturn in construction activity, suggesting a low price elasticity of supply. A more important role for the private sector in housing would require liberalisation of the regulations on land use, which is governed by 112 different laws that are administered by a number of different ministries. The complicated patchwork of regulations, which have been improved by the recently introduced Land Use Regulation Rationalisation Act, should be simplified further. Moreover, there is a lack of transparency given that there is no comprehensive database on these regulations. In addition, it is important to remove regulations that restrict housing supply. For example, the reconstruction of old apartments in the Kangnam area has recently been restricted through planning and building regulations, which appear to be strengthening upward pressure on prices. The government argues, though, that allowing reconstruction of more housing units would spark new demand and higher prices in the short run – which could spread to other parts of the country – until the additional units are available.[10] However, the limits on supply create expectations of future price increases, boosting demand for housing, although the higher property-related taxes should reduce demand.

Policies to restrict demand: reducing bank lending and cracking down on "speculators"

The authorities are concerned about the rising trend of mortgage lending by the banking sector, which expanded from 55 trillion won in 2000 (10% of GDP) to 217 trillion won (26% of GDP) in December 2006, excluding public financial institutions. The mortgage market used to be dominated by the government's National Housing Fund and the Korea Housing Bank, which lent to low and middle-income households. Following financial deregulation in the early 1990s and the privatisation of the Korea Housing Bank in 1997, the private mortgage market expanded sharply (Kim, 2004). Moreover, the business strategy of banks focused increasingly on households following the crisis, as large firms have gone through a period of de-leveraging and subdued investment activity, while smaller companies have become increasingly indebted, making further lending risky. Nevertheless, the government has criticised the increase in mortgage lending and made it a goal to cut "irrational" housing lending, on the grounds that it fuels speculation while putting the soundness of financial institutions at risk.[11] However, the total level of mortgage debt, including the public sector, was 34% of GDP in 2005, well below the OECD average of 56% (Figure 3.7). Mortgage debt, at 42% of total household debt, is relatively low by international comparison (Panel B).

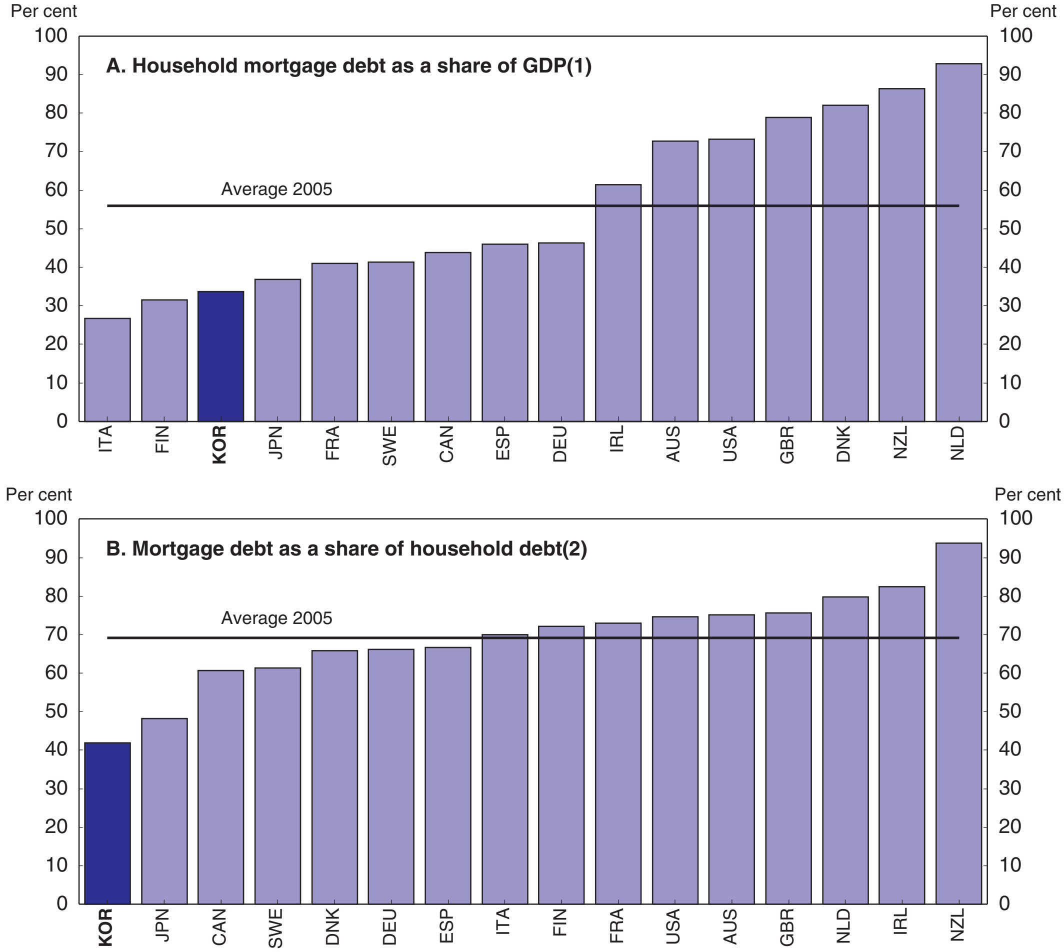
The authorities have taken a number of steps to slow the growth of mortgage lending. *First*, the Financial Supervisory Service (FSS) has reduced the maximum loan-to-value (LTV) ratio for housing loans in "speculation zones", which includes most of the capital region, from 60% to 40%. The LTV ratio is a key indicator of the mortgage market's ability to provide access to financing. The typical LTV ratio in OECD countries is between 55% and 90%, with the maximum range for the ratio going up to between 80% and 115% (Catte *et al.*, 2004). Many countries do not even have restrictions on the LTV ratio and, among those that do, the ceiling is generally much higher than in Korea (Table 3.1). In addition, regulations on LTV ratios in other OECD countries influence the availability of loans by changing borrowing costs based on the LTV ratio, whereas Korea imposes this restriction uniformly by administrative guidance on financial institutions. *Second*, the FSS imposed a ceiling of 40% on the debt-to-income ratio – principal and interest payments on total loans as a share of income – in most of the capital region. *Third*, the authorities raised the minimum provisions for bank loans classified as normal and precautionary, a move that is expected to raise bank provisioning by up to 2.5 trillion won.[12] Following the introduction of tighter regulations, a number of banks have reined in lending for housing, and one temporarily ceased such lending.

The authorities have taken a number of additional steps to reduce demand. Purchasers of homes are being required to report to local governments how they will finance the purchase and whether or not they will live in the home. In addition, the re-sale of all new houses in the capital region is banned for five to seven years after purchase, depending on size, as a way of ensuring that gains do not go to speculators. However, such measures limit property rights that are essential in market economies. Finally, in 2005, tax authorities investigated owners of more than three properties that are "suspected of speculation".

Policies to reduce prices

The government plans to reduce the prices of new apartments in new towns by 25% through regulatory changes and accelerated construction (Box 3.1). In addition, it expects to reduce the price of new homes built by private firms by 20% by setting price caps, based on the public disclosure of the firms' construction costs. This initiative reflects the

Figure 3.7. **International comparison of mortgage debt in 2005**



1. 2004 for Japan and Spain.
2. 2004 for Japan, Denmark and Spain.

Source: OECD Economic Outlook, No. 80, Financial Supervisory Service and the Bank of Korea.

government's perception that houses are overpriced because of persistent and restrictive regulations on land use. Such a policy has to be seen in the context of the government's objective to limit the large house swings in the short run. Despite the merits of such a policy objective, it may have the potential to create substantial harm if allowed to persist in the longer term. *First*, requiring private firms to publicly disclose construction costs, along with the price caps set by local governments, removes incentives to increase profits by reducing costs. *Second*, local governments will decide the appropriate level of profit in setting the price cap. Setting it at a low level, in line with the objective of reducing prices by one-fifth, would reduce investment in housing. The impact may be most severe in the high-end market, which has higher profit margins and faster-growing demand. Given these considerations, the government should phase-out housing price controls in the longer term, as regulatory changes are implemented and housing supply becomes more elastic. This would further increase housing supply. Finally, the government should also ensure that there is enough competition in the market.

Table 3.1. **Regulatory limitations on loan-to-value ratios**

	Property valuation method	Restrictions on valuation method	Regulatory limits on loan-to-value	Link with capital adequacy
Australia	OMV	Y	80% (100% if insured)	50% weight, subject to insurance if loan is above 80% limit
Belgium	OMV/MLV	N	None	50% weight, subject to prudent valuation of collateral
Canada	OMV (or variant)	N	75% (95% if insured)	50% weight if loan is up to 75% limit; 0% weight if CMHC-insured
Denmark	n.a.	n.a.	80%	None
Finland	n.a.	n.a.	None	None
France	OMV	Y	60% to be eligible for mortgage-backed securities	None
Germany	MLV	Y	60% to be eligible for mortgage-backed securities	50% weight for first mortgages if loan is up to 60% limit
Ireland	OMV	N	80% (only for building societies)	None
Italy	OMV	N	80% (100% if guaranteed)	50% weight if loan is up to 80% limit
Japan	n.a.	N	None	50% weight for first mortgages
Korea	**OMV**	**Y**	**40-60%**	
Netherlands	OMV	N	None	50% weight for part of the loan up to 75% of collateral; 0% weight if NHG-insured
Spain	Prudent valuation certified by appraiser	Yes	80% to be eligible for mortgage-backed securities	50% weight, subject to prudent valuation of collateral
Sweden	OMV	No	None	50% weight if loan is up to 100% of collateral
Switzerland	Mortgage lending value	n.a.	None	50% weight up to ⅔ of market value; 75% weight above that limit
United Kingdom	OMV	No	100% (only for building societies)	50% weight if loan is up to 90% of collateral; 60% weight above that limit
United States	OMV	No (but appraisers need to be certified)	90% if not guaranteed	50% weight if loan is up to 90% of collateral; 100% weight above that limit

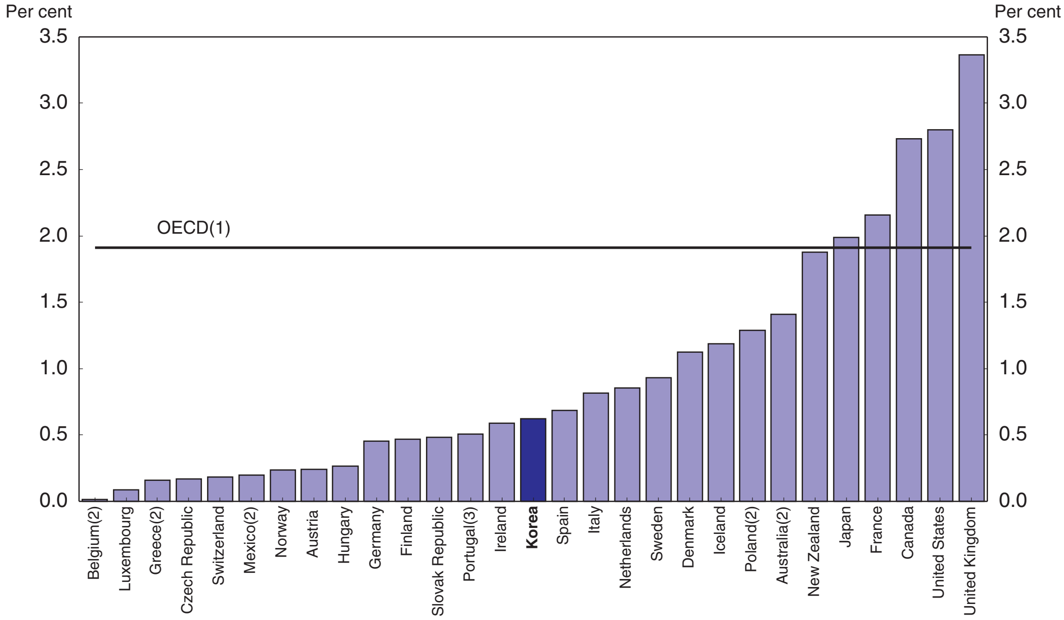
Note: OMV = Open market value; MLV = Mortgage lending value. The MLV must be based on a prudent assessment of the market value (in Germany the typical adjustment factor is 20-25%).
Source: Catte *et al.* (2004).

Reform of taxes on property

The government has been taking steps to reform property taxes with a focus on enhancing fairness and stabilising the property market. The major changes have been to reduce the tax burden on acquisitions, raise the burden on property holdings and increase the capital gains tax. The registration tax on real estate transactions was reduced from 3% to 1% in 2006, while the acquisition tax was cut from 2% to 1%, which should facilitate transactions and encourage mobility. As for taxes on property holding, recurrent taxes on property amount to 0.5% of GDP, well below the OECD average (Figure 3.8), reflecting a low effective tax rate of 0.1% of market value in 2005. The government has a target of raising the effective rate to around 1% by 2017. One step toward that goal was to bring the evaluation of real estate for tax purposes closer into line with market values. The evaluation – the application ratio – was increased from 36% of the value of housing assessed by the Ministry of Construction and Transportation (MCT) to 50% in 2005. Given that the MCT assessed value is about 80-90% of the market price, the tax base has risen from 29-32% of the market value to 40-45%.

Figure 3.8. **Recurrent taxes on immovable property in OECD countries**

Revenues as per cent of GDP in 2005



1. Weighted average using 2000 GDP and purchasing power parity exchange rates.
2. 2004 data.
3. 2003 data.

Source: OECD (2006), *Revenue Statistics, 1965-2005*, OECD, Paris.

The local tax on property, which had imposed separate taxes on housing (six rates between 0.3% and 7%) and on the attached land (nine rates between 0.2% and 5%), was combined in 2005. The new tax has three rates, ranging from 0.15% and 0.5% (Table 3.2). To maintain the progressivity of taxes on property holding, the Comprehensive Property Tax (CPT), a national tax, was introduced in 2005. The tax is applied to households and companies owning housing with a combined assessed value of more than 600 million won (about $650 000). The tax rate varies from 1% to 3%, as part of the long-run effort to raise the effective tax rate on property. In addition, the higher tax rate is intended to stabilise house prices by curbing "speculative demand". The new tax will also have a substantial impact on income re-distribution, given the progressivity in the tax rate and the 600 billion won threshold. In 2006, 237 thousand households (1.3% of the total) were subject to the CPT. The tax base was increased from 50% of the assessed value in 2005 to 70% in 2006, resulting in sharp increases in property tax assessments for some households.[13] As a result, the revenue from the CPT increased from 0.4 trillion won in 2005 to 1.3 trillion won (0.2% of GDP) in 2006. The combined effect of the two systems is a very progressive tax system. Indeed, the effective rate on households not subject to the CPT is less than 0.2% (Figure 3.9), but rises steadily to 0.8% for those with houses valued at 2.4 billion won ($2.5 million).

Property taxation is theoretically more advantageous for local governments than other taxes as it is levied on immobile assets, thus limiting the scope for tax evasion. Although the basic direction of increasing property holding tax and reducing taxes on acquisition is

Table 3.2. **Property holding taxes in Korea**

	Local property tax			National comprehensive property tax[1]		
	Housing	Land for business	Land for non-business	Housing	Land for business	Land for non-business
Asset value threshold (won)	0	0	0	600 million	4 billion	300 million
Calculation of tax base	Per property	Cumulative value per person	Cumulative value per person	Nation-wide cumulative value per household	Nation-wide cumulative value per person	Nation-wide cumulative value per household
Tax rates[2]	0.15 to 0.5%	0.2 to 0.4%	0.2 to 0.5%	1 to 3%	0.6 to 1.6%	1 to 4%
Ceiling on increase in tax payment[3]	105 to 150%	150%	150%	300%	150%	300%
Application ratio[4]	50%	60%	60%	80%	60%	80%
Year in which the application ratio reaches 100%	2017	2015	2015	2009	2015	2009

1. Introduced in 2005. Revenues are redistributed to local governments.
2. There are three tax rates for each category except the Comprehensive Property Tax on housing, which has four.
3. Relative to the preceding year.
4. The proportion of the value assessed by the Ministry of Construction and Transport that is used as the tax base.

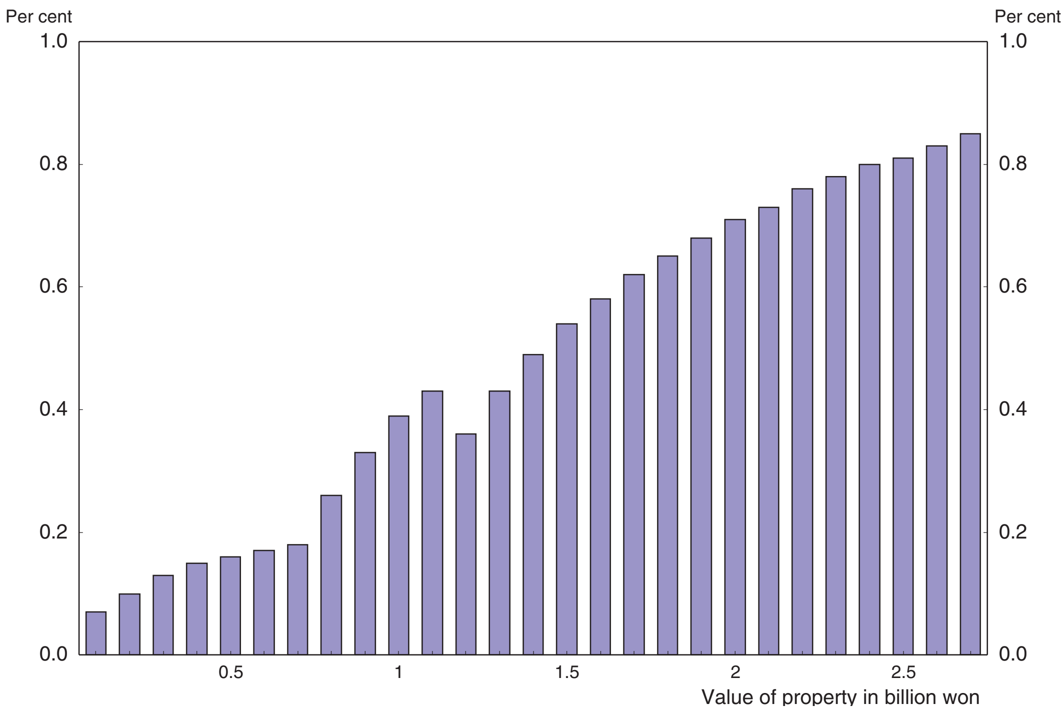
Source: Ministry of Finance and Economy.

in the right direction (see the 2005 *OECD Economic Survey of Korea*), there are a number of issues that should be considered in the longer term:

- Using property taxes for redistribution is inappropriate as it does not include other forms of wealth. Consequently, persons holding real estate are taxed more heavily than those who invested in other assets. Property taxes are usually based on the benefit principle, which stipulates that local taxes should reflect the use of local public services rather than residents' ability to pay.

Figure 3.9. **Effective tax rate on property holding in Korea**

Per cent of market value based on 2007 tax code



Source: OECD calculations.

- The use of two taxes – local and national – on property is a potential source of confusion.[14] Moreover, the national property tax is redistributed to local governments, according to a formula that gives an 80% weight to their fiscal needs, further undermining the benefit principle.
- Changes in the property tax system should be made from an efficiency perspective rather than as a tool to control short-term price fluctuations.

Finally, the question of property tax is linked to the issue of fiscal decentralisation. Some local governments in the capital region that are already running surpluses have cut their property tax rates as the increase in the tax base boosted their revenue, thus undermining the government's goal of raising the effective tax rate on property. This choice reflects the limited spending responsibilities of local governments. Indeed, key services such as education and police services are funded primarily by the central government (see below). Consequently, achieving a significantly higher effective rate on property is linked to fiscal decentralisation to give more spending responsibilities to local governments.

As for the capital gains tax on real estate, it depends on the length of ownership and the number of houses owned. Single homeowners are exempted from the tax on the sale of a home, owned at least three years, which does not exceed 600 million won. The normal tax rate ranges from 9% to 36% depending on the size of the capital gain. The rate increases to 50% for property held less than one year, and 40% for that held one to two years (Table 3.3). Two recent changes have boosted the effective rate as part of the government's effort to discourage speculation by taxing away more of the gains. *First*, in the past, capital gains were calculated based on the value assessed by the NTS, which was 50-70% of the market value. Beginning in 2007, actual sales prices are used instead for all homes.[15] *Second*, the government has focused higher capital gains taxes on persons who own more than one dwelling. A rate of 60% was imposed in 2005 on those owning three or more houses, with some exceptions.[16] Furthermore, a rate of 50% on those with two houses was announced in August 2005 and introduced in 2007. The early announcement had the expected impact of encouraging multiple home owners to sell before the rate was increased.

Table 3.3. **Recent changes in the capital gains tax on property in Korea**

Situation	Tax rates through the end of 2006	Tax rates beginning in 2007
Normal tax rates[1]	9% for taxable gain up to 10 million won 18% for taxable gain of 10 to 40 million won 27% for taxable gain of 40 to 80 million won 36% for taxable gain above 80 million won	No change
Owned less than 1 year	50%	No change
Owned 1 to 2 years	40%	No change
Unregistered property	70%	No change
Households owning 3 or more homes[2]	60%[3]	No change
Households owning 2 homes[2]	Normal tax rate (9% to 36%)	50%[4]
Land held for non-business purposes	Normal tax rate (9% to 36%)	60%[4]

1. Applies to households with one home with a selling price of more than 600 million won (about $650 000), which accounts for 2-3% of total homes in Korea. The taxable gain is calculated as: [(S – 600 million)/S] *(S – P), where S is the selling price and P is the purchase price. Thus, if the selling price were 1.8 billion won and the purchase price were 1 billion won, the taxable gain would be 0.53 billion won.
2. In addition, the special deduction in the capital gains tax for long-term ownership, which can go as high as 30%, is eliminated for multiple homeowners in 2007.
3. Introduced in 2005.
4. Announced in August 2005.

Source: Ministry of Finance and Economy.

The recent changes in the capital gains tax raise a number of concerns:

- The sharp increase in the capital gains tax, particularly with regard to multiple home owners, runs counter to the principle of lowering taxes on property transactions, and thus has a lock-in effect that blocks the supply of homes.[17] In addition, higher capital gains taxes may boost house prices, given that supply appears to be inelastic in the short run.
- The wide variation in tax rates applied to gains of similar size creates equity issues. For example, a person owning five or more dwellings can be treated as a rental business and subject to the normal capital gains tax rate ranging from 9% to 36%, while persons owning three or four dwellings pay 60%.

Summary of government housing policies

The Korean situation is sometimes compared with Japan's "bubble economy" of the late 1980s. The severe aftermath of the bubble, which resulted in a crisis in the financial system and a decade of economic stagnation, has been used as a rationale for policies to control the housing market. However, the situation of Japan during the bubble period was substantially different from the present situation in Korea (Box 3.2). Moreover, the interventionist approach taken in Japan was ineffective and, in the end, counterproductive and these policies have been largely abandoned in recent years.

In practice, it is difficult or impossible to distinguish price hikes due to real demand from those caused by speculation. Even if property price increase in urban centres may sometimes result in overvaluation and a possible spill-over to other areas, the authorities should be extremely cautious in trying to curb such increases, as there is a high degree of uncertainty about the impact of pre-emptive policies and the length of time for such policies to take effect. In the case of the United States, for example, the government decision not to intervene in the housing market appears to have been correct despite the large price hikes in some areas that were unsustainable. Moreover, house price hikes have the positive impact of increasing the resilience of an economy through wealth effects, especially in the case of Korea, where domestic demand is currently relatively sluggish.[18] There is little sign of macroeconomic overheating, while the series of real estate stabilisation measures since 2005 have tended to have a negative impact on economic activity by reducing construction activity (see Chapter 2).

Policies to discourage speculation tend to exacerbate price volatility, as noted above, in part by raising expectations of future policy changes. For example, a poll conducted right after the announcement of the August 2005 policy package showed that 65% predicted housing price increases over the following six months to one year. Government policies should instead focus on maintaining sound macroeconomic management and creating an efficient housing market rather than on measures to control short-run house price fluctuations.

Policies to achieve balanced regional development

Achieving balanced regional development by limiting the concentration of population and economic activity in the capital region has been a priority of the Korean government for the past several decades. This priority is strongly linked to the housing issue as it is expected to reduce demand for real estate in the capital region. This section looks at the degree of concentration in the capital region and examines the effectiveness of government policies to achieve balanced regional development.

Box 3.2. Japan's experience with a real estate price bubble

The property price bubble started in the Tokyo region, where the average price for residential land rose by over 50% in 1987 and then spread across the rest of the country. By 1991, the average nation-wide residential land price was 46% above its 1986 level and 120% higher in Tokyo. Even excluding the three largest metropolitan regions, residential land prices increased by a quarter over that period. In contrast, inflation, as measured by the consumer price index, remained steady at around 2-3% per year. A wide range of policies introduced by the government to control real estate prices, such as limiting the volume of land transactions and introducing the Land Value Tax on large landowners, proved ineffective or even counterproductive. The government even introduced a plan to build a new city to relocate central government functions outside of Tokyo. In sum, while the magnitude of real estate price hikes in Korea is only a fraction of that in Japan during the 1980s, the Korean authorities are pursuing policies that are more interventionist than those taken by the Japanese government – policies that in the end proved to be ineffective and counterproductive.

In Japan, nation-wide land prices started to fall rather abruptly in 1992, followed by 14 consecutive years of decline. The collapse of the bubble, which sharply boosted the non-performing assets held by banks, was a major cause of the decade of economic stagnation. The seriousness of the situation finally pushed the government to make a drastic reform of its urban and regional policy. *First*, building and zoning regulations in the centre of large cities were relaxed dramatically. The government allowed private developers to ignore existing zoning codes in the centre of major cities, which were designated as "Urgent Urban Revitalisation Areas". Building codes were also relaxed substantially, and the introduction of the transaction system for space rights encouraged large-scale redevelopment projects in city centres. *Second*, laws that had restricted the building of factories and universities in the Tokyo and Osaka regions since the 1960s were abolished. *Third*, public investment, which was heavily used to support regional economies during the 1990s, has been cut by almost half as a share of GDP in ten years, while some progress was made in shifting financial resources to key infrastructure projects in large cities. *Fourth*, the Housing Loan Corporation, which had dominated the mortgage market thanks to large government subsidies, was re-organised into a new administrative agency mainly responsible for the securitisation of housing loans in April 2007, with the aim of limiting the role of the public sector. In addition, the role of public corporations in charge of housing construction and urban development has been focused on supporting the private sector, following a hike in their debt and non-performing assets. *Fifth*, the plan to build a new city to relocate government functions was frozen.

Land prices finally stabilised and started to rise in the centre of large cities in the early 2000s, and the average land prices in the three largest cities increased in 2006 for the first time in 16 years. Residential land prices in central Tokyo are now growing at an annual rate of more than 20%. However, no policies to contain such price increases have been implemented or seriously considered thus far. On the other hand, land prices in regional cities continue to drop as migration into the Tokyo region, which was stagnant in the mid-1990s, has picked up again in recent years.

The degree of concentration in the capital region and its impact

Concentration in the capital region – Seoul, Incheon and Gyeonggi Province – is indeed high. With 12% of Korea's area and a population of 23.5 million, it is the second largest agglomeration in the OECD area after the Tokyo region, and accounts for 48% of Korea's population (Figure 1.6). Agglomeration economies attract firms to metropolitan areas by offering a wide range of specialised business services and high quality infrastructure.[19] Hence, large agglomerations are often a source of aggregate growth, boosting output and productivity. However, Korea is an exception (OECD, 2006a) as per capita income and labour productivity in the capital region are on par with the national average, according to Korean statistics. Compared to other OECD countries, Korea has a relatively modest level of regional variation in per capita income (OECD, 2005c). Moreover, economic growth in the capital region between 1995 and 2002 lagged behind the national average. Although there is a possible downward bias due to statistical problems in calculating regional GDP (Kook, 2005), there appear to be important diseconomies of agglomeration in the Seoul region that reduce income and growth (OECD, 2006a).[20]

Traffic congestion has continued to worsen in the capital region. It is estimated that Korea lost about 3% of its GDP in 2004 due to congestion, according to the MCT. In addition to increased economic activity in Seoul, growing suburbanisation has led to explosive growth in commuting between Seoul and the rest of the capital region. The share of public transport use remained at 63% between 1999 and 2005 despite continued investment in subways and the introduction of bus-only lanes. The share of passenger cars increased from 20% to 26% over the same period, while the proportion of those vehicles with only one passenger increased from 69% to 78%. More commuters choose to drive partly due to the lack of efficient public transport across the capital region (OECD, 2005d). Traffic congestion has exacerbated the severe pollution problem around Seoul (see Box 3.3).

Policies to limit concentration in the capital region

The negative externalities resulting from the high degree of concentration in the capital region provide a rationale for policies to disperse economic activities to other parts of the country. Special measures were introduced as early as the 1960s, including the relocation of certain government institutions and university branches and the provision of financial incentives to move firms out of the capital region. Construction of large-scale facilities in the capital region, including factories, universities, and other facilities that induce population concentration, are still prohibited or controlled by the government (OECD, 2001 and OECD, 2005d). However, the effectiveness is reduced by a number of exceptions that have been introduced, such as for small and medium-sized enterprises (SMEs), venture businesses, foreign-invested companies and advanced-technology firms. The government plans to replace direct regulations by economic instruments, possibly during the early 2010s, in tandem with progress in achieving balanced regional development through the various regional development initiatives discussed below.

However, the current strategies have a number of weaknesses. *First*, there is limited evidence that capital region regulations have actually promoted growth in other regions. Despite the restrictions, the capital region's share of Korea's population has risen from 18% in the 1980s to nearly half. Experiences in other OECD countries, such as France, Japan and the United Kingdom, demonstrate that regulatory policies to control the growth of capital regions have not been effective.[21] *Second*, there is concern that anti-concentration policies are holding back Seoul's international competitiveness. In an increasingly globalised economy, firms that cannot find suitable sites in the capital region may invest instead in other countries.[22]

Addressing negative externalities by imposing restrictions on the location of certain economic activities is a costly approach. Enterprises that would benefit the most from locating in the capital region are often excluded, while the possibility of obtaining exceptions to restrictions prompts lobbying. Instead, negative externalities related to high

Box 3.3. **Addressing air pollution in the capital region**

Korea has achieved significant success in addressing the problem of air pollution.* While economic output rose 27% between 1997 and 2003, emissions of SOx were reduced by 36% and those of NOx, VOCs and total suspended particulate matter (TSP) were held to moderate increases. Indeed, emissions per unit of GDP are half the OECD average for SOx and close to the average for NOx (Figure 3.10). However, several challenges remain. The concentration of NO2 and particulates in the capital region is still higher than in many other large cities, reflecting the rapid rise in car use, which has outpaced improvements in fuel quality and engine technology. In addition, the concentration of PM10 in Seoul was about twice as high as that in New York, London and Tokyo.

Korea has strengthened its air quality policy since the early 2000s in response to health and quality of life concerns. Its ambient air quality standards were upgraded in 2006 and, with some exceptions, are now close to WHO guidelines. A comprehensive ten-year air quality plan for the Seoul metropolitan area, announced in 2005, targets a 41% to 47% reduction in pollutant emission by 2014 by introducing comprehensive market-based and flexible measures.

First, for stationary sources, the cut in emissions is to be achieved through a total pollution load management and emission trading ("cap and trade") system. It will take effect in July 2007 in the capital region for SOx, NOx and TSP. It will be applied initially to large sources and extended to mid-sized sources in 2009. The emission levels of SO2, NOx and TSP will be allocated to each source within the overall total limit set for the metropolitan area. Emitters with excess pollution will then be able to purchase emission permits from those with surplus emission allowances. In case emitters exceed their allocated amount, they have to pay a penalty charge and their permissible emission level is reduced for the following year.

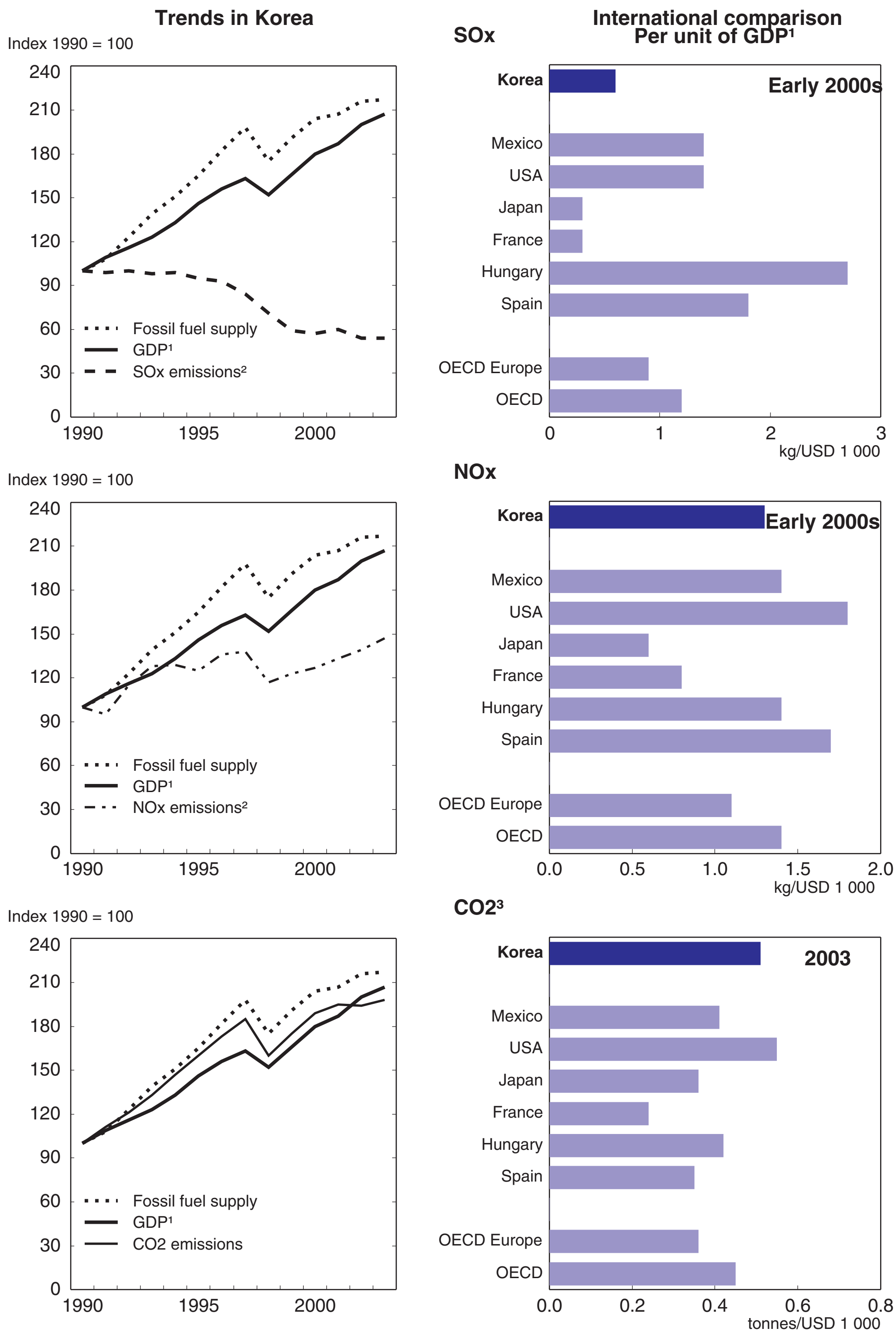
Second, a wide range of measures are being implemented to reduce emissions and energy consumption by on-road mobile sources, which are the major emission sources in the Seoul metropolitan area (51% of NOx and 65% of PM10 emissions). Vehicles must comply with the most stringent international emission standards. For diesel vehicles, Euro 3 emission standards have been in force since 2002 for light-duty vehicles. Euro 4 emission standards were introduced in 2006 for passenger vehicles and heavy-duty vehicles, and are to be introduced in 2007 for light-duty vehicles. For gasoline vehicles, the US federal LEV (Low Emission Vehicles) standards were introduced in 2003 and the ULEV (Ultra-Low Emission Vehicles) standards in 2006. Vehicle emission inspection has also been strengthened. An emission inspection was added to the general inspection in 2002, which must be carried out every two years for non-commercial passenger vehicles and annually for heavy-duty vehicles for commercial use. In particular, diesel vehicles that exceed emission standards must be equipped with an emission reduction device or retrofitted with a LPG engine. Fuel standards have also been strengthened to the level of the EU standard. Other measures include the subsidised introduction of low-emission vehicles such as compressed natural gas (CNG) buses, mandatory public procurement of low-emission cars such as hybrids, increased production of low-emission vehicles by car manufacturers (from 1.5% in 2006 to 6.6% in 2010) and restrictions on the use of construction materials emitting excessive harmful substances.

Third, the Korean government has introduced measures to reduce energy intensity, which is 21% above the OECD average. High energy intensity reflects distortions created by past energy pricing policies that aimed at economic growth and price stabilisation, without regard to air pollution, energy efficiency and climate concerns. The aim is to achieve a more appropriate ratio of relative prices among petrol, diesel and liquefied petroleum gas (LPG) through fuel taxes. In 2002, this ratio was set at 100: 75: 60. It was changed to 100: 85: 50 in 2005, taking into account environmental concerns related to diesel.

