Korea’s Steel Market
Recent Trends and Outlook

88th Session of the OECD Steel Committee
24th. Sep. 2020
WebEx Online meeting
CONTENTS

01. General economic outlook
02. Steel making capacity development
03. Recent changes in Korean steel market due to COVID-19
04. Recent changes in Korean steel consuming industries due to COVID-19
01
General economic outlook
01. General economic outlook

Overview

- Korea’s GDP growth has maintained stability at 2% - 3% for the past 10 years, but as expected the growth rate (BOK : -1.3%, OECD : -2.5%) is weighed down by COVID-19 this year.
- However the BOK has estimated the growth rate to recover to 2.8% in 2021.

<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>1H</th>
<th>2H</th>
<th>TOTAL</th>
<th>2021(e)</th>
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</thead>
<tbody>
<tr>
<td>GDP</td>
<td>3.2</td>
<td>2.7</td>
<td>2.0</td>
<td>-0.8</td>
<td>-1.8</td>
<td>-1.3</td>
<td>2.8</td>
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<td>Private Consumption</td>
<td>2.6</td>
<td>2.8</td>
<td>1.7</td>
<td>-4.4</td>
<td>-3.4</td>
<td>-3.9</td>
<td>3.8</td>
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<td>-2.4</td>
<td>-7.5</td>
<td>4.2</td>
<td>0.9</td>
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<td>6.2</td>
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<tr>
<td>Construction Investment</td>
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<td>-2.5</td>
<td>1.9</td>
<td>-3.1</td>
<td>-0.7</td>
<td>-0.4</td>
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<tr>
<td>Exports</td>
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<td>3.3</td>
<td>0.5</td>
<td>-3.2</td>
<td>-5.6</td>
<td>-4.5</td>
<td>4.8</td>
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<tr>
<td>Imports</td>
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<td>1.6</td>
<td>-0.8</td>
<td>-1.1</td>
<td>-2.5</td>
<td>-1.8</td>
<td>5.9</td>
</tr>
</tbody>
</table>

![Graph showing GDP growth over time](image-url)
01. General economic outlook

Global GDP growth rate

- Due to COVID-19 Pandemic, both developed and developing countries’ economies are severely hit and growth rates are expected to remain negative this year
- But China’s rapid economic growth at 4.5% may lead the global economic recovery in 2021

<table>
<thead>
<tr>
<th>Region</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020e</th>
<th>2021e</th>
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</thead>
<tbody>
<tr>
<td>World</td>
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<td>2.7</td>
<td>-7.6</td>
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<td>1.9</td>
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<tr>
<td>Mexico</td>
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<td>2.1</td>
<td>-0.1</td>
<td>-8.6</td>
<td>2.0</td>
</tr>
<tr>
<td>Canada</td>
<td>3.2</td>
<td>2.0</td>
<td>1.7</td>
<td>-9.4</td>
<td>1.5</td>
</tr>
<tr>
<td>E. ASIA</td>
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<td>3.3</td>
<td>2.9</td>
<td>-4.5</td>
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<td>China</td>
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<td>6.7</td>
<td>6.1</td>
<td>-3.7</td>
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<tr>
<td>EURO AREA</td>
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<td>1.9</td>
<td>1.2</td>
<td>1.1</td>
<td>1.2</td>
</tr>
</tbody>
</table>
01. General economic outlook

Industrial Production and business sentiment

- Korea’s industrial production has constantly increased by y-o-y 0.4% during 2019 but the growth apparently keeps slowing down.
- BSI Indexes for Manufacturing and Steel sectors are sharing similar trend while business sentiment is showing fluctuating trend over the year due to low economic growth.

