

# Republic of Korea

A recovery in private consumption, spurred by rising real earnings, supported 4.0% growth in 2005. Larger, export-oriented firms are likely to expand fixed capital investment this year, but some smaller firms face constraints in lifting investment. Growth in 2006–2007 is expected to pick up to average 5%, provided that investment strengthens. In the medium term, trend growth is forecast at 4.5–5.0%.

## Economic performance

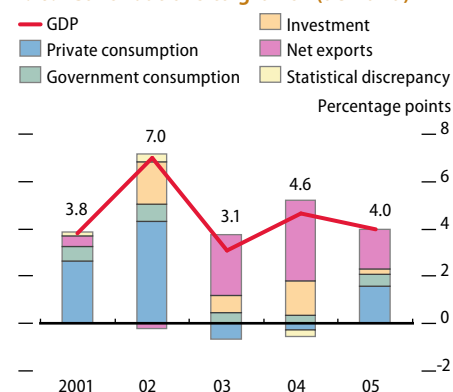
Consumer credit problems in 2003 caused a sharp deterioration in consumer finances and confidence, pulling down the growth rate and leaving household debt at approximately 130% of household disposable income—a level that remains broadly unchanged today. Although the economy rebounded in 2004, registering 4.6% gross domestic product (GDP) growth on the strength of a 19.7% expansion in exports, domestic private demand remained weak.

In 2005, private consumption staged a robust recovery, growing by 3.2% and contributing 1.6 percentage points to GDP growth of 4.0% (Figure 2.10.1). Government consumption expanded by 4%, and the external sector provided further momentum, driven by 8.8% export growth. But capital investment growth in 2005 remained weak. Soft fixed capital investment, coupled with yet higher oil prices, and somewhat softer support from exports than in the previous year, explain the modest deceleration in growth in 2005.

Robust growth in the volume of world trade and improvements in the competitiveness of large firms in the Republic of Korea (Korea) underpinned growth in exports. Korean electronics and automobiles continue to make inroads into markets with newly forming middle classes—People’s Republic of China (PRC), India, and Mexico were among the countries with which Korea’s trade position improved substantially in 2005. Despite solid export performance though, high import growth, due in large part to rising oil prices and the recovery of domestic demand, squeezed the trade surplus to \$33.5 billion and reduced the current account surplus to 2.1% of GDP. Meanwhile, a bullish stock market, as well as optimism over the economy and currency, contributed to an appreciation of the won, which strengthened by 2.4% against the dollar in 2005 and appreciated further against both the dollar and yen in early 2006 (Figure 2.10.2).

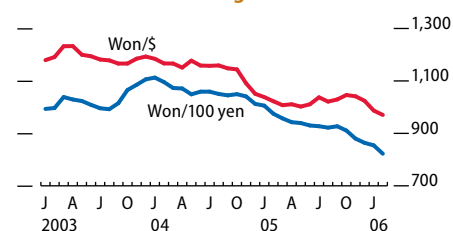
Investment has largely been supported by the capital spending of large, export-oriented firms. By contrast, investment by small and medium enterprises (SMEs), which employ more than 80% of the workforce, continues to lag. The large firms have strengthened their balance sheets following corporate restructuring. They have increasingly turned to cheaper suppliers in the PRC for inputs that were previously sourced from Korean SMEs. The heightened competition is inhibiting

2.10.1 Contributions to growth (demand)



Source: Bank of Korea, Economic Statistics System, available: [http://ecos.bok.or.kr/EIndex\\_en.jsp](http://ecos.bok.or.kr/EIndex_en.jsp), downloaded 8 February 2006.

2.10.2 Nominal exchange rates



Source: Bank of Korea, Economic Statistics System, available: [http://ecos.bok.or.kr/EIndex\\_en.jsp](http://ecos.bok.or.kr/EIndex_en.jsp), downloaded 25 March 2006.

investment by those Korean SME parts manufacturers and service providers that serve the large exporters. Meanwhile, SMEs selling services to domestic consumers have been restrained in their investments, due to delays in the normalization of demand for services. However, domestic demand for services is now recovering.