With comprehensive measures in place to tackle air pollution issues in the Seoul metropolitan area, there is a growing need to implement similar plans for other major cities and industrial complexes. Moreover, Korea should introduce additional economic instruments in implementing its air management policy, such as internalising the external costs of transport while ensuring that the marginal benefits of new policies exceed the costs. Finally, the use of renewable energy sources, which account for just 2.1% of total energy supply, should be expanded.

* This box draws on the OECD (2006c), *OECD Environmental Performance Reviews: Korea* and information from the Ministry of the Environment in Korea.

Figure 3.10. **Air pollutant emissions**



1. GDP at 2000 prices and purchasing power paritiy exchange rates.
2. 1990-98: OECD estimates.
3. Emissions from energy use only; sectoral approach; excludes international marine and aviation bunkers.

Source: OECD Environment Directorate; OECD-IEA (2005), *CO_2 Emissions from Fuel Combustion*; OECD (2005), *OECD Economic Outlook, No. 77*; OECD-IEA (2005), *Energy Balances of OECD Countries 2002-03*, OECD, Paris; and OECD (2006), *OECD Environmental Performance Reviews: Korea*, OECD, Paris.

levels of concentration can be better addressed by economic instruments. The introduction of a cap and trade system for pollutant emissions is a step in the right direction (Box 3.3). Given that a large part of negative externalities, such as congestion and air pollution, is related to the transport system, one approach would be to introduce congestion charges, an approach that has been implemented in some major cities in the OECD area. A peak-load pricing system on roads and trains would reduce congestion at peak times while encouraging businesses with heavy traffic loads to move out of the congested area. Meanwhile, public transport in Seoul could be improved further by changing the regional allocation of public investment in favour of the capital region.

Policies to achieve "balanced regional development"

Policies to limit population and economic activities in the capital region are accompanied by measures to promote development in other parts of the country. A special law for balanced national development was enacted in 2004, with a special account of 5.5 trillion won (0.7% of GDP) to support the initiative. The special account is to be increased to 7.5 trillion won in 2009. Initiatives to promote balanced development include the building of a new administrative city and the creation of "innovation cities" and "enterprise cities". In February 2007, the government announced that it would consider providing stronger tax incentives, including a permanent reduction of the corporate tax burden for companies that move their headquarters from the capital region to other parts of the country. In addition, special zones (see Chapter 6) may affect regional development.

At the centre of the government's balanced national development strategy is the creation of a new administrative city in Chungcheong Province, located 150 kilometres south of Seoul. Construction is due to begin in July 2007 and the relocation of 49 central government agencies, including 12 ministries, is scheduled to occur between 2012 and 2014. The target population of the city is 500 000 in 2030.

The innovation cities initiative aims at strengthening the link between public organisations, industry and universities through the relocation of public organisations, thereby creating a favourable environment for private investment and innovation. The designated areas are classified as industrial, knowledge-based, tourism and leisure or innovation-based areas. The innovation cities will benefit from the transfer of 175 public institutions from the capital region, thus reducing the share of public organisations located in the capital region from 85% to 35%. Local governments are required to provide high quality urban infrastructure in these areas. The enterprise cities offer incentives similar to those in the Free Economic Zones (see Chapter 6), such as simplified planning procedures and exemptions and reductions from national and local taxes on firms in order to encourage private firms to take the lead in development. Companies are also allowed to set up schools and hospitals in these areas. The six areas designated thus far are relatively small regional cities outside of large metropolitan areas.

Although most OECD countries implement some kinds of regional policies, the extensive programmes in Korea are ambitious and aim at a high level of regional redistribution compared with other countries. In recent years, a number of OECD countries have shifted away from policies aimed at greater equity across regions, giving more autonomy to sub-national governments in implementing strategies for local development (Morasch, 2000 and OECD, 2005a). This shift reflects the fact that policies that attempted to influence industrial location through subsidies and incentives have proven to be ineffective or too costly. Indeed, the tax reduction for companies moving outside of Seoul could significantly reduce tax revenues, given that firms headquartered in Seoul paid 20 trillion won (2.5% of GDP) of corporate taxes in 2004. In addition, overlapping programmes administered by various government agencies often result in the waste of resources and inefficiency. Furthermore, since preferential regulatory measures applied in geographically limited areas distort the location of businesses, the first best approach is to implement them on a nation-wide basis (see Chapter 6). In sum, the Korean government's regional policy should not focus on changing the regional distribution of population and economic activities *per se*, but should instead increase local autonomy in implementing regional development policy. Meanwhile, central government initiatives should be streamlined to improve their efficiency.

Fiscal decentralisation

Fiscal decentralisation is essential to make local governments more accountable for their policies and enhance the quality of public services in line with the demands of citizens. The 2005 *OECD Economic Survey of Korea* pointed out a number of problems with the relationship between levels of governments:

- The historical legacy of centralised control has left excessive authority at the central level. In addition, weak self-governance and a lack of capability in local governments have restricted the effective use of the power that they have.
- Local governments have limited spending responsibilities. In particular, the education budget is largely outside the control of the local authorities.
- The severe imbalance in the financial resources of central and local governments requires most local authorities to rely on transfers from the central government. While own-source revenues account for 95% of total revenue in Seoul, a high level by international standards, 84% of local governments rely on central government transfers for more than one-half of their revenues.
- The heavy reliance on earmarked grants, and the conditions attached to such grants, further reduce the autonomy of local governments.

Although the Roadmap for Fiscal Decentralisation in 2003 placed this issue near the top of the policy agenda, there has been little progress to date.

The issue of housing policy as discussed above is linked to fiscal decentralisation as property-related taxes account for almost half of local government tax revenue. Simplifying the local tax system, by eliminating some of the 16 local taxes, as recommended in the 2005 *OECD Economic Survey of Korea*, would further increase local government dependence on property taxes. The lack of spending responsibilities for local governments limits their need for additional revenue. Indeed, some wealthy jurisdictions in the capital region lowered property tax rates in response to rising revenue as tax bases increased, thus frustrating the government's plan to raise the effective rate on property holding. It is thus important to give more spending responsibility to local governments, while encouraging them to make use of their existing flexibility in setting tax rates. Moreover, it should be clear that changes in tax rates will not influence the level of transfers from the central government.

There is a concern that increased autonomy would result in greater disparity in regional income. Although some studies have found that fiscal decentralisation helps to narrow regional income disparity (Canaleta *et al.*, 2004), the wide variation in the financial capacity between regions in Korea suggests that fiscal decentralisation would have a negative impact on regional equity. As pointed out in the 2005 *Economic Survey of Korea*, the main challenge is to provide local governments with sufficient revenue-raising autonomy

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while ensuring adequate revenue capacity through a well-designed system of block grants. However, the success of such a strategy of increased autonomy depends on granting more spending responsibility for local governments.

Conclusion

The attention focused on housing policies, as illustrated by the five packages introduced during the past 18 months, appears incommensurate with the relatively modest increases in housing prices from an international perspective. House prices, however, have become a very sensitive political issue because of a more rapid pace of increase in the price of apartments in the capital region. A main reason is the decline in private supply of housing caused by difficulties in securing construction sites, in part due to persistent regulations, while demand for housing has increased due to favourable living conditions in this area, including the availability of high quality education. The government fears that the large price rises in the capital region could spill over to other parts of the country and it is also concerned about the large capital gains for some people and a widening dispersion of wealth. It is for these reasons that the government has responded to wide-spread public concern regarding house price rises by acting on a variety of fronts. The government measures have to be seen in the context of its objective of limiting large house price swings in the short term. Despite the merits of such a policy objective, some of these policies have the potential to create substantial harm if allowed to persist in the long-term. The government should, therefore, aim to establish an efficient housing market in which supply responds to price signals. Efforts to restrict demand for housing or engineer price declines, particularly though measures that are inconsistent with market principles, need to be phased out, as regulatory changes on land use are implemented and housing supply becomes more elastic. A less interventionist approach may also reduce price volatility, reducing the scope for capital gains, and would also increase the resilience of the overall economy.

The government's decision to boost the supply of housing in the capital region is appropriate. Meanwhile, it is important to avoid costly and inefficient measures aimed at changing the distribution of population and economic activity, while granting more autonomy to local governments in promoting economic development as part of fiscal decentralisation. Specific recommendations to improve housing and regional policies are shown in Box 3.4.

Box 3.4. **Summary of recommendations for housing and regional policies in Korea**

Housing policy

- Phase out policies aiming at controlling short-term price fluctuations, such as price caps and the requirement to disclose construction costs, particularly in geographically limited areas, and instead focus on creating a robust housing market from a long-term perspective, as regulatory changes on land use are implemented and housing supply becomes more elastic.
- Maintain the focus on increasing the supply of housing, particularly in the capital region.
- Concentrate the role of the public sector on developing more land for housing construction, while reducing regulations on construction and land use to facilitate a stronger private-sector response to demand.
- Make more publicly developed land available for private-sector housing projects to better match consumers' preferences.
- Phase out restrictions on the reconstruction of apartments, particularly in areas where prices are rising.
- Relax regulations on mortgage lending by the private sector without undermining strong prudential supervision of financial institutions.
- Encourage the development of the private-sector mortgage market, in part by developing the long-term bond market.
- Continue to lower property transaction taxes and increase property holding taxes, while not relying on property taxes as a tool to control property prices or redistribute income.
- Avoid high capital gains tax rates to limit the extent of distortions.

Regional policy and fiscal decentralisation

- Transform regulations that limit construction in the capital region into market-based instruments aimed at addressing externalities, such as pollution and congestion.
- Streamline various initiatives aiming at balanced regional development and give local government more autonomy to develop regional development programmes, while expanding nation-wide the preferential treatment granted in "enterprise cities".
- Further pursue fiscal decentralisation by granting greater autonomy to local governments, including more responsibility for providing services such as education and police.

Notes

1. While the term "asset price bubble" is frequently used, it remains controversial, given disagreement about measurement and definition of a bubble. Nevertheless, there is agreement that many periods of financial instability and crises were associated with equity or real estate price boom-bust cycles (Helbling, 2005).
2. Government measures to calm the real estate market may suggest that the authorities expect strong price pressures ahead, encouraging households to quickly purchase real estate.
3. A number of factors have contributed to the recent rise in property prices: *i)* the worldwide decline in interest rates; *ii)* the development of mortgage markets through deregulation; *iii)* the rise in the proportion of owner-occupied houses; *iv)* demographic factors, including immigration; *v)* supply bottlenecks due to various regulations; and *vi)* increases in per capita income. The degree of contribution by each factor differs considerably across countries (Girouard *et al.*, 2006). The development of financial markets has reduced risk premia, resulting in higher purchase prices. A

number of studies indicate that the rise in property prices has stimulated private consumption through wealth effects in countries that have large, efficient and responsive mortgage markets (Catte *et al.*, 2004).

4. Kangnam (south of the river), refers to the part of Seoul south of the Han River. At the centre of Kangnam is Kangnam-gu (ward), with a population of 0.5 million (5.2% of Seoul and 2.3% of the capital region).
5. Le Bas and Miribel (2005) found stronger agglomeration economies from the geographical concentration of ICT industries as compared with non-ICT industries.
6. See Hannah, Kim and Mills (1993), Kim (2004), OECD (2005b) and Kim and Wachter (2006).
7. For example, the New Real Estate Reform policy of August 2005 states that "the government will cut off in advance any possibility of windfall income from real estate speculation to dent social cohesion".
8. The decline in the 1993 to 1999 period reflects the supply of 2 million houses in the capital region in the early 1990s and the sharp fall in house prices in 1998 in the wake of the financial crisis.
9. The remaining 25% lived in homes leased under "chonsei" contracts. Under the chonsei system, the tenant pays a deposit equivalent to about half of the house price instead of monthly rental payments. This allows households to live in homes that they are not able to purchase.
10. The government set two conditions for easing regulations on the reconstruction of old apartments in August 2005 – price stability and the ability of the government to retrieve the development gains from reconstruction. This second condition was met with the imposition of charges (a quasi-tax) up to 50% of re-development gains in March 2006.
11. The authorities view the relatively small increase in mortgage lending rates – of 50 basis points since August 2005 – while the short-term policy rate rose 125 basis points, as evidence of excessive competition.
12. Banks' loan-loss provisions totalled 7.7 trillion won in 2005.
13. Other changes in the CPT that took effect in 2006 concerning housing: *i)* the tax is imposed on a household's total properties rather than on each individual's; *ii)* the tax is levied on the excess of the government assessed value over 600 million won instead of 900 million won; and *iii)* the maximum increase in a tax liability is 300% from the preceding year rather than 150%.
14. The Swedish tax system imposes a property tax at the national level but not at the local government level. However, the government plans to abolish this tax and will consider the introduction of some form of property taxation at the local level in the coming years. Nevertheless, the Korean government intends to maintain the CPT as a national tax due to its concern about the strong tendency of some revenue-rich local governments to undermine the central government's initiative of raising the effective tax rate on property holding.
15. The use of the actual sales price was introduced for homes valued at more than 600 million won (from 1999), households owning three or more homes (from 2004) and households owning two or more homes (from 2006).
16. A normal tax rate of, 9% to 36%, is applied to those who rent five or more houses and meet the following conditions: *i)* the houses must all be located in the same city or county; *ii)* the houses must be rented for ten years or longer; *iii)* the size of each of these rented houses must be 85 square metres or less; *iv)* the value of each of the rented houses cannot exceed 300 million won in value (as assessed by the government) at the time of sale.
17. According to simulations by the Korean authorities, the lock-in effect seems to be negligible in Korea. Less than half of multiple homeowners, around 3~4% of the total 9.7 million households, are subject to the 50~60% rate on capital gains. As for single homeowners, around 91% of total households, most are exempted, and only 2~3% pay capital gains tax at an effective rate of 5~6% on average.
18. Real estate accounts for about 85% of household wealth in Korea.
19. Agglomeration economies are confirmed by the positive correlation between city size and income, especially cities accounting for over 20% of GDP (OECD, 2006a). Capital cities are at the forefront.
20. Henderson (2000) found Korea to be among the countries with a highly excessive concentration in the largest city based on an econometric analysis using data between 1960 and 1995.
21. There is little reliable data showing whether constraints imposed on the growth in the major regions in some OECD countries were effective in encouraging economic activities in other regions, thus compensating the loss in the major regions with higher growth elsewhere in the country. In the United Kingdom, both deterrents and incentives were used to limit the high concentration

in London from the 1960s to 1970s, but the rate of office floorspace development in London accelerated in the next decade. In France, the decision to relocate some public research centres outside the Paris metropolitan area led to a deterioration in its performance in innovation capacity and competitiveness compared to other EU countries (OECD, 2005d and 2006a). Japan's experience is discussed in Box 3.2.

22. The recent case of Hynix, which was denied permission to build a plant in the capital region, prompted a debate on this issue.

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ANNEX 3.A1

Key elements of the policy packages for property price stabilisation since 2005

31 August 2005 package

1. Expand the National Housing Fund from 1.5 trillion won to 2 trillion won in order to assist low and middle-income people to purchase homes.
2. Expand public rental housing construction by allowing the construction of additional National Rental Housing Complexes and boosting government support for rental housing from 11.4 trillion won to 13.1 trillion won.
3. Revitalise the supply of private rental housing through regulatory incentives, while expanding tax benefits for private rental housing businesses.
4. Enhance transparency in property transactions by requiring that actual prices be reported to local governments and by establishing a surveillance system targeting speculators likely to disturb the market.
5. Strengthen the Comprehensive Property Tax and raise the capital gains tax to curb speculative demand.
6. Boost housing supply in the capital region by providing extra public land, and provide incentives to encourage redevelopment led by public companies.

30 March 2006 package

1. Enhance the welfare of low and middle-income people by:
   - Strengthening financial support for rental housing for low income and precarious households.
   - Cutting apartment prices by relaxing zoning regulations and expanding public rental housing.
2. Rationalise the redevelopment system by increasing the transparency of the construction process and taxing windfall redevelopment gains up to 50%.
3. Achieve a sustainable expansion of housing supply of more than 0.3 million housing units per year on average until 2010 by providing additional public housing sites in the capital region and using fiscal expenditures and regulatory incentives to encourage the development of existing urban areas.
4. Require purchasers of homes in certain areas to report to local governments how they will finance the purchase of the home and whether they will live in the home.
5. Disperse housing demand by promoting balanced regional development throughout the country by creating innovation cities and enterprise cities and encouraging the development of lagging regions in urban areas.

15 November 2006 package

1. Increase the housing supply by front-loading the plan to provide land for housing construction and relaxing regulations, such as the mandatory greenfield ratio.
2. Reduce the prices of new apartments in new towns by 25% by:
   - Relaxing the floor space-to-land ratio (8% reduction in price).
   - Changing the land price calculation method to lower its price (10% reduction in price).
   - Shortening the housing construction period (6% reduction in price).
3. Tighten restrictions on home-backed loans from financial institutions for houses with a market value of more than 600 million won.
   - Terminate the exceptional treatment that alows loan-to-value (LTV) ratios of up to 60% for banks and insurance companies. The ratio should be a maximum of 40%.
   - Lower the LTV ratio to a ceiling of 50% for non-bank financial institutions.
   - Expand the coverage of the debt-to-interest (DTI) ratio restriction of 40% to nearly the entire capital region.
4. Increase access to housing for low-income households by further expanding financial support from the National Housing Fund and the Korea Housing Finance Corporation.
5. Build 1.64 million housing units by 2010 while expanding the role of the public sector (0.87 million units on public land and 0.77 million units on privately-owned land).

11 January 2007 package

1. Require private-sector builders to publicly disclose their construction costs for housing projects in the capital region and designated "overheating" zones in other areas from September 2007 (such a requirement is already applied to government-run housing projects).
2. Set a price ceiling on new homes nation-wide. It is to be based on the construction costs, assessed land prices and what the local government regards as a proper level of profit.
3. Limit mortgage loans in speculation zones to only one per person.
4. Ban the re-sale of all new houses in the capital region for five to seven years, depending on the size of the house.
5. Favour households with no home and at least two children and the elderly in the subscription for new houses, while penalising multiple home owners.

31 January 2007 package

1. Increase the stock of long-term rental housing by 2.6 million (from 0.8 million in 2006 to 3.4 million in 2017), raising the share of rental housing in total housing from 6% to 20%.
2. Create a rental housing fund, amounting to 91 trillion won (10% of GDP) by 2019 (yearly average of 7 trillion won between 2007 and 2019) to construct 0.5 million rental housing units.
   - Attract investors from the public sector, such as the National Pension Fund, agricultural co-operatives, Postal Savings, and the private sector, by offering a guaranteed rate of return slightly above the government bond rate.
   - Provide government subsidies of 0.5 trillion won each year between 2008 and 2019 for the construction of rental housing by public-sector developers, such as the Korea Land Corporation and Korea National Housing Corporation.

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Chapter 4

The fiscal situation in Korea

Korea currently has a sound fiscal position and a relatively low level of public spending. Given the impact of rapid population ageing on public expenditures in the long run and the potential cost of economic integration with North Korea, it is important to maintain a strong financial position. Slowing the growth of public outlays from its 9% pace since 2002 would help achieve the target of a balanced budget in the medium term. Reforming the tax system is necessary to generate additional revenue and to remove the cost of distortions as tax rates rise to cope with spending pressure. The personal income tax system should be improved by reducing generous exemptions and allowances that exclude more than half of wage income from the tax system. In addition, the corporate income tax base should be broadened by eliminating incentives that distort the allocation of investment and complicate tax administration.

Maintaining a sound fiscal position in Korea is a priority given future spending pressures, including those stemming from population ageing and the potential cost of economic co-operation with North Korea. At present, public debt is relatively low in Korea, which is one of only eight OECD countries in which government net debt is reported to be negative, *i.e.* the government is a net creditor. Nevertheless, the pace of spending increases – at a 9.3% annual rate since 2002 – has significantly boosted the share of the public sector in the economy and may prevent achieving a balanced budget by the end of the decade. The government's *Vision 2030* plan (see Chapter 1) calls for boosting government revenue through 2010 by improving the tax system. This chapter begins by discussing fiscal developments in 2006 and 2007, and then reviews economic co-operation between North and South Korea. Principles to guide tax reform are presented in the third section. The chapter concludes with a box of recommendations (Box 4.1).

Fiscal policy developments in 2006 and 2007

The consolidated government budget (excluding the social security surplus, privatisation revenue and the cost of financial-sector restructuring) recorded a deficit of 1.3% of GDP in 2006, slightly higher than in 2005 (Table 4.1).[1] However, the 2006 deficit was below the 1.7% projected in the budget for the year. The lower-than-expected deficit reflects an overshooting of revenue, equivalent to 0.2% of GDP.[2] The main factors were buoyant personal and corporate income tax revenues that more than offset unexpectedly weak VAT revenues. In addition, government spending is estimated to have undershot the initial budget figures by 0.3% of GDP. The stance of fiscal policy in 2006 was broadly neutral.

The large cost associated with financial-sector restructuring, which boosted government spending by about 1½ per cent of GDP per year beginning in 2002, came to an end in 2006.[3] Adjusted for this factor, government spending is expected to rise by 7.5% in 2007. Meanwhile, government revenue is projected to increase 8.2%, well above the 6.9% rise in nominal GDP projected by the government. One factor is revenue from the Comprehensive Property Tax (see Chapter 3), which is expected to rise from around 1.3 trillion won in 2006 to 2.9 trillion won in 2007. Despite buoyant revenue growth, the budget projects a widening of the government budget deficit to 1.5% of GDP. However, in light of the undershooting in 2006, the actual deficit may turn out to be smaller.

Given the slowdown in economic growth in the second half of 2006 (see Chapter 2), the government decided to frontload expenditures in the first half of 2007. Around 56% of annual outlays are being spent during the first six months of the year, implying a shift of 12.7 trillion won (1.4% of GDP) of spending, in order to help smooth the path of growth during the year. This would result in a decline in government spending at a 38% annual rate in the second half of 2007. Concentrating government spending in the first half of the year creates pressure for a supplementary budget to avoid a decline in outlays in the second half of the year, although the 2007 National Fiscal Act should help limit such pressures. There were supplementary budgets each year between 2001 and 2006, providing additional public outlays of nearly

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Table 4.1. **Consolidated government budget**

Trillion won[1]

	2000	2001	2002	2003	2004	2005		2006		2007
	Outcomes					Budget[2]	Outcome[3]	Budget[2]	Outcome[3]	Budget[2]
A. Total										
Revenue	135.8	144.0	158.7	171.9	178.8	199.7	191.4	208.1	209.6	225.1
Growth (per cent)	25.8	6.1	10.2	8.3	4.0	7.8	7.0	4.2	9.5	8.2
Per cent of GDP	23.5	23.2	23.2	23.7	23.0	23.8	23.6	24.5	24.7	24.9
Expenditures	129.3	136.8	136.0	164.3	173.2	194.1	187.9	209.0	205.9	211.7
Growth (per cent)	6.9	5.8	–0.5	20.8	5.4	8.9	8.5	7.7	9.6	1.3
Per cent of GDP	22.3	22.0	19.9	22.7	22.2	23.1	23.2	24.6	24.3	23.4
Balance	6.5	7.3	22.7	7.6	5.6	5.6	3.5	–0.9	3.6	13.4
Per cent of GDP	1.1	1.2	3.3	1.1	0.7	0.7	0.4	–0.1	0.4	1.5
of which:										
Social security balance	12.5	15.5	17.6	19.6	21.2	25.9	23.6	26.0	26.4	27.0
Per cent of GDP	2.2	2.5	2.6	2.7	2.7	3.1	2.9	3.1	3.1	3.0
Privatisation revenues	0.0	3.7	6.7	1.4	0.6	0.0	0.0	0.0	0.0	0.0
Per cent of GDP	0.0	0.6	1.0	0.2	0.1	0.0	0.0	0.0	0.0	0.0
Financial-sector restructuring costs	0.0	0.0	0.0	13.0	12.0	12.0	12.0	12.0	12.0	0.0
Per cent of GDP	0.0	0.0	0.0	1.8	1.5	1.4	1.5	1.4	1.4	0.0
B. Alternative measures of the balance										
Excluding social security	–6.0	–8.2	5.1	–12.0	–15.6	–20.2	–20.1	–26.8	–22.8	–13.6
Per cent of GDP	–1.0	–1.3	0.7	–1.7	–2.0	–2.4	–2.5	–3.2	–2.7	–1.5
Excluding social security, and financial sector restructuring costs	–6.0	–8.2	5.1	1.0	–3.6	–8.2	–8.1	–14.8	–10.8	–13.6
Per cent of GDP	–1.0	–1.3	0.7	0.1	–0.5	–1.0	–1.0	–1.7	–1.3	–1.5
Excluding social security, privatisation and financial sector restructuring costs	–6.0	–11.9	–1.7	–0.4	–4.2	–8.3	–8.1	–14.8	–10.8	–13.6
Per cent of GDP	–1.0	–1.9	–0.2	0.0	–0.5	–1.0	–1.0	–1.7	–1.3	–1.5
Memorandum item:										
Adjusted expenditures[4]	129.3	136.8	136.0	151.3	161.2	182.1	175.9	197.0	193.9	211.7
Growth (per cent)	6.9	5.8	–0.5	11.2	6.5	9.6	9.1	8.2	10.2	7.5

1. On a GFS basis. Includes public enterprises, but excludes local government.
2. Growth rate relative to previous year's budget.
3. Growth rate relative to previous year's outcome.
4. Excludes financial sector restructuring costs.

Source: Ministry of Planning and Budget and Ministry of Finance and Economy.

5 trillion won (0.7% of GDP) per year on average. However, the government's projection of an economic rebound in the second half of 2007 also appears to make additional fiscal stimulus unnecessary. Moreover, given the time needed to implement a supplementary budget, its impact would be felt so late that it would risk being pro-cyclical.

The priority should be to limit the growth of outlays, which have risen at a 9% annual rate since 2002. The increase in expenditures has been led by social welfare spending and R&D investment (Table 4.2). Given the pace of spending, the budget (excluding the social security surplus, privatisation revenue and the cost of financial-sector restructuring) has deteriorated from a balance in 2003 to a deficit of 1.3% of GDP in 2006, as noted above (Table 4.1). Meanwhile, gross government debt rose from 23% of GDP in 2003 to 30% in 2005 (Figure 4.1). However, the increase includes the impact of bringing government-guaranteed bonds into the budget. The combined amount of debt and government-guaranteed liabilities rose more modestly from 34% of GDP in 2003 to 37% in 2005.

Table 4.2. **Central government expenditures by category**

Annual average increase in spending[1]

	2002-06	2006-10
Social welfare	10.2	9.1
R&D investment	9.7	9.1
Public security	9.7	3.1
National defense	8.3	9.0
Education	6.9	8.1
Support for local government	6.9	6.8
Culture, tourism and sports	6.1	4.9
Industry and SMEs	5.6	0.7
Information technology	5.3	1.1
Social infrastructure and regional development	3.6	1.6
Agriculture	3.3	1.6
Environment	1.6	6.2
Foreign affairs and unification	1.2	6.0

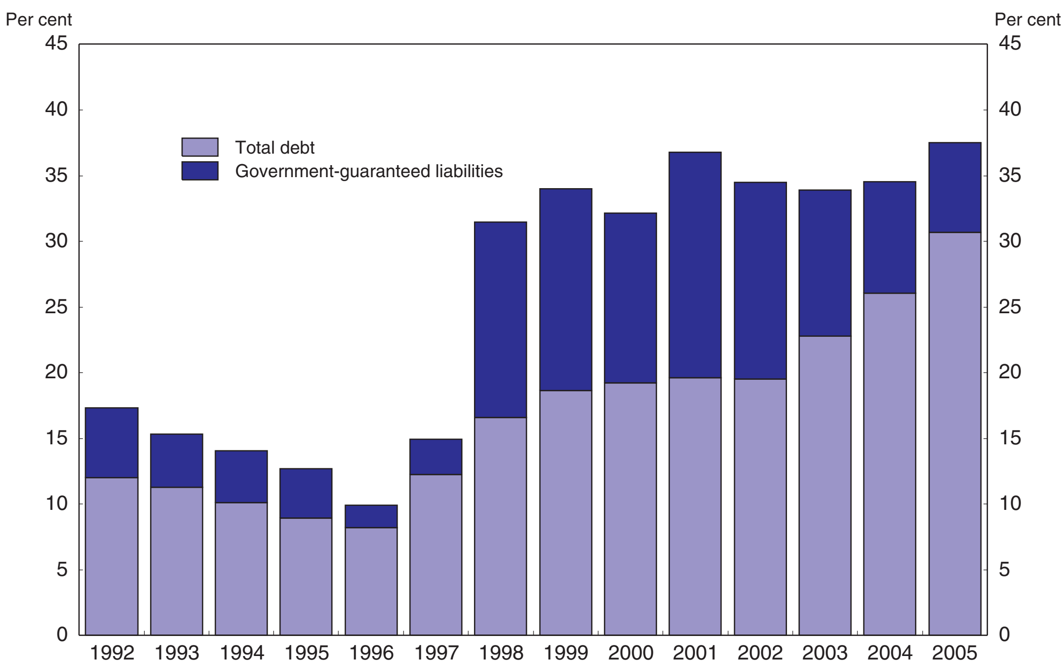
1. The increase in spending in these categories does not match the total spending in the consolidated government budget shown in Table 4.1.

Source: Ministry of Planning and Budget (2006), *National Fiscal Management Plan*.

The National Fiscal Management Plan for 2006-10 projects that the deficit will decline slightly to 0.8% of GDP by the end of the decade, despite a deceleration in spending growth to 6.4% over the five-year period. Social welfare and R&D investment remain the top priorities for public expenditures (Table 4.2). In addition, spending for education, the environment and

Figure 4.1. **Government gross debt and guaranteed liabilities**

Per cent of GDP[1]



1. Intra-government debt is netted out beginning in 1997.

Source: Ministry of Finance and Economy.

foreign affairs and unification is projected to accelerate. In contrast, the plan calls for less economic-related spending on industry, small and medium-sized enterprises (SMEs) and information technology.

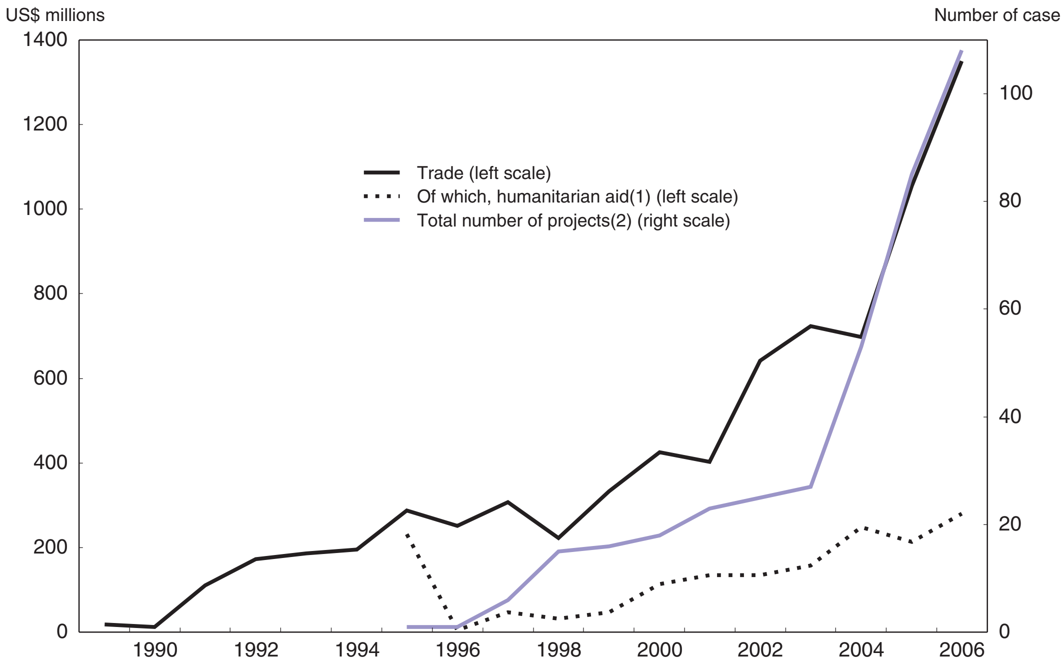
Economic co-operation with North Korea

The *Vision 2030* plan projects that spending on economic co-operation with the North will rise from 0.1% of GDP in 2005 to 1% in 2030. The initiative in the late 1990s to encourage engagement with North Korea has prompted closer economic ties between the South and North. As a result, inter-Korean trade increased three-fold between 2000 and 2006 to reach $1.3 billion in 2006 (Figure 4.2). Inter-Korean trade consists of: 1) processing-on-commission projects, centred primarily in textiles (19% of the total): 2) other commercial trade (23% of the total); 3) economic co-operation projects, notably the Gaeseong Industrial Complex and Mt. Geumgang tours (27% of the total); and 4) non-commercial trade (31%), which is mostly humanitarian aid of food and fertiliser. The large rise in trade is primarily due to the expansion of economic co-operation projects with the North. Indeed, between 2004 and 2006, the amount of trade related to Gaeseong increased seven-fold ($41 million to $298 million) and that related to Geumgang increased 1.4 times ($42 million to $57 million). Meanwhile, food assistance, including that from the private sector, has been on an upward trend, more than doubling between 2000 and 2006. The North continues to experience a chronic grain shortage of about 2 million tonnes a year, as its annual output of around 4 million tonnes falls well short of its needs, making it dependent on South Korea and other countries for food. South Korea's support for the North has focused on food assistance; 63% of government outlays for North Korea-related projects between 1991 and 2006 were for humanitarian aid compared to 34% on economic co-operation projects, with the remainder spent primarily on social and cultural projects.

The Gaeseong Industrial Complex is in the first phase aimed at developing a labour-intensive complex for South Korean SMEs in the manufacturing sector. In 2004, 15 SMEs signed contracts to invest in Gaeseong and have begun operations. Another 23 SMEs signed contracts in 2005 and three have begun operations. Infrastructure for the complex – notably rail and road links, electricity and communications – is provided by the South Korean government and the SMEs involved.[4] Low production costs make the complex attractive to South Korean firms. Indeed, the 11 000 North Korean workers employed in Gaeseong are paid an average wage of $59 per month, only 2% of the average manufacturing wage in South Korea. Moreover, the cost of leasing land is only one-third of that in South Korea and the corporate tax rate is low at 10% to 14%. Furthermore, to encourage firms to enter Gaeseong, the Export-Import Bank of Korea gives cheap loans of up to 90% of the investment amount, and provides insurance of up to 70% of the costs related to security risks and the failure of North Korean counterparts to comply with contracts.

The tourist project at Geumgang Mountain, operated by the Hyundai business group since 1998, has also expanded. The government supports the project by subsidising part of the tour expense for some groups and by providing a subsidy to Hyundai during the winter when there are fewer travellers. Road links to Geumgang (on the east coast) and Gaeseong (on the west coast) have been opened, but the opening of the rail link has been delayed by North Korea. In addition to government-driven projects, private economic co-operation is also deepening, as reflected in the increase in the number of approved projects (Figure 4.2), with total investment at $258 million in 2005. The rising trend is likely to continue, given the government's policy of engaging North Korea and the potential cost-savings for firms.

Figure 4.2. **North-South trade and economic co-operation**



1. Includes both public and private assistance, primarily for food.
2. Number of approved private economic co-operation projects.

Source: Ministry of Unification.

However, North Korea's missile test in July 2006 and its nuclear test in October stalled economic co-operation projects. The entry of more SMEs to the Gaeseong Industrial Complex was put on hold, while the government's winter subsidies for the Mt. Geumgang tours were suspended, leading to a sharp drop in the number of tourists. In addition, humanitarian aid of rice and fertiliser was suspended following the missile test. South Korea linked the resumption of aid to progress in resolving the North Korean nuclear issue. The stall in economic relations will only widen the income gap between North and South, making the eventual cost of economic integration even higher. In 2004, North Korea's GDP was estimated at only 3% of that in the South, implying a per capita income of only 6% of that in the South (Table 4.3). The recent six-party agreement on the North Korean nuclear issue may help boost economic activities and increase inter-Korean trade.

Improving the tax system

Given the spending pressures, bringing the budget into balance by the end of the decade will call for additional revenue. The *Vision 2030* plan calls for tax reform in order to boost government revenue over the period 2007-10. Korea's tax system has a number of positive features, notably a marginal tax wedge on labour income that is among the lowest in the OECD area, thus encouraging employment and output growth. However, the low wedges are primarily a result of the overall low tax burden. As the tax burden increases, the cost of the distortions in the current system, which are relatively minor at present, will be magnified.

The most important priority is to broaden the tax base for the personal income tax, which generates revenue equal to 4% of GDP, the lowest in the OECD area and well below the average of 10% in the OECD area.[5] Wage and salary income earners receive various income

Table 4.3. **Comparison of North and South Korea**

2005 unless otherwise noted[1]

	(A) North Korea	(B) South Korea	(A/B) Comparison (%)
Population (millions)	22.9	48.1	47.6
GDP (billion USD)	20.8	682.4	3.0
GDP/GNP per capita (USD)	914	14 193	6.4
Total trade (billion USD)	3.0	545.7	0.5
Exports	1.0	284.4	0.4
Imports	2.0	261.2	0.8
Inter-Korean exports	340	716	47.5
Commercial exports[2]	340	350	97.1
Non-commercial exports[3]	0	366	. .
Industrial statistics			
Power generation (100 million kWh)	215.0	3 646.0	5.9
Steel production (million tonnes)	1.2	47.7	2.5
Cement (million tonnes)	5.9	59.3	9.9
Agricultural statistics			
Grains (million tonnes)	4.5	5.5	81.8
Fertilizer (million tonnes)	0.5	1.5	33.3

1. The figures for GDP are for 2004.
2. Processing-on-commission trade accounts for about half of commercial trade.
3. Mostly includes humanitarian aid of commodities such as rice and fertiliser.

