Economic Forecast for 2021 and the Medium Term

September 2020

Summary

1. Economic Forecast for 2021 and the Medium Term

❑ Real GDP to grow 2.3% in 2021 as the economy slowly recovers from the COVID-19 shock

- ○ Private consumption, which dropped sharply during 2020, under the impact of COVID-19, is expected to rebound in 2021 with the easing of the downturn in service consumption, leading to an overall increase in consumption activity, and the recovery of consumer confidence.
  - – However, the improvement in household income and employment conditions is anticipated to be limited, making a quick recovery to a level surpassing pre-pandemic levels (2019 level) unlikely.
- ○ In construction investment, although the downturn will be less severe than in 2020, thanks to the improvement of leading indicators and the increase in the allocation for SOC development in the government's 2021 budget, the overall investment is forecasted to decrease slightly as housing investment continues to show weakness.
- ○ While facilities investment is projected to increase in semiconductors and other IT sectors, the increase is likely to be modest in non-IT sectors as uncertainty looms over the economic environment amid a generalized downturn.
- ○ As the upward trend in private R&D investment continues, intellectual property products investment is forecasted to grow at a solid pace, centered on the development of online service-related software, the demand for which has increased rapidly since the onset of the COVID-19 pandemic.
- ○ Total exports (volume basis) are projected to rebound, helped by the recovery in major countries, leading to an increase in global trade volume.

– Total imports (volume basis) are also expected to rise centered on goods imports as the domestic economy embarks on a recovery path.

❑ In 2021, there will be a high level of uncertainty over the growth path of the Korean economy amid changing developments in the COVID-19 pandemic and international conditions.

- ○ Economic projections in this forecast were developed on the assumption that the COVID-19 outbreak is brought under control in 2021. Should there be a new spike in COVID-19 cases or a new escalation in the US-China trade dispute, negatively impacting global trade, the actual growth path may be significantly different from the forecasted path.

Korean Economic Outlook for 2020-2024

(units: %, 100 millions of USD, KRW)

	2019	2020	2021	2022	2023	2024
GDP	2.0	−1.6	2.3	2.8	2.4	2.3
Private consumption	1.7	−4.1	3.1	2.5	2.1	2.0
Facilities investment	−7.5	2.5	2.7	4.6	2.8	2.4
Construction investment	−2.5	−0.6	−0.3	0.7	1.3	1.4
Intellectual property products investment	3.0	2.9	3.2	4.7	3.7	3.4
Total exports	1.7	−5.5	3.6	3.4	2.4	2.1
Total imports	−0.6	−4.5	4.6	4.0	2.8	2.4
Current account (in 100 millions of USD)	600	540	555	520	490	470
Goods exports (customs basis)	−10.4	−9.8	7.5	5.5	3.1	2.9
Goods imports (customs basis)	−6.0	−9.3	7.3	4.9	3.0	2.7
Unemployment rate	4.0	4.1	4.0	3.8	3.9	3.9
Consumer price inflation	0.6	0.5	1.0	1.2	1.2	1.3
Treasury yield (3-year)	1.5	1.0	1.3	2.0	2.3	2.2
USD to KRW exchange rate (reference rate)	1,166	1,200	1,184	1,166	1,154	1,142
GDP deflator	−0.9	0.6	1.1	1.1	1.1	1.3
Nominal GDP	1.1	−1.0	3.4	3.9	3.5	3.6

Note: The data for 2020 and beyond are projections by the National Assembly Budget Office.
Sources: National Assembly Budget Office, Bank of Korea, Statistics Korea.

❑ In 2021, Korea’s nominal GDP is anticipated to grow by 3.4%.

◦ After a negative growth (-1.0%, projected) in 2020, in 2021, nominal GDP is projected to record a growth rate in a mid-3% range as the economy enters a recovery phase, with the GDP deflator showing an increase.

− Rate of nominal GDP growth in 2021 (3.4%) = Real GDP growth

(2.3%) + Increase in GDP deflator (1.1%)

− In 2021, the increase in the GDP deflator is expected to be driven by the rise in the private consumption deflator amid the economic recovery and improving trade conditions.

❑ In the medium term, between 2020 and 2024, real GDP is forecasted to grow at an annual average rate of 1.6%.

◦ In 2020-2024, growth in real GDP is projected to decelerate from the annual average rate for the past five years (2015-2019) of 2.8% to 1.6% (annual average rate of 2.5% if 2020 is excluded).