Real monthly earnings rose by 1.3% in 2005, continuing an upward trend, and the length of the work week fell by 1.2%, implying a 2.5% increase in real wages. The unemployment rate rose to 3.7% in 2005 from 3.5% in 2004 (Figure 2.10.3). These trends suggest that, while the labor market is supporting growth in earnings, which should help maintain economic expansion, it is not tightening. Accordingly, despite higher prices for imported oil, price pressures were moderate in 2005. Consumer price inflation fell by nearly 1 percentage point to 2.7%, in part reflecting recent increases in interest rates.

## Economic outlook

Projections for the next 2 years rest on four assumptions. First, international semiconductor and electronics demand will provide strong support in 2006. Second, fiscal policy will not provide much support from the demand side, though tax revenues are expected to cover gradual increases in social spending associated with an aging population. Third, the Bank of Korea will continue to set policy interest rates to contain inflationary expectations. (Further rate rises are likely in 2006 if growth accelerates and inflationary pressures mount. The central bank targets an inflation rate of 2.5–3.5%, has forecast inflation in 2006 at just over 3%, and has raised interest rates three times in 5 months, most recently in February 2006.) Fourth, the won will not appreciate much beyond its recent rate of around 970 to the dollar.

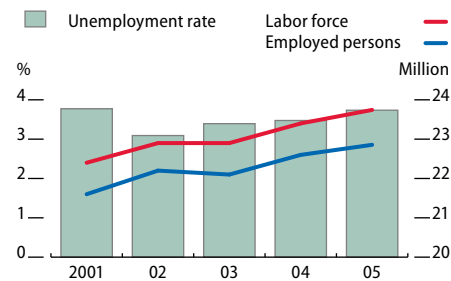
### Prospects for 2006 and 2007

Growth is expected to accelerate to 5.1% in 2006 on the back of stronger consumption and investment. On the assumption that cyclical support to growth eases as 2006 progresses, growth is projected to soften to 4.9% in 2007. (Medium-term prospects are given in Box 2.10.1.)

Double-digit export growth is expected in 2006 on the strength of a recovery in global electronics sales and a favorable global economic environment. However, export growth would likely be tempered by any further appreciation of the won against the dollar or yen. (Given that Japanese and Korean products in the electronics and automotive sectors compete in similar markets, and the strong competition between Korean SMEs and dollar-linked PRC companies, both yen and dollar exchange rates influence the competitiveness of Korean exports.) The robust recovery in domestic demand and recent won appreciation will drive an increase in imports, potentially shrinking the trade surplus and pushing net foreign income into the red. Accordingly, the current account surplus is forecast to decline to about 1% of GDP in 2006, and hold at roughly that level in 2007 (Figure 2.10.4).

Investment by large exporting firms is expected to rise more quickly in 2006, driven largely by the need to expand capacity to meet growing export and domestic consumption demand. This investment is likely

### 2.10.3 Labor indicators



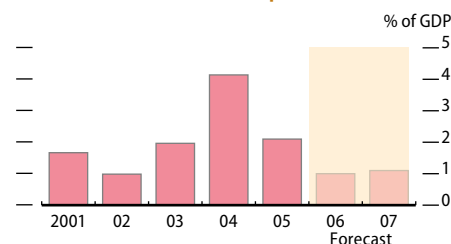
Source: Bank of Korea, Economic Statistics System, available: [http://ecos.bok.or.kr/EIndex\\_en.jsp](http://ecos.bok.or.kr/EIndex_en.jsp), downloaded 8 February 2006.

### 2.10.1 Selected economic indicators

	2006	2007
GDP growth	5.1	4.9
Inflation	3.0	2.8
Current account balance (% of GDP)	1.0	1.1

Source: Staff estimates.