Source: Ministry of Unification and Korea National Statistical Office, Republic of Korea.

deductions and tax credits. As a result, 43% of household's wage and salary income is taxed compared to 91% in Germany and 77% in both the United States and the United Kingdom.[6] Only about half of wage earners pay income tax. Another problem is weak taxation of the self-employed, whose income is estimated to be as much as 50% higher than reported.[7] As in the case of employees, only about half of the self-employed pay income tax. Increasing the number of audits and imposing higher penalties would improve their tax compliance. Reducing allowances and credits, as well as improving the taxation of fringe benefits, capital income and the self-employed could generate an additional 5% of GDP according to some estimates (*OECD Economic Survey of Korea*, 2001). Widening the tax base, and thereby gaining an additional 5% of GDP of revenue, would allow the government to finance additional expenditure without raising tax rates.

Similarly, the tax base for the corporate income tax, which includes numerous incentives to encourage investment in specific sectors, notably R&D, SMEs and agriculture, should be broadened by reducing and streamlining the incentives. Extensive use of tax incentives has several negative consequences. *First*, they distort market signals in determining resource allocation, resulting in a suboptimal outcome for the economy as a whole. *Second*, they complicate tax administration, increase compliance costs and create scope for loopholes and evasion.[8] In sum, tax incentives should be limited to a strict minimum and concentrated in areas where there is clear evidence of market failures that result in underinvestment.

It is also important to improve the local tax system, which accounts for about one-fifth of total tax revenue in Korea, as part of the government's objective of promoting fiscal decentralisation (see the 2005 *OECD Economic Survey of Korea)*. One priority is to simplify the local tax system, which includes 16 different taxes compared to only four in the Nordic countries, thereby reducing compliance costs. Nine key taxes generated 88% of local tax revenue in 2003. The large number of minor taxes, each generating less than 3% of local tax revenue, reflects the reliance on earmarked taxes, which should be phased out. A second objective is to increase local government revenue-raising powers to allow them to better respond to the preferences of local citizens. In addition, it would help ensure fiscal discipline by making the cost of local public services more visible for local taxpayers.

Greater revenue-raising powers would increase local government autonomy from the central government, but there is a risk of a widening gap in the fiscal capacity between regions. The challenge is to provide local governments with sufficient revenue-raising autonomy to make them accountable to local citizens and encourage fiscal discipline, while providing the transfers necessary to ensure at least a minimum level of core public services. One aspect of autonomy is the right to set tax rates. Although the Local Tax Act defines the tax bases and standard rates for 16 local taxes, local governments are allowed to adjust rates, by as much as 50% above or below the standard rate, for 11 of the 16 local taxes. However, this power has been rarely used in practice, thus restricting the scope for healthy tax competition. The limited use of tax-rate flexibility by local governments reflects concern that lowering tax rates would lead to reductions in grants from the central government, while raising rates has negative implications for local elections. As a result, there is a general reluctance to diverge from norms set by the national authorities.

Conclusion

The projected pick-up in economic activity during 2007 would make fiscal stimulus unnecessary. The focus should instead be on limiting the growth of government spending. Tax reform is a priority to reduce distortions and to raise more revenue to cope with spending pressures, including those related to population ageing, which are discussed in Chapter 5. The recommendations are summarised in Box 4.1.

Box 4.1. **Recommendations for fiscal policy**

- Avoid additional fiscal stimulus, in 2007, as the economy is likely to pick up during the course of the year and the impact of stimulus would come so late as to risk having a pro-cyclical impact.
- Achieve a balance in the consolidated central government budget (excluding the social security surplus) over the medium term to prepare for future spending pressures.
- Broaden the base of the personal income tax while strengthening tax enforcement toward the self-employed.
- Reduce exemptions in the corporate tax system except when needed to address clearly identified market failures.

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Notes

1. The government's preferred fiscal measure excludes the social security surplus as this is intended to cover the future liability of public pensions, as well as the cost of financial-sector restructuring in the wake of the crisis that boosted government outlays between 2002 and 2006. It should also be noted that Korea uses the GFS measure of the government budget. General government on an SNA93 basis is available through 2004, when it reported a surplus of 2.5% of GDP, compared to a 0.7% surplus for the consolidated government budget, including the social security surplus and the cost of financial-sector restructuring (Table 4.1). The difference reflects the fact that GFS does not include local government, but does include net lending items, some of which are financial in nature.
2. One factor was larger than expected receipts from the capital gains tax, which is included in the personal income tax. Revenues from the capital gains tax were estimated at 7.1 trillion won in 2006, well above the initial estimate of 4.8 trillion won, thus explaining much of the rise in personal income tax to 31 trillion won, well above the initial estimate of 27.7 trillion won.
3. These costs resulted from the use of 168.3 trillion won (29% of 2000 GDP) to re-capitalise financial institutions and address the non-performing loan problem. Almost two-thirds of this amount was financed by government-guaranteed bonds. While some of this amount was recovered by the government through sales of assets and the privatisation of re-capitalised financial institutions, 49 trillion won (8% of GDP) of such debt was brought into the budget.
4. South Korea is currently supplying 15 thousand kilowatts of electricity and plans to supply an additional 100 thousand kilowatts in 2007.
5. Personal income tax rates were lowered from 10, 20, 30 and 40% in 2001 to 8, 17, 26 and 35% in 2005.
6. This percentage is for a single person earning the average wage. See OECD, *Taxing Wages 2004/2005*.
7. To improve the coverage of the income of the self-employed, the government introduced "Measures to better identify hard-to-trace income" in 2006.
8. The government has made efforts to reduce and streamline tax incentives and thereby broaden the corporate income tax base. *First*, 23 tax incentives that were slated to expire were reduced or abolished in 2006. This reduced incentives from 14.4% of tax revenue in 2005 to 14.1% in 2006. *Second*, tax incentives will be strictly managed by the 2007 National Fiscal Act, which limits the total ratio of incentives to tax revenue. Ministries requesting new incentives must reduce existing incentives.

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Chapter 5

Public social spending in the context of rapid population ageing

Faced with exceptionally rapid population ageing, Korea should address obstacles that lower fertility rates while encouraging higher labour force participation, particularly among women. While public social spending is currently very low, there is pressure for increased outlays on pensions, healthcare, long-term care and social assistance. The government should be cautious in expanding spending, taking into account the impact on economic growth. Outlays should be limited by shifting from direct provision of social services, notably childcare and long-term care, in favour of providing vouchers to consumers. Given the limited coverage of the public pension system, the new means-tested benefit for the elderly will be useful in reducing poverty. It is important to increase transparency about self-employed income to ensure fairness in the financing of social insurance systems, including the new long-term care insurance. The rise in inequality and relative poverty should be reversed by reducing labour market dualism.

The development of social spending in Korea, which was still one of the poorest countries in the world only 40 years ago, is relatively recent. The key events include the introduction of a public pension system in 1988, universal health insurance in 1989 and unemployment insurance in 1995. Nevertheless, gross public social spending in Korea remained the lowest in the OECD area at 6% of GDP in 2003, well below the average of 21% (Figure 1.8). Taking account of the impact of the tax system on social expenditure only slightly narrows the gap between Korea and the OECD average (Table 5.1).

Table 5.1. **Social spending in OECD countries**

Per cent of GDP, including pensions, in 2003

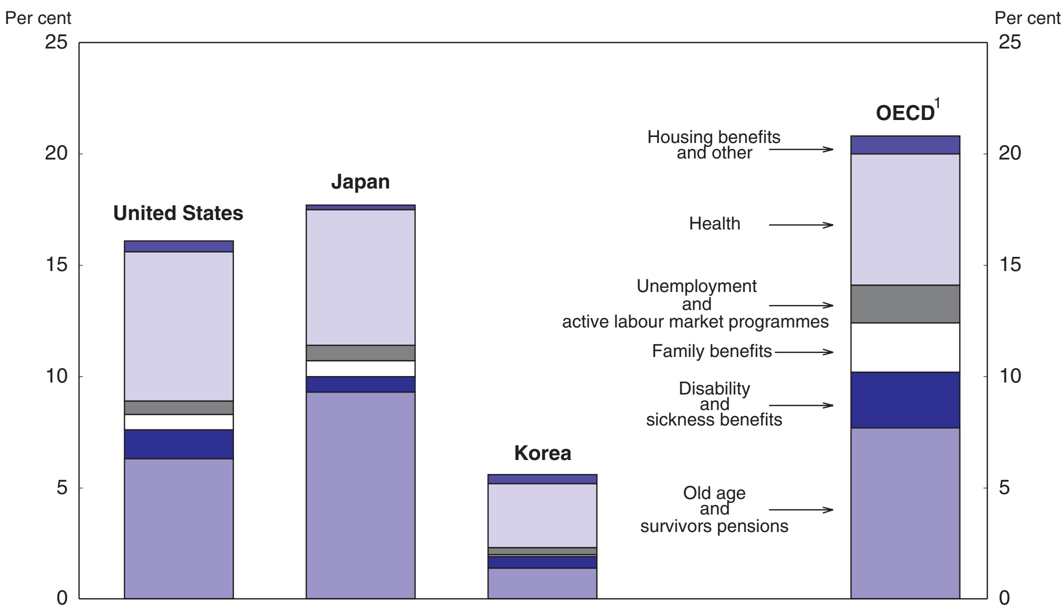
	Gross public spending	Net public spending[1]	Net mandatory private spending	Total net public and mandatory private spending
Sweden	31.3	24.2	0.3	24.5
France	28.7	25.4	0.3	25.7
Denmark	27.6	20.1	0.1	20.2
Germany	27.6	26.2	0.6	26.8
Belgium	26.5	22.9	0.0	22.9
Austria	26.1	20.6	0.5	21.2
Norway	25.1	20.2	0.9	21.1
Italy	24.2	20.6	1.4	22.0
Portugal	23.5	20.8	0.4	21.2
Finland	22.5	17.7	2.1	19.8
Czech Republic	21.1	19.5	0.2	19.7
Netherlands	20.7	17.9	0.4	18.3
Spain	20.3	17.6	0.0	17.6
United Kingdom	20.1	18.6	0.6	19.3
Iceland	18.7	16.6	3.3	19.9
New Zealand	18.0	15.0	0.0	15.0
Australia	17.9	17.0	2.3	19.3
Japan	17.7	17.6	0.6	18.2
Canada	17.3	17.2	0.0	17.2
Slovak Republic	17.3	16.0	0.2	16.2
United States	16.2	17.3	0.4	17.6
Ireland	15.9	13.8	0.0	13.8
Mexico	6.8	7.6	0.0	7.6
Korea	**5.7**	**5.9**	**1.8**	**7.8**
OECD average	20.7	18.2	0.7	18.9

1. Adjusts for the impact of the tax system on social expenditure.
Source: OECD (2007), *Social Expenditure Database, 1980-2003*, OECD, Paris (*www.oecd.org/els/social/expenditure*).

The low level of spending is explained by a number of factors. *First*, outlays on pensions, at only 1% of GDP, are well below the OECD average (Figure 5.1), reflecting Korea's relatively young population and the immature pension system. The small proportion of elderly, combined with a per capita income level that is well below the OECD average, also limits public

Figure 5.1. **Composition of public social spending**

Per cent of GDP in 2003



1. Weighted average of 30 countries.

Source: OECD (2007), *Social Expenditure Database, 1980-2003*, OECD, Paris (*www.oecd.org/els/social/expenditure*).

healthcare and long-term care expenditures. *Second*, a low unemployment rate, averaging less than 4% of the labour force since 2000, and the low incidence of long-term joblessness have limited spending on unemployment benefits and active labour market policies. *Third*, social welfare has traditionally been the responsibility of families, companies and non-governmental institutions, an approach that appeared to support rapid economic growth. Mandatory private spending amounted to 1.8% of GDP in 2003, more than double the OECD average (Table 5.1). In sum, combined public and mandatory private social spending in Korea, on a net basis, was 7.8% of GDP in 2003 compared to an OECD average of 18.9%.

However, a number of factors will boost public social spending over the medium term:

- Population ageing in Korea is projected to be the most rapid in the OECD area between 2000 and 2050, increasing public expenditure on pensions, healthcare and long-term nursing care.
- Continued income gains, as Korea's per capita GDP converges to the OECD average, may stimulate demand for high-quality healthcare and long-term nursing care.
- The marked increase in income inequality and in precarious employment since the financial crisis creates pressure for larger social outlays.
- The government has announced a shift from its policies of "growth first", pursued since the mid-1960s, toward greater emphasis on the quality of life and a more equal distribution of income.

In light of these factors, the government's *Vision 2030* plan (see Chapter 1) projects a rise in public social spending to the current OECD average of around 21% of GDP over the next quarter century.

The substantial shift of resources envisioned in the government's long-term plan suggests a need for caution. While *Vision 2030* provides a roadmap for increased expenditure, it does not specify how the additional outlays should be financed. The experience of some OECD countries that are now trying to scale back public social spending in an attempt to promote efficiency and growth underlines the need to carefully design public social programmes in order to achieve their intended objectives, while avoiding or limiting wasteful spending and negative externalities. Cross-country research by the OECD suggests that increasing social protection spending accompanied by higher taxes can reduce growth, indicating a trade-off between efficiency and social spending.[1] The negative impact is due in part to higher tax burdens, which can reduce labour supply and demand, as well as saving and capital investment. An OECD study estimates that a one percentage-point rise in the tax wedge on labour income reduces employment by 0.25%.[2] The labour tax wedge in Korea was the fourth lowest in the OECD area in 2004 at 16% and well below the OECD average of 29%, thus encouraging employment and output growth.[3] Taking account of the implications of increased social spending for the tax burden and economic growth will tend to moderate plans to boost such expenditures. Korea's *Vision 2030* plan emphasises developing cost-efficient and growth-friendly social programmes.

This chapter begins with an overview of demographic trends and measures to raise the fertility rate. Policies to mitigate the impact of population ageing by raising labour force participation are discussed in the second section. The following sections examine the three major social insurance systems – public pensions, healthcare and long-term nursing care, which is to be introduced in 2008. The sixth section discusses social assistance in the context of rising income inequality and relative poverty. The chapter concludes with a set of policy recommendations shown in Box 5.6.

The demographic transition and the fertility rate

Korea's population is projected to peak at 50 million in 2020 and then decline about 15% by mid-century (Table 5.2). The median age, which was 20 years in 1960, reached 32 in 2000 and is likely to be nearly 50 in 2030, suggesting fundamental changes in the country's socio-economic structure. Moreover, the share of Korea's total population over the age of 65 is expected to double from 7% in 2000 to 14% by 2018 (Table 5.3). In contrast, this transition is projected to take 71 years in the United States and took 115 years in France. The further increase in the share of the elderly from 14% to 20% in Korea is exceptionally rapid at only eight years, compared with up to 40 years in major European countries. The rising number of older persons will boost the elderly dependency ratio from the second lowest in the OECD area in 2000 to the fourth highest by mid-century (Figure 5.2), the largest increase among OECD countries. This "compressed population ageing" reflects the transformation of Korea from an agrarian society to a modern, industrial state in the span of one generation.

Increasing life expectancy and falling fertility is driving population ageing. Life expectancy increased 21 years, from 55 years in 1960 to 76 years in 2000 (Table 5.2), the largest in the OECD area. A more important factor is the fall in the fertility rate – the average number of children a woman can expect to bear during her lifetime. It fell from six children in 1960 to below the replacement level in 1983 and further to 1.5 in 2000 (Figure 5.3),

Table 5.2. **Population indicators and projections for Korea**[1]

	Population (in millions)	Growth rate (per cent)[2]	Fertility rate[3]	Life expectancy (in years)	Median age (in years)	Share of elderly[4] (per cent)
1960	25.0	2.3	6.0	55.3	19.9	2.9
1970	31.5	1.8	4.5	63.2	19.0	3.1
1980	37.4	1.5	2.7	65.8	22.2	3.8
1990	43.4	0.6	1.6	71.3	27.0	5.1
2000	46.1	0.6	1.5	75.9	31.8	7.3
2010	49.2	0.1	1.2	79.1	37.9	10.9
2020	50.0	–0.1	1.2	81.0	43.7	15.7
2030	49.3	–0.5	1.3	81.9	49.0	24.1
2040	46.7	–1.0	1.3	82.6	53.1	32.0
2050	42.3	. .	1.3	83.3	56.2	37.3

1. Projections by the Korea National Statistical Office for the period 2005 to 2050.
2. The annual average growth rate for the decade. The figure in 1960, for example, shows the rate for the decade 1960 to 1970.
3. The average number of children that a woman can expect to bear during her lifetime.
4. The number of persons over the age of 65 as a percentage of the total population.

Source: Korea National Statistical Office.

Table 5.3. **Speed of ageing in selected OECD countries**

	Year when share of elderly (over age 65) make up			Years elapsed	
	7% of population	14% of population	20% of population	7 to 14%	14 to 20%
Korea	**2000**	**2018**	**2026**	**18**	**8**
Japan	1970	1994	2006	24	12
Germany	1932	1972	2012	40	40
United Kingdom	1929	1976	2021	47	45
Italy	1927	1988	2007	61	19
United States	1942	2013	2028	71	15
Sweden	1887	1972	2012	85	40
France	1864	1979	2020	115	41

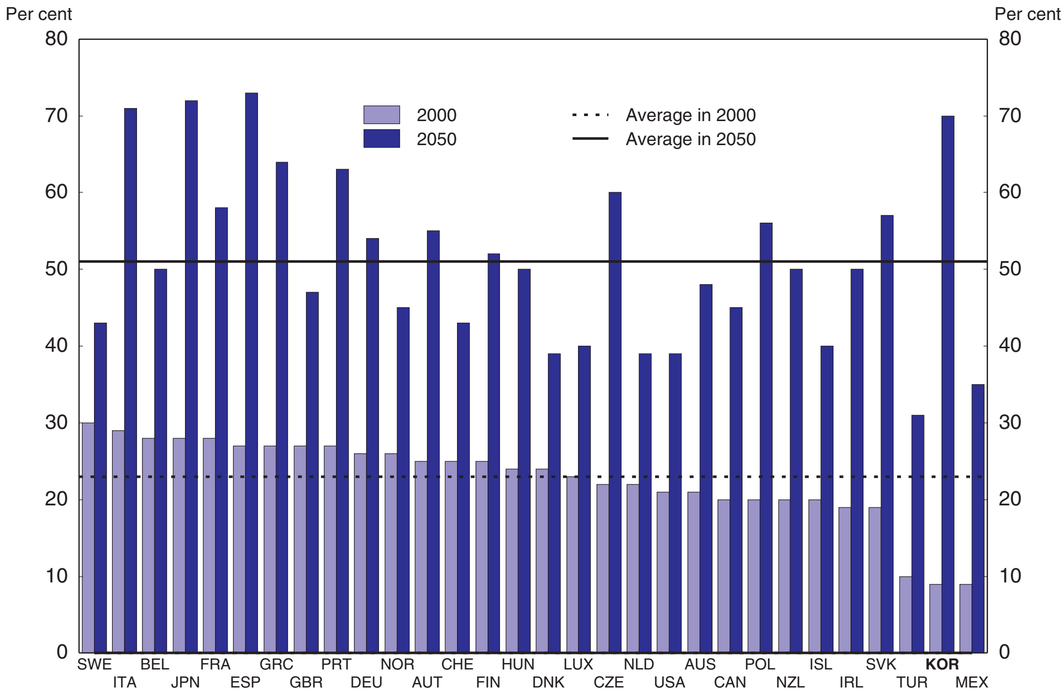
Source: United Nations.

reflecting long-term trends such as rising labour force participation of women and changing social values.[4] The decline continued with a 25% drop in the fertility rate between 2000 and 2005, to 1.08, the lowest level in the OECD area. The extent of the fall is unprecedented among OECD countries and may reflect heightened economic uncertainty in the wake of the 1997 financial crisis.[5] Indeed, the average age of marriage for women increased from 25.5 years in 1990 to 27.7 years in 2005, as young people seek greater financial security prior to starting families. The age of marriage is a key determinant of fertility as only 1% of births in Korea occur out of wedlock. The fall in the fertility rate to an exceptionally low level will have serious negative consequences in the long term.

Some of the decline in fertility in recent years may be temporary, reflecting the trend toward later marriage and childbirth. However, a study of OECD countries concluded that the fall in birth rates over the past few decades is unlikely to be fully reversed in the medium term (d'Addio and Mira d'Ercole, 2005). Korea's official population projections assume that the fertility rate will rebound to 1.3 by 2030 and then remain at that level. However, the government has set a target of increasing the fertility rate to the OECD average of around 1.6 by 2020. Accomplishing this goal requires an understanding of the causes of the decline and the factors that influence fertility.

Figure 5.2. **Population ageing in OECD countries**

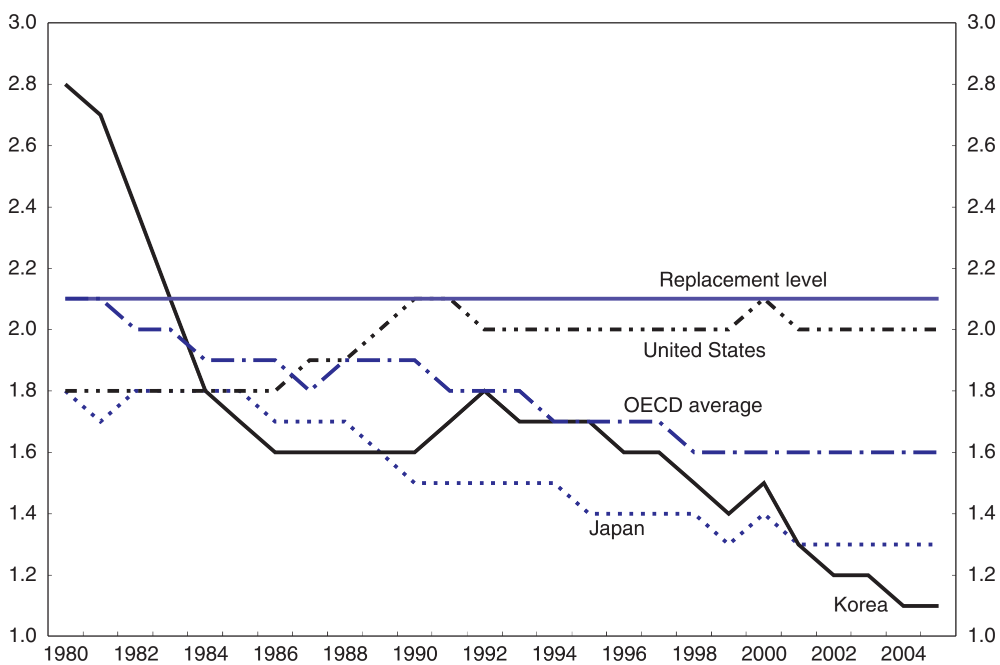
Population aged 65 and over, relative to the population aged 20-64



Source: OECD (2006e), *Society at a Glance: OECD Social Indicators*, OECD, Paris.

Figure 5.3. **Trends in total fertility rates in OECD countries**

Children per woman



Source: D'Addio and Mira d'Ercole (2005).

Government policies to boost the fertility rate

According to a 2005 government survey, 59% of Korean women would like to have two children, while 34% would like three or more, with an average of 2.3. Women thus have one child less on average than they would like to have, suggesting that there are constraints that discourage childbirth. Raising the fertility rate thus requires policies to relax these constraints. The cost of raising children appears to be an important factor in the case of Korea. In a 2005 government survey of married women between the ages of 20 and 44 with at least one child, more than half cited education as the largest item in the household budget, absorbing 18% of household income on average. One-third of the women surveyed did not plan to have more children because of the high cost of education.[6] A second factor limiting the birth rate is the difficulty of combining childrearing and work. Research by the OECD has found that the fertility rate is higher in countries where parental leave is longer and childcare enrolment rates are higher (d'Addio and Mira d'Ercole, 2005). Other factors include a lack of suitable housing (see Chapter 3). To achieve its goal of raising the birthrate, the government announced a five-year plan for the period 2006-10 (Box 5.1).

Focusing policies on the key constraints limiting childbearing

The government's plan to expand income-tested support for childcare and education of children under the age of five and to reform healthcare insurance should have a positive impact on fertility by reducing the direct cost of children.[7] However, the amount is rather modest compared to the high and rising overall cost of education, which as noted above, absorbs almost one-fifth of income in households with children. The authorities should address the issue of education costs directly to reduce this constraint on childbearing decisions, while at the same time improving the quality of the school system.

The 2005 *OECD Economic Survey of Korea* discussed a number of problems linked to the private, after-school tutoring institutes known as *hakwon*. *First*, they compete and overlap with public education, thus raising total expenditures on education unnecessarily. *Second*, the high burden of private tutoring hinders equal access to educational opportunities, raising equity issues. *Third*, they make it difficult for the public education system to cope with students of widely differing educational levels. *Fourth*, they create very long days for children, thus hindering their full development. The top priority should be to reduce expenditures on private tutoring, which is regarded by Koreans as a social disease that has a number of negative consequences. Several studies indicate that the high reliance on private tutoring is related to the low quality of schools (Taejong Kim, 2004) and dissatisfaction with the public education system (Hyunjin Kim, 2004). Structural reforms that bring decision-making power and accountability closer to those who teach and manage schools would enhance quality, while allowing more scope for independent schools.[8] In addition, the heavy reliance on standardised university entrance exams encourages reliance on after-school tutoring of students to gain admission to the best institutions. Allowing universities more autonomy in selecting applicants would reduce reliance on *hakwon*. The revision of the college admission system starting in 2008, which will give more weight to performance in school and less weight to the standardised test, may help reduce the importance of *hakwon*.

A second issue is the high cost of tertiary education, reflecting the low level of public funding. Indeed, government expenditure on tertiary education amounted to less than $1 000 per student (at PPP exchange rates) in 2002, compared to an OECD average of around $8 000. Consequently, most of the cost is borne by households. With the rate of advancement from secondary to tertiary education rising from 33% of the age cohort in 1990 to 81% in 2004, a

Box 5.1. **The government's plan to boost the fertility rate**

In 2005, the government created the Committee on Low Fertility and Population Aging Policy, which is chaired by the President of Korea, to guide the preparation of a basic plan on demographic issues every five years. According to the plan announced in 2006, the government intends to spend 32 trillion won (0.8% of GDP per year) over the period 2006-10. The main objectives are to alleviate the burden of bearing and caring for children, while creating more family-friendly workplaces to reduce obstacles facing women who wish to combine paid employment and childrearing.

Alleviate the burden of childcare

- *Increase the coverage of income-tested support for childcare and education of children under the age of* 5. At present, the government provides a benefit for children in households with an income less than the average urban household. In 2006, 0.6 million children (half of the 0 to 4 age group) received payments, which averaged 270 thousand won per month (14% of the average wage). The eligibility is to be expanded to households with an income of up to 130% of the average income by 2009, increasing the coverage from 50% to 80% of children.
- *Expand the role of primary schools in childcare*. The proportion of primary schools providing care for students is to be increased from 20% to 100% by 2010 and the availability of after-school activities is to be encouraged, thus reducing the burden of childcare on families and the need to enrol children in private tutoring institutes (*hakwon*).
- *Improve the treatment of families with children in social insurance programmes*. *First*, the criteria for assessing health insurance payments will be reformed to remove disadvantages for families with two or more children. Higher premium rates are still imposed for the second child and above. *Second*, the National Pension Scheme will allow "childbirth credits" worth one year of contributions for the second child and 18 months for the third child onward (up to a ceiling of 50 months).
- *Provide preferential treatment in housing, including public mortgage loans and rental housing, to families with three or more children*.

In addition, the government is considering the introduction of a "child allowance system" and measures to favour households with at least two children in future tax reform initiatives. At present, the income tax offers very small incentives to have children. In 2005, the tax burden on a two-earner couple with two children amounted to 16% of labour costs, only slightly less than the 16.4% if they had no children.* The average tax wedge in the OECD area is reduced by 4.3 percentage points, from 34.3% to 30%, for a couple with two children.

Combining work and family responsibilities

- "Provide quality, public childcare services" by increasing investment in public childcare facilities to boost their share of children in institution-based care from 11.2% in 2005 (Table 5.4) to 30%.
- Introduce a subsidy to private-sector facilities that care for children up to age 2. To ensure the quality of such services, an accreditation system was introduced in 2005 based on an assessment carried out every three years.
- Encourage flexible working schedules, including shorter hours for parents with childcare responsibilities.
- Promote family-friendly workplaces by providing rewards, certification and financial incentives to firms with good practices.

Box 5.1. **The government's plan to boost the fertility rate** *(cont.)*

- Make parental leave more flexible and generous. Beginning in 2008, parents will be entitled to one year of leave to care for children up to age 3 (previously up to age 1). In 2007, the benefits for parental leave will be raised by a quarter to 0.5 million won per month (25% of the average wage). The number of workers taking parental leave is low in Korea – only 10 500 in 2005 – about one-quarter the number of women taking maternity leave. Moreover, men accounted for only 2% of those taking parental leave.

Paid maternity leave is provided for 90 days, with 60 days financed by firms and the remaining 30 days by the Employment Insurance System (EIS). Beginning in 2006, EIS covers the entire 90 days for women employed in SMEs.

Table 5.4. **Early childcare and education in Korea**

A. Enrolments in childcare facilities (June 2006)

	Facilities		Children (thousands)		Staff (thousands)	
	Number	Per cent	Number	Per cent	Number	Per cent
Public	1 507	5.2	112.7	11.2	14.4	9.6
Private, non-profit	1 484	5.2	121.4	12.1	16.3	10.9
Corporate	975	3.5	55.3	5.5	8.2	5.5
Individual	12 860	44.7	566.1	56.2	76.5	51.2
Parent	49	0.2	1.1	0.1	0.3	0.2
Homecare	11 575	40.2	136.2	13.5	31.6	21.1
Work-place based	291	1.0	14.0	1.4	2.3	1.5
Total	**28 761**	**100.0**	**1 006.8**	**100.0**	**149.5**	**100.0**

B. Enrolment in childcare centres and kindergartens (thousand children in June 2006)

Age	Total number of children	Childcare centres		Kindergartens		Total enrolled	
		Number of children	Per cent	Number of children	Per cent	Number of children	Per cent
0-2 years	1 436.2	305.6	21.3	0	0.0	305.6	21.3
3 years	513.9	226.7	44.1	74.8	14.6	301.5	58.7
4 years	594.8	220.3	37.0	177.0	29.8	397.3	66.8
5 years	613.9	254.2	41.4	289.8	47.2	544.0	88.6
Total	**3 153.5**	**1 006.8**	**31.9**	**541.6**	**17.1**	**1 548.4**	**49.0**

Source: Ministry of Education and Human Resource Development and Ministry of Gender Equality and Family.

* This measure, taken from the OECD's *Taxing Wages*, refers to income tax plus employee and employer contributions, less cash benefits, as a per cent of total labour costs. It assumes a two-earner household, earning 100% and 33% of the average wage.

university education is considered almost mandatory by Korean parents. The projected 11% decline in the number of persons under the age of 19 over the next five years should allow a rebalancing of public outlays on education from primary and secondary level education (3.3% of GDP) to tertiary education (0.3%). Increased public spending on tertiary education would reduce the burden on parents while reversing the decline in the quality of the university system that accompanied its rapid expansion.

The government's plans to increase the compatibility of female paid employment and childcare should have a positive effect on fertility. Many women who wish to pursue a career are reluctant to have any children. One factor that enables women to combine employment and parenthood is the availability of childcare for pre-school children. In the OECD area, the proportion of children enrolled in childcare facilities has a positive effect on fertility rates (d'Addio and Mira d'Ercole, 2005). In Korea, the proportion of children enrolled in childcare is 21% for the 0-to-2 age group and 72% in the 3-to-5 age group (Table 5.4), close to the OECD averages of 25% and 73%, respectively. Moreover, the cost of childcare is relatively low. Childcare for two children (aged 2 and 3) in a public facility costs 1.8% of gross household income compared to an average of 2% in the OECD area, while the cost of privately-provided childcare is limited by price ceilings.

Overall, there is not a shortage of childcare, given the vacancy ratio of 16% (see the 2005 *OECD Economic Survey of Korea*). Nevertheless, a 2004 survey reported that 23% of women did not work "because they could not find a credible childcare facility".[9] The proportion of children under the age of six in childcare institutions would thus be higher if more high-quality care were available. The government plans to expand publicly-provided childcare in order to triple the proportion of children under the age of six in public facilities to 30% (see Box 5.1), a goal that will be expensive to achieve. Improving the availability of private childcare could be more efficiently achieved by granting earmarked support to parents. A number of countries, including Australia and the United States, have found success in using a system of childcare vouchers. Other countries, such as Canada, Germany and the United Kingdom, use tax credits and cash benefits to reimburse documented expenses. Shifting government funding from supplying childcare services to providing vouchers to families would foster competition among providers and give more choice for parents.[10] It can attract new funding and greater dynamism while limiting the outlays of governments (OECD, 2006a). Concerns about quality can be met by requiring that support for parents be used for childcare provided by licensed facilities.

Achieving the benefits of competition requires lifting the price ceilings imposed on private childcare services. For a child less than one year old, the ceiling is set at 361 000 won ($378) per month, with the government providing an additional 292 000 won (Table 5.5). The combined amount (653 000 won) is well below the 789 000 won that the government calculates is necessary to provide adequate care. This gap reduces the provision of childcare by private providers. It is not surprising, therefore, that a significant proportion of parents cannot find suitable childcare. The government argues that the price ceiling is needed to

Table 5.5. **Childcare costs in the private sector**

Thousand won per month in 2007

Age	0 to 1 years	1 to 2 years	2 to 3 years
Price ceiling on fees	361	317	262
Government subsidy[1]	292	134	86
Total	**653**	**451**	**348**
Cost of adequate care[2]	789	524	403
Shortfall	136	73	55

1. To private childcare facilities.
2. Calculated by the Government.
Source: Government of Korea (2006), *Seromachi Plan 2010.*

prevent a rise in the cost of childcare to households. However, the impact on low-income households could be offset in the vouchers provided to households, a less expensive approach than the current plan to build public childcare facilities.

However, additional spending on childcare can only be effective in raising fertility rates if workplace practices change so that parents can combine careers with children. In particular, the average working time is around 2 350 hours per year, 37% above the OECD average. More than three-quarters of Korean women work longer than 40 hours per week, while 86% of men work more than 40 hours per week, reflecting in part the pro-work incentives of low marginal tax rates. The practice of unpaid overtime and long commutes in urban areas further lengthen working days. Finally, part-time employment, which is useful in balancing employment and family responsibilities in many countries, is relatively low in Korea, at 13% of female employees, compared to an OECD average of 26%. In sum, implementing family-friendly policies in the public sector and encouraging their introduction in the private sector is a key priority.

Offsetting population ageing through increasing labour force participation

While boosting the fertility rate would slow the pace of population ageing and the burden on the working-age population, it would not be sufficient to prevent a significant decline in the labour force in the first half of this century. According to the government's population projections, the labour force would fall by 28% between 2020 and 2050 if participation rates for each age group were to remain at their current levels (Figure 5.4). Increasing the overall participation rate, which is below the OECD average, is important to cope with population ageing. The remaining scope for increasing the participation rate appears to be primarily among prime-age women in Korea, who have the third lowest rate in the OECD area (Figure 5.5). Consequently, the gap between the male and female employment rates is one of the highest in the OECD area at 23 percentage points. Another priority is to raise the age of retirement from firms.

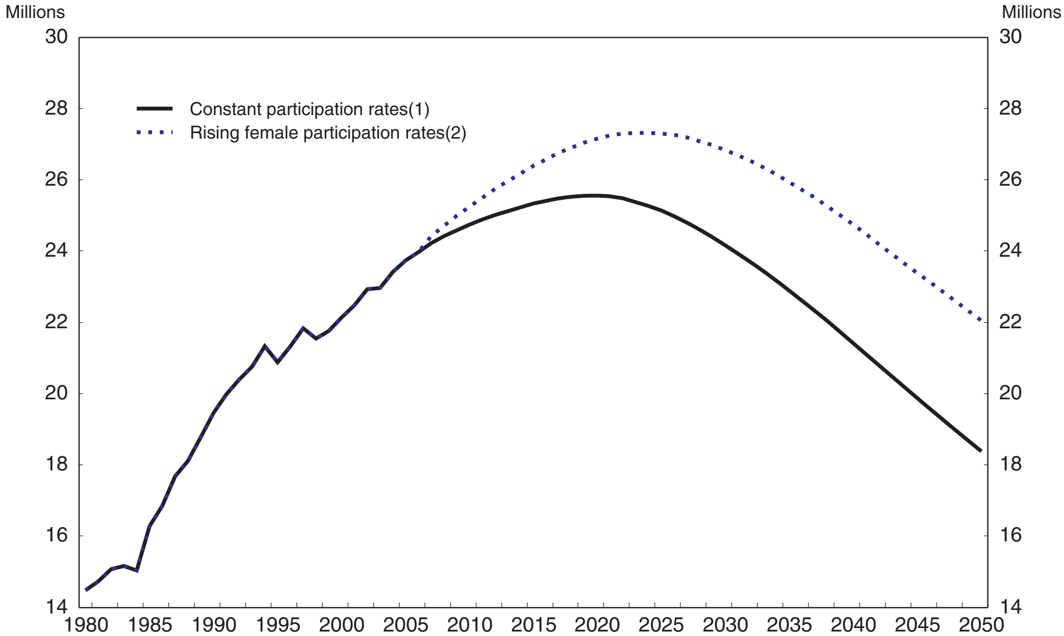
Boosting the labour force participation rate of women

If the participation rate for women were to increase to the same level as for men by mid-century, the labour force in 2050 would be 20% higher than in the case of unchanged participation (Figure 5.4). Female employment is limited by the fact that a significant proportion of women withdraws from the labour force at the time of childbirth. Consequently, the life-time participation pattern of women is M-shaped, with peaks in the 20 to 24 and 45 to 49 age groups (see the 2005 *OECD Economic Survey of Korea*). Consequently, the female employment rate, at 52.5% is well below the OECD average of 60%. There is a high opportunity cost attached to not fully using women's skills in the labour force. Indeed, 97% of women in the 25 to 34 age group in Korea have finished at least upper secondary school, the highest proportion in the OECD area.

