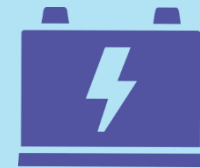




Doosan Corporation



Annual Business Review 2018

February 2019

Disclaimer

The information herein is provided for your information purposes only and contains preliminary figures which may be materially different from the final figures.

Forecasts and projections contained in this material are based on current business environments and management strategies, and they may differ from the actual results upon changes and unaccounted variables. We make no guarantees and assume no responsibility for the use of information provided. We trust your decisions will be based on your own independent judgment.

Financial data in this presentation is on a IFRS consolidated and IFRS parent basis.

Table of Contents

I. In-house Business Results & Plan

II. 2018 Results and 2019 Plan

III. Appendix

2018 Results and 2019 Plan (In-house Business)

2018

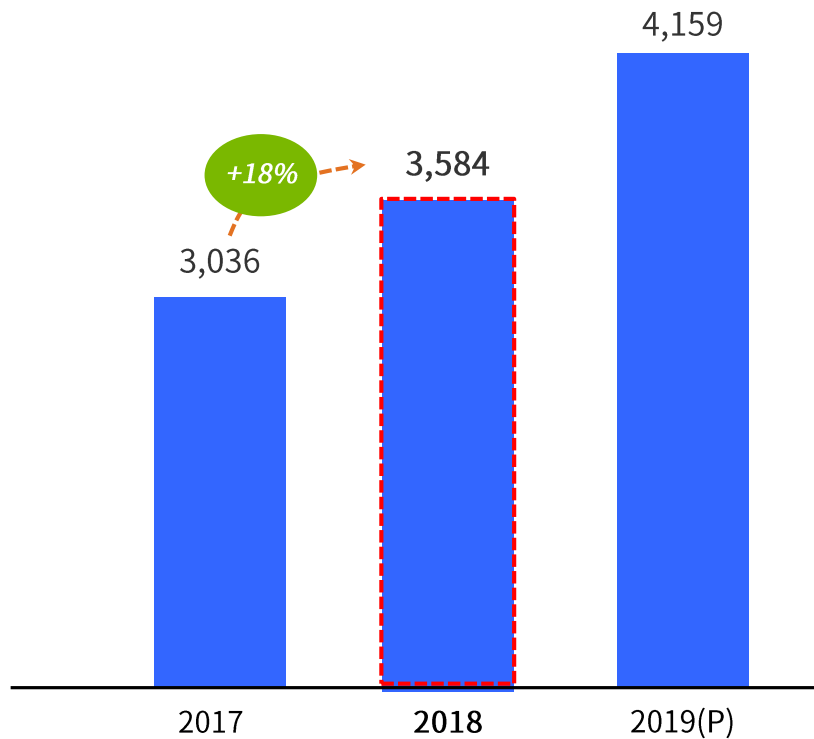
- Growth of In-house biz all across the board led huge improvement of sales but OP decreased due to the cost of managing new business

2019

- 2019 earnings growth will be driven by continued growth of existing biz and turn-around of new biz

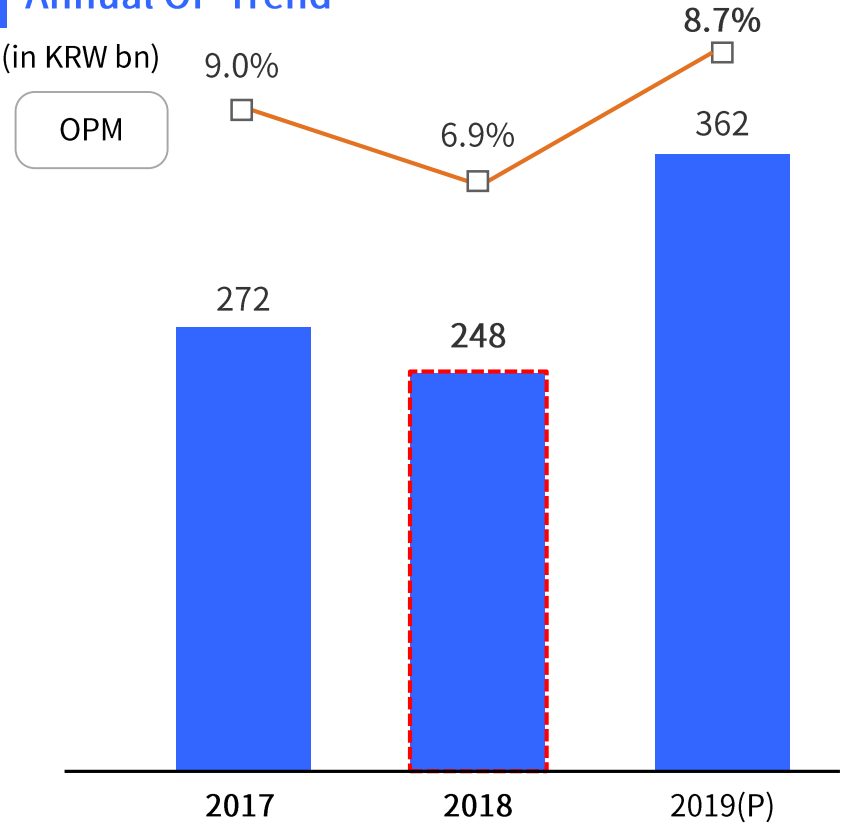
Annual Sales Trend

(in KRW bn)