### 2.10.4 Current account surplus

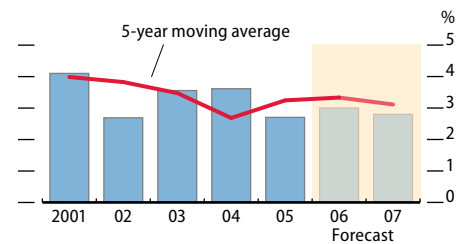


Sources: Bank of Korea, Economic Statistics System, available: [http://ecos.bok.or.kr/EIndex\\_en.jsp](http://ecos.bok.or.kr/EIndex_en.jsp), downloaded 8 February 2006; staff estimates.

to be funded through firms drawing down cash surpluses on their balance sheets. Investment by export-oriented SMEs may continue to be constrained by competitive pressures from the PRC. Services-oriented SMEs are likely to expand investment in response to strengthening demand from domestic consumers. The upswing in economic growth may lead to some tightening in the labor market. In the context of the forecast expansion in the real economy and the baseline monetary policy assumptions, inflation rates for 2006 and 2007 are forecast at 3.0% and 2.8%, respectively (Figure 2.10.5).

Industrial production and consumer demand data reported for early 2006 suggest that growth could surprise on the upside. But investment by export-oriented SMEs remains weak. In response to strong competition from the PRC, pressures for structural changes in the SME sector are building. Facilitating such adjustments, while supporting the recovery in domestic demand, will be a key policy challenge. The Government is revising the targeting of long-standing credit-guarantee schemes to SMEs, which cover a substantial portion of bank loans to approved firms, with a view to fostering innovation among SMEs. If successful, this would help SMEs carve out market niches and avoid head-on competition with PRC suppliers. The competitiveness of export-oriented SMEs would, though, be tested further by additional appreciation of the won.

### 2.10.5 Inflation



Sources: Bank of Korea, Economic Statistics System, available: [http://ecos.bok.or.kr/ElIndex\\_en.jsp](http://ecos.bok.or.kr/ElIndex_en.jsp), downloaded 8 February 2006; staff estimates.

### 2.10.1 Medium-term prospects and trend growth rate

Why do mature economies grow more slowly than those of dynamic developing countries? What can be learned from the experiences of the former that might be applied to understand what will probably happen to Korea?

Typically, as economies mature and undergo structural transformation, their potential for growth declines. There are two principal features of this structural transformation. The first is that the composition of gross domestic product (GDP) tends to change. Indeed, as economies grow and mature, the share of agriculture falls while the shares of industry and services rise (though there are exceptions). This is a consequence of the fact that the income elasticity of demand for agricultural output is typically less than one, while those for industrial output and services are typically greater than one. Hence, as income rises, the demand for agriculture grows less than proportionately, leading to a smaller share of that sector. Moreover, at some point after an economy takes off, the industry sector starts growing relatively fast. The rise in the share of industry is accompanied by a significant acceleration of overall growth. This is mainly the result of investment for industrialization, which leads to capital accumulation. As the rate of capital accumulation decelerates over time and the economy starts approaching maturity, the services sector takes over as the main driver.

The second feature of the structural transformation is that the allocation of labor across sectors changes. This

stems in part from the varying demand for the output of the three sectors, as determined by the income elasticities of demand, and in part from supply factors represented by the rates of growth of labor productivity in the sectors. Generally, labor productivity is lowest in agriculture and highest in industry. Hence, part of the acceleration of growth in the early stages is due to the shift of labor out of agriculture to the other sectors. Similarly, part of the deceleration of growth in the later stages is due to the shift of labor from industry into services.