 − In the upcoming five-year period, real GDP is expected to rebound in 2021 from a negative growth in 2020 amid the economic slowdown caused by the COVID-19 outbreak and reach a peak of 2.8% in 2022 before tapering off thereafter.

◦ Regarding the contribution of expenditure components to real GDP growth, in 2020-2024, the contribution of government expenditures and facilities investment is projected to increase from the level in the previous five-year period (2015-2019), while that of private consumption and construction investment is expected to fall.

 − GDP growth contribution (2015-2019→2020-2024, %p): Private consumption 1.2→0.5, Government expenditures 0.8→1.0, Facilities investment 0.2→0.3, Construction investment 0.5→0.1

❑ In 2021, GDP per capita in Korea is projected to amount to USD 32,023.

◦ In 2020, Korea's GDP per capita, which peaked to USD 33,429 in 2018 and dropped lower in 2019 (brought down to USD 31,838 by the weakness of the Korean won), is expected to continue on a downward trend (projected to fall to USD 30,582 due to a decrease in nominal GDP and a further retreat of the Korean won).

◦ In 2021, nominal GDP per capita is expected to edge up higher (3.4% compared to the previous year), buoyed by the rally of the Korean won (4.7% compared to the previous year), but is unlikely to reach the level in 2018.

◦ In 2020-2024, when estimated using the forecasted annual average rate of nominal GDP growth (2.7%) and the forecasted rate of increase in the value of the Korean won (0.4%), GDP per capita is anticipated to reach USD 36,970.

2. Forecast by Sector

❑ In 2021, private consumption is expected to grow 3.1% on the gradual recovery of consumption activity and the improvement in consumer confidence.

- ◦ Improvement is expected in private consumption as consumption activity and consumer confidence, which sharply weakened amid the COVID-19 outbreak, gradually pick up.
  - − In 2021, private consumption is likely to be lifted by the base effect of the negative growth recorded in 2020, together with the pent-up consumption demand becoming unleashed.
- ◦ However, improvement in household income is expected to be limited as employment recovery is delayed amid the COVID-19 pandemic and worsened corporate earnings result in stalled wage growth.
- ◦ In 2020-2024, private consumption is forecasted to grow at an annual average rate of 1.1%, a significantly slower rate than in the past five-year period (2015-2019).
  - − In the medium term, private consumption growth is projected to slow due to the debt accumulated in the process of responding to COVID-19, a higher saving tendency as a result of an increase in life expectancy, the decline in working age population and the income insecurity in older populations.

❑ In 2021, construction investment is forecasted to decrease by 0.3% in spite of an increase in civil engineering investment, due to the persistent slump in investment in housing construction.

- ◦ As investment in non-residential construction and civil engineering gains pace thanks to new plant construction projects and an increase in the government's SOC budget, this will likely to reduce the extent of contraction in construction investment.
  - – Non-residential construction is expected to regain traction centered on industrial real estate as private sector firms set out to add new plants and warehouses.
  - – The government increased the allocation of SOC development in its 2021 budget under a plan to invest in large-scale projects such as the 'Korean New Deal.'
- ◦ Meanwhile, housing construction investment is likely to continue on a downward trend as the slump in private housing development persists, even though the severity of the downturn is reduced by an increase in the supply of public housing.
  - – The weakness in private housing development is expected to continue, with the volume of new apartments for sale declining.
- ◦ In 2020-2024, construction investment is forecasted to embark on a slow recovery path on the easing of the slump in investment in private housing development and the increase in public sector expenditures.
  - – The rise in public sector investment expenditures from the increase in the government's SOC budget (at an annual average rate of 8.3%), coupled with the gradual recovery of private housing investment from recent lows, is expected to help construction investment grow at an annual average rate of 0.5% in 2020-2024.

❑ In 2021, amid the persistent COVID-19-related uncertainty, facilities investment is forecasted to continue on a slow recovery trend from last year, albeit limited to semiconductors and certain IT sectors.

◦ In 2021, facilities investment is expected to grow 2.7%, a rate similar to the previous year's.

◦ Although facilities investment is likely to slowly recover in semiconductors and other IT sectors from the brief weakness in the second half of 2020, the intensifying US-China dispute surrounding related industries is expected to serve as an additional factor for delaying investment.

◦ In non-IT sectors, amid a delay in new investment, caused by deteriorating earnings and heightened uncertainty amid the COVID-19 pandemic, an increase in investment is expected in fields such as next-generation cars and environmentally-friendly new and renewable energy sources.