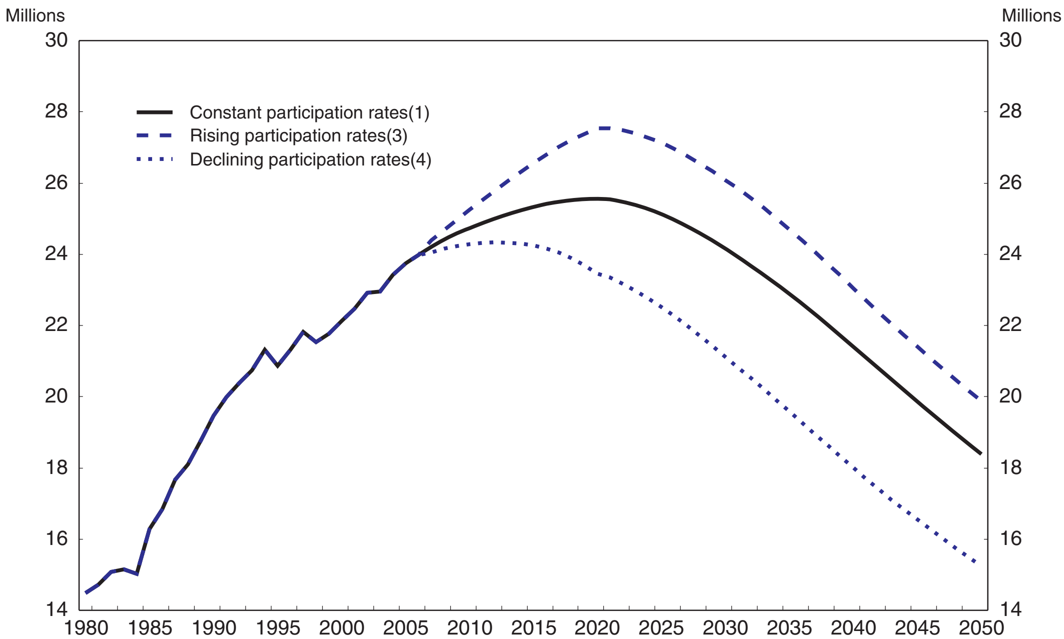
The experience of countries such as the United States and New Zealand, which have fertility rates of two and female employment rates close to 70%, demonstrates that it is possible to combine high fertility and high female employment (Figure 5.6). The correlation between female employment and fertility rates in the OECD area is significantly positive. For Korea, the policies discussed above to boost fertility rates by encouraging family-friendly policies in the business sector and expanding the availability of affordable childcare will tend to raise both fertility and participation rates. Indeed, in a 2006 government survey, 46% of women cited childcare as the chief obstacle to female labour force participation.[11] Paid

Figure 5.4. **Long-term projections of the labour force**

A. Labour force with different scenarios for female participation



B. Labour force with different scenarios for older workers

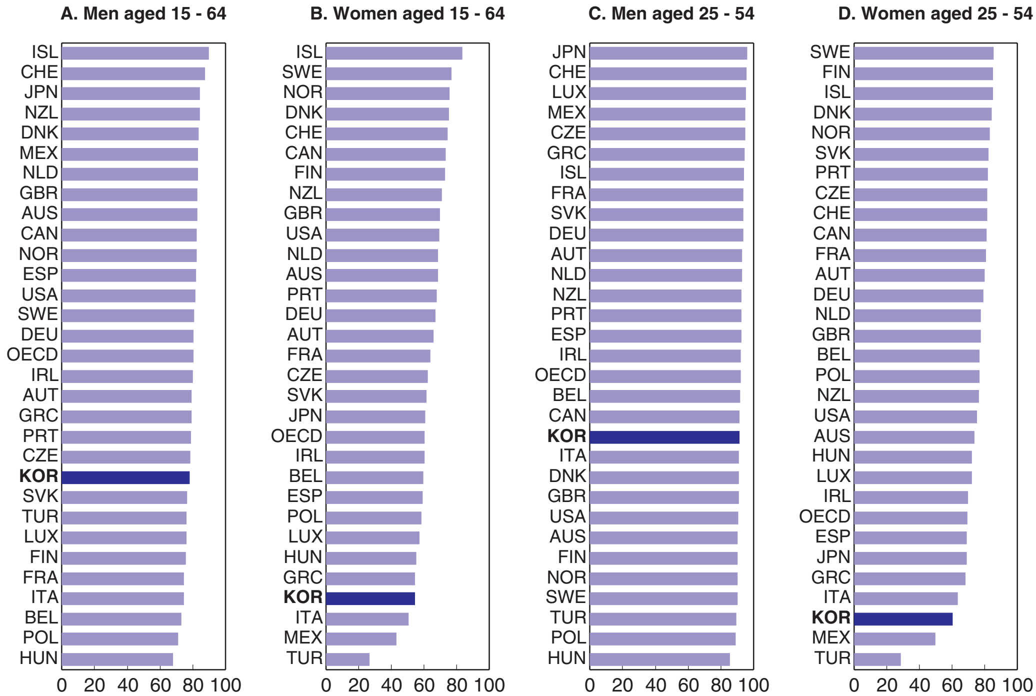


1. The participation rates for men and women remain at their current levels for each age group.
2. Female participation rates reach current male rates in each age group by 2050.
3. The participation rates converge by 2030 to the maximum value in the OECD for each gender and age group over 50, while the rates for younger workers remain at their current levels.
4. The participation rates converge by 2030 to the average value in the OECD for each gender and age group over 50, while the rates for younger workers remain at their current levels.

Source: OECD calculations based on population projections by the Korea National Statistical Office.

Figure 5.5. **International comparison of labour force participation rates**

Per cent, 2005[1]



1. For the Netherlands and Sweden, data are available only for 2004.

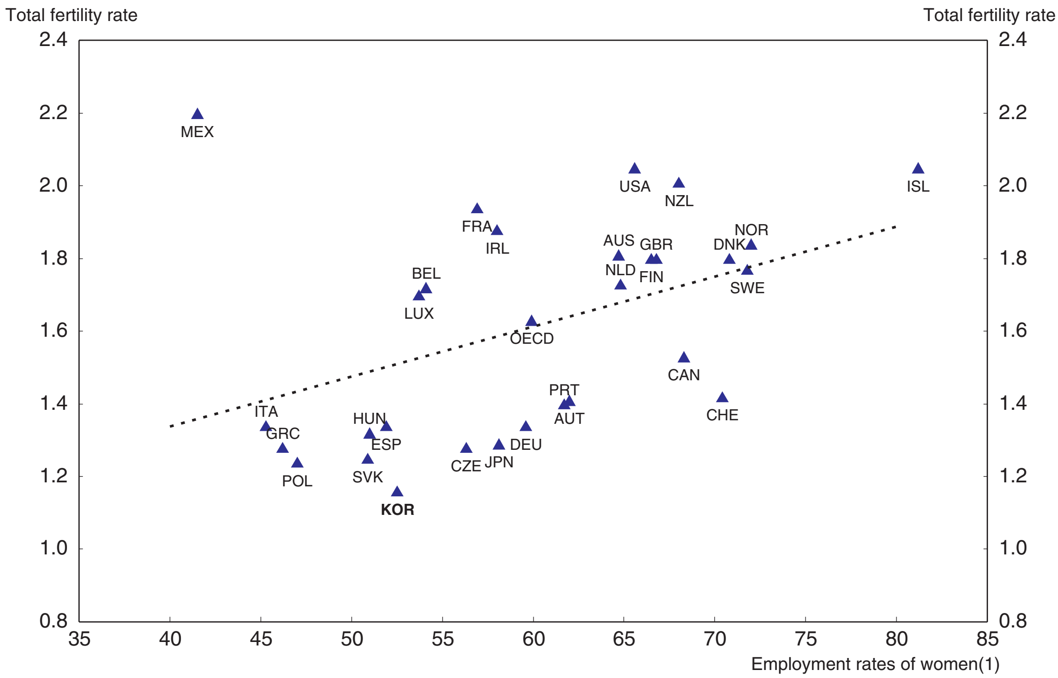
Source: OECD (2006c), *Employment Outlook*, OECD, Paris.

parental leave and childcare subsidies have been found to have a significantly positive impact on female participation rates in other OECD countries (Jaumotte, 2003). Compared to the OECD average of five months, paid maternity leave in Korea is 90 days and there is some question about its effective coverage. Indeed, the average maternity benefit per birth in Korea in 2002 was only 3% of the average production workers' wage, one of the lowest benefit levels in the OECD area and well below the average of 42% (d'Addio and Mira d'Ercole, 2005). On the other hand, providing tax and social benefits for families with children, as suggested in the government's five-year plan, has been found to lower female participation in other OECD countries. Transfers to families with children, therefore, should be aimed at reducing child poverty, rather than boosting the fertility rate.

In addition to facilitating female employment and childrearing, there is the question of attracting mothers who have left jobs back into the labour force once their children are older. Incentives to return to work are weakened by labour market conditions, including the large gender wage gap, which at 40% in 2003, is more than double the OECD average of 18%.[12] The wide gap reflects a number of factors. *First*, although women make up 38% of the workforce, their share of managerial jobs is only 8%, compared to 20-30% in many OECD countries (OECD, 2007). *Second*, the tradition of seniority-based wages rewards workers with long tenures. As a result, women who interrupt their careers for children are locked into low salaries regardless of their performance. *Third*, the high and rising proportion of non-regular workers, who receive significantly lower salaries and benefits (see below), limits opportunities for women, as the incidence of non-regular employment is nearly twice as high for women. Even women employed as regular workers prior to interrupting their careers for children find it difficult to return as regular workers (Hwang and Chang, 2004).

Figure 5.6. **Female employment rates and total fertility rates**

2005



1. Refers to women aged 15-64.

Source: OECD (2006e), *Society at a Glance: OECD Social Indicators*, OECD, Paris.

Unattractive employment options encourage many women to remain out of the labour market. Indeed, Korea is the only OECD country in which the employment rate of female university graduates (57%) is less than the rate for women with less than an upper secondary education (59%). In contrast, the average employment rate for female university graduates in the OECD area, at 79%, is significantly higher than the 49% rate for women with less than an upper secondary education. Creating better opportunities for women requires reversing the rising trend of non-regular workers, while encouraging the use of performance-based pay in place of the seniority-based system. In addition, OECD experience indicates that paid maternity leave of up to five months is ideal in terms of female labour force participation, suggesting that the three months currently provided in Korea should be lengthened.

Making effective use of the human capital of older workers

While almost half of the population is under the age of 30 at present, more than half will be over the age of 50 by 2030 and over age 56 by the middle of the century, according to government projections. Consequently, the size of the labour force will depend critically on the participation rate of older persons. As noted earlier, the labour force would decline by more than a quarter between 2020 and 2050 if participation rates were to remain at their current levels (Figure 5.4). The decline could be limited to 22% if the participation rate for the 50 to 64 age group were to increase to the maximum level recorded in the OECD area in 2000 (Panel B). On the other hand, the labour force would decline 40% from its 2020 peak if the participation rate for older workers were to decrease to the OECD average. Unlike most other OECD countries, Korea has not experienced a decline in participation rates for older workers. Indeed, the rate remains relatively high for men in the 50 to 64 age group and for both men and women over 65, reflecting in part the early stage of development of the pension system. Older persons thus depend to a large degree on employment, as well as transfers from family members, for support. The sensitivity of the size of the labour force in 2050 to the participation rate of older workers demonstrates the importance of policies to encourage those over age 50 to remain economically active in order to increase or at least maintain their participation rate.[13]

In addition, it is important to use the human capital of older workers more effectively. At present, employees tend to leave firms around the age of 50, a relatively young age in a rapidly ageing economy. Indeed, the average employment tenure peaks at 11 years in the 45 to 49 age group – well below most other OECD countries where the peak is in the 55 to 64 age group – and then falls sharply (see the 2005 *OECD Economic Survey of Korea*). The early departure of employees reflects the importance of seniority – rather than individual performance – in determining wage levels. Most firms set a mandatory retirement age, generally well below the age of 60 recommended by law, to avoid being burdened by a large number of expensive older workers. Given the difficulty of dismissing regular employees, a mandatory retirement age also helps firms to adjust their workforces (Cho and Lee, 2005). About three-quarters of departing employees become self-employed, primarily in sectors characterised by low productivity and income. Consequently, 40% of workers over the age of 55 are self-employed, compared to only 27% of those under that age. Of those who continue as employees past the age of 50, the majority work as non-regular workers in small firms.

Older self-employed persons tend to work in sectors, such as agriculture and retail, which are facing significant structural change. However, as the average education level of older persons increases over time, they may become less interested in accepting self-employment and jobs at small companies offering significantly lower salaries. Consequently, the pattern of employees leaving firms at a relatively young age may have an increasingly negative impact on the participation rate in the future. It is thus important to encourage greater flexibility in wages within firms so that older workers do not become too expensive. Requiring companies to set the age for mandatory retirement at an age closer to the pension eligibility age – or forbidding the use of mandatory retirement altogether – would be beneficial. Firms accept the seniority-based wage systems demanded by employees on the condition that they can force older workers to leave once their productivity no longer matches their pay. Without mandatory retirement, companies would insist on wage systems that more closely reflect productivity. In addition, the retirement allowance system (see below), which increases the cost of keeping older workers, needs to be reformed. Finally, the National Pension Scheme should be closely monitored as it matures to avoid providing incentives for early retirement.

The relatively low level of education of older persons is a major challenge to their participation in the labour force. Indeed, two-thirds of unemployed persons over the age of 50 failed to complete secondary school, leaving them behind in Korea's increasingly knowledge-based economy. Three-quarters worked previously as daily or temporary workers (Chang, 2004). Government expenditures on lifelong learning, including vocational training, amounted to only 0.8 trillion won (0.1% of GDP) in 2004. The participation rate of adults in lifelong education is 23%, which is in the lower group of OECD countries. Moreover, the rate for those who failed to complete secondary school is less than 10%. More emphasis on lifelong learning and training would likely improve the employment prospects of older workers.

Lifelong learning may be more effective than the employment subsidies offered by the government. The number of workers covered by three different subsidies to encourage firms to hire and retain older worker rose from 88 000 in 1996 to more than 250 000 in 2004 (see the 2005 *OECD Economic Survey of Korea*). Real estate service firms account for about two-thirds of the companies receiving subsidies, with the majority concentrated in building maintenance services. The concentration of the subsidies in one business line raises doubts as to their effectiveness in boosting the overall employment of older workers. Indeed, 92% of firms receiving the subsidy responded that they would have hired the same number of workers in the absence of any assistance (Chang, 2004). This is consistent with results in other OECD countries showing deadweight costs as high as 90% (Martin and Grubb, 2001).

Ensuring adequate income for elderly persons

The relative poverty rate – based on an income threshold of 40% of the national median – for households that include elderly persons has risen from 27% in 1991 to 38.8% in 2000, nearly five times higher than the 8.1% national average (Table 5.6). In contrast, the average relative poverty rate for the elderly in the OECD area, at 13% in 2000, was not far above the average of 10% for the total population.[14] There has been a weakening of the tradition of three-generation households in Korea. In 2005, elderly persons living alone or with a spouse accounted for 55% of households with an elderly person. In contrast, the share of elderly persons living with one of their children was only 39%. Still, three-quarters of the elderly receive financial support from their children, while one quarter earns income from their own and/or their spouse's employment. Pension income still plays a minor role: only 14% of the elderly receive public pensions, reflecting the relatively recent introduction of the National Pension Scheme (Box 5.2). In addition, 9% receive social assistance (Korea Institute for Health and Social Affairs, 2006).

The maturation of the NPS will increase the income of the elderly. However, the number of contributors to the NPS leveled off at around a third of the working-age population in 2000 (Figure 5.7). The proportion is significantly higher for men, at half of the male working-age population, compared to only a quarter for women. Adding the occupational pension

Table 5.6. **Relative poverty rate by type of household**

Threshold for relative poverty rate is 40% of median income

	1991	1996	2000
A. Relative poverty rate			
Couple households	3.8	2.4	4.9
Elderly households	27.0	40.3	38.8
Female-headed households	13.1	11.0	14.6
Male-headed households	7.1	6.0	11.6
Single-person households	7.1	9.4	16.4
Total households	5.0	4.6	8.1
B. Demographic structure			
Couple households	88.3	84.9	82.8
Elderly households	2.9	3.6	6.7
Female-headed households	4.3	5.4	5.0
Male-headed households	2.7	3.2	3.4
Single-person households	1.8	2.9	3.1
Total households	100.0	100.0	100.0

Source: Ku (2004).

Box 5.2. **Public pensions in Korea**

The National Pension Scheme (NPS) was created in 1988 as a partially-funded system with a strong redistributive element, as benefits are based equally on the average wage in the economy and individual earnings. In effect, all beneficiaries with 40 years of contributions will receive a basic pension equivalent to 30% of the average wage, with the remainder of the benefit determined by the individual's earnings. In setting pension benefits, average earnings, based on the three-year average of all insured persons during the three years immediately prior to retirement, are valorised in line with prices and the benefit is indexed to prices after retirement.

The coverage of the NPS was initially limited to regular employees in firms with at least ten workers. Compulsory coverage has been gradually expanded to include all workplaces and types of employees and the self-employed. Consequently, the number of persons paying contributions increased from 4.4 million in 1988 to 12.8 million in 2006, 53% of the labour force (Figure 5.7). Payment of the full NPS old-age pension will only begin in 2008, once the initial participants meet the minimum twenty years of contributions. However, the government is already paying benefits to 1.4 million persons who receive other types of NPS pensions,[1] although total payments are small at 0.3% of GDP.

Figure 5.7. **The coverage of the National Pension Scheme**

Number of contributors

Source: National Pension Service and the Korea National Statistical Office.

The government is required to review the sustainability of the NPS every five years. Although the NPS is less than 20 years old, it has already been revised several times. The pension benefit accrual rate was initially set at 1.75% a year, implying a replacement rate

Box 5.2. **Public pensions in Korea** *(cont.)*

of 70% for an average income worker with 40 years of contributions. Even though the initial contribution rate of 3% was doubled to 6% in 1993, benefits remained too high relative to contributions. In 1998, the NPS was reformed by reducing the average replacement rate to 60% (an accrual rate of 1.5%) and raising the contribution rate to 9%. Under these parameters, the scheme would have moved into deficit in 2036, exhausting the National Pension Fund by 2047. Ensuring financial sustainability – defined as a reserve fund large enough to pay two years of benefits – through 2070 would have required boosting the contribution rate to nearly 20% by 2030.

A bill was introduced in the National Assembly in 2003 to reduce the replacement rate from 60% to 50% in 2008, accompanied by a rise in the contribution rate to 15.9% by 2030. However, this proposal was blocked by the National Assembly. Finally, in December 2006, a compromise was approved by a committee in the National Assembly to lower the replacement rate to 50% (an annual accrual rate of 1.25%), while boosting the contribution rate to 12.9% by 2018. This bill, though, was also rejected by the National Assembly in April 2007. This reform would have delayed the depletion of the National Pension Fund from 2047 to 2065. However, ensuring the long-run financial sustainability of the system under the planned contribution rate of 12.9% would have required a reduction of the replacement rate to 40%.[2] In 2008, the government will introduce a means-tested benefit equal to 5% of the average wage. Initially, 60% of the elderly will be eligible for this means-tested benefit, with total payments amounting to 0.3% of GDP initially.

Korea is one of only three countries with a pension eligibility age as low as 60, although it is to be gradually increased to 65 by 2033.[3] There is a risk, though, that a significant number of workers will opt for the "early pension", which is available from age 55. It is essential to avoid incentives for early retirement, which depend on the combined effect of the replacement rate – the level of pension income relative to wage earnings – and the change in pension wealth when continuing to work. A high replacement rate encourages withdrawal from the labour force, as would a loss in net pension wealth if the person continues to work. The increase in the reduction rate from 5% to 6% per annum – which lowers pension benefits to those who retire early – may reduce incentives for early retirement.

It is also important to reform the occupational pension schemes established for civil servants (1960), military personnel (1963) and private-school teachers (1975). These schemes, which currently insure 1.4 million workers (6% of the labour force), rely increasingly on government subsidies, which amounted to 1.5 trillion won in 2005 (excluding the government's contributions as an employer). The amount of subsidies is projected to rise sharply in the future, indicating the need for reform. Eliminating subsidies for the civil service pension would require boosting the contribution rate from 8.5% to 37%. In addition, it is essential to address the issue of portability between the occupational schemes and the NPS.

1. These include the "special pension" (paid to persons over 60 with an insured period of at least five years), the "early pension" (over 55 and ten years insured), the "reduced pension" (over 60 and 10 to 20 years insured) and the "active pension" (persons between 60 and 64 who continue to work and have an insured term of at least ten years).
2. The political parties agreed to a compromise in April 2007 that would reduce the replacement rate from 60% to 40%, while keeping the contribution rate unchanged at 9%.
3. Raising the age further should be considered as one option to ensure the sustainability of the NPS without further cutting the replacement rate.

schemes for the civil service, military and private-school teachers boosts the proportion of contributors to almost 40% of the working-age population (Table 5.7). However, it remains low compared to the OECD average of 63.4%. The low level of coverage in Korea reflects the large number of self-employed persons and non-regular workers. The long-term projections of the NPS assume that less than half of the elderly will receive NPS pensions in 2030, suggesting that it does not expect a significant expansion in coverage.

Table 5.7. **International comparison of pension coverage**

		Number of contributors to mandatory pension system:[1]	
		As per cent of labour force	As per cent of working-age population
Austria	2004	80.8	58.8
Belgium	1995	86.2	65.9
Canada	1992	91.9	80.2
Czech Republic	2003	86.0	61.0
Denmark	2003	92.0	74.0
Finland	2003	90.3	67.0
France	2003	90.0	62.0
Germany	2003	88.0	64.0
Greece	2002	79.0	52.0
Hungary	1996	77.0	65.0
Iceland	1993	92.0	91.0
Ireland	2002	93.0	64.7
Italy	2003	90.0	56.0
Japan	2003	94.0	73.0
Korea	**2004**	**58.8**	**39.9**
Mexico	2002	34.6	22.6
Netherlands	2002	94.0	72.0
Norway	2003	92.0	75.0
Poland	2005	84.8	54.5
Portugal	2003	92.0	71.0
Slovak Republic	2003	58.8	55.0
Spain	2003	92.0	63.0
Sweden	2003	90.0	72.0
Switzerland	2003	99.0	84.0
Turkey	2002	44.9	24.3
United Kingdom	2003	94.0	73.0
United States	2003	91.0	71.0
Average		83.6	63.4

1. This table does not take into account any universal, tax-financed pensions.
Source: World Bank (2007), *World Development Indicators*.

In addition to the low level of coverage, there is a risk that pension benefits will be relatively small. In its long-term projections, the NPS assumes that the average period of contribution of beneficiaries in 2030 will be 17.6 years and will increase only gradually to 20.7 years by 2050. With an annual accrual rate of 1½ per cent, the replacement rate for a worker in 2030 who had earned an average income and had 40 years of contributions, would be 26%, less than half of the targeted replacement rate of 60%. Such an income is close to the minimum cost of living, which is set at 20% of the average wage. If the authorities follow the option of lowering the target replacement rate to 40%, the average pension in 2030 would then fall below the minimum cost of living. Moreover, there is likely to be a significant variation among beneficiaries in their contribution periods. Salaried workers would have as many as

30 years if the average age when workers leave companies rises from its current level of around age 50 to 55. With the overall average of 17.6 years of contributions, the average contribution period for the self-employed is likely to be quite short, leaving them below the minimum cost of living. Moreover, there is a large gap in the level of contributions between those ensured through their workplace (1.9 million won in 2006) and individually-insured persons (1.05 million won), who tend to be self-employed. In sum, the low level of coverage, short average contribution period and small payments by those who are self-employed raise the risk that the NPS will not be adequate to reduce the rate of poverty among older persons.

Options for further reform of the National Pension Scheme

In addition to ensuring its long-run financial sustainability, reform of the NPS should focus on the effectiveness of the pension system in reducing poverty among the elderly. One option is to substantially boost the amount of contributions to the NPS and its coverage, which has stalled at around one-third of the working-age population. Achieving this objective is difficult, as noted above, because of the large number of non-regular workers and self-employed and the lack of transparency about their income. Given the uncertainty, the NPS assumes, as a general practice, that self-employed persons have the same earnings as middle-income employees, thus discouraging low-income persons from contributing to the NPS.

Given the difficulty of substantially extending the coverage of the NPS, the recent introduction of the means-tested benefit is a step in the right direction, although at 5% of the average wage, it is well below the minimum cost of living (0.4 million won per month), which is 20% of the average wage, according to the National Basic Livelihood Security System (NBLSS). Expanding the benefit to the minimum cost of living to prevent absolute poverty and extending its coverage to all persons over the age of 65 is estimated to boost its cost from 1.1% of GDP in 2050 to around 6.8% (Box 5.3). The cost of this universal pension would be in addition to contributions to the NPS, which would reach 7% of GDP in 2050, based on a contribution rate of 12.9%. The total cost of a universal pension and the NPS would thus rise to almost 14% of GDP in 2050 (Table 5.8, Column 2). This is above the OECD average of 11% of GDP projected for 2050 (Dang *et al.*, 2001). A higher than average level in Korea would not be surprising given that its share of elderly will be one of the highest in the OECD area. Nevertheless, this would be a tremendous increase in public social spending.

The total cost of public pensions under the two-part approach could be reduced by further scaling back the NPS. With the development of financial markets, the rationale for government involvement in redistributing people's income over their lifetime has weakened, suggesting a greater focus on protecting the elderly against poverty. If the replacement rate of the NPS were cut to 20%, the contribution rate could be reduced to 6.5% of labour income, 3.5% of GDP (Table 5.8, third column). The combined replacement rate of 40% – 20% each from the universal pension and the NPS – would cost around 10% of GDP in 2050, close to the level projected for the OECD area. The cost could be further reduced by cutting the universal pension. If it were set at 15% of the average wage, the total cost (including the NPS) would be 8.6% of GDP in 2050 (Table 5.8, fourth column), well below the projected level for the OECD.

In sum, the Korean authorities have a choice between the current approach, which will provide a substantial public pension benefit to nearly half of the population, and systemic reform to create a two-part national system that includes a universal pension. There are advantages to each of these options. The current approach has the positive feature of requiring saving by the current working population in preparation for retirement, thus promoting inter-generational equity. The advantage of the two-part national pension is

Box 5.3. **Options for pension reform**

A basic or universal pension

This box tries to estimate how much it would cost to transform the means-tested benefit to be introduced in 2008 into a universal pension. The means-tested benefit will be equivalent to 5% of the average national wage and will be provided to 60% of the elderly, at a cost of 0.3% of GDP (Box 5.2). As the proportion of the elderly rises from 10% in 2008 to 37% by 2050, the cost would be around 1.1% of GDP (Table 5.8, first column). Raising the benefit to the minimum cost of living (20% of the average wage) and making it universal would boost the cost to 6.8% of GDP in 2050:

- Increasing the benefit from 5% of the average wage to 20%, while maintaining the coverage at 60% of the elderly, would raise the total cost to 4.4% of GDP.
- Eliminating the means test to make it a universal pension would further increase the cost to around 6.8% of GDP (Table 5.8 second and third columns), taking into account that 8.6% of the elderly already receive social assistance to boost their income to the minimum cost of living.[1]

Lowering the replacement rate to 15% would reduce the cost to 5.1% of GDP (Table 5.8, fourth column).

Table 5.8. **Options for pension reform**

Projections for 2050

	Government's reform plan[1]	Government's reform plan plus universal pension[1]	Universal pension plus scaled-back NPS	Reduced universal pension plus scaled-back NPS
Means-tested/universal pension[2]				
Replacement rate (%)	5.0	20.0	20.0	15.0
Cost (% of GDP)[3]	1.1	6.8	6.8	5.1
National Pension Scheme				
Contribution rate (%)	12.9	12.9	6.45	6.45
Replacement rate (%)	40.0	40.0	20.0	20.0
Cost (% of GDP)	7.0	7.0	3.5	3.5
Total cost (% of GDP)	8.1	13.8	10.3	8.6

1. Under the government's reform plan, the remplacement rate would be cut from 60% to 50%. However, it needs to be cut to 40% (as assumed in the first two columns) to ensure the sustainability of the NPS under the proposed contribution rate of 12.9%. Otherwise, the contribution rate would need to be raised to nearly 16%. The cost in terms of GDP assumes that employee compensation and self-employed income – which are subject to NPS contributions – remain around 55% of GDP.
2. Both the means-tested benefit in the government's plan and a universal pension would be financed by tax revenue.
3. For the universal pension, it nets out the savings in social assistance to the elderly (currently 8.6% receive social assistance).

Source: OECD calculations.

The cost of the NPS

Under the government's reform proposal, the contribution rate would rise to 12.9% of earnings in 2018. Assuming that it would stay at that level – sufficient to ensure the sustainability of the NPS for a replacement rate of 40% – NPS contributions would amount to 7% of GDP.[2] The total cost of the NPS and the means-tested benefit would be around 8.1% of GDP in 2050 (Table 5.8, column 1), while transforming the benefit into a universal pension would be significantly more expensive (column 2). The cost assuming that the NPS is scaled back is shown in column 3, while column 4 assumes that both the NPS and the universal pension are reduced.

1. There would be additional savings from eliminating the Old-age Allowance, which provides 50 000 won a month to social assistance recipients over the age of 80, 45 000 won to those between 65 and 80 and 35 000 won to low-income elderly.
2. This does not take account of the public occupational schemes, which cover 6% of the labour force and are scheduled for fundamental reform. Table 5.8 assumes that everyone is covered by the NPS.

that it would prevent absolute poverty among the elderly. In terms of financing, the two-part system would rely more on tax revenue and less on social security contributions.

The National Pension Fund amounted to 185 trillion won (23% of GDP) in October 2006 and is projected to increase nine-fold over the next 30 years. The Fund's investment objective is to generate a high return, while taking account of "stability and socioeconomic utility". Around 91% of the Fund is invested in bonds, with government bonds accounting for almost half of this category. Investment in equities is much less at 8% of the Fund. Further increasing the outsourcing of Fund management to private companies, which account for 8% of the total at present, may help boost returns. However, it is essential to ensure a governance framework that prevents political influence on the firms in which the Fund invests. In addition, it is important to protect the Fund from political pressure in allocating its investment portfolio.

Scaling back the NPS as part of a systemic reform would limit the accumulation of assets in the National Pension Fund. While this would reduce the risk associated with a large concentration of assets in a single institution, scaling back the NPS would make it even more important to encourage greater private-sector savings for retirement. One key is to develop the "company pension system" introduced in 2005.

Developing an effective company pension system

The company pension system was implemented in 2005, with the following provisions:

- Workplaces with five or more employees may transform the existing lump-sum retirement allowance into a company pension, based on an agreement between labour and management. They must choose between a defined benefit and a defined contribution scheme. Firms with less than ten employees are allowed to establish individual retirement accounts (IRAs).
- Firms that adopt defined benefit schemes must entrust at least 60% of the funds to financial institutions and 100% in the case of defined contribution schemes. In both cases, the employers must provide payments at least as large as under the lump-sum retirement allowance.

By December 2006, pension plans had been introduced by more than 16 000 firms (3.5% of the total), although most of them were small companies. Indeed, 99.6% of the firms introducing pension plans had less than 500 employees. Defined contribution schemes (including individual retirement accounts) accounted for 89% of the pension plans. However, among the 59 large companies that adopted pension plans, three-quarters opted for defined benefit schemes or plans that combined defined benefits with defined contributions.

The low number of large firms introducing company pension plans reflects differences between employers and employees on which type of plan to introduce. Employers favour defined contribution plans, which place the risk on workers, while workers favour defined benefit plans, which are similar to the current retirement allowance in guaranteeing the amount paid. The difficult environment for collective bargaining may frustrate agreements on the type of pension plan. The government's decision to introduce a company pension system while maintaining the retirement allowance reflects the difficulty of phasing out the latter, which is popular with workers, who consider it to be deferred wage payments. Moreover, the lump sum is often used to start a small business after leaving a firm. In the absence of new government measures, the retirement allowance system may continue indefinitely given its popularity.

However, the retirement allowance system has a number of drawbacks. *First*, it creates incentives to retire employees early. Many large firms have agreed to pay about double the required one month of salary for each year worked. Given that the lump sum is based on an employee's final wage, which increases sharply with seniority, there is a disincentive to keep older employees. *Second*, it is not a secure source of income, as the lump-sum is partially unfunded, making full payments dependent on the firm's survival. *Third*, given the short average tenure of employees in Korea, this payment has lost its link to retirement income as most workers receive such lump sums numerous times during their working life and often spend it for housing or consumer durables.[15] To promote the transition to company pensions, the government should remove the tax preferences for retirement allowances, which allow the lump sum to be taxed over a number of years at low rates. In addition, the government should encourage defined contribution systems, rather than those based on defined benefits, in order to promote pension portability and thereby labour mobility. Given that average employment tenure is only five years in Korea, an average worker may be employed by as many as eight or nine firms during his/her career, making a defined benefit system difficult to manage.

Coping with rising pressure for healthcare spending

Public spending on healthcare, on a per capita basis, has expanded at a 10.1% annual rate (adjusted for inflation) since 1981, well above the OECD average of 3.6% (Table 5.9). The increase was largely explained by rising incomes, although demographic factors also played a role. In addition, a residual factor – primarily the shift of healthcare spending from the private to the public sector – boosted outlays by 2.4% a year. The National Health Insurance (NHI) achieved universal coverage in 1989, only 12 years after its introduction (Box 5.4). To limit the cost of expanded coverage, the NHI restricted benefits and set co-payments at a high level. Consequently, the private sector accounts for half of total spending on healthcare, well above the OECD average of 28%. This helps to limit public healthcare expenditure to 3% of GDP, the lowest in the OECD area (Figure 5.8).

A cross-country analysis by the OECD projects that public spending on healthcare will rise by between 3 and 5 percentage points of GDP in Korea over the period to 2050, the largest increase among member countries (Figure 5.8). *First*, given the tendency for medical expenses to increase with age, rapid population ageing in Korea is projected to raise public healthcare outlays by 1.6% of GDP, double the 0.7% expected in the OECD area (OECD, 2006d). The elderly in Korea accounted for 23% of total health expenditures in 2004, well above their 9% share of the population. Consequently, healthcare expenditure per capita was three times higher for those over 65 than for those under. *Second*, relatively rapid growth in income, as living standards in Korea converge to the OECD average, will tend to push up the share of national income devoted to healthcare.[16] Under this assumption, the level of healthcare spending in Korea in 2050 – at 6% to 8% of GDP – would be comparable to the current level in some OECD countries, including Japan.