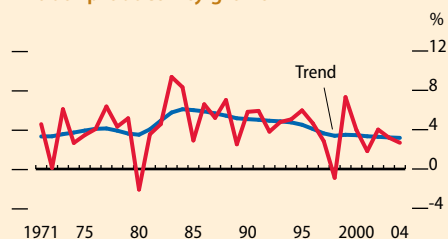
Elements of these two long-run processes can be detected in the evolution of the Korean economy. To modernize, over the past 30 years the country has made huge investments in infrastructure (e.g., airports, roads, ports). During this period, its rates of gross fixed capital formation accelerated, rising from around 15% of GDP in the early 1960s, to a peak of around 35% in the early 1990s. This acceleration, together with a relatively high productivity of capital, led to very high rates of capital accumulation. High domestic savings rates, which more or less tracked the investment rates, largely supported the burgeoning investment needs. Now that these large investments are in place, new investment requirements have decreased. A lower share of capital formation in output will likely restrain capital accumulation from now on.

Mechanization, facilitated by high rates of investment, underpinned large increases in Korean labor productivity

### 2.10.1 Medium-term prospects and trend growth rate (continued)

growth. During the 1970s and 1980s, real wage rates grew at above 10% a year, partly as a result of this process and partly because of policy and institutional measures that improved the efficiency of the economy. The movement of workers out of lower-productivity jobs in agriculture and the informal sector into manufacturing and industry in general also boosted overall productivity. Now that opportunities for technological catch-up have been largely exploited, and service activities have a growing share in Korean output, aggregate labor productivity growth will decline (Box figure 1), and opportunities for productivity growth will increasingly depend on technological advances.

1 Labor productivity growth



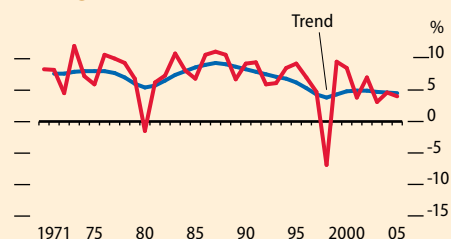
Notes: Growth rates are logarithmic. Trend growth rates are calculated using a Hodrick-Prescott filter.  
Sources: Bank of Korea; staff estimates.

Finally, demographics are important in setting the tempo of output growth. Over the past 30 years, Korea reaped a “demographic dividend” as the ratio of the working age population to the number of dependents increased. Given its rapid rate of capital accumulation, Korea was successful in providing new jobs for a fast-growing labor force. But, as the demographic transition reached completion, this source of growth also came to an end. Indeed, as the population starts to age, the high costs of pensions and health care for an aging population, coupled with reduced labor force participation, act as a “tax” on growth.

A simple growth-accounting framework can be used to think about Korea’s growth rate potential.<sup>1</sup> Assuming that the share of fixed capital formation stays at about 30%

of GDP, which has been its approximate level since the 1997–98 Asian financial crisis, and that capital productivity remains steady at current levels (which it has done since the crisis), this would imply that the capital stock would grow at about 5% a year. Demographic changes, which are very slow moving, indicate that employment can grow by about 0.5% a year over the next 5 years. Reasonable assumptions about potential wage growth, profit growth, and distributional parameters then imply a potential GDP growth rate of 4.5–5.0% in the medium term. This estimate is still substantially higher than those for most other economies in the Organisation for Economic Co-operation and Development, but significantly lower than the impressive growth rates Korea achieved in the past (for example, roughly 8% in the mid-1980s). Box figure 2 shows the slow deceleration in trend growth.

2 GDP growth



Notes: Growth rates are logarithmic. Trend growth rates are calculated using a Hodrick-Prescott filter.  
Sources: Bank of Korea; staff estimates.

It follows that the country will have to make efforts at translating further investment into technological advances that guarantee growth.

1 From the income side of the national income and product accounts, the GDP growth rate is computed as the sum of the weighted growth rates of the capital stock, employment, real wage rate, and real profit rates, where the weight of the growth rates of capital stock and the real profit rate is the share of capital in GDP, and the weight of the growth rates of employment and the real wage rate is the share of labor in GDP.