◦ In 2020-2024, facilities investment is anticipated to grow at an annual average rate of 3.0%, a slight acceleration from the level in the past five years (2015-2019, annual average rate of 2.9%), with the increase centered on IT manufacturing and service sectors such as communications services.

  − Investment growth is expected to be driven mainly by IT sectors due to the downturn in non-IT manufacturing sectors amid the global economic slowdown, decelerating growth in global trade and the protracted US-China trade dispute.

  − Despite the stalled growth in facilities investment, its share in total fixed capital investment is projected to grow slowly over the next five years to reach an annual average rate of 30% due to the decline in construction investment during this period.

❑ In 2021, intellectual property products investment is forecasted grow at an annual average rate of 3.2%, driven by R&D investment related to Fourth Industrial Revolution-related technologies and corporate software development.

◦ Growth in intellectual property products investment by the private sector is expected to accelerate from last year's pace on the increase of Fourth Industrial Revolution technology-related investment and IT expenditures related to contactless activities.
  - The rate of growth in R&D investment by the private sector is likely to remain at a level similar to the previous year's as sales drop and uncertainty persists amid the COVID-19 pandemic.
  - In other intellectual property products investment, the increase in contactless activities both in business transactions and internal corporate activities is expected to lead to a solid growth in related software expenditures.

◦ In the government sector, growth in intellectual property products investment is expected to accelerate from the previous year (3.1%) on the increase in the R&D budget and the higher volume of software purchases.

◦ In 2020-2024, intellectual property products investment is projected to maintain a solid rate of growth of 3.4%, helped by the increasing share of knowledge industries and related corporate spending.
  - In 2020-2021, in spite of a slowdown in R&D investment as the COVID-19 pandemic takes a toll on corporate sales, other intellectual property products investment is expected to grow at a relative high rate, lifted by an increase in corporate spending related to IT services.
  - In 2022-2024, corporate R&D investment is projected to pick up speed, growing at an annual average rate in the range of 3.9%.
  - In the medium term, investment demand for intellectual property products is anticipated to steadily rise on the continuous growth of ICT and Fourth Industrial Revolution technology sectors and the growing share of knowledge industries in the domestic industry.

- ❑ In 2021, exports (customs basis), which plummeted in 2020 (−9.8%, projected), is forecasted to rebound on the global recovery and an expanding volume of global trade to grow by 7.5%.
  - ◦ In 2021, customs-based exports are expected to rise as the global recovery leads to an increase in corporate production and investment activities as well as in consumption, lifting the import demand from overseas.
    - − Goods exports are projected to increase 7.5% from a year earlier to USD 525.3 billion, while goods imports increase 7.3% to USD 490.2 billion.
    - − In 2021, the average daily exports, brought down in 2020 by 10.2% from the previous year to USD 1.79 billion, is expected to increase 7.1% to USD 1.92 billion, which is however still below the level in 2019 (USD 2 billion).
  - ◦ In 2021, the trade surplus is forecasted to amount to USD 35.1 billion.
    - − Korea's trade surplus, which after hitting an all-time high in 2017 (USD 95.2 billion), slipped lower on a prolonged downturn in exports, is expected to reach a level corresponding to about 37% of its high point in 2017.
    - − In 2021, the trade volume (total export value plus total import value) is forecasted to recover from the new low (USD 945.6 billon, projection) reached in 2020, under the COVID-19 shock, to climb to a USD 1 trillion range.
  - ◦ In 2020-2024, customs-based exports are projected to expand at an annual average rate of 1.8%.
    - − In 2020-2024, although customs-based exports are expected to rebound from the low reached during the previous five-year period (2015-2019, -0.6%), the annual average rate is likely to amount only to 1.8%, far below the pre-financial crisis level (2000-2008, annual

average rate of 13.3%).

- Since the global financial crisis, Korea's external exports have been continuously on a downward trend as the low growth trend in the world economy, intensifying US-China trade dispute and the weakening of global value chains caused global trade growth to slow.

◦ In 2021, the current account surplus is forecasted to amount to USD 55.5 billion in spite of a widening deficit in the service account, as this is expected to be largely offset by an increased surplus in the goods account.