In contrast, the Korean authorities project a sharper increase in public healthcare spending to 12% of GDP by 2050, which would make it the highest in the OECD area. Indeed, the rise in healthcare expenditures may be significantly larger than projected in Figure 5.8 for a number of reasons. Perhaps most importantly, total healthcare outlays, at 6% of GDP in 2005, is relatively low compared to the level of per capita income in Korea, in part due to the practice of keeping price increases in the healthcare sector below overall inflation. This creates pressure for catch-up in the price of healthcare services that would boost its share

Table 5.9. **Growth in public expenditures on healthcare**[1]

Average annual percentage change between 1981 and 2002 unless otherwise noted

	Total health spending	Age effect	Income effect[2]	Residual[3]
Australia (1981-2001)	2.6	0.4	1.8	1.4
Austria	2.2	0.1	2.1	0.0
Belgium (1985-2002)	2.9	0.4	1.7	0.6
Canada	2.6	0.4	1.7	0.6
Czech Republic (1993-2002)	2.7	0.4	2.8	–0.4
Denmark	1.3	0.1	1.7	–0.5
Finland	2.6	0.3	2.1	0.2
France	2.8	0.2	1.6	1.0
Germany	2.2	0.2	1.2	1.0
Greece (1987-2002)	3.4	0.4	1.3	0.8
Hungary (1991-2002)	1.5	0.3	2.8	–1.5
Iceland	3.5	0.1	1.5	1.9
Ireland	3.9	0.1	4.9	–1.0
Italy (1988-2002)	2.1	0.7	1.7	–0.1
Japan (1981-2001)	3.8	0.4	2.2	1.1
Korea (1982-2002)	**10.1**	**1.4**	**6.1**	**2.4**
Luxembourg (1981-2002)	3.8	0.0	3.9	–0.1
Mexico (1990-2002)	4.5	0.7	0.5	2.4
Netherlands (1981-2002)	2.6	0.3	1.9	0.3
New Zealand	2.7	0.2	1.5	1.0
Norway	4.0	0.1	2.5	1.5
Poland (1990-2002)	3.1	0.5	3.2	–0.6
Portugal	5.9	0.4	2.6	2.8
Slovak Republic (1997-2002)	2.1	0.5	4.2	–1.5
Spain	3.4	0.3	2.3	0.8
Sweden	1.5	0.1	1.7	–0.4
Switzerland (1985-2002)	3.8	0.2	0.8	2.9
Turkey (1984-2002)	11.0	0.3	2.3	8.3
United Kingdom	3.4	0.2	2.3	1.0
United States	4.7	0.1	2.0	2.6
Average	3.6	0.3	2.3	1.0

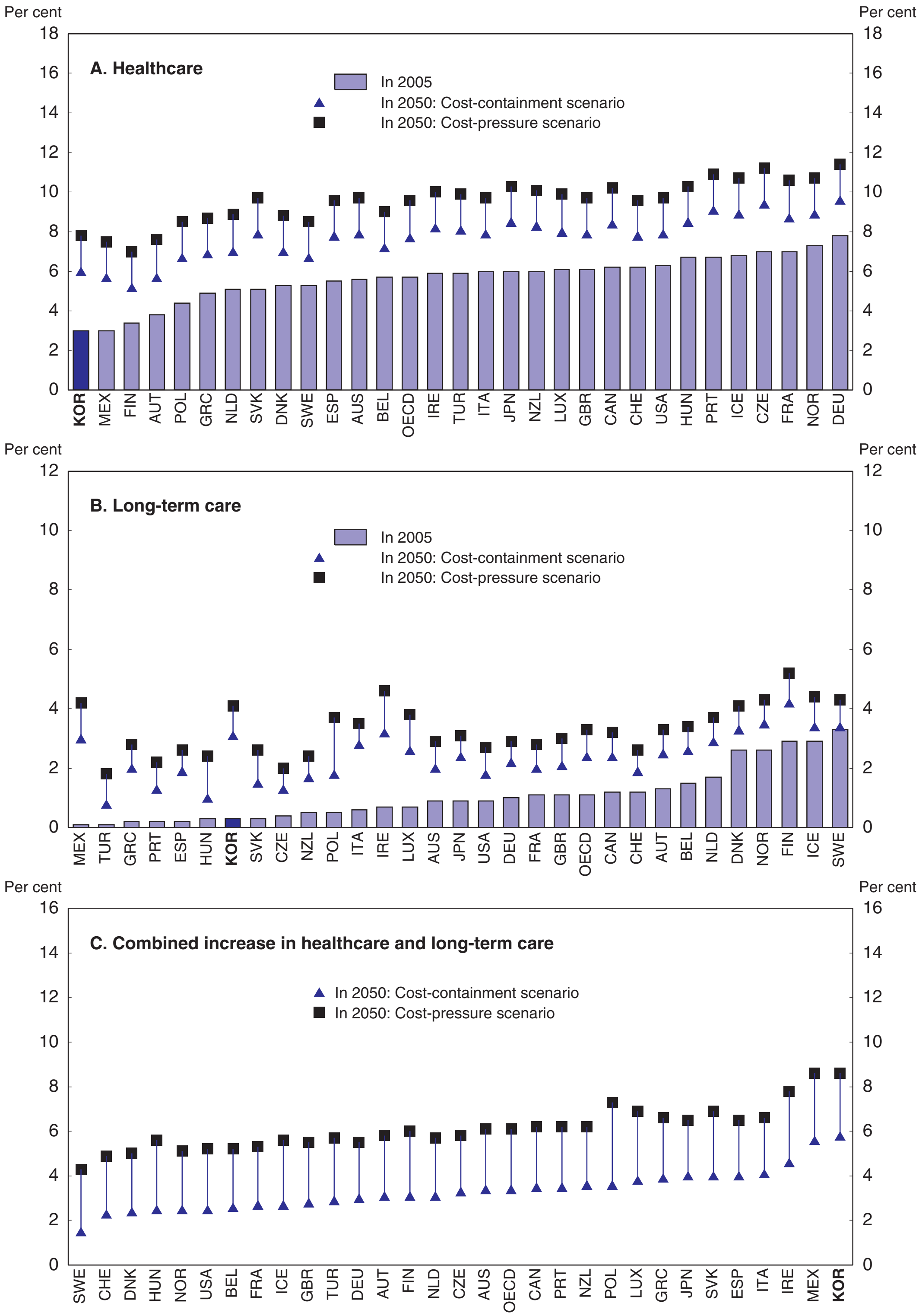
1. Total public health spending per capita.
2. Assuming an income elasticity of health expenditure equal to 1.
3. Includes the shift of healthcare spending from the private to public sector, the cost of implementing technological advances in medical care and adverse relative price changes.

Source: OECD (2006d).

of GDP. In addition, the low level of healthcare outlays at present reflects the impact of high out-of-pocket payments that restrict demand.[17] Given that the share of healthcare spending borne by the private sector is already high, there is little scope for controlling public outlays by shifting more of the burden to the private sector. The government instead plans to increase its share of healthcare financing from 50% to 60% over the next few years.[18] It is important to ensure that out-of-pocket payments do not limit access to healthcare. While out-of-pocket payments are useful in discouraging frivolous demand and limiting costs, they may restrict access to care in the case of catastrophic or chronic illness and for those unable to afford even modest co-payments on services covered by the NHI. At present, half of co-payments exceeding 1.2 million won per month (60% of the average wage) are covered and there is a cap of 3 million won in co-payments over a six-month period. Even co-payments of such an amount could block access for low-income persons or patients with chronic illness.

Figure 5.8. **Projected increase in public spending on healthcare and long-term care**

Over the period 2005 to 2050, in per cent of GDP



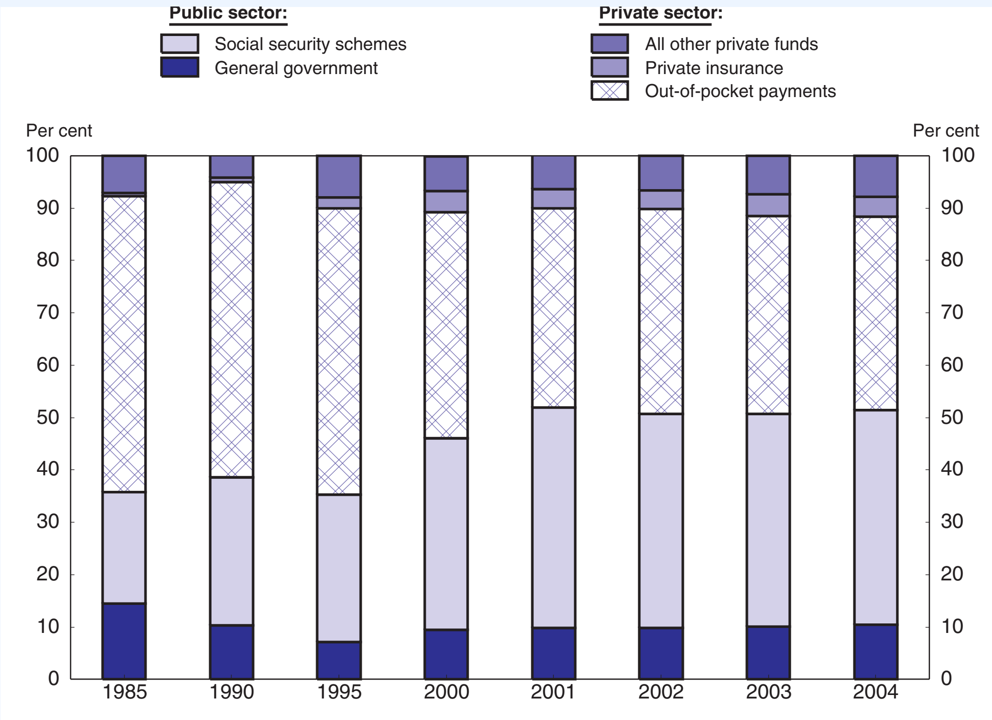
Source: OECD (2006d).

Box 5.4. **Korea's healthcare system**

Korea has achieved universal coverage of health insurance in a relatively short time and at a relatively low cost. Healthcare is provided primarily by the private sector; about 90% of specialist doctors work in the private sector and 93% of medical institutions are privately-owned.* Consumers are free to choose healthcare providers. Financing is divided between the public sector (51%) and the private sector (49%). Among public sources, the National Health Insurance (NHI) is most important, providing 41% of total health expenditure (Figure 5.9). The NHI is funded by employers, employees and the self-employed, with the government paying about half of the premiums for the latter group. The government accounts for an additional 10% of outlays, in part for the Medical Aid Programme, which provides care for the very poor. The key private-sector funding source for healthcare is out-of-pocket payments by patients, accounting for 37% of total outlays. The high share, which includes co-payments on services covered by the NHI and full payment for non-covered services, reflects the government's objective of achieving universal coverage of the NHI at low contribution rates by keeping benefits low and excluding some diseases and diagnostic procedures. The co-payment rate is 20% for hospital care and 30% to 50% for outpatient care. Consequently, the NHI provides relatively comprehensive but shallow protection in case of illness. The system may also pose barriers to access for the poor since co-payments are unrelated to income and the cap on total co-payments is rather high (see below). Private insurance accounts for only 4% of healthcare expenditures.

Figure 5.9. **Evolution of Korean health expenditure by source of financing**

Per cent of total



Source: OECD (2006), *Health Database*, OECD, Paris.

Box 5.4. **Korea's healthcare system** *(cont.)*

At present, medical fees are set through negotiations between the NHI and healthcare providers, and the prices of pharmaceuticals are set by the government. These prices determine the payments from the NHI to providers for their treatment of insured persons. All medical providers are under compulsory contract with the NHI and subject to the government fee schedule. The government has limited healthcare expenditures by constraining the rate of increase in medical fees.

Until 2000, the NHI was fragmented, consisting of nearly 400 quasi-public insurance societies established to achieve universal coverage. Given the variety of methods of calculating contributions and benefits, individuals with similar income often paid different contribution rates for the same benefits, resulting in horizontal inequality. The 2000 Integration Reform combined the insurance societies into a single insurer and set a uniform contribution rate for all employees, thus improving equity. The reform also increased efficiency in management; administrative costs fell from 6.4% of total expenditures in 2000 to 3.7% in 2004. In addition, the reform gave market power to the NHI as the sole purchaser of healthcare services. However, the reform has not resolved the problem of evasion or underpayment of contributions by the self-employed.

The Separation Reform of 2000 split the physician's role of prescribing and the pharmacist's role of dispensing drugs. The sale of drugs was important to doctors, accounting for between one-third and a half of their total revenues, depending on their specialisation. The decision of doctors to prescribe drugs was thus influenced by profit motives. The Reform was intended to reduce the over-use of pharmaceuticals and improve the efficiency of the drug industry. Doctors responded by staging a number of strikes, leading to a 41% hike in medical fees to compensate them. The Reform thus exacerbated the financial problems of the NHI, resulting in a deficit of 2.2 trillion won (one-fifth of expenditures) in 2001. In addition to the sharp hike in medical fees, the Reform boosted expenditures by increasing the number of doctor visits to obtain prescriptions formerly handled by pharmacies and the use of more expensive drugs as doctors lost the incentive to prescribe discounted medicines. The government launched a programme in 2001 to bring the NHI back into surplus; *i)* government subsidies to the self-employed pool were raised to 50% of contributions; *ii)* income assessment for the self-employed was to be improved; *iii)* co-payments were raised; *iv)* detection of fraud by providers was to be improved; and *v)* the contribution rate was raised from 3.4% to 4.5% by 2006. These reforms helped return the NHI to surplus in 2003.

* The government maintains around 250 primary healthcare facilities in rural areas to fill gaps in private provision.

Nonetheless, further reductions in the co-payment rates should be avoided to limit the increase in public outlays. At the same time, the burden on employed persons should be eased by several reforms. *First*, elderly persons, who are currently exempted from contributions to the NHI if they have working children, should be required to contribute. Given the maturation of the public pension system, elderly persons will be in a better financial position to shoulder more of the burden. *Second,* as with the NPS, it is essential to more accurately assess the income of the self-employed and reduce underreporting in order to achieve an equitable sharing of the financial burden among the labour force. The government currently pays about half of the contributions for the self-employed, resulting in transfers from low-income employees to high-income self-employed persons. In sum, it is important to ensure the fiscal sustainability of the NHI, while trying to provide an appropriate level of healthcare services.

Promoting efficiency and high-quality healthcare

Less than half of Koreans are satisfied with their medical services according to a 2006 government survey. High medical fees, reflecting large out-of-pocket payments, and unsatisfactory treatment, perhaps due to limits on the cost of healthcare, were the major complaints (Table 5.10). In addition, 17.5% cited long waiting times and 6.6% cited over-treatment. Koreans have an average of 10.6 medical consultations per year, compared to an OECD average of 6.6. However, the number of doctors per 1 000 population in Korea was 1.6 in 2004, the second lowest among OECD countries and well below the OECD average of 3.0. Similarly, the number of nurses per capita was only 1.8, compared to the OECD average of 8.3. This suggests a pattern of frequent but short visits, as doctors compensate for low fees by raising the volume of consultations in Korea's fee-for-service system. Given the large number of visits and the low number of doctors, the number of consultations per doctor is one of the highest in the OECD area, suggesting low quality. As the government does not restrict supply, the small number of doctors and nurses suggests that the attractiveness of medical careers is limited by low prices for such services. One option to increase medical personnel is to relax controls on the inflow of foreign workers, such as nurses (see Chapter 6).

Table 5.10. **Reasons for dissatisfaction with medical services in Korea**

Percentages in 2006

	Whole country	Urban areas	Rural areas
High medical fees	27.2	27.9	23.0
Unsatisfactory treatment	22.9	22.9	22.9
Waiting time for treatment and hospitalisation	17.5	17.7	16.4
Unkindness	11.1	11.0	11.8
Inappropriate treatment	9.2	9.3	8.9
Over-treatment	6.6	6.8	5.5
Poor equipment	2.7	2.2	6.4
Others	2.7	2.3	5.2
Total	**100.0**	**100.0**	**100.0**

Source: Korea National Statistical Office (2006).

Allowing for-profit companies to provide healthcare and a greater role for private health insurance may help increase the satisfaction of consumers. At present, only "medical legal persons" are permitted to establish medical institutions, and they are limited to one institution each. Foreign providers of medical care are thus excluded, except in the three Free Economic Zones and Jeju Special Governing Province (see Chapter 6). The possibility of allowing a larger role for the private sector in medical care in the rest of the country is now under discussion. As for private insurance, it accounts for only 4% of healthcare spending (Figure 5.9) and half of this amount is accounted for by compulsory insurance against car accidents. Allowing private insurance to cover more healthcare services not reimbursed by the NHI would help meet consumer demand. However, the role of private insurance is limited by the government's concern that it will lead to a polarisation in healthcare provision. This should be accompanied by measures to ensure access to healthcare for low-income individuals and those facing catastrophic health expenditures.

Limiting the cost of healthcare

Although the contribution rate for the NHI has risen from 3.4% in 2001 to 4.8% in 2007, it remains well below the level of other OECD countries such as Japan (8.5%), Germany (14%) and France (18.5% to 20%). Ideally, expenditure plans should be linked to forecasts of revenues, based on a tax burden acceptable to taxpayers. Cost containment thus far has relied primarily on controlling fees. However, since the strikes by doctors in the wake of the Separation Reform in 2000 (see Box 5.4), fees are now decided by collective bargaining rather than by government fiat. Cost control measures should focus on factors that put expenditures on an unsustainable growth path in the long run. Despite the hike in contribution rates and in government support (from 3.1 trillion won in 2002 to 3.9 trillion won – 0.5% of GDP – in 2006), the NHI returned to deficit in 2006 in the wake of a one-third increase in spending between 2004 and 2006.

One problem is that the fee-for-service reimbursement system tends to boost outlays as doctors increase the number of appointments. Incentives for the efficient use of resources would be improved by the introduction of other payment systems, such as: 1) *resource-based relative value scale*, in which payments are based on the level of resources needed to provide each service; 2) *volume-related reimbursement*, which reduces the unit fee for incremental treatments so that providers have less incentive to increase volumes; and 3) *Diagnostic Related Groups*, in which reimbursement for a specific diagnosis is rate-based (Docteur and Oxley, 2003). Finally, the Integration Reform (see Box 5.4) should allow the NHI to become a more active and effective purchaser of health services for its clients rather than passively paying for all claims. Strengthened auditing and assessment of medical bills will help to reduce costs.

The projection of future healthcare spending in Korea shown in Figure 5.8 assumes that further increases in life expectancy are matched by a corresponding rise in the average healthy lifespan. If extended longevity were instead accompanied by longer periods of disability, healthcare spending would rise even faster than projected. On the other hand, reducing the length of disability would slow the rise in healthcare expenditures. The Korean authorities recognised this link in the *Health Plan 2010*, which set a target of a "healthy life span" of 72 years. The plan includes 108 objectives in 24 areas. One key is to further reduce the rate of smoking among men, which was the highest in the OECD area at almost 60% in 2004. Increases in cigarette prices, the expansion of smoke-free areas and the implementation of smoking prevention programmes helped to lower the proportion to 50% in 2005, with an objective of 30% by 2010. A second priority is to maintain healthy diets. Total calorie consumption is among the lowest in the OECD area, keeping the proportion of obesity at 30%, the second lowest in the OECD area. Nevertheless, the rate of obesity is increasing rapidly in Korea and is about 60% higher than a decade ago. Illness prevention and health promotion policies are needed to slow the increase in demand for healthcare as the population ages.

The 2000 Separation Reform, which removed doctors from the profitable business of dispensing pharmaceuticals to their patients, has not achieved its objective of reducing the use of pharmaceuticals. Indeed, its share of healthcare spending has declined only slightly, from 27.8% in 2000 to 27.4% in 2004, which is well above the OECD average of 17.7%. However, given the lower level of healthcare spending in Korea, spending on pharmaceuticals is close to the OECD average of 1.6% of GDP. Nevertheless, a new framework to encourage cost-effective use of pharmaceuticals based on audits and appraisal of doctors' prescription behaviour, the introduction of prescription guidelines and greater use of generic drugs may result in savings in the use of pharmaceuticals in Korea.[19]

The average length of stay in hospitals for acute care was 10.6 days in Korea in 2004, compared to an OECD average of seven days. One reason is the growing pressure on hospitals to care for elderly people who need long-term care. Indeed, at least 14% of inpatient cases in acute care hospitals are inappropriate (Kwon, 2006). The pressure to provide long-term care is one factor driving the rapid growth in the number of acute care hospital beds from 3.6 per 1 000 in 1994 to 5.9 in 2003, compared to an OECD average of 4.1. "Social admissions" to hospitals is an expensive method to assist elderly persons who need nursing care. The further development of long-term care facilities, which would reduce the pressure on the healthcare system, is discussed in the following section.

Providing long-term care for the elderly

Public expenditures on long-term care amounted to 0.3% of GDP in 2005, well below the OECD average of 1.1% (Figure 5.8, Panel B). The government's role is focused on providing in-home or institutional care to persons qualifying for social assistance. The low overall level of spending on long-term care reflects Korea's relatively young population at present and the heavy reliance on informal family care provided primarily by daughters (49%) and spouses (32%). Indeed, the concept of formal long-term care is new in Korea. Only 0.4% of the elderly in 2004 received long-term care in institutions, the lowest among the 23 OECD countries for which data are available and well below the average of 4.5% (Table 5.11). Similarly, the proportion receiving formal paid care at home is only 0.7%, well below the OECD average of 9.6%. With long-term care facilities available for only 0.4% of the elderly at present, the growing need for long-term care is met by acute care hospitals, placing an increasing strain on the NHI.

Demographic trends will increase spending on long-term care, which grows exponentially with age, with the bulk concentrated on persons over the age of 80. In Korea, the number of persons above that age is projected to increase nine-fold by mid-century, rising from 1% of the population at present to 14%. In addition, growing female participation in the labour force and the falling proportion of elderly living with their family will reduce the scope for family-based care, creating the need for a better developed social infrastructure for providing care. The OECD estimates that public spending on long-term care will rise to between 3% and 4% of GDP by 2050, above the OECD average of 2.4% to 3.3% (Figure 5.8). As is the case for healthcare, the projected increase is among the largest in the OECD area.

The challenge is to provide wider and more equitable access to long-term care services within the constraints of fiscal sustainability. The public sector in Korea provides institutional long-term care to about 15 000 persons, about 90% of the elderly in institutions at present. Of the 679 long-term care facilities in August 2006, 77% were public facilities, with private institutions focused on the upper end of the market. The authorities plan to add 1 112 public long-term care facilities, with 30 000 additional places, between 2006 and 2008, with another 6 000 places provided by the private sector. The government will encourage a larger private-sector role after it further develops public long-term care.

As in the case of childcare, providing vouchers to households would increase consumer choice in long-term care and improve the satisfaction of older persons and increase their degree of independence (Lundsgaard, 2005). Shifting Korea's current approach of relying on the government to provide most long-term care facilities would foster competition among providers and more choice for families, while limiting government outlays (OECD, 2005a). Concerns about quality can be met by requiring that support for the elderly be used for long-term care provided by licensed facilities.

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Table 5.11. **International comparison of long-term care**

	Number of recipients (% of elderly)[1]			Expenditure on long–term care (% of GDP)		
	Institutions	In-home	Total	Public	Private	Total
Korea	**0.4**	**0.7**	**1.1**	**0.2**	**0.1**	**0.3**
Italy	1.5	..	..	..	..	..
Ireland	1.8	..	..	0.5	0.1	0.6
Germany	2.4	6.1	8.5	1.0	0.4	1.4
Japan	3.0	9.3	12.3	0.8	0.1	0.8
United States	3.6	..	..	0.7	0.5	1.3
Austria	3.6	19.3	22.9	1.3	..	..
Luxembourg	3.9	4.5	8.4	0.5	..	..
Canada	4.2	..	..	1.0	0.2	1.2
United Kingdom	4.2	6.9	11.1	0.9	0.5	1.4
Denmark	4.4	21.5	25.9	..	..	..
New Zealand	4.5	9.0	13.5	0.5	0.2	0.7
Czech Republic	4.9	8.2	13.1	..	..	..
Finland	4.9	6.9	11.8	..	..	..
Slovak Republic	5.1	..	..	..	..	..
Australia	5.3	6.2	11.5	0.9	0.3	1.2
Netherlands	5.6	..	..	1.3	0.1	1.4
Norway	5.8	17.4	23.2	1.9	0.3	2.2
France	6.3	5.2	11.5	..	..	..
Belgium	6.6	7.5	14.1	..	..	..
Switzerland	6.6	9.4	16.0	..	..	1.5
Sweden	7.5	9.5	17.0	2.7	0.1	2.9
Hungary	8.0	15.1	23.1	0.2	0.1	0.3
Average[2]	4.5	9.6	13.8	1.0	0.2	1.2

1. Countries ranked by percentage of elderly receiving long-term care in institutions.
2. The average for the total number of recipients includes only the countries for which both institutional and in-home care is available and the average for total expenditure includes only those countries for which both public and private expenditures are available.

Source: DELSA dataset.

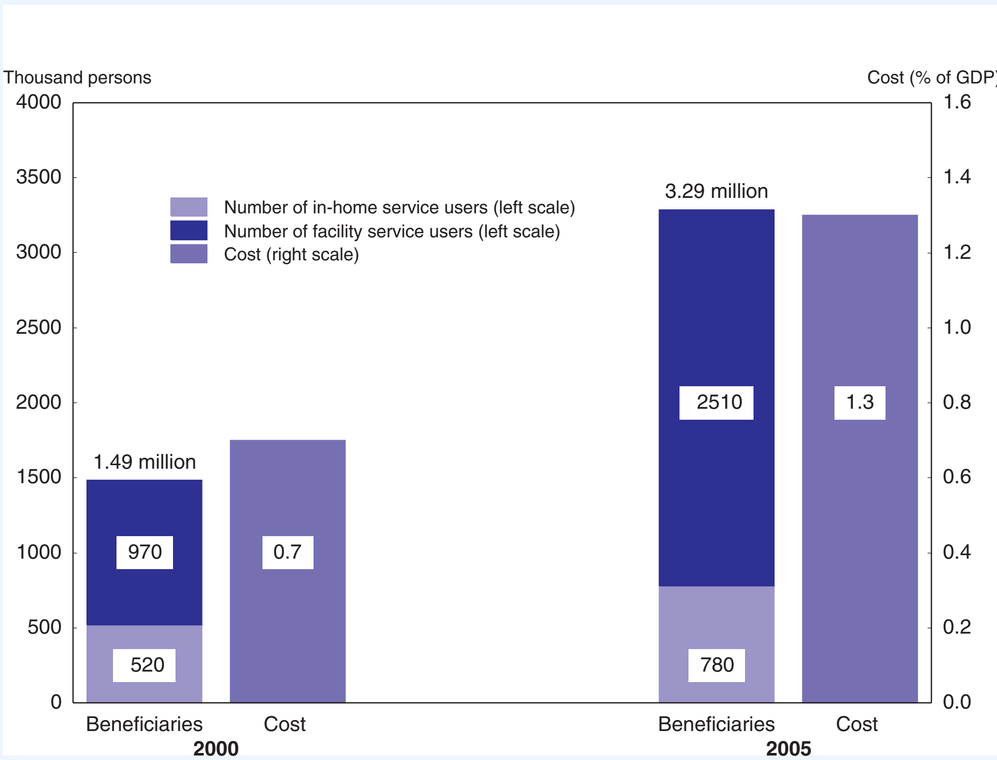
A national long-term care insurance system is to be introduced in 2008, an approach currently used in Germany, Japan, Luxembourg and the Netherlands, while Austria finances long-term care from the general budget and gives individuals more freedom in choosing their care (Lundsgaard, 2005). Contributions are to be collected by the NHI, with an initial rate expected to be set at around 0.25% of employee income.[20] Beneficiaries, who will be chosen by the Health Insurance Corporation from among the elderly suffering geriatric diseases, can receive public care at home or in institutions, or cash benefits to pay for private care. The number of beneficiaries is to be initially limited to 80 thousand (1.7% of the elderly population). However, 350 thousand elderly persons (8.3% of the elderly) were already suffering from dementia in 2005. The number of beneficiaries is expected to double by 2010. Recipients of care pay 20% of the cost of home and institutional care,[21] with insurance contributions covering 50% and the government 30%. In implementing this new insurance system, it is important to learn from the experience of other countries (Box 5.5).

Box 5.5. **Long-term care insurance: lessons from Japan**

In response to the rising number of elderly people and increasing medical costs, Japan launched the Long-Term Care Insurance System (LTCI) for the elderly in April 2000 as a third pillar of social security along with pensions and healthcare. This mandatory insurance is operated by municipalities and provides benefits to persons over the age of 65 who are certified as eligible based on an objective assessment of their physical and mental condition by the municipality in which they live. Neither the willingness and/or ability of family and friends to provide care are taken into account in deciding eligibility. Once eligibility is determined, a "care manager" employed by the municipality develops an appropriate plan of care. The system allows consumer choice of services and providers, and includes institution and home-based care. The fees for LTCI services are set by the government and apply to all providers, which are subject to quality standards that are set nationally. Patients are required to pay 10% of the cost, with the remainder split equally between the government[1] and insurance contributions. Contributions are set by municipalities at levels sufficient to cover their costs. On average, persons over the age of 65 paid 4 090 yen ($35) per month in FY 2006, while those in the 41 to 64 age range paid a similar amount, with the premium spilt between employer and employee.

There has been a remarkable expansion of long-term care utilisation in Japan since 2000 resulting from the release of pent-up demand (Shimizutani, 2006). The number of beneficiaries more than doubled between 2000 and 2005, while expenditures rose from 0.7% to 1.3% of GDP (Figure 5.10), well above the projected level. This is due in part to a

Figure 5.10. **Expansion of long-term care insurance in Japan**



Source: Ministry of Health, Labour and Welfare (2006).

Box 5.5. **Long-term care insurance: lessons from Japan** *(cont.)*

"remarkable" increase in the number of elderly receiving low levels of care.[2] To contain costs, the government launched a major revision of the LTCI in April 2006 that restricted the provision of home-care for those with mild disabilities and introduced preventative measures aimed at cutting demand for long-term care. In addition, it hopes to reduce the use of institutional care by lowering the generosity of coverage relative to home care. Under the original system, it was cheaper in some cases to check into a facility even if only a low level of care were needed. As a result, the number of beneficiaries receiving institution-based care rose by 50% between 2000 and 2005. Meanwhile, the proportion receiving homecare increased by 159%.

The experience of Japan has useful lessons for Korea:

- The release of pent-up demand following the introduction of LTCI spurred a 131% increase in the number of private providers of long-term care, from around 20 000 in 2000 to more than 50 000 in 2005 (Shimizutani, 2006). It is thus essential to eliminate any regulations that may discourage the entry of new companies.
- It is important to avoid a supply-driven increase in the number of elderly receiving relatively low levels of care. The sharp increase in Japan reflects in part the tendency of care managers to err on the side of generosity in approving care. Moreover, some may have been effectively captured by service providers, illustrating the importance of ensuring the neutrality of care managers (Imai and Oxley, 2005). In contrast, in the case of Australia, care managers have been effective in their role as gatekeepers (OECD, 2005a).
- It is important to stabilise or even reduce the number of persons cared for in institutions. In a number of countries, including the United States, there has been an absolute decline in the number of elderly cared for in institutions, reflecting an increase in the types of homecare available (OECD, 2005a).
- There is a wide variation in premium payments, with the elderly in more sparsely populated areas paying two-thirds more than the national average (Saidel, 2004). Even with additional payments from the central government, the number of long-term care users in such areas has exceeded the ability of municipalities to pay, forcing higher premiums.

1. The central government pays 25%, while prefectural and local governments pay 12.5% each.
2. Ministry of Health, Labour and Welfare (2006). Elderly requiring "Care Level 1" account for half of beneficiaries.

Social assistance in the context of rising relative poverty and income inequality

Most social assistance to families is provided through the National Basic Livelihood Security System (NBLSS). This system, which was formerly called the Livelihood Protection Programme, has been strengthened and enlarged since the financial crisis. It provides cash benefits for living, housing and education, as well as medical care, in order to ensure that all households have an income at least equivalent to the national minimum cost of living. The minimum level was increased by 7% in real terms between 1999 and 2005, reaching 0.4 million won per month for an individual (20% of the average wage). Meanwhile, the number of recipients has risen from 1.2% of the population to around 3%.

While the NBLSS has been improved, there remain several concerns. *First*, in addition to an income test, eligibility depends on asset and family criteria. Combined income and assets must be less than the minimum cost of living, while only persons without relatives capable of supporting them are eligible for assistance. According to one estimate, only about half of the persons with income below the minimum cost receive assistance (Park, 2005). *Second*, the lack of transparency about income of the self-employed may divert benefits to those who are not eligible. *Third*, the NBLSS discourages work as there is no earnings disregard.

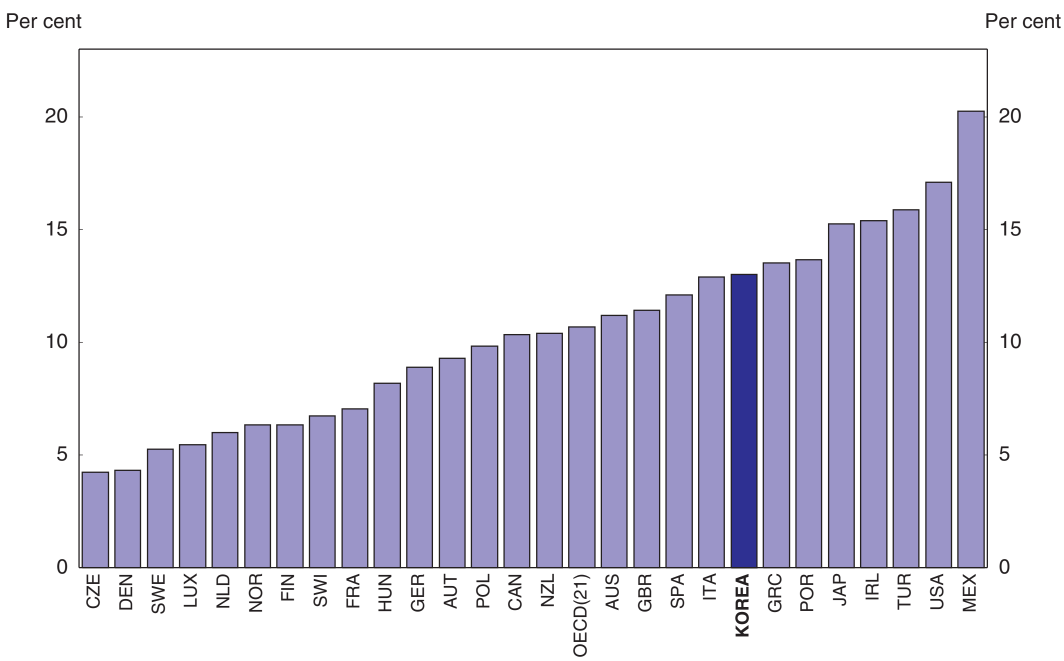
In most OECD countries, social spending and tax systems significantly reduce relative poverty, defined as an income of less than half of the national median. Indeed, social spending and taxes reduced the poverty rate by more than half, from an average of 18.2% to 8.4% in the OECD area in 2000.[22] The combined effect of government spending and tax measures have only a modest impact on the level of poverty in Korea, compared to other OECD countries (Park *et al.*, 2002), reflecting the still low level of social spending in Korea (Table 5.1). However, the effectiveness of social spending on reducing poverty also depends on its composition and targeting of spending.[23] In Korea, 74% of public social outlays is spent on health and pensions, and is thus concentrated on the elderly. In contrast, only 10% is spent on the working-age population, considerably below the OECD average of 17%.[24] In particular, family benefits amount to only 0.1% of GDP in Korea compared to an OECD average of 2.2%.

Relative poverty

The limited impact of social assistance on relative poverty, which has risen since the 1997 crisis, is a concern. Indeed, the rate of relative poverty increased from 8.7% in the mid-1990s to 13% in 2000 – from below the OECD average to considerably above it (Figure 5.11).

Figure 5.11. **International comparison of relative poverty rates**

The entire population in 2000[1]



1. Poverty rates are defined as the share of individuals with equalized disposable income less than 50% of the median for the entire population.

Source: Förster and Mira d'Ercole (2005) and Yeo *et al.* (2005).

Furthermore, the upward tend continued, though at a slower pace, to 15.5% in 2003. As in other OECD countries, population ageing and changes in household structure – more single-person and female-headed households – have played a role in boosting poverty (Table 5.6). However, increased poverty among families headed by a couple accounted for most of the rise in poverty, suggesting that higher income inequality was the key factor.[25]

The government plans to introduce in 2008 an Earned Income Tax Credit (EITC) similar to that in the United States, in part to strengthen work incentives. The programme will be introduced on a limited scale to salaried workers with two or more children, who do not own a home and have assets of less than 100 million won (about $110 000). The income ceiling (gross annual basis per household) is 17 million won (70% of the average wage), about 20% higher than the minimum cost of living for a family of four. The EITC will provide 10% of earnings up to an annual income of 8 million won, with a ceiling of 0.8 million won. The tax credit will be phased out from 12 million won. The EITC is to be gradually extended to the self-employed over the coming decade. However, the problem of accurately determining the income of the self-employed makes the EITC inappropriate for the entire population.