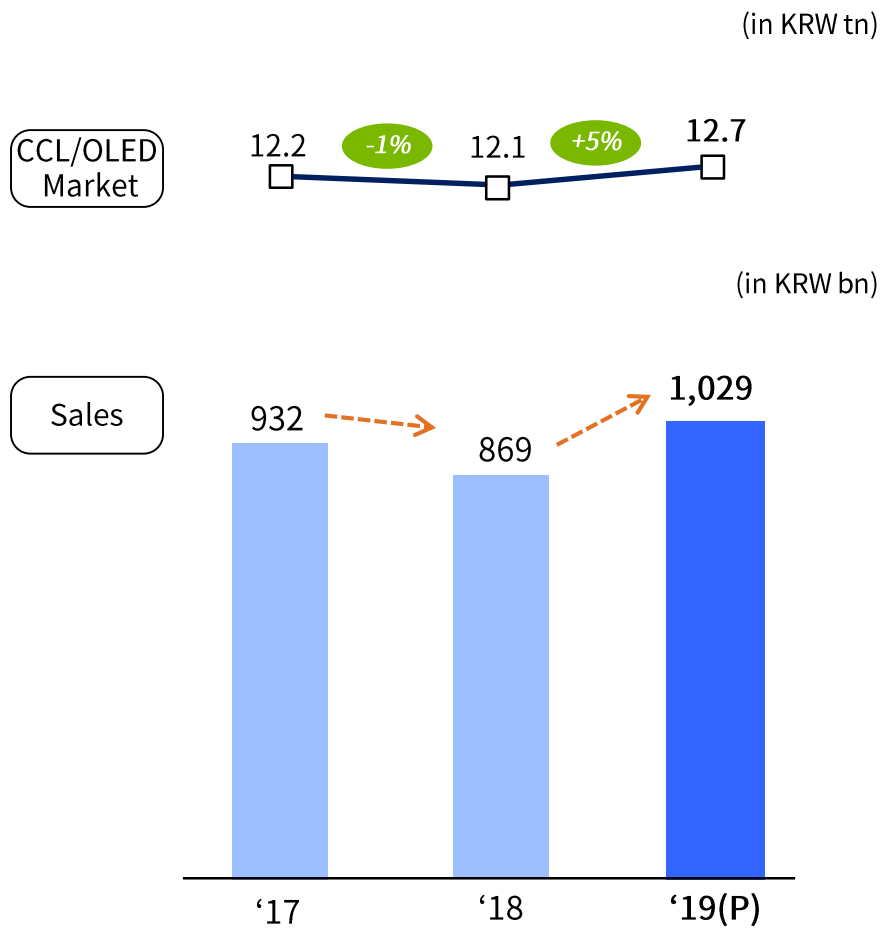
Annual OP Trend

(in KRW bn)



* New Biz: Fuel Cell, D.F.S

Electro-Materials



2018 Performance

- In 2018, Sales and OP decreased on YoY basis due to poor premium phone sales and improvements in OLED refresh rate
- Increased sales of overseas, especially in China through customer diversification
- Established new application base (5G & OLED TV)
- Started electric copper foil plant construction in Hungary
- Optimized profitability by reducing cost and streamlining low margin products

2019 Plan

- Expect to expand M/S in key components of mobile
 - New phone launch and the semiconductor market recovery in 2Q19
 - Increase in OLED adopted phone
- Increase in sales by expanding new application base, such as 5G/Server, Electronic Vehicle, and Energy
- Continuous OP expansion through cost improvement