- In 2021, the goods account surplus, which sharply fell in 2020 (USD 65 billion) amid the COVID-19 outbreak from the level in 2019 (USD 76.9 billion), is expected to be lifted to USD 70.9 billion by rising exports.
- The deficit in the service, primary and secondary accounts, which was reduced in 2020 by a large improvement in the service account balance, particularly in travel and transportation, is projected to widen in 2021 as the slowdown in the spread of COVID-19 leads to a gradual recovery in international travel.
- The current account surplus ratio (relative to GDP) is forecasted to reach 3.3% in 2021 and embark on a slow downward trend thereafter to amount to 2.5% in 2024.

❑ In 2021, the increase in total number of employed persons is expected to be limited to about 180,000 on the slow economic recovery and an equally slow improvement in business conditions for in-person service sectors.

◦ Even with improvement in economic conditions, the rate of unemployment is unlikely to drop significantly for the foreseeable future as more economically inactive people will be seeking employment.

– The rate of unemployment is forecasted to drop slightly from 4.1% in 2020 to 4.0% in 2021.

◦ For service sector employment, amid the looming threat of a resurgence of COVID-19, the recovery is likely to be slower in in-person services than in other sectors as the downturn will persist until conditions are safer for their consumption.

◦ In manufacturing, no rapid improvement in employment conditions is expected as production facilities will continue to operate at reduced capacity in most sectors amid the COVID-19 pandemic, even though business conditions will improve in semiconductors and other IT sectors.

– The budget increase for publicly-funded job creation programs and R&D is likely to help ease the employment crisis in the private sector, especially in areas such as public administration, public health and social welfare and professional science and technology services.

◦ In 2020-2024, the total number of employed people is forecasted to increase by 146,000 annually, on average (0.5%), growing at a slower rate than during the past five-year period (2015-2019, 245,000, 0.9%).

– The slowdown caused by the COVID-19 pandemic is expected to reduce the annual average rate of economic growth to 1.6% over the upcoming five-year period, leading to a weakness in labor demand.

– The rate of unemployment, after climbing to 4.1% at the onset of the COVID-19 outbreak, is projected to drop slightly on the gradual recovery of the economy, but is likely to increase by 0.2%p annually, on average from the level in the previous five-year period (3.7%).

– The rapid ageing of the workforce is expected to keep the employment rate in population aged 15 and over mostly stagnant, with its gap from the OECD-standard rate (aged 15-64) widening.

* Employment rate in population aged 15 or over (annual rate, %): 60.7

(2015-2019) → 60.7 (2020-2024).

* Gap between the employment rate in population aged 15-64 (OECD standard) and the employment rate in population aged 15 and over (%p): 5.4 (2015)→ 5.8 (2017) → 5.9 (2019).

❑ In 2021, the consumer price inflation rate is forecast to accelerate to 1.0% due to the base effect of low prices in 2019-2020, coupled with rising international crude oil prices and the easing of the downward pressure on prices on the demand side.

◦ The inflation rate in 2021 will show a base effect of a low inflation rate in the past two years (2019-2020), which was in the mid-0% range.

◦ The prices of industrial products are projected to rise, lifted by the prices of petroleum products resuming an upward march and the upswing in car prices as a result of the fading price effect of lowered excise taxes.

◦ Starting in 2021, the negative real GDP gap is expected to shrink, gradually easing the downward pressure on prices on the demand side.

− Notwithstanding, the slowdown in wage growth, together with government programs such as free education and slowing inflation expectations, is likely to exert a downward pressure on prices.

◦ In 2020-2024, a continuously low inflation environment is forecasted, with the annual consumer price inflation rate remaining below 2%.

− In the medium term, the consumer price inflation rate, although likely to increase from the 0% range to a 1% range on the easing of downward pressure on the supply side and the gradual recovery of the economy, is projected to be lower than in the past due to the drop in the rate of economic growth.

❑ In 2021, the yield on Treasury bonds (3-year) is anticipated to inch up higher to 1.3% from the level a year earlier on the gradual recovery of the real economy in Korea and worldwide.

- ◦ In 2021, market interest rates are expected to rise slowly as the economy picks up.
- ◦ However, the upward pressure on interest rates are likely to be limited given the modest growth in real GDP (projected) of 0.7% from the level in 2019 and the consumer price inflation rate remaining well below the Bank of Korea's inflation target (2.0%).
  - − The monetary easing policy by the Bank of Korea in response to the slowing economy and the stability of international interest rates are expected to continue into 2021, reducing upward pressure in domestic interest rates.
- ◦ In 2020-2024, the annual average yield on Treasury bonds (3-year) is forecasted at 1.8% as the global and domestic economies overcome the shock of the COVID-19 pandemic and continue growth.
  - − International interest rates are also expected to slowly climb in the medium term, exerting an upward pressure on domestic interest rates.