Rising income inequality and the labour market

Rising poverty was accompanied by higher income inequality,[26] which increased according to a number of measures (Table 5.12). For example, the ratio of the top income decile to the bottom has risen from 7.4 in 1990 to 9.3 in 2004. The decline in inequality recorded during the rapid growth in the first half of the 1990s was reversed by the 1997 crisis and the severe recession in 1998. Since then, measures of inequality have fluctuated

Table 5.12. **Indicators of income inequality in Korea**

For urban salary and wage-earner households[1]

	Gini coefficient[2]	Quintile ratio[3]	Decile ratio[4]
1990	29.5	4.6	7.4
1991	28.7	4.5	7.0
1992	28.4	4.4	7.0
1993	28.1	4.4	6.8
1994	28.4	4.4	6.9
1995	28.4	4.4	6.8
1996	29.1	4.6	7.2
1997	28.3	4.5	7.0
1998	31.6	5.4	9.4
1999	32.0	5.5	9.3
2000	31.7	5.3	8.8
2001	31.9	5.4	8.8
2002	31.2	5.2	8.3
2003	30.6 (34.1)	5.2 (7.2)	8.9 (15.5)
2004	31.0 (34.4)	5.4 (7.4)	9.3 (15.7)
2005	31.0 (34.8)	5.4 (7.6)	9.1 (15.9)
2006	31.0 (35.1)	5.4 (7.6)	9.1 (15.9)

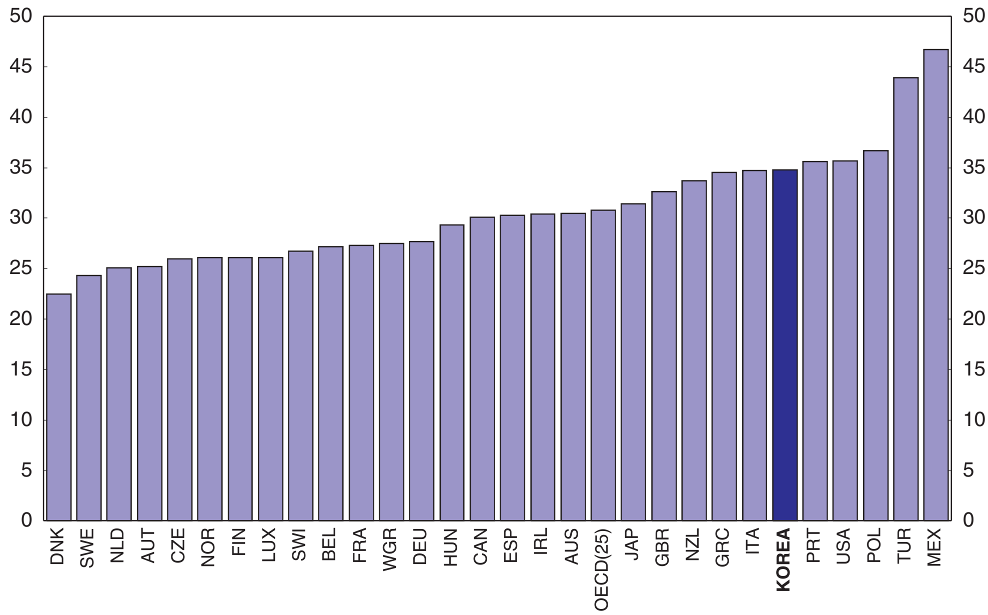
1. Nation-wide data, available since 2003, is shown in parentheses.
2. The Gini coefficient is defined as the area between the Lorenz curve (which plots cumulative shares of the population, from richest to poorest, against the cumulative share of income that they receive) and the 45-degree line, taken as a ratio of the whole triangle. The values, which range from 0 in the case of perfect equality and 1 in the case of perfect inequality, are multiplied by 100 to give a range of 0 to 100.
3. The ratio of the top quintile to the bottom quintile.
4. The ratio of the top decile to the bottom decile.

Source: Korea National Statistical Office.

around the higher level, falling during the years of strong growth (2000-02) and rising following the collapse of the household credit bubble and relatively weak growth since then. The Gini coefficient on a nation-wide basis was 35.1 in 2006, the sixth highest in the OECD area and 13% above the OECD average (Figure 5.12). The high level of inequality reflects the relatively low level of social spending, resulting in little scope for redistribution, and a high degree of wage dispersion. For full-time workers, the ratio of the 90th to 10th earning percentiles is 4.0, well above the OECD average.

Figure 5.12. **International comparison of income inequality**

Gini coefficient × 100[1]



1. See Table 5.12 for a definition of the Gini coefficient.

Source: Förster and Mira d'Ercole (2005) and the Korea National Statistical Office.

The rising level of inequality is explained in part by the increasing share of temporary workers from 16.6% in 2001 to 29.4% in 2005 (Table 5.13),[27] the second highest in the OECD area. Workers on fixed-term contracts of one year or less, account for more than half of temporary workers. There is a large wage gap: non-regular workers (as defined by the Korea supplementary labour force survey) earned 62% as much as regular workers in 2005. A second factor explaining the upward trend in inequality is the increasing wage gap between large and small firms. The average wage at SMEs has fallen from 71% of that in large firms in 2000 to 64% in 2005, reflecting the difficulties facing smaller firms in the context of exchange rate appreciation and weak private consumption. The widening gap is also due in part to greater use of non-regular workers in smaller firms. In 2005, non-regular workers accounted for 54% of employees in small firms compared to 18% in large firms. Moreover, the wage gap is larger in SMEs: non-regular workers in small firms earn only half as much as regular workers, while those in large firms earn two-thirds.

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Table 5.13. **Share of temporary workers in Korea**

Per cent of employees[1]

		2001	2002	2003	2004	2005
Workers with a fixed-term contract	Less than or equal to 1 month	5.6	5.2	6.7	5.6	5.5
	More than 1 month to less than 1 year	2.8	2.7	4.9	4.7	4.8
	Exactly one year	1.5	1.9	3.3	4.4	5.3
	More than 1 year to less than 3 years	0.6	0.6	1.3	1.7	1.8
	3 years or more	0.5	0.6	0.7	0.8	0.8
	Subtotal	11.0	10.9	17.0	17.1	18.2
Workers without fixed-term contract, whose job is not expected to continue due to involuntary reasons		2.9	3.8	4.3	7.6	5.9
Temporary agency workers		1.0	0.7	0.7	0.8	0.8
On-call workers		2.2	2.9	4.2	4.6	4.8
Total[2]		**16.6**	**18.1**	**25.9**	**29.7**	**29.4**
Memorandum item:						
Total dependent employment (thousands)		13 540	14 030	14 149	14 584	14 968

1. This table shows the share of employees who are temporary according to the OECD definition. The concept of non-regular worker in Korea includes other categories, such as part-time workers, and is higher at around 40%.
2. The total is adjusted for overlapping categories. The Supplementary Survey has been carried out each August since 2001. There have been a few changes that may influence recent results. *First*, the sample of the monthly *Economically Active Population Survey* was replaced starting from January 2003 and the question on fixed-term contracts was moved to this *Survey*. *Second*, workers who assess the durability of their employment as unlimited because their contract is renewed on a regular basis are included in the "temporary" category since 2002.

Source: Ministry of Labour, *Economically Active Population Survey* and the *Supplementary Survey of Economically Active Population Survey*.

According to a survey of firms employing non-regular workers, 32.1% cited lower labour costs as the major reason for hiring such workers (Table 5.14). The lower wages are explained in part by productivity differences, though discrimination also plays a role. According to the Korea Employers Federation (2006), the productivity of non-regular workers is 22% below regular workers, while their wages are 44% less. Only one-half of the wage differential, therefore, is justified by productivity differences. Another study found that non-regular workers are paid 20% to 27% less than regular workers, after adjusting for age, experience, education and other attributes (Jeong, 2003). A more recent analysis reported that 23% of the wage gap is explained by discrimination.[28] In addition to lower wages, non-regular workers also receive fewer benefits (Table 5.15). While 73% of regular workers receive the retirement allowance, over-time payments, regular bonuses and paid-holiday leave, 74% of non-regular

Table 5.14. **Reasons for hiring non-regular workers**

Percentages

	Labour costs	Flexibility	Peripheral tasks	Short-term tasks	Others
All industries	32.1	30.3	18.5	13.9	5.2
Manufacturing	28.7	34.5	17.9	14.7	4.1
Non-manufacturing	35.4	26.1	19.1	13.2	6.2
Firms with					
Less than 30 workers	35.5	28.9	15.8	13.2	6.6
30-99 workers	28.5	27.6	18.7	18.2	7.0
100-299 workers	37.7	26.2	15.5	14.3	6.3
300-499 workers	34.3	29.4	19.6	12.7	3.9
500 workers and more	26.1	39.9	22.9	9.6	1.6

Source: Cited from Ahn *et al.* (2003).

Table 5.15. **The coverage of social insurance and benefits by type of employment**

	Regular employees	Non-regular employees[1]
Benefits[2]		
All	73.0	9.5
Some	25.9	16.3
Nothing	1.1	74.2
Social insurance[3]		
All	81.2	29.4
Some	17.4	5.3
Nothing	1.4	65.3

1. In the paper by Ahn, non-regular workers includes temporary and daily workers, as well as "non-standard workers". The latter category includes workers on fixed-term and part-time contracts, as well as alternative employment (dispatched workers, temporary agency workers, independent contractor, on-call work and home-based work).
2. Includes the retirement allowance, over-time payments, regular bonuses and paid-holiday leave.
3. Includes the National Pension Scheme, National Health Insurance and the Employment Insurance System.

Source: Ahn (2006).

workers receive none of these benefits. Labour costs are further widened by differences in social insurance coverage. More than four-fifths of regular workers are covered by all social insurance programmes – national pension, health and employment insurance – while two-thirds of non-regular workers have no work-based social insurance. The low coverage of non-regular workers is not primarily due to differences mandated by the law, but instead reflects weak compliance.

The survey of employers also reported that 30% hire non-regular workers to increase employment flexibility, a rationale that was more important for large firms than for small firms, which focus more on reducing labour costs (Table 5.14). It is very difficult to lay off regular workers because of the Labour Standards Act[29] and the power of trade unions. The OECD ranks employment protection for regular workers in Korea in the top third of member countries. In a world of increasing competition, Korean firms have an incentive to maintain a minimum number of regular workers and to adjust to demand fluctuations by hiring non-regular workers and outsourcing. Non-regular employment thus helps firms achieve the optimal level of employment, leading to profit maximisation. Countries with stricter protection for regular workers tend to have a higher incidence of temporary employment (Grubb *et al.*, 2007).

According to a 2005 government survey, 80% of regular workers were satisfied with their employment, compared to only 29% of non-regular workers. However, 41% accepted non-regular employment because nothing better was available, while another 11% preferred non-regular employment as it provided working-time flexibility. Surprisingly, only 8% of non-regular workers hoped to use their current post as a stepping stone to another job, reflecting limited mobility between regular and non-regular employment. Of those who were non-regular workers in 2003, only 15% moved to regular employment during the following year, while 59% remained in non-regular status. Moreover, 20% lost their jobs and became unemployed or left the labour force, while 5% became self-employed. It is clear that a considerable portion of non-regular workers are trapped in this type of employment. In contrast, less than 10% of regular workers moved to the categories of unemployment, inactivity or unpaid family workers.

In sum, non-regular employment is characterised by precarious jobs that pay low wages and provide limited coverage by the social safety net. The social polarisation resulting from the increasing proportion of non-regular employees thus has negative implications for equity. It also reduces long-term growth prospects by boosting the rate of worker turnover; 62% of non-regular workers have less than one year of tenure compared to 30% for regular workers. A number of studies show that non-regular workers receive less training than regular workers (Grubb *et al.*, 2007).

The government's strategy is to limit the use of non-regular workers and prevent discriminatory treatment of them. The labour law reform bill passed in December 2006 had two major provisions:

- "Unjustifiable discriminatory practices" against non-regular workers are prohibited. Employees claiming discriminatory working conditions or wages can submit complaints to the Labour Relations Commission, where firms must prove that their practices are not discriminatory.
- After two years of employment, workers with fixed-term contracts are considered to be regular employees. However, the labour unions argue that the limit on fixed-term contracts is too long and that firms will simply fire such workers before the end of the two years.

In addition, the government plans to target active labour market policies on non-regular workers to improve their employability and increase the coverage of such workers by the social safety net.

The emergence of a dualistic labour market, in which one segment is subject to lower wages, less protection from the social safety net and greater job precariousness, creates equity concerns. While the labour law reform is aimed at reducing the growing proportion of non-regular workers, it risks reducing employment of such workers, as well as overall employment. The prohibition on discrimination against non-regular workers may subject firms to costly and time-consuming litigation that would discourage the employment of non-regular workers and increase poverty, thereby putting upward pressure on public social spending. If non-discrimination were interpreted as wage parity, the total wage bill would increase by as much as 13%. In practice, the actual increase would depend on the proportion of the wage gap that is attributed to discrimination and how much is due to differences in the job performed and productivity, a question for which there is a wide range of estimates, as shown above.

Instead, relaxing employment protection for regular workers would reduce dualism and may spur job creation. It may also encourage investment in Korea (see Chapter 6). At the same time, it is important to improve the effective coverage of social insurance, including the Employment Insurance System (EIS), to reduce the gap in labour costs between regular and non-regular workers. In 2005, only 27% of unemployed persons received unemployment benefits, due in part to strict conditions to qualify for benefits as well as their relatively short duration. However, it was also because of the limited coverage of the EIS. Although nearly 80% of employees are eligible for the EIS, only 57% are actually insured (Table 5.16), reflecting the difficulty of ensuring compliance. Increasing the effective coverage is complicated by the frequent turnover of non-regular employees and the large number of small firms. Indeed, 3 million of Korea's 3.2 million firms in 2005 had less than ten employees. The initiative of the National Tax Service to require firms to report the payroll of temporarily employed workers and contingent employees may be helpful in improving compliance. In addition, the collection of the four social insurance contributions (pension, health, employment and industrial accident) will be consolidated in a single agency in 2009.

Table 5.16. **Coverage of the employment insurance system**

Number of workers in thousands and per cent

	1995	1999	2000	2001	2002	2003	2004	2005
Wage and salary earners	12 824	12 603	13 142	13 265	13 932	14 672	14 584	15 185
Eligible for EIS	4 280	8 342	8 700	9 269	9 269	9 651	12 389	12 011
Actually insured	4 204	5 876	6 747	6 884	7 102	7 180	7 905	8 663
Eligible as a per cent of wage and salary earners	33.4	66.2	66.2	69.9	66.5	66.0	84.9	79.1
Insured as a per cent of eligible workers	98.2	70.4	77.6	74.3	76.6	74.4	63.8	72.1
Insured as a per cent of wage and salary earners	32.8	46.6	51.3	51.9	51.0	49.1	54.2	57.0
Proportion of unemployed receiving benefits[1]	. .	13.5	. .	16.0	. .	19.1	23.6	27.3

1. Annual averages.

Source: Ministry of Labour.

Conclusion

Korea faces considerable pressure to increase public social spending on childcare, pensions, healthcare, long-term care and social assistance, as discussed above. However, the government should be cautious in boosting such spending, which may be difficult to reduce in the future. A number of OECD countries have found that significant increases in social spending, accompanied by higher taxes, have had a negative impact on economic growth. The pace of spending hikes should be consistent with targets to ensure medium and long-term fiscal sustainability and increased social spending should be partially offset by reduced outlays in other areas. Rather than setting an overall target of around 21% of GDP for social spending, it would be better to focus on developing effective programmes in each area that taxpayers are willing to fund, an objective of the *Vision 2030* plan. For example, the proposed increase in the National Pension Scheme contribution rate to the 15.9% level necessary to ensure the financial sustainability of the scheme, assuming a 50% replacement rate, was rejected by the National Assembly, and the political parties agreed to leave the contribution rate at its current level of 9%. Specific recommendations in each area discussed in the chapter are summarised in Box 5.6.

The authorities should take into account the characteristics of the labour market in developing the social safety net. Given the key role of social insurance programmes in Korea, about three-quarters of public social spending is financed by contributions from workers, and the other quarter by the government. The burden on workers is relatively high compared to the European Union, where the government financed 37% of public social outlays in 2001. Contribution-based social spending may have an effect comparable to tax-based systems, if the coverage is comprehensive. However, coverage is far from universal in Korea. As noted above, only half of the labour force contributes to the public pension scheme, reflecting a low proportion for the self-employed. Similarly, 64% of regular workers are insured by the EIS, but only 34% of non-regular workers. In addition, the difficulty of ensuring compliance and enhancing the transparency of the income of the self-employed places a large burden on employees, who account for 43% of the working-age population. Indeed, social insurance charges already amount to 25% of employee earnings (Table 5.17). Greater reliance on tax-financed social spending, such as the basic pension benefit, would reduce the burden on employees. In sum, it is important to design social spending programmes that are compatible with Korea's labour market characteristics.

While increased social spending is one usual response to rising inequality and poverty, it is important to address the issue of increased dualism in the labour market. Reversing the trend toward more non-regular workers would reduce the need for additional social spending

Table 5.17. **Social insurance contributions**

Per cent of employee earnings in 2005

	Employer	Employee	Total
Industrial accident compensation insurance	1.62	. .	1.62
Wage claim guarantee fund	0.04	. .	0.04
Employment Insurance System[1]	1.30	0.45	1.75
National Health Insurance	2.16	2.16	4.31
National Pension Scheme	4.50	4.50	9.00
Retirement allowance[2]	8.30	. .	8.30
Total	**17.92**	**7.11**	**25.02**

1. The rate varies from 0.7% to 1.3% depending on the size of the firm.
2. The Labour Standard Law requires firms to pay departing employees a lump-sum of one month of salary for every year worked.

Source: Ministry of Finance and Economy.

aimed at the working-age population. Moreover, an expansion of social programmes may not always succeed in substantially reducing poverty rates; between 1995 and 2000, there was only a weak relationship between increases in social spending and overall reductions in poverty in OECD countries (OECD, 2006b).

Finally, the emphasis on equality in the provision of social services should be tempered by more attention to promoting competition and enhancing consumer welfare. This would reduce the emphasis on the public provision of social services, such as childcare and long-term care, in favour of a larger role for private firms. Providing vouchers to users of services would stimulate competition and the supply of services that match consumer demands. In addition, allowing a greater role for private health insurance for services not covered by the NHI and for-profit hospitals would increase consumer welfare.

Box 5.6. **Summary of recommendations on public social spending in the context of ageing**

Remove obstacles that limit the fertility rate

- Reform the education system to reduce reliance on private tutoring institutions and lower the out-of-pocket cost paid by families for education.
- Reduce obstacles that discourage childbirth by ensuring an adequate supply of high quality childcare and encouraging more family-friendly policies in firms, an approach that will also boost female labour participation.
- Encourage private-sector supply of childcare, in part by removing price caps on private-sector suppliers.
- Be cautious in introducing tax and social benefits for families to boost the fertility rate as this approach may also discourage the labour force participation of women.

Box 5.6. **Summary of recommendations on public social spending in the context of ageing** *(cont.)*

Encouraging labour force participation

- Address the factors that limit the attractiveness of the labour market to women by reversing the trend toward greater non-regular employment and the importance of seniority in determining wages.
- Promote the participation of older workers by raising or eliminating mandatory retirement ages.
- Replace employment subsidies with high deadweight costs by more emphasis on lifelong education.

Ensuring adequate income for elderly persons

- Increase the means-tested benefit from 5% of the average wage to reduce poverty among the elderly, given the difficulty in extending the coverage of the NPS.
- Reform the pension schemes for the civil service, military and private-school teachers to reduce government subsidies and introduce portability with the NPS.
- Accelerate the transition from the lump-sum retirement allowance to company pensions through changes in the tax law and promote the use of defined contribution rather than defined benefit schemes.

Improving the healthcare system

- Avoid overall cuts in co-payment rates to limit the rise in public healthcare expenditures.
- Lower the ceiling on the amount of co-payments over a six-month period in order to ensure greater access for low-income persons and patients with chronic illnesses.
- Mitigate the burden on the working-age population by requiring the elderly to contribute to the NHI.
- Allow for-profit companies, including foreign firms, to provide healthcare and permit a greater role for private health insurance for services not covered by the NHI to increase the availability of high quality services.
- Limit spending pressures by making the unified NHI a more effective purchaser of health services and by considering payment systems other than fee-for-service.
- Promote "healthy ageing" to avoid longer periods of disability as life expectancy increases.
- Improve the framework for the provision of pharmaceuticals to reduce their relatively large share in healthcare spending.

Providing long-term care for the elderly

- Expand the capacity of long-term care facilities for the elderly, thus lowering the burden on the healthcare system.
- Reduce reliance on public-sector institutions by encouraging the entry of private-sector suppliers.
- Control the increase in demand for long-term care as insurance is introduced by ensuring an effective gate-keeping function and favouring home-based care over more expensive institutional care when possible.

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Box 5.6. **Summary of recommendations on public social spending in the context of ageing** *(cont.)*

Addressing rising inequality and relative poverty

- Expand the National Basic Livelihood Security System to ensure that all households have income that at least matches the minimum cost of living.
- Increase the coverage of non-regular workers by the social insurance programmes for pensions, health and employment, thereby improving equity and reducing the cost advantage in hiring non-regular workers.
- Ensure that the new labour law provisions to prevent discrimination against non-regular workers do not discourage the hiring of such workers, which firms need for employment flexibility.
- Reduce employment protection for regular workers to reverse the rising proportion of non-regular workers.

Notes

1. A study of OECD countries estimates that raising social spending from 18.5% of GDP to 19.5% would reduce GDP in the long run by 0.7% (Arjona *et al.*, 2001).
2. This estimate is from Bassanini and Duval (2006). Using econometric estimates to gauge the potential employment effect of policy reforms requires caution. *First*, the impact of a given reform differs between countries, in part because other policy settings may offset or amplify the employment effects of the reform. For instance, the increase in unemployment resulting from a rise in the tax wedge may tend to be larger when minimum wages are high, or when wage bargaining takes place at a sectoral and/or regional level. *Second*, the impact of a reform on unemployment is implicitly assumed to be a linear function of the policy change. This assumption holds only insofar as large reforms are comparable in nature to smaller ones.
3. The tax wedge measures the difference between total labour compensation paid by the employer and the net take-home pay of employees as a ratio of total labour compensation. The international comparison of tax wedges is based on a couple earning 100% of average worker earnings, using the average of three family situations (OECD *Taxing Wages* database).
4. The introduction of a national family planning programme in 1962 to lower the birthrate contributed to the rapid decline (Cho, 2006). The various regulations in the programme were finally removed in 1996.
5. A number of studies have found that a higher unemployment rate lowers fertility rates by increasing income uncertainty. See Adsera (2004).
6. Education costs amounted to 12% of spending in households with one child, 22% in those with two children and 26% in those with three or more. The proportion of women who do not want more children because of education costs excludes those who responded that they have enough children or were too old, thus limiting the sample to women who want to have additional children. See KIHASA, Ministry of Health and Welfare and the Presidential Committee on Aging Society and Population Policy (2005).
7. However, increasing child allowances may reduce female labour supply through its income effect.
8. The number of independent secondary schools is limited to six at present.
9. Provided by the Ministry of Gender Equality and Family in response to an OECD questionnaire.
10. In the case of Australia, childcare providers have become more flexible in their opening hours and allow parents to buy childcare for varying time periods that match their needs (Pearson and Martin, 2005). However, given that commercial providers may not invest in low-income or remote areas, there may be a need for publicly supplied childcare.
11. Korea National Statistical Office (2006). The other major obstacles were social prejudice against working women (18.5%), unfair labour conditions (11.6%) and the burden of housework (7.2%).
12. After adjusting for workers' characteristics, the gender gap in wages is estimated at about 20% for regular workers (Jeong, 2003).

13. In February 2007, the government announced its "2+5 Strategy", which aims to reduce the preparation period prior to entering the labour force by two years and to encourage people to stay in the labour force for an additional five years. To accomplish the latter objective, the government will: 1) take policy initiatives to expand job description and performance-based wage systems; 2) reform the National Pension Scheme by further reducing the Early Old-age Pension (which is available from age 55) and further increasing the Later Old-age Pension (which is available from age 60); and 3) encourage a longer work period through the introduction of the Retirement Extension Allowance and by preventing age discrimination. Under the Retirement Extension Allowance, employers who extend the employment of older workers receive 0.3 million won per worker during half of the employment extension.
14. This is based on a poverty threshold set at 50% of the national median.
15. In fact, employees are allowed to receive this lump-sum payment in advance while still employed to help them finance major expenditures, including housing.
16. However, in the OECD projections, the rise in public healthcare spending is limited by the assumption that the residual factor is constant at 1% through 2050 in all member countries (cost-pressure scenario) or that it is gradually reduced to zero in all countries by 2050 (cost-containment scenario). This assumption may be less appropriate for Korea given that the private-sector share of healthcare spending is already high.
17. Out-of-pocket payments include co-payments for services covered by the NHI as well as the costs of illness not covered by the NHI.
18. The government has recently extended the coverage of the NHI to include certain major diseases, additional diagnostic procedures, some "hotel" services and catastrophic cover.
19. In May 2006, the government announced the Drug Expenditure Rationalisation Plan, which aims at guaranteeing affordable access to cost-effective pharmaceuticals, as well as to rationalise national drug expenditures. The new Plan was implemented in December 2006.
20. For the self-employed, the contribution will be set at 5.5% of the NHI premium. As in the case of pensions and healthcare, the lack of transparency about the income of self-employed is a serious problem.
21. There is a reduction for low-income elderly and those eligible for social assistance will pay nothing.
22. An average of 17 OECD countries for which data are available. See Förster and Mira d'Ercole, 2005.
23. For example, tax and benefit policies reduce relative poverty by 57% and 73% respectively in Italy and the Netherlands, even though gross public social spending is higher in Italy (24.1% of GDP) than in the Netherlands (20.7%). See Förster and Mira d'Ercole, 2005.
24. The relatively high level of mandatory private social spending (Table 5.1) is concentrated on employees of large companies, who are the highest paid employees in Korea. Consequently, private social spending by firms is not likely to have much impact on income redistribution and may even increase inequality.
25. The relative poverty rate, measured by a threshold of 40% of the median income, rose from 4.6% in 1996 to 8.1% in 2000. Increased poverty among households including married couples – 83% of all households – accounted for more than 2 percentage points of the increase. See Ku, 2004.
26. Patterns in inequality and relative poverty over time are similar in most OECD countries. The correlation of the Gini coefficient and the relative poverty rate during the period 1970 to 2001 was 0.90.
27. This figure refers to the share of workers who are temporary according to the OECD definition. In Korean statistics, the proportion of non-regular workers, which also includes other types of workers such as part-timers, in addition to temporary workers, is around 40%.
28. Ahn (2006). Thus, 9 percentage points of the 38-point gap between regular and non-regular workers is due to discrimination. The rest of the wage gap is explained by a workers' tenure (20%), the industry in which they work (17%), firm size (12%), education level (11%), gender and marital status (9%), age (5%) and occupation (4%). Some of these factors may also be related to discrimination.
29. The revision of the labour law in 1998 to allow collective dismissals for "urgent managerial reasons" has not sufficiently enhanced flexibility in practice. This reflects the attached conditions, notably exhausting "all means" to avoid dismissals, discussing proposed dismissals for at least two months with workers and notifying the government. In practice, rulings by the Supreme Court have introduced flexibility in certain cases. Nevertheless, given the constraints in the law, firms have relied on more expensive methods to reduce employment, such as early retirement packages and incentives for voluntary departures. In addition, regular workers in unionised companies also receive protection in collective bargaining agreements.

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Chapter 6

Enhancing the globalisation of Korea

Globalisation through foreign direct investment (FDI), international trade and international movements of labour is a key force driving economic growth. Although Korea has become more integrated in the world economy over the past decade, it still ranks low in terms of import penetration, the stock of inward FDI relative to GDP and foreign workers as a share of the labour force. A number of policy reforms would help Korea make greater use of goods, services, capital and human resources from abroad: i) *reducing barriers to FDI, including foreign ownership limits in some sectors;* ii) *focusing on attracting FDI by improving the business and living environment rather than through special zone schemes;* iii) *reducing import barriers, particularly in agriculture, through multilateral trade negotiations and WTO-consistent regional trade agreements;* iv) *relaxing product market regulations, notably in services; and* v) *easing controls on and facilitating the inflow of both low and high-skilled workers.*

The benefits of integration in the world economy are demonstrated by both economic theory and history (OECD, 2005a). Korea is one of the countries that have benefited most from increased globalisation during the past decade through freer international flows of capital, goods and services. Indeed, foreign capital played a key role in the restructuring of its financial and corporate sectors in the wake of the 1997 crisis. Foreign ownership of listed companies increased from 15% in 1997 to a peak of 42% in 2004, with foreign investors holding more than 50% of a number of leading companies,[1] as a result of the liberalisation of capital inflows and wide-ranging reforms in the corporate and financial sectors. Meanwhile, exports have doubled from 29% of GDP in 1997 to 58% in 2006, with net exports accounting for almost half of output growth since 1997.

Despite increased openness, Korea's level of integration with the world economy is still low in terms of import penetration, the stock of inward foreign direct investment (FDI) and the share of foreign workers (Figure 1.9). Furthermore, FDI inflows declined in 2005-06, while foreign ownership of listed companies fell to 37% by the end of 2006. At the same time, a significant segment of the Korean population questions the benefits of foreign investment and the broad-based free trade agreement recently negotiated with the United States. Addressing these issues goes beyond trade and investment liberalisation to include structural reforms, such as regulatory changes in product markets and the introduction of market principles in agriculture and social services. A new momentum for reform is now needed to further improve Korea's ability to take full advantage of globalisation. This chapter discusses how the Korean economy can benefit more fully from globalisation by increasing its openness to FDI, trade and human resources from abroad, thereby accelerating productivity gains and output growth. Policy recommendations are summarised in Box 6.4. In addition to the recommendations in this chapter, options for how to proceed are set out in the OECD report, *Korea: Progress in Implementing Regulatory Reform* (OECD, 2007), particularly in its chapter on market openness.

Promoting a more friendly environment for foreign direct investment

The economic benefits of FDI result from positive spill-overs from the presence of foreign firms that: *i)* trigger transfers of technology; *ii)* facilitate the restructuring of firms; *iii)* promote international trade; *iv)* strengthen competition; and *v)* support human capital formation. The $46.5 billion of FDI inflows into Korea between 1998 and 2005 were more than double the amount received during the previous 35 years, and much larger than the $10 billion received between 1991 and 1997. As a result, the stock of inward FDI rose from 2% of GDP in 1990 to 8% in 2005, according to UNCTAD (2006).

While the global investment boom during the second half of the 1990s explains some of the increase, a number of factors encouraged the surge in FDI flows to Korea. *First*, the extensive restructuring in the financial and corporate sectors in the wake of the crisis created a large market for cross-border M&As. More than half of the 30 largest business groups in 1998 either went bankrupt or entered workout programmes and the number of financial institutions has fallen by 40% since 1997. Many of the rest have survived thanks to

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links with foreign investors. *Second*, the government removed many restrictions on FDI while making vigorous efforts to attract foreign investors (see below). *Third*, a significant decline in stock and land prices made investment more attractive for foreign investors. Increased FDI inflows played a pivotal role in Korea's strong recovery following the 1997 crisis by providing significant capital, technology and management skills. Foreign affiliates in Korea accounted for almost a quarter of the increase in manufacturing turnover between 1997 and 2003 and their labour productivity in the manufacturing sector is estimated to be 25% higher than in domestic firms (MOCIE, 2005). However, the role of foreign-affiliated firms in the service sector has been less important (see Box 6.1).

However, the benefits from FDI have been limited by the small amount of inflows in Korea. Despite the increase since 1997, the stock of inward FDI relative to GDP was the sixth lowest in the OECD area in 2002 (Table 6.1). Korea's "inward FDI potential" is ranked 14th among OECD countries by UNCTAD. In contrast, Korea's performance, which compares actual inflows to its economic size, was ranked 24th in 2005, suggesting that there is a large

Table 6.1. **Inward FDI position of OECD countries**

Countries[1]	Stock in 2002 (per cent of GDP)	Inward FDI potential[2] ranking among OECD countries in 2004	FDI performance[3] ranking among OECD countries in 2005
Japan	1.9	17	28
Iceland	8.3	9	2
Italy	9.6	20	22
Turkey	10.2	29	19
Greece	10.5	22	26
Korea	**11.5**	**14**	**24**
United States	12.8	1	25
Austria	18.8	19	15
Norway	19.5	4	21
Finland	23.2	10	17
Mexico	23.8	28	12
Germany	24.1	6	27
France	24.1	12	14
Poland	25.0	26	7
Canada	30.6	3	20
Australia	30.7	13	23
Slovak Republic	31.3	27	8
Portugal	32.1	24	10
Spain	32.3	18	13
United Kingdom	33.8	2	5
Denmark	38.3	16	29
Switzerland	40.2	15	16
New Zealand	41.8	21	11
Sweden	44.3	5	9
Czech Republic	48.3	25	3
Hungary	54.4	23	4
Netherlands	75.0	8	6
Belgium	104.0	11	1
Ireland	133.0	7	18

1. Ranked in ascending order by FDI stock as a share of GDP.
2. Based on factors that affect an economy's attractiveness to foreign investors, such as real GDP growth, GDP per capita, total exports, energy use, education and R&D expenditure.
3. Actual inflows relative to economic size.

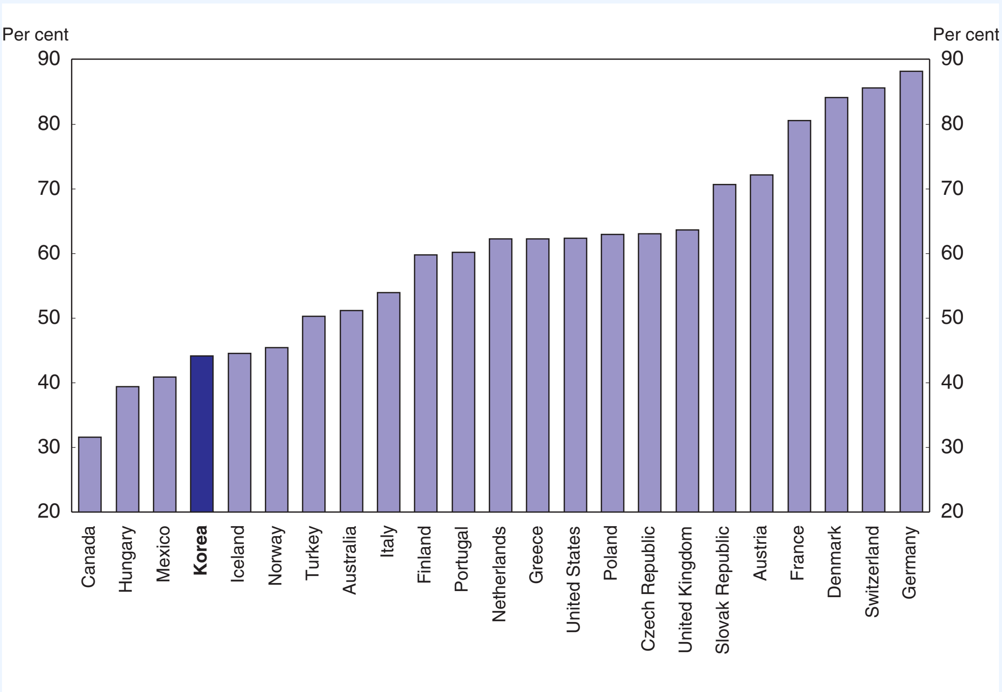
Source: OECD (2005c), *Economic Globalisation Indicators*, OECD, Paris and UNCTAD, *World Investment Report 2006*.

Box 6.1. **The importance of the service sector**

The share of the service sector in Korea's inward FDI stock was one of the lowest in the OECD area at 44% in 2002 (Figure 6.1), reflecting a relatively high level of restrictions on foreign ownership and product market regulations in the service industry (see below). As a result, foreign affiliates accounted for only 8% of service sector turnover and 4% of employment in 2004 (MOCIE, 2005), compared to OECD averages of 19% and 10%, respectively (OECD, 2005c). However, the service sector has accounted for about half of FDI inflows since 1997, reflecting the restructuring of the financial sector in the wake of the crisis and policies intended to develop service industries. In particular, the 2004 plan to make Korea a financial hub for Northeast Asia demonstrates the government's commitment to develop the financial industry.

Figure 6.1. **Share of the service sector in the stock of inward FDI in OECD countries**

In 2002[1]



1. The breakdown is not available for Belgium, Ireland, Japan, Luxembourg, New Zealand, Spain and Sweden. 2000 for Mexico.

Source: OECD (2005c), *Economic Globalisation Indicators*, OECD, Paris.

The potential gains from FDI in services is illustrated by the banking sector, which has received considerable foreign investment in recent years.[1] After-tax profits increased from 3.4 trillion won in 2001 to a record high of 8.6 trillion won in 2005, while the return on asset ratio improved from 0.8% to 1.3% during the same period (Table 6.2). Meanwhile, loans classified as substandard or below fell to a record low of 1.3% in 2005. The privatisation of banks re-capitalised using public funds resulted in a sharp expansion of foreign ownership in the banking sector from 16% in 1997 to 64% in 2004. Currently, foreign investors own more than 50% of nine of the 14 commercial banks. Although much of the improved performance of the banking sector was a result of extensive government-financed restructuring after the crisis and the stronger economy, the foreign presence

Box 6.1. **The importance of the service sector** *(cont.)*

Table 6.2. **Indicators of bank profitability**

Nation-wide banks, in trillion won

	1998	2001	2002	2003	2004	2005
Before-tax profits						
Net profits	–3.2	9.0	9.0	10.7	12.8	13.5
Net profits minus loan loss provisions	–10.1	3.6	3.7	0.3	6.0	10.1
After-tax profits	–10.1	3.4	2.9	0.2	5.9	8.6
Return on equity (per cent)	–48.6	16.3	11.0	0.9	18.2	20.5
Return on asset (per cent)	–3.0	0.8	0.6	0.0	0.9	1.3
Total loans (A)	263.9	353.2	432.2	463.9	473.0	503.3
Substandard loans or below[1] (B)	19.0	11.7	10.6	13.1	9.4	6.5
Ratio to total loans (%) (B/A)	7.2	3.3	2.4	2.8	2.0	1.3
Loan loss reserve (C)	12.1	8.8	8.8	10.7	9.1	7.7
Reserves to substandard loans or below (%) (C/B)	63.8	75.3	83.5	82.1	96.6	117.9
Capital adequacy ratio (BIS ratio)	8.2	10.8	10.5	10.3	11.3	12.5
Number of branches	4 164	4 052	4 304	4 345	4 341	4 415

1. Includes loans classified as substandard, doubtful and estimated loss.

Source: Financial Supervisory Service.

has greatly contributed to improving the productivity of individual institutions by promoting competition, introducing advanced know-how and practices, and strengthening risk management in lending (Kim, 2005).