* Source: Kostat, MOTIE, KIET
02

Steelmaking capacity development
02. Steelmaking capacity development

Capacity development over time

- Global steelmaking capacity has rapidly increased by 11.6% over the past 10 years
- China occupies 46.7% of global steelmaking capacity while Korea occupies about 3.3%
- ASEAN’s capacity has noticeably increased over 86% compared to that of 2010, which can be attributed to cross-border investments by foreign entrepreneurs

* Source: OECD (Sep. 2020)
03

Recent changes in Korean steel market due to COVID-19
03. Recent changes in Korean steel market

Steel Production (million MT)

Steel Consumption (million MT)

* Source: Korea Iron & Steel Association
03. Recent changes in Korean steel market

Demand Outlook

- Demand for finished steel product in 2020 is expected to recover to -4.3% in 4Q but uncertainty remains due to second COVID-19 hit in Korea
- Annual outlook indicates that recovery is expected in 2021 but not up to the level of 2019

Korea’s demand for finished Steel (quarterly)

\[\%\, Y-o-y\]

<table>
<thead>
<tr>
<th></th>
<th>'20.1Q</th>
<th>2Q</th>
<th>3Q</th>
<th>4Q</th>
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</thead>
<tbody>
<tr>
<td>Base 1</td>
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<td>-15.1</td>
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<td>Downside Scenario</td>
<td>-22.9</td>
<td>-13.3</td>
<td>-15.1</td>
<td>-4.9</td>
</tr>
</tbody>
</table>

Note: Base 1 - estimate of August 2020, Base 2 - estimate of May 2020

* Source: POSRI

Korea’s demand for finished steel (yearly)

\[(\text{Million MT})\]

<table>
<thead>
<tr>
<th></th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base 1</td>
<td>53.2</td>
<td>48.9</td>
<td>50.8</td>
</tr>
<tr>
<td>Base 2</td>
<td>48.1</td>
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<tr>
<td>Downside Scenario</td>
<td>46.5</td>
<td>48.1</td>
<td>46.6</td>
</tr>
</tbody>
</table>

* Note: Base 1 - estimate of August 2020, Base 2 - estimate of May 2020

* Source: POSRI
03. Recent changes in Korean steel market

Exports by products category

Imports by products category

Exports and imports by countries in 2019

* Source: Korea Iron & Steel Association
03. Recent changes in Korean steel market

Continuous import penetration of stainless steel products

- Korea’s import penetration rate is relatively higher than other major steel producing countries with the highest record on STS above of 220% in 2019, and 120% in 2020.
- STS flat products (HR·CR) imports from Indonesia rapidly increased in 2019 and particularly STS HR was even higher than that of China.
- Import penetration rate by country (2018, Worldsteel): US 31.8%, Japan 9.2%, Korea 27.8%

Korea’s Steel Import penetration in 2019 (Import / Domestic demand)

Korea’s STS HR import (2015-2019)

Korea’s STS CR import (2015-2019)

* Source: Korea Iron & Steel Association
04
Recent changes in Korean steel consuming industries due to COVID-19
04. Recent changes in steel consuming industries

Automobile

- Korea’s automobile production is expected to decrease by -12.6% due to weak global demand in 1H due to COVID-19 but steady recovery is expected in 2H.
- Exports in 1H of 2020 dropped by -33.9% due to lock-downs and border closures in major markets.

* Source: Korea Automobile Association & POSRI

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**Korea’s automobile Production (2016~2020e)**

- 2016: 423
- 2017: 411
- 2018: 403
- 2019: 395
- 2020e: 345

(10,000 units)

(△ 12.6%)

**Korea’s auto & auto parts export**

* Source: Korea Customs
04. Recent changes in steel consuming industries

Shipbuilding

- Korea occupied about 37% out of total world orders, and 29% of world deliveries in 2019
- COVID-19 pandemic is a long lasting influence on Korea’s shipbuilding industry with total delivery volumes expected to decrease by -23.5% in 2020
- New orders dropped by -58.0% in 1H as bulk carrier demand plummeted and LNG PJTs delayed

Order and delivery by country in 2019

Shipbuilding delivery amount

* Source : POSRI
04. Recent changes in steel consuming industries

Construction

- Construction order volume in 2020 was initially expected to plummet by -19% y-o-y, but updated data shows that it may decrease by -0.6% due to immediate medical surveillance on further spread of COVID-19.
- Construction investment focused on residential sectors is likely to maintain downtrend.

**Construction order amount**

(Unit: trillion KRW)

**Construction investment volume**

(Trillion Won)

**Construction investment forecast**

- 2019: 20.3 (e), 2020: 20.6 (e), 2021e: 19.3

* Source: CAK, Posri

* Source: BOK
Korea’s Steel Market: Recent trends and outlook

THANK YOU

Korea Iron and Steel Association | www.kosa.or.kr

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