❑ In 2021, the USD to KRW exchange rate is projected to drop to 1,184 won on annual average from the level a year earlier, on the recovery of the global economy and the weakness of the US dollar.

- ◦ The global economic recovery, as it has a stabilizing effect on the international financial markets, is expected to lessen the concentration of demand for the US dollar.
  - − As the global economic recovery further stabilizes the Korean economy, this is likely to lead to an increase in foreign investment in domestic securities markets.
  - − Korea's sovereign credit rating, the third highest grade, is equal to the UK (Moody's As2, S&P AA, Fitch AA-), and the CDS premium

on its Foreign Exchange Stabilization Bonds, which sharply spiked in March 2020, dropped to a level below the 2019 level in September.

- The Korean won has been recently gaining ground against the US dollar, which fell from 1,208 won on average in June to 1,186 won in August.

◦ In 2020-2024, the USD to KRW exchange rate is forecasted to drop to 1,169 won in annual average value as the US dollars gradually weakens, while Korea's current account surplus continues.

- A stable growth trend in the global economy is likely to lead to the weakening of the US dollar, while Korea's sustained current account surplus helps maintain favorable conditions for the supply of foreign currency liquidity.

3. Potential Growth Rate

❑ In 2020-2024, the potential growth rate of the Korean economy is expected to fall to an annual average rate of 2.0% in the aftermath of the shock from the COVID-19 pandemic.

◦ In 2020-2024, the potential growth rate of the Korean economy is anticipated to be brought down to 2.0% on annual average as the shock from the COVID-19 pandemic results in the lowering of the overall economic efficiency and a decrease in investment.

- Among input factors, the contribution of labor, capital and total factor productivity to the potential growth rate (annual average, %p) during this period is estimated at 0.0, 1.1 and 0.9, respectively.
- The contribution of capital to the potential growth rate is projected to decrease by 0.4p from the level during the previous five-year period (1.5%p) due to a sharply slowing growth in total fixed investment, with the slowdown being particularly pronounced in construction investment. This decrease in the contribution of capital is

likely to be the biggest driving factor for the drop in potential growth rate.

- The contribution of total factor productivity, a measure of the efficiency of the overall economy, is expected to slip by 0.2%p from the level in the previous five-year period (1.1%p).
- The contribution of labor to the potential growth rate is likely to remain unchanged from the level in the past five-year period (0.0%p) due to the rapid population ageing causing the growth in both the workforce and the number of employed persons to slow.

◦ The real GDP gap,[1] an indicator of the economic environment, is projected to remain in negative territory for some time as real GDP slowly approaches the level of potential GDP in 2020-2024, suggesting the possibility that a low total demand would exert a downward pressure on prices during this period.

- In 2020, amid the weakness in private consumption and exports caused by the COVID-19 shock, the real GDP gap fell to a level similar to that during the global financial crisis.
- From 2021 onwards, although the negative gap is expected to shrink gradually, the real GDP gap is likely to remain in negative territory for quite some time until 2024.

1) Defined as the percentage gap between real GDP and estimated potential GDP, real GDO gap is calculated as 'real GDP gap = (real GDP − potential GDP)/potential GDP×100.' A positive real GDP gap suggests the existence of an upward price pressure resulting from excess demand, while a negative gap means the existence of a downward price pressure resulting from a low total demand.

- Total labor input, on a downward trend during the previous five-year period (2015-2019, annual average rate of −0.5%), is expected to increase from the low in 2020, growing at an annual average rate of 0.2% in 2020-2024.
  - While total labor input is anticipated to decrease from the level during the previous five-year period, negatively affected by the slowing population growth (0.8% → 0.5%), rising unemployment rate (3.7% → 3.9%) and the decrease in weekly working hours (annual average rate of −0.3%), the extent of decline is likely to be reduced by the rise in the labor force participation rate of women and the elderly.
- In 2020-2024, the rate of increase in the productive capital stock is forecasted to drop by 0.9%p from 3.7% in 2015-2019 to 2.8% on annual average, due to the slowdown in the growth of fixed capital investment.
  - In 2020-2024, the total fixed capital investment is projected to grow at an annual average rate of 1.9% on the slow pace of recovery in facilities investment in the aftermath of the COVID-19 shock and the protracted slump in the construction sector.