Given Korea's high quality infrastructure and human capital, there is large scope for boosting the level of FDI in the service sector. The potential gains from such inflows appear important, given its lower level of productivity and growing share of the economy.[2] Labour productivity in services in 2003 was only 64.8% of that in manufacturing, the largest gap in the OECD area, where productivity in the two sectors is roughly equal (Table 6.3). By international standards, sales turnover per employee is low, at 34% of the US level in design, 36% in legal and accounting, 44% in film, 52% in management consulting, and 61% in hospital care (LG Economic Research Institute, 2006).

Table 6.3. **Employment, value-added and productivity by sector**[1]

	Korea	OECD
Share of total employment, 2003 (%)[2]		
Manufacturing (15-37)	19.0	16.6
Services (50-99)	63.5	69.2
Share of total value added, 2003 (%)[3]		
Manufacturing (15-37)	26.4	17.9
Services (50-99)	57.2	68.9
Value added per worker in 2003, manufacturing = 100[2]		
Services (50-99)	64.8	97.1
Wholesale and retail trade, hotels and restaurants (50-52, 55)	28.1	70.5

1. The numbers in parentheses show the ISIC (Rev.3) codes.
2. The OECD total is the simple average of 28 countries in which both employment and value added data are available for 2003 or the most recent year.
3. The OECD total is based on 30 countries, using data for the latest year available.

Source: OECD, *STAN Database for Industrial Analysis*, 2006.

Box 6.1. **The importance of the service sector** *(cont.)*

Low productivity in the service sector is explained by a number of factors. *First*, industrial and tax policies favouring the manufacturing sector and exports of goods have penalised services. *Second*, entry barriers are generally higher in the service sector, weakening competition and resulting in a large number of small firms. *Third*, there is a large inflow of older workers into services, given the early age of retirement from firms (see Chapter 5). Lacking other alternatives, two-fifths of workers over the age of 55 are self-employed, primarily in the service sector. Consequently, one-third of workers in services are either self-employed or family workers compared to an average of 19% in the OECD area.

The Ministry of Finance and Economy announced a comprehensive plan in December 2006 to promote the service industry by providing support through tax policy, subsidies and deregulation. The plan identified 159 tasks to achieve three key objectives:

First, the business environment for the service industry is to be improved through better tax treatment and deregulation. For example, the comprehensive property tax will be cut for certain service industries, such as golf courses and hotels, and development charges (a quasi-tax) will be reduced for the service industry in non-metropolitan areas, as is currently the case for manufacturing. The tax credit for facility investment will be extended to more service industries and the cost of electricity for the service industry will also be lowered by about 30% to reach the level of the manufacturing sector by 2010. Furthermore, the government will provide additional cheap loans and financial subsidies to support investment in promising service industries. State-run banks will expand their capital pool for lending to service-sector companies from 3.2 trillion won in 2006 to 5 trillion won (0.6% of GDP) in 2007, while credit guarantees and export aid for the service sector are increased. A major step in the area of deregulation is the introduction of "Medical Service Organisations", which will allow hospitals to form networks with other hospitals and thereby achieve cost efficiencies and raise the quality of local hospitals by sharing facilities and brands.

Second, the government has identified 21 promising service industries, including video games, digital broadcasting, fashion and film, as priorities for enhancing growth and creating jobs. Detailed action plans, which are expected to include financial support and deregulation, will be announced by each related ministry in 2007.

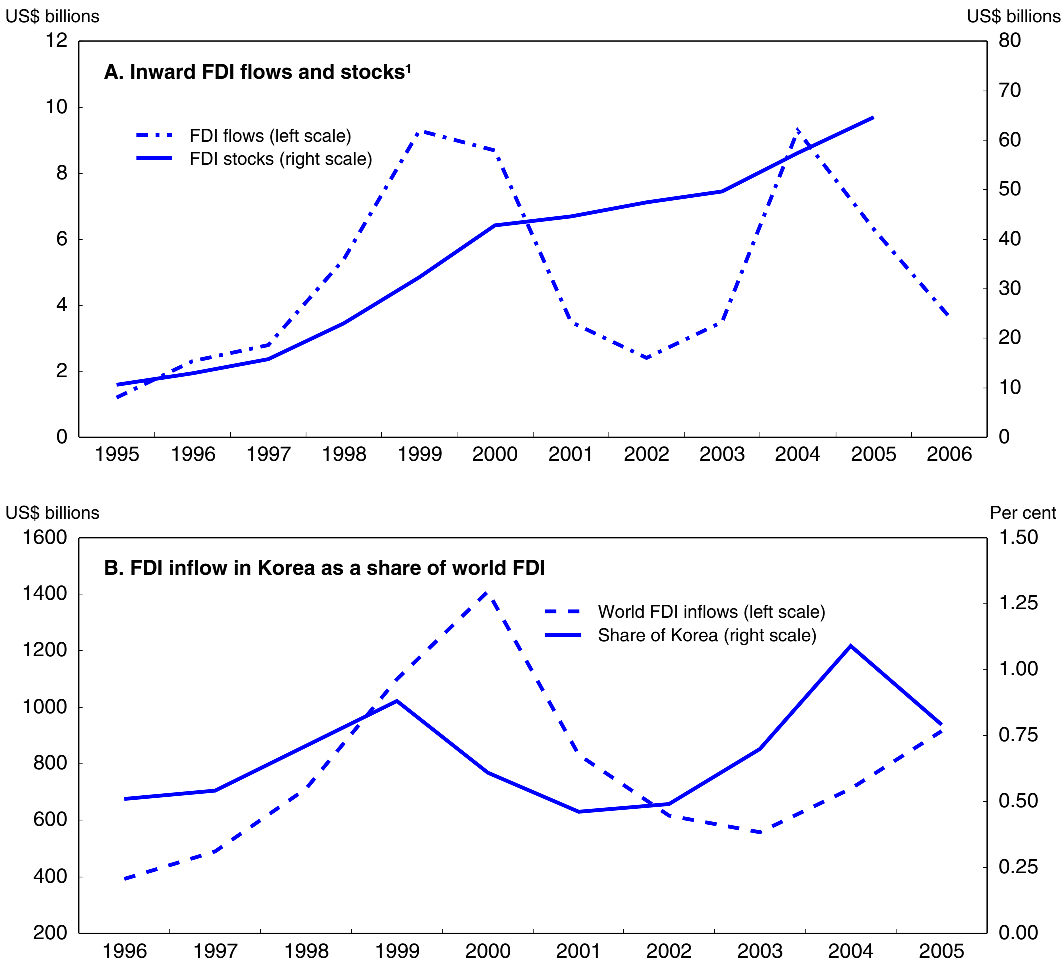
Third, the plan includes tax incentives and deregulation to promote the tourism and education sectors. One goal is to build an English-speaking town on Jeju Island in order to reduce demand for study-abroad programmes. As for tourism, the tax on developing facilities will be reduced to the level imposed on industrial complexes and administrative procedures will be streamlined.

The objectives of regulatory reform and equal treatment for the service sector relative to manufacturing are certainly positive steps. However, the playing field is still not level. In addition, the comprehensive plan raises some concerns. The measures to increase government lending, credit guarantees and export aid to the service sector raise moral hazard issues and distort the allocation of capital. The detailed action plans for 21 service industries should not include significant financial support by the public sector. Moreover, given that smaller firms play a significant role in many areas of the service sector, there is a risk that this initiative will undermine the government's goal of reducing the broad array of programmes to assist small and medium-sized enterprises (SMEs). In 2007, SMEs are supported by 174 different programmes, supervised by 12 different ministries, with total spending of 7.2 trillion won (0.8% of GDP). In addition, two public institutions, the Korea Credit Guarantee Fund and the Korea Technology Guarantee Fund, guarantee loans to SMEs, with the total amounting to 39 trillion won (4.6% of GDP) in 2006. The Bank of Korea has a longstanding guideline that 45% of lending by national banks and 60% by regional banks should go to the SME sector, which is highly indebted compared to large companies. Concern about rapid liquidity growth led the Bank to reduce policy lending to SMEs in December 2006 (see Chapter 2), conflicting with the new plan to expand lending to the service sector from state-owned banks.

1. The financial sector accounted for the largest share of FDI inflows in services, with 19% between 2001-04. However, there are no foreign bank subsidiaries in Korea even though there are no restrictions in principle.
2. The share of value added in services increased from 49.5% of GDP in 1990 to 57.2% in 2003.

scope for additional FDI in Korea. However, inflows declined from $9.3 billion in 2004 to $6.3 billion in 2005 (Figure 6.2), reducing Korea's share of world FDI inflows from 1.1% to 0.8% (Panel B). Inflows fell further to $3.7 billion in 2006. The unrealised potential and the declining trend suggest the need to address factors that act as barriers to FDI inflows and improve policies aimed at attracting foreign investors.

Figure 6.2. **Inward FDI in Korea and its share of the world total**



1. Actual basis.

Source: Ministry of Commerce, Industry and Energy, Bank of Korea and UNCTAD, *World Investment Report 2006*.

Addressing factors that limit FDI inflows

The conditions sought by foreign investors are largely equivalent to those that constitute a healthy business environment. The most important factors considered by firms include (OECD, 2003):

- A predictable and non-discriminatory regulatory environment and an absence of administrative impediments to business.
- A stable macroeconomic environment.
- High quality infrastructure and human capital.

Many of these concerns are covered by the OECD's Policy Framework for Investment.[2] Achieving such an environment is essential, as internationally mobile investors tend to respond quickly to changes in business conditions. To improve the environment in Korea for FDI inflows, the major tasks are to develop the M&A market, further relax restrictions on FDI, ease product market regulations and improve the business and general living environment.

Activating the M&A market

M&A activity has emerged as the main driver of FDI flows.[3] Korea experienced a surge in cross-border M&As after 1997 as a result of the removal of restrictions and the restructuring of the corporate and financial sectors (Table 6.4). Subsequently, the amount decreased during 2000-02, before picking up during 2003-04. The telecommunication and financial sectors have accounted for much of the increase, reflecting high entry barriers in telecommunications and general financial regulations in the financial sector that make M&As the preferred method of entering these markets. The share of M&As by foreign firms in Korea's M&A market has been around 30% in recent years, close to the 36% share of cross-border M&As in the global total of M&As. Cross-border M&As accounted for 46% of total FDI in Korea during the period 2003 to 2005.

The total M&A market is relatively small in Korea, amounting to only 2.9% of market capitalisation in 2005, well below the United States (6.9%), France (7.4%), Germany (9.4%) and the United Kingdom (9.9%).[4] Moreover, the share of M&As by foreign firms in Korea amounted to only 1.5% of the world total of cross-border M&As in 2005 (Table 6.4, Panel B). The small M&A market partly reflects funding difficulties in Korea's still developing capital market and the negative attitude of management, labour unions and non-governmental organisations concerning M&As. Such sentiments have been fuelled by the experiences of

Table 6.4. **Recent trends in the Korean M&A market**

A. M&As in Korea[1] (trillion won)

		1998	1999	2000	2001	2002	2003	2004	2005
Total M&As	Case	486	557	703	644	602	589	749	658
	Amount	125.0	80.0	30.7	13.5	15.3	13.7	16.2	19.2
M&As by foreign firms	Case	132	168	114	102	90	103	125	84
	Share in total (%)	27.2	30.2	16.2	15.8	15.0	17.5	16.7	12.8
	Amount	9.3	10.9	2.5	1.6	1.3	3.5	6.3	5.5
	Share in total (%)	7.4	13.6	8.1	11.9	8.5	25.5	38.9	28.6

B. World total by seller ($ billion)

	2003		2004		2005	
	Amount	Per cent	Amount	Per cent	Amount	Per cent
United States	73.2	19.8	69.7	22.8	81.9	21.5
European Union	208.8	56.5	126.0	42.4	178.8	47.0
Japan	5.7	1.5	11.0	3.7	8.9	2.3
Korea	**5.4**	**1.5**	**3.8**	**1.3**	**5.6**	**1.5**
Other OECD[2]	27.7	7.5	20.9	7.0	39.1	10.3
Rest of world	49.0	13.3	65.6	22.1	66.3	17.4
Total	**369.8**	**100.0**	**297.0**	**100.0**	**380.6**	**100.0**

1. M&As include the transfer of business and equity acquisition. M&As by foreign firms were not allowed until after the 1997 crisis.
2. Australia, Canada and New Zealand.

Source: Korea Fair Trade Commission and UNCTAD (2006), *World Investment Report*.

private equity funds that purchased Korean banks following the crisis[5] and the active role of foreign shareholders.

The share of unsolicited takeovers in global cross-border M&As doubled from 6% in 2005 to 12% in the first half of 2006 (Oh and Park, 2006). Although there has never been a successful unsolicited takeover bid for a Korean firm by foreign investors, three unsuccessful attempts launched since the crisis[6] have prompted demands from Korean companies for increased protection from unsolicited takeover bids. Moreover, firms feel more vulnerable in the context of reduced restrictions on FDI (see below). Consequently, business groups have argued for the inclusion of poison pills, golden share and multiple voting rights in the Commercial Code to allow them to fend off unsolicited takeover bids. However, these demands were rejected on the grounds that they are inconsistent with global standards and violate the "equal treatment of shareholders" principle of the Code. The Federation of Korean Industries also argued for an end to the 25% shareholding ceiling imposed on *chaebol*-affiliated companies as it makes them more vulnerable to unsolicited takeover bids (Box 6.2).

Higher priority should be given to facilitating M&As, given that Korea's market is still small. The authorities should explain the benefits of an active market for corporate control, while rejecting demands for legal changes to prevent unsolicited takeovers. At the same time, the government should ensure a level playing field between foreign and domestic firms, in part by removing the 25% shareholding ceiling. A more active M&A market may help reduce the "Korea Discount" – the low price-earnings ratio for Korean firms compared to other countries[7] – by prompting a revaluation of target firms. Indeed, the M&A premium – the value of a firm in excess of its market price – is large in Korea. In addition, facilitating M&A activity may improve weak corporate governance in *chaebol*. The threat of a potential M&A adds pressure to develop well-structured corporate governance.

Further liberalising restrictions on FDI inflows

Lifting FDI restrictions to provide equal treatment of foreign and domestic investors is important to encourage inflows. The financial crisis prompted Korea to relax such restrictions through the Foreign Investment Promotion Act (FIPA) of 1998. The major measures included: 1) opening additional sectors to foreign investment. The number of business lines completely closed to FDI was reduced from 30 in 1997 to two at present – television and radio broadcasting – out of 1 058 business lines;[8] 2) eliminating restrictions on cross-border M&As; 3) removing regulations on foreign ownership of real estate; 4) streamlining the registration of FDI from prior approval to notification. The FIPA also established the Committee on Foreign Direct Investment (CFDI) to make major policy decisions on FDI and prepare an annual FDI Environment Improvement Plan, based on proposals submitted by ministries and local governments, which are members of the Committee. Invest Korea was established in 2003 to provide a "one-stop service" to help foreign investors with administrative, legal and tax matters. In addition, the independent Foreign Investment Ombudsman was created to handle specific grievances by foreign investors, and in conjunction with Invest Korea, provides one-stop service to foreign investors.

Overall, formal FDI restrictions in Korea are judged to be slightly weaker than the OECD average, reflecting lower restrictions in manufacturing.[9] However, investment in 26 sectors, primarily services, such as transport, telecommunications and electricity, are restricted by limits on foreign ownership.[10] As a result, the OECD index of FDI restrictions in these sectors is above the average of member countries. Reducing FDI restrictions is likely to significantly

Box 6.2. **Recent reforms in the area of corporate governance**

Korea has made vigorous efforts since the crisis to improve corporate governance, such as expanding the rights of minority shareholders, strengthening the role of outside directors, requiring large business groups known as *chaebol* to produce consolidated financial statements, and stiffening penalties for improper disclosure. In addition, class action suits against large firms with assets of at least 2 trillion won were allowed in 2005 in securities-related cases. Nevertheless, the Korea Fair Trade Commission (KFTC) continues to impose extensive regulations on the corporate and financial structure of *chaebol* to limit the concentration of economic power and to improve corporate governance.[1]

One of the regulations limits shareholding in other companies by firms affiliated with the *chaebol* to 25% of their net assets. Despite holding only 6% of the groups' shares on average, the founding families of the large business groups have exercised significant control over affiliated firms through "circular shareholding". According to the KFTC, such a structure can undermine internal and external monitoring, disregard the interests of minority shareholders and create a risk that the bankruptcy of one subsidiary could drag down the entire conglomerate. Large business groups argue that this regulation is a major obstacle to business investment while making domestic companies vulnerable to unsolicited takeover bids. On the other hand, the KFTC believes that the regulation is not a serious obstacle to business investment as it is applied only to acquiring existing shares, and there has not been a significant correlation between increased shareholding by large business groups and subsequent investment.

The number of business groups subject to the shareholding ceiling, which was applied to business groups with more than 6 trillion won of assets, has been cut from 19 in 2002 to 14 in 2006, largely as a result of a graduation system based on corporate governance practices in 2004. Large *chaebol* are exempt from the regulation if they meet one of four conditions; 1) an excellent internal monitoring system; 2) a narrow gap between cash flows and voting rights; 3) a shareholding structure with five or less affiliates; or 4) adoption of a holding company structure. In practice, the coverage of this regulation is reduced by exemptions based on business needs, industry characteristics and government initiatives, including building "enterprise cities" (see Chapter 3), attracting FDI, economic co-operation with North Korea (Chapter 4) and promoting industries identified as "growth engines". As a result, half of total shareholding by *chaebol* that would otherwise be subject to the regulation is exempted. In 2007, the National Assembly passed a bill to further reduce the coverage of the regulation by increasing the asset threshold while raising the shareholding limit.

Korea is taking further steps to improve corporate governance,[2] such as extending the possibility of class action suits to all listed firms in 2007. In addition, amendments to the Commercial Code are to be proposed in 2007 to make managers and controlling shareholders more accountable to minority shareholders. Major changes under discussion include: 1) the introduction of "Double Derivative Lawsuits", which allow shareholders holding 1% or more of a parent company to sue directors of its subsidiary companies for breach of duty; 2) the "Executive Director System", which is intended to strengthen internal checks and balances by separating the supervisory role of boards of directors from that of executive directors focused on decision making; 3) a prohibition against corporate directors using their corporate responsibility for their own or a third party's benefit; and 4) subjecting transactions between corporations and their directors to greater review from the board of directors to prevent managers from pursuing personal interest at the expense of the firm. Although large business groups are critical of these measures, arguing that they would depress entrepreneurship and unduly undermine corporate autonomy, the enhanced Commercial Code should provide clear rules to help reduce many of the abuses that have occurred due to weak corporate governance practices. The strengthening of corporate governance should allow the phasing out of special regulations targeting the *chaebol* and allow the KFTC to focus more on competition policy. Supervisory functions related to shareholding, guarantees and intra-group transactions that amount to misuse of corporate assets should be concentrated in regulators responsible for financial and securities matters, notably the Financial Supervisory Service. Transactions that have an exclusionary or distorting effect on product market competition in particular cases should still be subject to competition-law control.

1. In addition to the shareholding ceiling, other major regulations include bans on cross-shareholding and cross-debt guarantees for affiliated companies, and a restriction on the voting rights of a financial company belonging to a *chaebol* to 30% regardless of its ownership share. These controls are applied to *chaebol* with assets of more than 2 trillion won.
2. According to a survey by the Korea Corporate Governance Service, the overall corporate governance framework is good but there is a need for better practice and enforcement, despite some improvement since 2003.

increase Korea's stock of inward FDI.[11] In addition to network industries, it is important to open public social services, such as education and healthcare, to FDI inflows to enhance productivity and efficiency in these key areas.

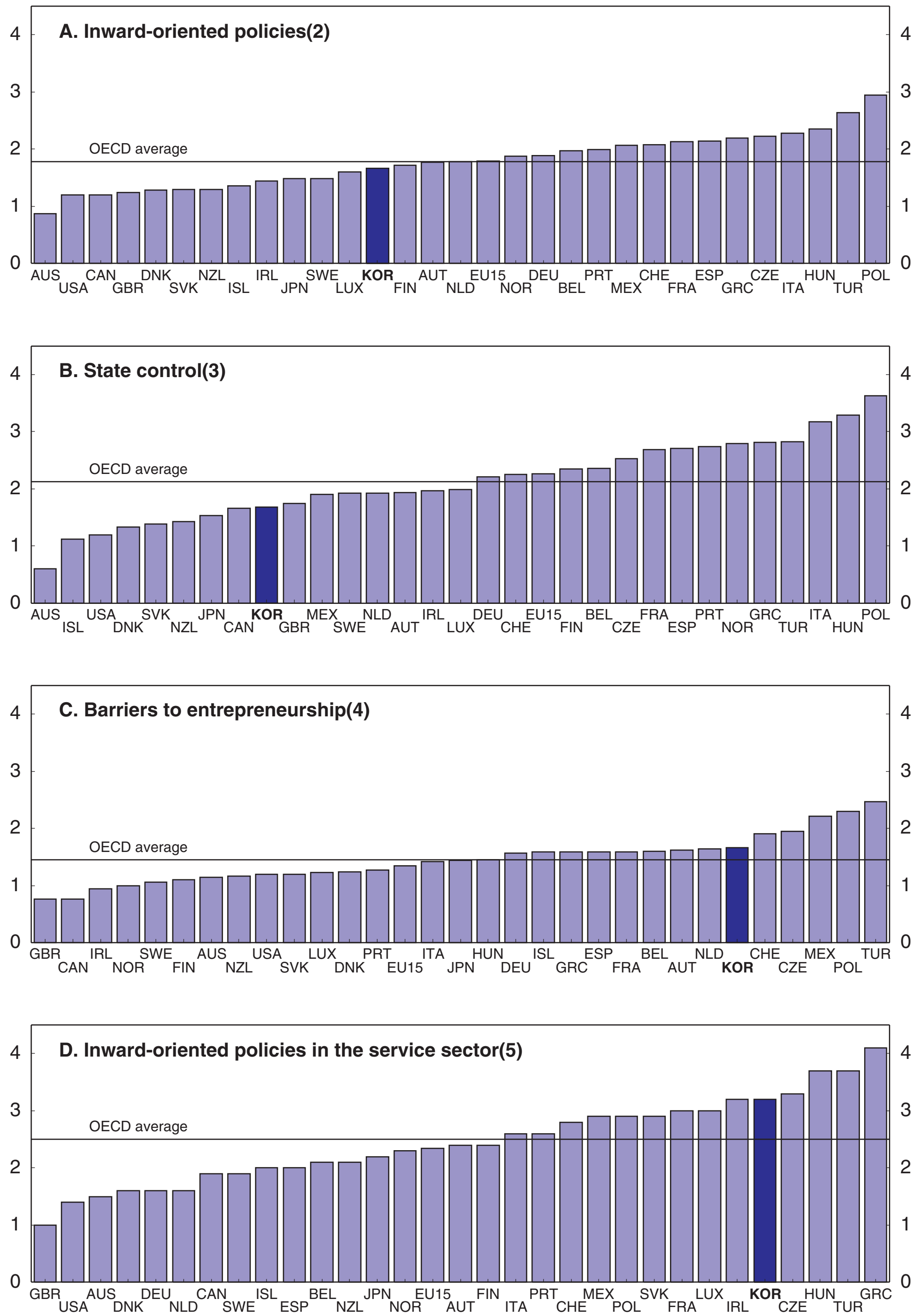
Product market regulations (PMRs) – regulations that have the potential to reduce competition in all sectors – have been found to impose significant barriers to FDI in OECD countries. Moreover, they have become relatively more significant obstacles as explicit restrictions on FDI have been gradually eliminated. Empirical studies show that countries with relatively restrictive and costly product market regulations tend to have lower stocks of foreign investment (Nicoletti *et al.*, 2003).[12] According to the OECD indicator, inward-oriented regulations in Korea were near the OECD average in 2003 (Figure 6.3). In the "state control" sub-category, Korea's regulations are rated as more liberal than the OECD average, reflecting the progress in privatisation since the crisis.[13] However, Korea's regulations were ranked as relatively restrictive in the "barriers to entrepreneurship" sub-category, which includes regulatory opacity, administrative burdens on start-ups and barriers to competition. As for the service sector, Korea was ranked as the fifth most restrictive country. Restrictive PMRs and regulations on foreign ownership in some sectors help to explain why the share of Korea's FDI stock in services is one of the lowest in the OECD area.

In particular, regulations restricting new investment in the capital region, which are intended to promote balanced national growth (see Chapter 3), are frequently cited as a major obstacle to FDI. The preference of foreign investors for the capital region, given its high quality infrastructure, the availability of skilled human resources and access to a large market, conflicts with the government's objective of developing other parts of the country. The authorities temporarily exempted foreign investment in 25 high-technology industries from these restrictions, while also allowing exemptions for domestic firms in eight industries. Nevertheless, each foreign investment proposal still requires approval from the relevant ministries, based on its overall contribution to the economy. The case-by-case approach undermines the transparency of the FDI framework, thereby driving away potential investors. Transparency should be enhanced by introducing clear criteria, while lifting the capital-region regulations.

Improving the business and living environment

A 2006 poll of foreign firms identified the main problems in the business environment in Korea (Table 6.5). In the survey, labour-management relations are the major concern cited by foreign firms in Korea. The relationship between employers and employees is often marked by struggle and confrontation rather than dialogue and compromise. Indeed, the number of working days lost due to labour strikes in Korea averaged 100 days per 1 000 workers between 2000-03, the sixth highest in the OECD area and significantly above other Asian countries (Figure 6.4). Although the number of strikes has fallen during the past two years, the number of days lost remained high at 77 days per 1 000 workers in 2006. Of the 280 foreign firms surveyed, 49% were dissatisfied with labour-management relations – the largest share for any issue – while only 19% were satisfied. Other labour market problems cited by foreign affiliates include the demand of workers to participate in management, a complicated wage structure, the retirement allowance system, the requirement to pay labour union leaders and limits on the duration of contracts for dispatched workers. Another concern is employment protection, which makes corporate restructuring difficult and raises costs by limiting managerial discretion.[14] The lack of flexibility in restructuring may undermine the rationale for M&As, thus tending to reduce FDI inflows.

Figure 6.3. **Product market regulation in 2003**[1]



1. The scale of indicators is 0-6 from least to most restrictive. OECD and EU15 are simple averages.
2. Inward-oriented policies consist of "State control" and '"Barriers to entrepreneurship", excluding barriers to trade and investment.
3. State control covers public ownership of business enterprises and government's involvement in business operations.
4. Barriers to entrepreneurship cover regulatory and administrative opacity, administrative burdens on start-ups and barriers to competition, including entry barriers.
5. Includes electricity, gas, airlines, rail and road transport, post and telecoms. Barriers to trade and investment are not included.

Source: Conway *et al.* (2005).

Table 6.5. **Korea's business environment: the view of foreign firms**

Response to the question: "What is the most important task to improve the business environment?"[1]

	Per cent
Address problems in labour-management relations	34.6
Create an international mindset	31.1
Open markets	22.5
Expand the use of foreign languages	13.9
Alleviate the excessive tax burden	13.2
Ensure transparent business practices	12.9
Strengthen administrative support for services	12.1
Foster a freer and more international financial environment	10.7
Ensure political stability	8.9
Refurbish the logistical environment	6.1
Other	2.1
No response	0.4

1. A survey of 280 foreign firms operating in Korea.

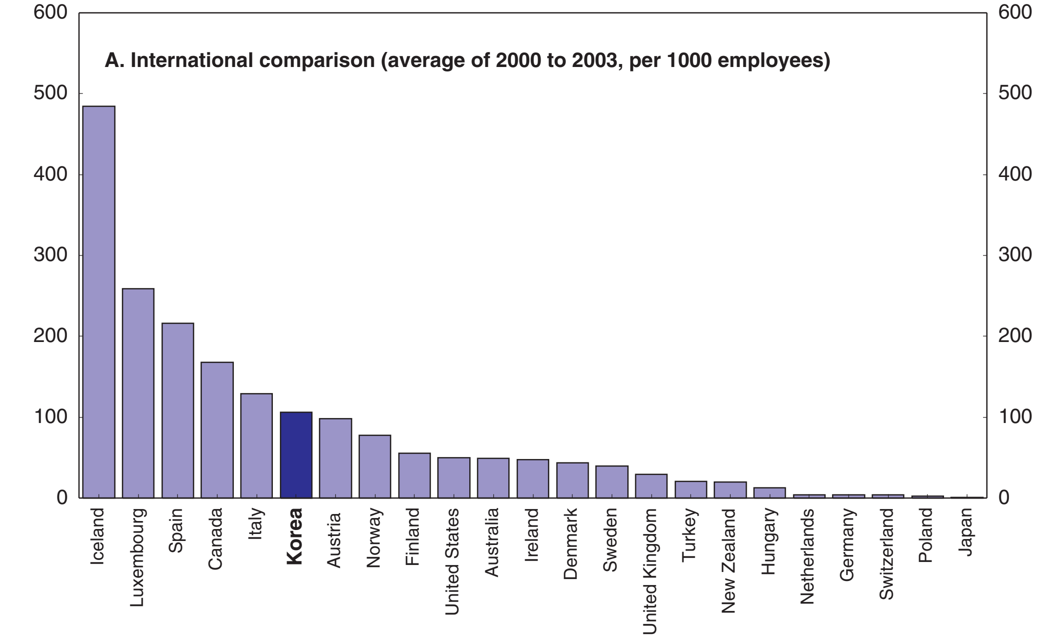
Source: Invest Korea (2006).

The government has made progress in bringing Korea more closely in line with international labour standards in implementing the 2003 "Roadmap for Industrial Relations Reform".[15] The main outstanding questions are allowing multiple unions at the enterprise level and the prohibition on companies paying union leaders. The Tripartite Commission, consisting of unions, management and government officials, agreed to delay the introduction of multiple unions and the ban on paying union leaders until 2009. Despite the progress in implementing the Roadmap, a national labour confederation has launched a number of general strikes focused on several issues, including the Korea-US free trade agreement (see below). Moreover, the issue of employment flexibility for regular workers has not been addressed.

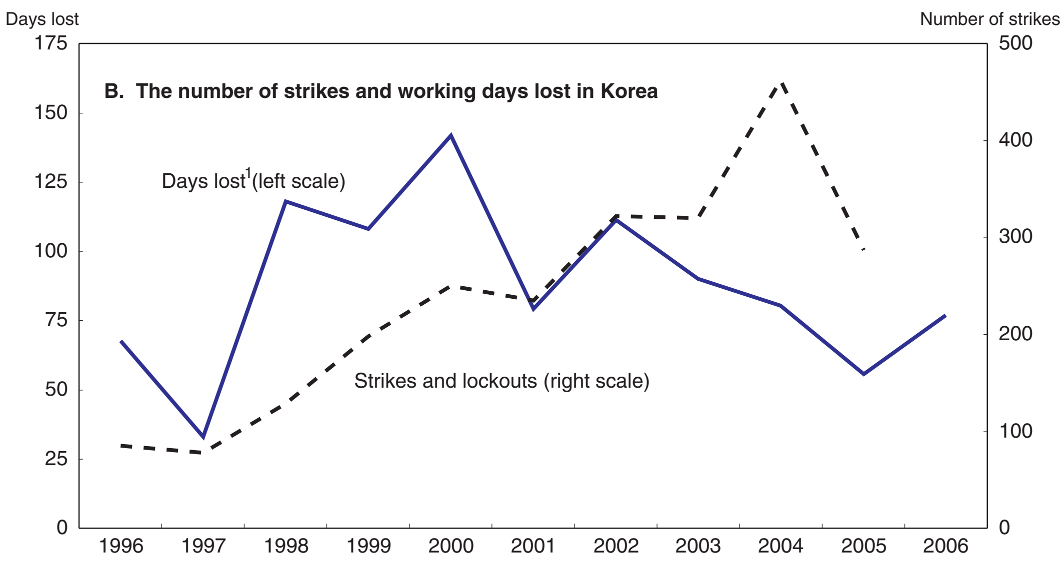
Another criticism of the business climate in Korea concerns administrative transparency. Foreign firms complain about a lack of transparency and predictability in tax and financial supervisory policies, especially at the enforcement level, and believe that rules are interpreted more strictly for foreign companies (OECD, 2007). This is a result of enforcement based on internal regulations and wide discretion at the working-level staff. Despite government efforts to improve transparency, a 2006 poll of foreign firms by Invest Korea reported that 58% saw no change and 19% saw a deterioration in the situation.

Another important factor in FDI decisions is the quality of life for foreigners, including access to high quality foreign schools and hospitals. In Korea, firms, whether domestic or foreign, are not allowed to establish schools or hospitals for profit. To improve the living environment for foreigners, the Korean government recently allowed foreign hospitals and schools in the Free Economic Zones (see below). However, the repatriation of earnings from schools is banned, effectively discouraging foreign schools from entering the zones. Allowing both domestic and foreign firms to enter the education and healthcare markets on a nation-wide basis would improve living conditions throughout the country. In 2004, the government announced a five-year plan to promote a more friendly business and living environment for foreign investors. It identified 156 tasks, including immigration procedures, residential facilities and access to high quality schools and medical facilities. By the end of 2006, 108 of the tasks had been addressed, with the remainder to be completed by 2008.

Figure 6.4. **Working days lost due to strikes**



Notes: For Canada. includes strikes lasting at least half a day with more than 10 days lost; for Italy, computed on the basis of a seven-hour working day; for Norway, Sweden and Switzerland, excluding work stoppages lasting less than one day; for the United States, excluding work stoppages involving fewer than 1000 workers and lasting less than a full day or shift; for Australia, excluding work stoppages in which less than 10 workdays not worked; for the United Kingdom, including stoppages involving fewer than 10 workers or lasting less than one day if more than 100 working days are lost; for New Zealand, excluding work stoppages in which less than 5 workdays not worked; for Hungary, includes stoppages involving 10 workers or more; for the Netherlands, average 2000 to 2001; for Germany, includes work stoppages lasting less than one day only if more than 100 workdays not worked and excluding public administration; and for Japan, excluding work stoppages lasting less than half a day.



1. Per 1 000 employees.

Source: International Labour Organisation, *Yearbook of Labour Statistics*.

Incentives for FDI inflows

Many countries offer incentives[16] that discriminate in favour of foreign firms, reflecting the view that the return on FDI is higher than that on other sources of investment. However, such incentives risk reducing global welfare by shifting capital away from where it is most productive to jurisdictions paying the highest subsidies. This results in investment projects that would not be viable without subsidies.

Even if FDI does provide important spill-over benefits, financial incentives are not the best option to attract investors. As noted above, foreign investors focus primarily on the quality of the business and living environment. The use of tax incentives, financial subsidies and regulatory exemptions to attract FDI is no substitute for measures to improve the business environment, which would at the same time encourage domestic investment. There is a rationale for incentives aimed at compensating for structural problems that cannot be quickly remedied. However, there are risks to using incentives. *First*, the incentives can distract policymakers from the more important task of addressing the structural problems that deteriorate the business environment. *Second*, offering incentives selectively to foreign investors risks hurting the environment for domestic firms. This is especially the case in Korea, given its abundant private savings and many potential domestic investors. In sum, the cost of moving away from a level playing field, which include distortions in the allocation of capital, have to be weighed against the economic benefits of incentives (OECD, 2003).

Korea has implemented various policy initiatives to attract FDI inflows since 1970 and these efforts have been strengthened since the financial crisis. In particular, there are four types of special zones aimed at encouraging FDI (Table 6.6): Foreign Investment Zones (FIZ) type A, which can be located anywhere in the country (at present there are 24); eleven FIZ type B (industrial complexes); nine Free Trade Zones (FTZ) and; three Free Economic Zones (FEZ). Tax incentives are a key aspect of each type of zone.[17] Incentives are primarily aimed at knowledge intensive and high value-added industries that promote innovation (Box 6.3).

FDI incentives should be evaluated regularly to ensure that their economic benefits exceed their fiscal costs. For example, foreign investors in the special zones receive tax holidays and rent subsidies. Tax expenditures resulting from FDI incentives for income and corporate tax alone jumped from 44 billion won in 1999 to 550 billion won (0.1% of GDP) in 2005. Evaluations require transparency and accountability, as well as estimates of the impact of incentives. It is important to avoid deadweight costs, *i.e.* subsidising investments that would have occurred without incentives. In addition, the authorities should consider opportunity costs, which arise from more effective alternative uses (OECD, 2003).

There are concerns about the effectiveness of Korea's special zone initiatives to attract FDI. *First*, despite the government's efforts to consolidate and streamline different special zones,[18] the availability of four different types of zones and the fact that some of the zones overlap geographically[19] complicate the FDI regime and may confuse potential foreign investors. The rationale for different incentives and eligibility requirements for the same type of investment projects is not clear.[20] The objective should be to create a coherent framework of incentives that provides the same, or at least a similar, level of incentives between zones. Setting a fixed duration for incentives would encourage regular evaluation, thus helping to limit the number of different types of zones.

Second, there is concern about the effectiveness of incentives for FDI. For example, even though each FEZ has a planning office under local government, foreign firms still need to get individual approval from some national ministries. In particular, the

Box 6.3. **Policy initiatives to encourage inward FDI**

The development of four different types of zones (Table 6.6) reflects the introduction of new types of zones to attract investors while maintaining existing zones. For example, the FIZ type A, which allows flexibility in the location of FDI, were introduced in 1999 to address the unattractiveness of the pre-designated industrial complexes (FIZ type B) created in 1994. Indeed, the occupancy ratio of these zones is only 59%. The introduction of new zones with stronger incentives and a better business environment make existing zones unattractive to investors.

The FEZs were introduced in 2003 in response to demand from investors for an improved business and living environment. The three regions designated as FEZs thus far – Incheon, Busan/Jinhae and Gwangyang Bay – are still in the initial stage of developing infrastructure, with less than $1 billion in investment by the end of 2006. A number of incentives have been introduced to encourage investment in the FEZs. For example, foreign companies in the zones are exempted from quotas on employing veterans, the disabled and the elderly and are allowed to build hospitals in the zones, which is not allowed elsewhere in the country except in "enterprise cities" (see Chapter 3). In addition to the tax incentives, foreign investors receive rent subsidies of up to 100% on state land and may receive cash grants for investments of over $10 million in high technology and parts and material, and over $5 million in R&D facilities. The grant is negotiated on a case-by-case basis, taking into account spill-over effects, job creation and the level of technology. The overall incentives for FDI, including tax breaks, cash grants and subsidies for land use, can be as high as 20% of total investment (Nam and Yoon, 2006).

Table 6.6. **Special zones to encourage FDI inflows**

	Foreign investment zones (type A)	Foreign investment zones (type B)	Free economic zones	Free trade zones
Year introduced	1999	1994	2003	1970
Number	24 (located anywhere in the country)	11	3	9
Eligibility for tax incentives	Manufacturing (more than $30 million) High technology (more than $30 million) Industry-supporting services (more than $30 million) Tourism (more than $20 million) Logistics (more than $10 million) R&D (more than $0.5 million)	Manufacturing (more than $10 million) Logistics (more than $0.5 million)	Manufacturing (more than $10 million) Tourism (more than $10 million) Logistics (more than $0.5 million)	Manufacturing (more than $10 million) Logistics (more than $0.5 million)
Tax incentives[1]	100% for 5 years, 50% for 2 years[2]	100% for three years, 50% for 2 years[2]	100% for three years, 50% for 2 years[2]	100% for three years, 50% for 2 years[2]
Other taxes[3]	100% for capital goods	100% for capital goods	100% for capital goods	100% for imported goods
Rent support	100% for 50 years	75 to 100%[4]	Up to 100%	100%[5]

1. Exemptions applied to national taxes, such as corporate and income taxes, and local taxes, such as property, registration and acquisition taxes.
2. Can be extended up to 15 years for local taxes.
3. Customs duties, special consumption tax and value-added tax.
4. 100% for high-tech industry with investment of more than $1 million. 75% for manufacturing firms with investment of more than $5 million.
5. 100% for high technology firms with investment of more than $0.5 million and other industries with more than $1 million.

Source: Ministry of Commerce, Industry and Energy.

regulations on construction in the capital region, which classify land into three zones (congestion restraint, growth management and nature conservation), are a serious obstacle to developing the Incheon FEZ. Part of the Incheon FEZ is classified as a congestion restraint zone, subjecting it to stricter approval procedures. Furthermore, domestic firms, except SMEs, are not allowed to invest in congestion restraint zones. Such restrictions have a negative impact on attracting foreign firms that wish to foster close ties with Korean companies. Discriminatory regulations against domestic firms should be lifted to ensure a level playing field with foreign companies. The regulations allowing foreign investment in social services, such as healthcare and education, should be extended beyond the FEZs and allowed for domestic firms as well. Rather than offering preferential regulatory treatment in the FEZs, it would be beneficial to relax regulations that discourage foreign investors throughout the country. Finally, investment promotion agencies, such as the planning offices for the FEZs, should act as "one-stop service" agencies.

Third, while the use of front-loaded benefits, such as cash grants, on a case-by-case basis enhances flexibility in providing incentives, it also reduces transparency since negotiations are confidential. In addition, it increases the risk that the grants will be larger than the benefits of additional FDI.

Fourth, FDI incentives focus mainly on the manufacturing sector, despite the government's commitment to make Korea a financial and business hub in Northeast Asia and foreign firms' growing interest in services. At present, the only services eligible for FDI incentives are tourism, logistics and R&D.

Deepening international integration through trade

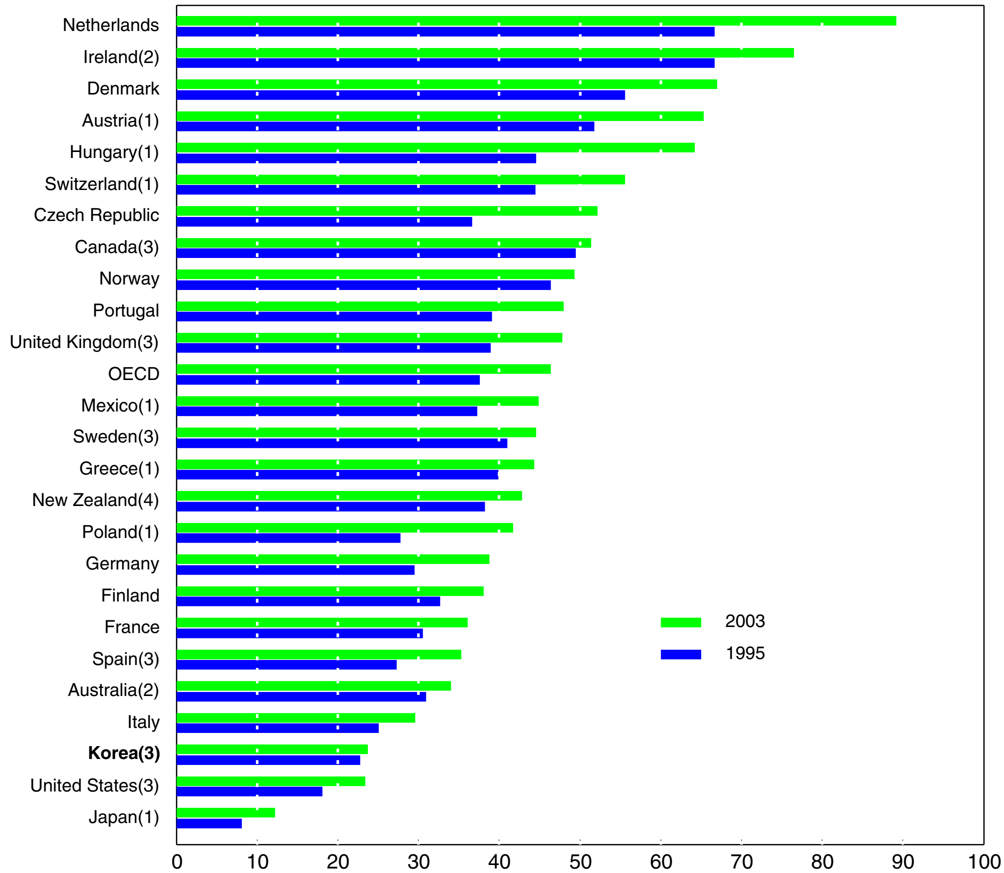
Import penetration, defined as imports of manufactures divided by domestic demand, in Korea is one of the lowest in the OECD area (Figure 6.5). Moreover, it rose less than 1 percentage point between 1995 and 2003, compared to a 9 percentage-point average increase in the OECD area. Nevertheless, the level of imports appears to be consistent with expected levels, taking into account country size, transport costs and per capita income (OECD, 2006c). Import penetration, though, could be boosted by reductions in trade barriers. Meanwhile, export intensity (exports as a share of domestic production) has increased significantly during the past decade.

Promoting trade liberalisation

One major factor influencing trade flows is trade protection. In terms of tariffs, Korea's simple average rate is more than double that in other major OECD regions, reflecting very high rates on agricultural products (Table 6.7). In contrast, the average rate on other products is more in line with other OECD countries, while the extent of non-tariff barriers – quantitative controls, finance measures and price controls – appears to be relatively low, again with a sharp difference between manufactures and non-manufactures (Bora *et al*., 2002). However, differences between countries in standards can also limit imports. Of the 21 251 Korean standards, 60% are subject to international harmonisation. The proportion varies significantly, from 93% for information technology to 23% for household goods. Foreign firms argue that standards unique to Korea pose a barrier to imports, notably in some industries such as food products and cars. Moreover, labelling, testing and certification procedures are considered to be unfair in areas such as pharmaceuticals (OECD, 2007). Further reducing and harmonising voluntary standards and mandatory technical regulations with international norms would increase openness to imports.

Figure 6.5. **International comparison of import penetration**

Imports of manufactures as a per cent of domestic demand



1. Data for Austria, Greece, Hungary, Japan, Mexico, Poland and Switzerland refer to 2002.
2. Data for Australia and Ireland refer to 1999.
3. Data for Canada, Korea, Spain, Sweden, United Kingdom and United States refer to 2001.
4. Data for New Zealand refer to 1998.

Source: OECD (2005c), *Economic Globalisation Indicators*, OECD, Paris.

The number of bilateral and regional free trade agreements (FTAs) in force reported to the World Trade Organisation has soared from 27 in 1990 to nearly 200. However, Korea did not belong to any such agreements prior to 2004, as it focused on the multilateral trading system. The increasing emphasis in Korea on FTAs marks a shift toward a two-pronged trade policy (Table 6.8). Korea's first FTA was with Chile, followed by Singapore, the European Free Trade Association (EFTA) and ASEAN (covering goods only). Negotiations with the United States were

Table 6.7. **International comparison of tariffs**

Simple average of applied MFN tariff rates in 2004[1]

	Total	Agricultural products	Non-agricultural products
Korea	**12.8**	**52.2**	**6.7**
United States	4.9	9.7	4.0
European Union	6.5	16.5	4.1
Japan	6.3	17.7	3.7

1. WTO definitions for agricultural and non-agricultural products.

Source: World Trade Organisation.

Table 6.8. **Korea's FTA strategy**

	Status	Share of exports in 2005 in per cent		Share of imports in 2005 in per cent	
		Total	Agriculture	Total	Agriculture
Chile	Signed in 2003 and took effect in 2004	0.4	0.0	0.9	0.6
Singapore	Signed in 2005 and took effect in 2006	2.6	1.1	2.0	0.3
EFTA	Signed in 2005 and took effect in 2006	0.4	0.1	0.7	0.3
ASEAN	Signed only on trade in goods in 2006	9.6	6.5	10.0	10.6
United States	Negotiations were completed in 2007	14.5	12.5	11.7	21.0
Canada	Negotiations are underway	1.2	1.3	1.0	3.6
India	Negotiations are underway	1.6	0.2	0.8	1.8
Mexico	Negotiations are underway	1.3	0.1	0.2	0.2
Japan	Negotiation stopped since 2005	8.4	32.7	18.5	2.0
EU	Negotiations are underway	15.4	2.4	10.4	11.1
MERCOSUR	Joint study at government level was completed in 2006	1.0	0.2	1.1	11.0
China	Joint study at private level was completed in 2006	21.8	9.7	14.0	23.8

Source: MOFAT, Korea International Trade Association and Korea Agricultural Trade Information.

successfully concluded in April 2007. At present, Korea is pursuing a multi-track approach, negotiating FTAs with Canada, India, Mexico and the European Union. In addition, Korea has completed joint studies with MERCOSUR at the government level and China at the private level. Korea's long-term objective is to conclude FTAs with large economic blocs.

Korea's objective in pursuing FTAs is to revitalise its economy by liberalising its trade and investment regime, while securing better access to foreign markets. FTAs are expected to boost output growth through dynamic gains from capital formation and increased productivity, in addition to static gains in efficiency by prompting the restructuring of less competitive sectors. The Korea-US FTA is projected to increase GDP by as much as 2% in the long run (KIEP, 2006). Furthermore, FTAs should improve the FDI climate by expanding the scope of the market and reducing operating costs, thus providing better opportunities to foreign investors. A comprehensive agreement with the United States would add considerable momentum to regulatory reform in the service sector.

Opening the agriculture sector

Despite the strong commitment to achieve FTAs with major trading partners, the priority attached to protecting sensitive areas – primarily the agriculture sector – substantially limits the positive economic impact on Korea. One reason is that it weakens the negotiating leverage to open up markets for manufactures, where Korea has a competitive advantage. Under the Korea-Chile FTA, Korea permanently excluded the possibility of lower tariffs on 21 important agricultural items such as rice, apples, and pears.[21] Moreover, tariff reductions on 373 agricultural tariff lines, including vegetables, grains, livestock, dairy products and fruit, were temporarily excluded.[22] As a result, most of the decline in the average tariff rate imposed on imports from Chile was due to reductions on manufactured products.[23] In contrast, the average agricultural tariff on imports from Chile after the FTA remains high at 50% (WTO Trade Policy Review, 2004), roughly in line with Korea's overall average on agricultural products (Table 6.7). Similarly, in the FTA with ASEAN, at least 90% of tariff lines are scheduled to be liberalised by 2010, with agricultural products (including forest and fishery products) accounting for most of the remaining 10%. Agricultural products were also largely excluded from the FTAs with Singapore and EFTA, although this was not a controversial issue, reflecting the small portion of agricultural trade between Korea and these countries.

The reluctance to open up the agricultural market reflects the high level of agricultural support, especially for rice.[24] Korea's agricultural support exceeds the sector's relatively small GDP contribution[25] and is among the highest in the OECD, with a Producer Support Estimate (PSE) of 62% in 2003-05, double the OECD average (Figure 6.6). As a result of such heavy protection, Korean consumers paid 2.5 times the world price on average for agricultural commodities between 2003 and 2005, as indicated by the Nominal Protection Coefficient shown in Panel B. Rice alone accounts for almost one-third of the PSE. Most of the support for agriculture is provided through market price supports, the most distortive form of support, as they alter production and trade decisions and limit the influence of world markets on domestic production decisions. This results in surplus production of key commodities, such as rice and dairy products. The share of market price supports fell slightly from 93.5% of the total PSE in 2004 to 92.4% in 2005, thanks to changes in rice policy in 2005, which included the abolition of government purchasing and the introduction of direct income support mechanisms.[26]

Given the need for structural reform in agriculture, government policy is focused on supporting larger and more efficient farms, for example, by targeting benefits on full-time farmers. In addition, the government is providing financial incentives to purchase farmland in order to boost the average farm size, which is only 1.3 hectare. The 2003 ten-year blueprint for developing farming aims at gradually reducing direct price support and introducing or expanding "green box" measures.[27] It plans to raise public investment and loans to 119 trillion won (15% of 2005 GDP) between 2004 and 2013 to boost rural income and compensate for reduced protection. About half is to be spent to enhance the competitiveness of agricultural products, with 27% to boost farmers' income through expanding the direct payment system and 15% to support regional development to boost rural farm and non-farm income. It is important to carefully monitor such spending to ensure its efficient use. A similar fund established in Japan to help agriculture adjust to the Uruguay Round resulted in inefficient public investment (Keizai Doyukai, 1997). In addition, the "FTA Facilitation Support Fund" was established in 2004 to alleviate any negative impact of the Korea-Chile FTA on the agricultural sector, with total expenditure of 1.2 trillion won planned between 2004 and 2010. The Fund will provide direct income payments and subsidise farmers engaged in grape and kiwi farming, which are directly affected by tariff elimination, to shift to new commodities. However, given the large number of FTAs envisaged in the near future, the Fund needs to be incorporated into an overall plan to develop the agricultural sector rather than an *ad hoc* response to each new trade agreement.

The "Trade Adjustment Act" in 2006 created a fund to support both workers and companies in manufacturing and manufacturing-related services that are negatively affected by FTAs. For individual workers, the fund provides job information, training services, consulting services and an employment subsidy. Firms are given management consulting services and financial support for R&D, training and facility investment. Total expenditure is expected to reach 2.8 trillion won (0.3% of GDP) over the decade from 2007. Furthermore, the "SME Restructuring Facilitation Act" was created to support SMEs that intend to change their business activities as a result of FTAs. However, subsidies should be strictly linked to the impact of FTAs and focused on providing information and training in order to avoid creating moral hazard. Moreover, the coverage should be extended to more service industries.

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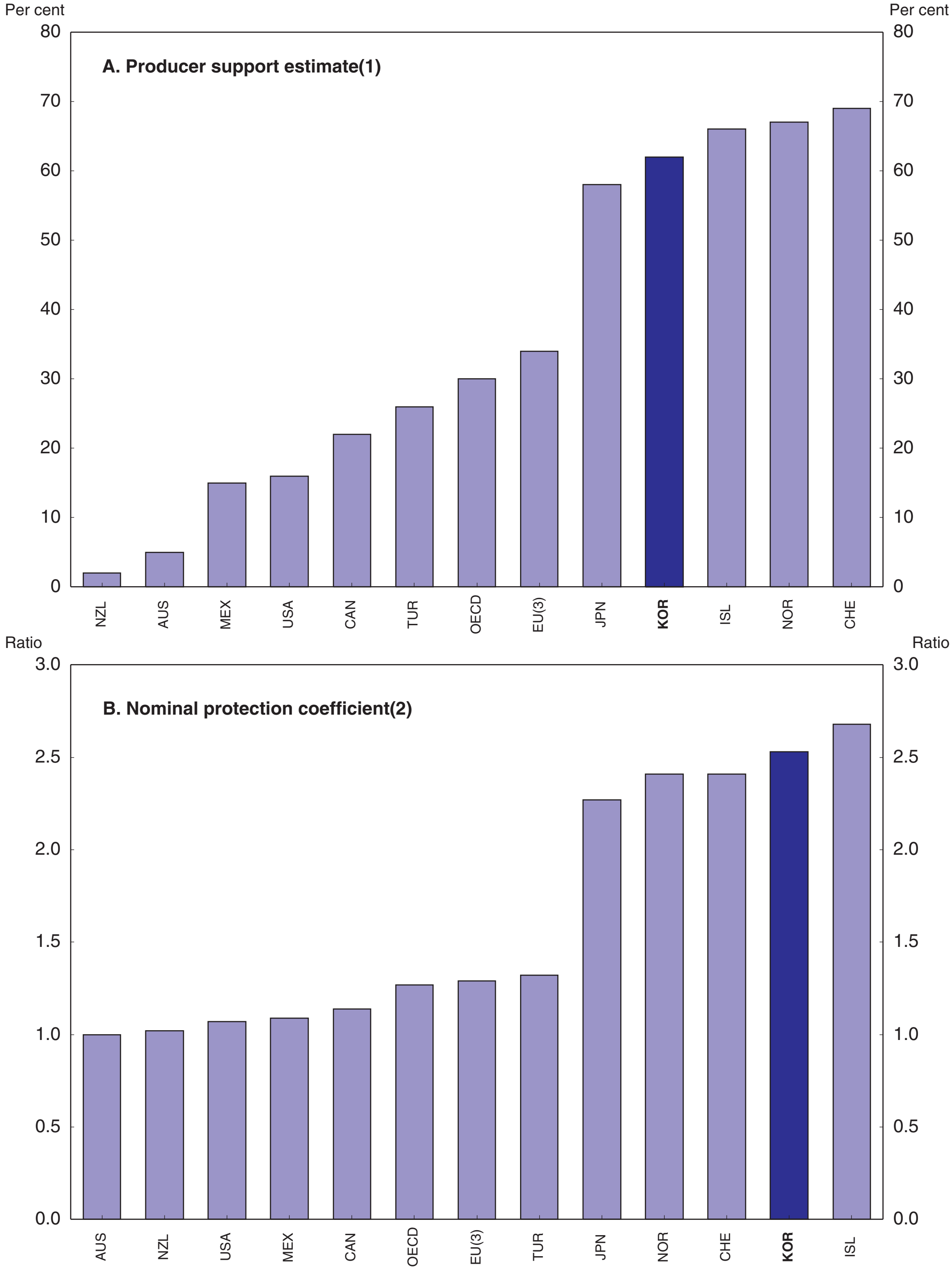
Figure 6.6. **An international comparison of agricultural support in 2003-05**



1. The producer support estimate is an indicator of the value of monetary transfers to agriculture resulting from agricultural policies. It is presented as a share of the total value of production at domestic producer prices.
2. The nominal protection coefficient is a measure of market protection defined as the ratio between the average prices paid by consumers and the international price.
3. EU15 for 2003 and EU25 from 2004.

Source: OECD (2006a), *Agricultural Policies in OECD Countries: At a Glance*, OECD, Paris.

Liberalising the inflow of human resources

Inflows of foreign workers to Korea's homogeneous society have been small, despite labour shortages in some sectors. In 2002, there were only 33 900 foreign residents with employment permits (Table 6.9) – high-skilled professionals such as ICT technicians, researchers and university professors, and low-skilled workers (trainees who had spent one year in Korea) – in a labour force of 23 million. The extensive regularisation of workers without permits temporarily lifted the number of registered foreign workers to around 200 000 in 2003. This was followed by the introduction of the Employment Permit System (see below). Nevertheless, at 0.8% of the labour force in 2004, the proportion of registered foreign workers was the fourth lowest in the OECD (Figure 1.9).

Table 6.9. **Foreign workers in Korea**

Thousand persons

Year[1]	Total	Per cent of total labour force	Employment permit holders					Trainee visa holders				Unregistered workers	
			High-skilled workers[2]		Low-skilled workers		Subtotal	Industrial trainees	Trainees in firms investing overseas	Subtotal			
			Number	Per cent[3]	Number	Per cent[3]	Number	Number	Number	Number	Per cent[3]	Number	Per cent[3]
1995	128.9	0.6	8.2	6.4	0	0	8.2	23.6	15.2	38.8	30.1	81.9	63.5
1996	210.5	1.0	13.4	6.4	0	0	13.4	38.3	29.7	68.0	32.3	129.1	61.3
1997	245.4	1.1	15.9	6.5	0	0	15.9	48.8	32.7	81.5	33.2	148.1	60.4
1998	157.7	0.7	11.1	7.0	0	0	11.1	31.1	15.9	47.0	29.8	99.5	63.1
1999	219.2	1.0	14.4	6.6	0	0	14.4	49.5	20.0	69.5	31.7	135.3	61.7
2000	285.4	1.3	17.0	6.0	2.1	0.7	19.1	59.0	18.5	77.5	27.2	189.0	66.1
2001	329.6	1.5	19.6	6.0	8.1	2.4	27.6	33.2	13.5	46.7	14.1	255.2	77.5
2002	362.8	1.6	21.5	5.9	12.3	3.4	33.9	25.6	14.0	39.7	11.0	289.2	79.7
2003	395.8	1.7	20.1	5.1	187.0	47.2	207.0	38.9	11.8	50.7	12.8	138.1	34.9
2004	421.7	1.8	20.4	4.8	176.	41.8	196.6	28.1	8.4	36.6	8.7	188.5	44.7
2005	347.6	1.4	23.4	6.7	105.1	30.2	128.5	32.2	6.1	38.3	11.1	180.8	52.0
2006	424.8	1.8	27.3	6.4	166.6	39.2	193.9	38.2	5.8	44.0	10.4	186.9	44.0

1. Year-end.
2. High-skilled workers include those with visa type from E-1 to E-7 such as researchers, professors and IT technicians.
3. Per cent of foreign labour force.

Source: Ministry of Justice.

Increasing the number of foreign workers would have a significantly positive impact, particularly in the context of rapid population ageing and labour shortages. However, given the magnitude of the projected decline in the working-age population (see Chapter 5), inflows of foreign labour are not capable of fully offsetting demographic changes. Increased immigration should thus be accompanied by measures to raise labour force participation and remove constraints that limit the number of children.

Policies to encourage inflows of low-skilled workers

In 1993, the "Industrial Trainee System" (ITS) was introduced in response to the chronic shortage of labour in SMEs and the growing number of unregistered foreign workers, who suffered from the infringement of their rights. Under this system, SMEs in manufacturing, construction, fishery and agriculture could employ foreign workers for up to three years, one year as a trainee and two years as an employee, subject to an annual ceiling set by the government. The number of industrial trainees peaked at almost 60 000 in 2000 (Table 6.9). However, the system has been criticised on the grounds that trainees were not protected by labour laws even though they were really workers and many left their training posts for jobs. Furthermore, there were a number of scandals involving the selection and entry of the trainees.

Responding to these problems, the government implemented the "Employment Permit System" (EPS) for unskilled workers in 2004 and decided to abolish the ITS in 2007. Under the EPS, foreign workers are provided employment permits for up to three years and are eligible for the same social insurance benefits and labour rights as domestic workers. However, they are not allowed to bring their families to Korea. The Foreign Workforce Policy Committee in the prime minister's office determines the inflows of low-skilled foreign workers, including the ceiling on the total number, industry of employment and countries of origin. Firms that wish to hire foreign workers must show that they have made efforts to hire domestic workers. The number of unregistered workers – 80% of the total in 2002 – declined in 2003 as a significant number were regularised. In addition, there is a special programme since 2002 for overseas Koreans who wish to work in Korea, including in jobs in the service and construction sectors, which are substantially closed to foreign workers. While the ITS was abolished, a trainee programme remains in place for Korean firms investing overseas, allowing them to train foreigners from the host country for two years in Korea (Table 6.9).

The impact of foreign workers on domestic economies is generally positive in the experience of OECD countries. In Korea, much of the benefit goes to SMEs in the manufacturing sector, which hires foreign workers willing to work at low wages that are unattractive to most Koreans. According to a recent survey of firms with foreign workers, more than half replied that increasing foreign employees is a short and long-term solution to labour shortages, suggesting a large demand for foreign workers (Yoo *et al.*, 2004). However, given rapid structural change in Korea, in part as a result of globalisation, and the sharp decline in the labour force projected to start in 2016, keeping traditional labour-intensive industries alive through inflows of foreign workers is not a realistic option. Nevertheless, greater use of foreign labour can help ease the transition. Moreover, the EPS needs to be used to decrease the high share of unregistered workers in the foreign labour force. After falling significantly in 2003, the number of unregistered workers rebounded to more than half of foreign workers in Korea in 2005. There is thus a need to increase the number of employment permits and extend the permitted length of stay to meet the growing demand for foreign workers.

Other reforms are needed in the system of allowing low-skilled foreign workers. *First*, workers under the EPS should be able to work in the service sector, as is the case for overseas Koreans. For example, foreign workers could help fill shortages for carrying for the elderly, which is likely to increase in the context of population ageing. *Second,* the Ministries of Justice and Labour are jointly responsible for the EPS and the programme for overseas Koreans, in consultation with other ministries, while the Ministry of Justice directs the trainee program for firms investing overseas. The immigration control system, which involves more than a dozen ministries, needs to be streamlined.

Raising the share of high-skilled workers

Compared to unskilled workers, the immigration system gives preferential treatment to high-skilled foreign workers. For example, there is no ceiling on the total number of visas, visas can be renewed an unlimited number of times and foreign workers are allowed to change employers or work in another field. In 2000, the system was reformed to encourage the entry of specialists in high-technology sectors such as ICT, e-commerce and e-business.[28] Despite the preferential treatment and government efforts to attract such workers, the number of foreign high-skilled workers in Korea has stagnated at around 25 000 since 2000, accounting for about 6% of the total foreign labour force. In contrast, skilled labour accounts for 19% of foreign labour in Japan. The low share of high-skilled workers is largely a result of problems in the business and living environment and administrative regulations that make it difficult to work in Korea. According to a survey of employers, more than half of those currently employing foreign high-skilled workers identified the administrative regulations controlling their entry and stay as the most serious obstacle (Lee *et al.*, 2005). As Korea endeavours to develop itself into a knowledge-based economy, the importance of attracting high-quality foreign workers is increasing. It is essential, therefore, to further improve the immigration control system for such workers to facilitate their entry to Korea.

Conclusion

Korea's geographical location, well developed infrastructure, high-quality labour force and the growing purchasing power of its consumers will help it achieve its goal of becoming a regional hub for northeast Asia. However, taking advantage of these qualities requires a national consensus about the gains from globalisation in order to foster a more open environment. It is thus important to change the negative perception of globalisation. Greater openness would result in lower prices for consumers and higher returns for shareholders. It is particularly important to encourage a more open stance in services, which is relatively more closed to international competition and characterised by a low level of productivity relative to manufacturing. Opening up the service sector, including social services, would increase overall efficiency and productivity, making this sector an engine for growth. Given the links between foreign investment, trade and inflows of foreign workers, it is important to pursue a comprehensive approach that would allow FDI inflows, imports and the number of foreign workers to increase from their currently low levels, compared to other OECD countries. For example, a comprehensive FTA that includes services would encourage FDI inflows in Korea. Specific recommendations are presented in Box 6.3.

Box 6.4. **Summary of recommendations to increase the integration of Korea in the world economy**

Removing obstacles to the inflows of foreign investment

- Foster a foreign investment-friendly environment by providing clear evidence of the gains from such investment.
- Develop the M&A market, including cross-border M&A, by relaxing related regulations and easing negative public sentiment, while avoiding steps to protect domestic firms from cross-border M&As.
- Further liberalise FDI restrictions, in particular by reducing or removing foreign ownership ceilings in sectors such as telecommunications, transport and electricity.
- Reduce product market regulation, especially in services, to encourage domestic and foreign investment, and phase out the regulations on construction in the capital region.
- Increase the predictability of the business environment by enhancing the transparency of tax and financial supervisory policies and removing the scope for discretionary interpretation, application and enforcement.

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Box 6.4. **Summary of recommendations to increase the integration of Korea in the world economy** *(cont.)*

- Resolve the issues in the labour market, including labour-management relations, which discourage FDI.
- Extend the regulatory reforms introduced in the Free Economic Zones to improve the business and living conditions to other parts of the country and ensure a level playing field between domestic and foreign firms.
- Streamline the various zones created to encourage FDI and provide equal treatment of manufacturing and service sectors.
- Increase transparency by limiting the scope of special incentives, such as cash grants, for foreign firms.
- Avoid preferential fiscal and regulatory treatment, which distorts the locational decisions of foreign investors.
- Do not allow the emphasis on special zones to distract the authorities from the fundamental objective of improving the business climate, which would promote domestic, as well as international, investment.
- Review special zone schemes regularly to ensure that the economic benefits exceed the costs, while minimising the deadweight and opportunity cost of such zones.

Improving the climate for international trade

- Pursue the liberalisation of trade barriers through multilateral trade negotiations to further reduce the level of trade restrictions, including tariff and non-tariff barriers.
- Further harmonise Korean regulations and standards with international standards to reduce barriers to imports.
- Pursue WTO-consistent regional free trade agreements, covering substantially all products.
- Strengthen market principles in the agricultural sector, in part by reducing market price supports, thereby benefiting consumers and broadening the scope for regional free trade agreements.
- Limit moral hazard in policies used to support industries and workers negatively affected by free trade agreements by applying strict causality tests and focusing support on providing information and training.

Promoting the inflows of human resources

- Reform the Employment Permit System (EPS) to reduce the number of unregistered workers and allow a sufficient number of low-skilled foreign workers to ease labour shortages in some sectors.
- Allow low-skilled foreign workers to be employed in the service sector, in addition to manufacturing.
- Increase the inflow of high-skilled workers by improving the immigration control system, as well as the business and living environment.

Notes

1. It is not certain to what extent increased portfolio investment has translated into increased management rights. According to a survey by the IMD, Korea ranked 37th among 60 countries in both 2001 and 2005 on the ease with which foreigners can secure management rights.
2. The 2006 Framework covered investment promotion policy, trade, competition and tax policies, corporate governance, policies for promoting responsible business conduct, human resource development, infrastructure and financial-sector development and public governance.
3. The value of cross-border M&As rose by 88% in 2005, driving the increase in global FDI inflows. Cross-border M&As accounted for 67% of global FDI inflows in 2004-05 (UNCTAD, 2006).
4. Relative to GDP, the size of the M&A market is also small in Korea at 2.2%, compared to 7.1% in the United States and 11.9% in the United Kingdom (Oh and Park, 2006).
5. The two cases concern Newbridge Capital, which bought Korea First Bank in 1999 and sold it in 2005, and Lone Star, which bought Korea Exchange Bank (KEB) in 2003 and tried to sell it in 2006. Both claimed exemption from Korean taxes on their gains as they had established subsidiaries in countries with which Korea has bilateral tax treaties to avoid double taxation. In July 2006, Korea introduced a special withholding tax on third-country residents established in countries with such treaties to prevent them from benefiting from such treaties. However, investors can receive a refund if they subsequently prove that they are entitled to benefits under the treaty. In addition to the tax issue, there have been allegations that financial data on KEB had been understated to manipulate its stock price and lower the purchase price paid by Lone Star. These investigations forced Lone Star to terminate its proposed sale of KEB.
6. These include the bid for SK Telecommunication by the Tiger Fund in 1999 and for SK Corporation by Sovereign in 2003. In addition, Icahn made an unsolicited takeover bid for KT&G in 2006.
7. The average price-earnings ratio of listed companies in the Korean stock market in 2005 was 11.2, compared to an average of 12.6 in China, 14.8 in Taipei, China, 15.6 in Malaysia, 16.0 in Hong Kong, 16.5 in Singapore and 18.0 in India (Jang, 2006). This is usually attributed to weak corporate governance practices in Korea.
8. The 1 058 business lines exclude public services such as postal services and education.
9. Korea was rated at 0.12, compared to an OECD average of 0.148 (Golub and Koyama, 2006).
10. The ceiling on foreign equity is 50% in power distribution and transmission, air transport, fishing and beef cattle, 49% in telecommunications and 33% in cable and satellite broadcasting. The latter restriction was strengthened in 2006 by requiring potential purchasers of more than a 15% stake in a telecommunications firm to receive prior approval from the Ministry of Information and Communications.
11. Nicoletti *et al*. (2003) estimated that reducing the level of restriction in Korea to that in the least restrictive country (the United Kingdom) would boost Korea's stock of FDI by 40%.
12. An OECD study showed that product market reform would provide larger gains in GDP per capita than lowering tariff rates and obstacles to FDI. Aligning the stance of domestic regulations on that in the least restrictive country leads to an increase in GDP per capita of 1.75% to 3% in the OECD area while the impact of lowering barriers to FDI is 0.75% and that of cutting tariff rates is 0.25% to 1% (OECD, 2005a).
13. Eight of the 11 state-owned enterprises (SOEs) identified for privatisation in 1998 have been fully privatised while the remaining three – Korea Electronic Power Corporation (KEPCO), Korea Gas Corporation (KOGAS) and the Korea District Heating Corporation – are still to be privatised.
14. The first priority of the US-Korea Business Council in the area of labour is "Ensuring management's ability under Korean labor regulations to react quickly to fluctuations in global and local demand and competitive pressure through hiring, dismissing, and transferring employees at management's discretion".
15. Four of the six issues identified in the 2005 follow-up study on Korea's industrial relations by the OECD's Directorate for Employment, Labour and Social Affairs have been resolved. *First*, trade unions for public officials were allowed in 2006. *Second*, the definition of essential public services was narrowed and the practice of mandatory arbitration was replaced by ensuring minimum services. *Third*, unemployed persons are now allowed to become union members. *Fourth*, the requirement for notification of third parties in industrial disputes was abolished.

16. Incentives are defined as measures designed to influence the size, location or industry of a FDI project by cutting its relative cost or by reducing risks through inducements not available to domestic firms.

17. This reflects concern about the relatively high corporate tax rate in Korea at 25%, compared to China (15%), Hong Kong (17.5%) and Singapore (20%).

18. The government consolidated “Customs Free Zones”, which focused on attracting FDI in the logistics sector, into the FTZs in 2004. In addition, in 2005 it incorporated “Industrial Complexes for Foreign Firms” into the FIZ scheme, changing its name to FIZ type B and strengthening tax incentives to the level of the FEZs and FTZs.

19. For example, the Daebul industrial complex includes both a FIZ type B and a FTZ, with the Gwangyang Bay FEZ located nearby.

20. For example, in FIZ type A zones, the minimum FDI level for a tax incentive is $30 million in manufacturing, $20 million in tourism and $10 million in logistics while in the FIZ type B and FEZ, the minimum level is only $10 million in manufacturing and tourism, and $0.5 million in logistics. In addition, the duration of incentives differs. A foreign investment project in manufacturing is eligible for seven years of tax breaks in FIZ type A zones, but only five years in other zones.

21. Based on the HS 10-digit level.

22. Chile permanently excluded 54 tariff items, such as refrigerators, washing machines, sugar and wheat.

23. The Korea-Chile FTA provided for immediate tariff-free access in 87% of tariff lines by Korea and 41% by Chile, which corresponds to 77% of Chilean exports to Korea and 67% of Korean exports to Chile.

24. Protection is aimed at achieving some degree of self-sufficiency. Self-sufficiency ratios on crops averaged 29.3% in 2005, ranging from 101.7% for rice, 60.8% for barley, 8.5% for soybeans, 0.9% for corn, 0.2% for wheat and 7.7% for other crops.

25. The share of agriculture, forestry and fisheries fell from 4.9% of GDP in 2000 to an average of 3.3% between 2003-05. This is below the “Total Support Estimate” of 26.3 trillion won (3.5% of GDP) over the 2003-05 period. As agriculture accounts for 9% of employment, labour productivity in agriculture is about one-third of the national average, reflecting the small scale of farming and a lack of capital investment.

26. The impact of the revised policy on reducing the share of market price supports was partly offset by the appreciation of the exchange rate, which expanded the difference between the border price and the domestic price, and the fact that the direct payment system was not fully implemented in 2005.

27. Green box measures include public stockbuilding for food security purposes, decoupled income support and structural adjustment assistance provided through producer retirement programmes.

28. Major measures included issuing plural visas, extending the maximum length of stay from two to three years and expanding the range of domestic activities.

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