Industrial Vehicles

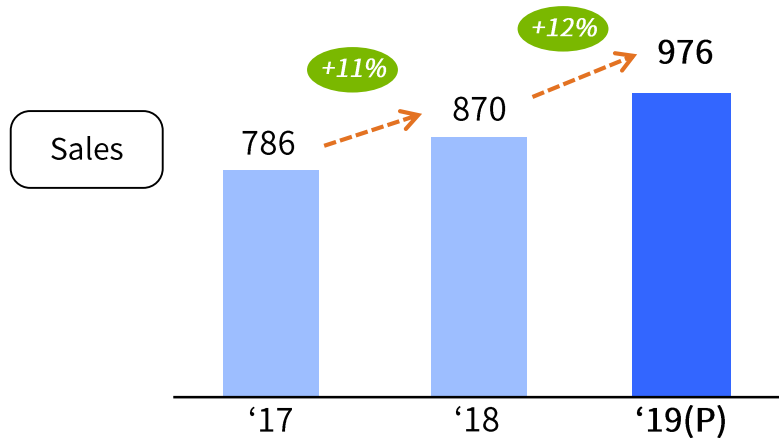
2018 Performance

- In 2018, sales increased 11% YoY and OP decreased 13% YoY
 - Sales : Increased due to sales growth in the developed and emerging markets
 - OP : Declined due to raw material price increases and a fall in the exchange rate
 - Domestic M/S is 54%, which is 1%p higher on YoY basis
- Targeted to expand M/S in domestic electric-type market through the launch of new product
 - Domestic electric-type M/S : ('18)38% → ('19)39%

2019 Plan

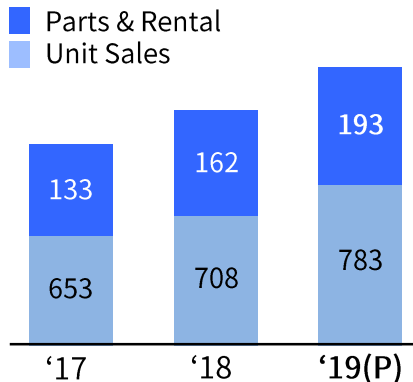
- Expect to achieve increase in sales by 12% and OP by 35% on YoY basis
 - Steady growth in domestic and overseas markets will lead sales expansion
 - OP will increase through sales and market price increases
- Expand global business through the launch of new engine-type product in North America and electric-type product in Europe

(in KRW bn)



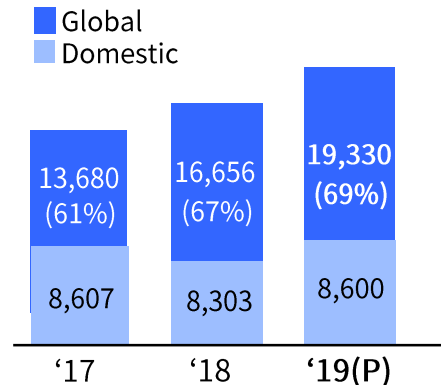
Sales Breakdown

(in KRW bn)

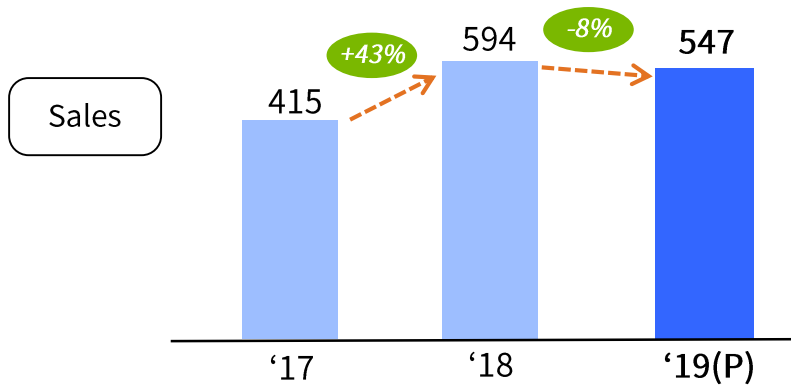


By Region

(in Units)



(in KRW bn)



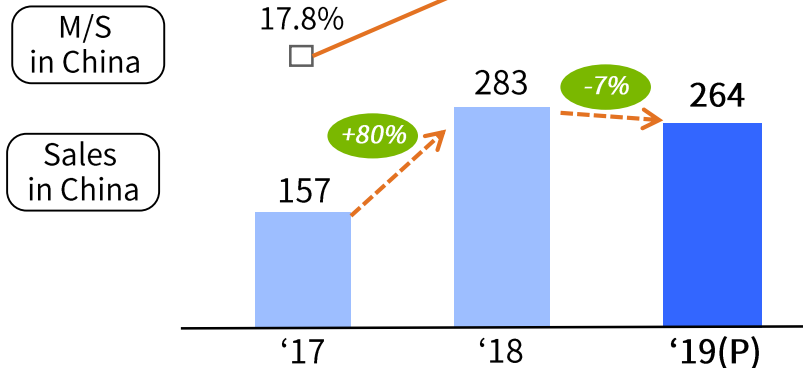
2018 Performance

- In 2018, sales and OP increased 43% and 69% YoY
 - Demand growth in the Chinese excavator market led improvement of sales and OP
 - Sales in China grew 80% YoY, Chinese M/S +1.9%p YoY
- Strengthened supply to the Indian market
 - Sold 25,000 units to the Indian market (YoY +19.5%)
 - Continuous growth in the Indian market with a CAGR of 7%
 - Achieved a M/S of 5.2% in the Indian market

2019 Plan

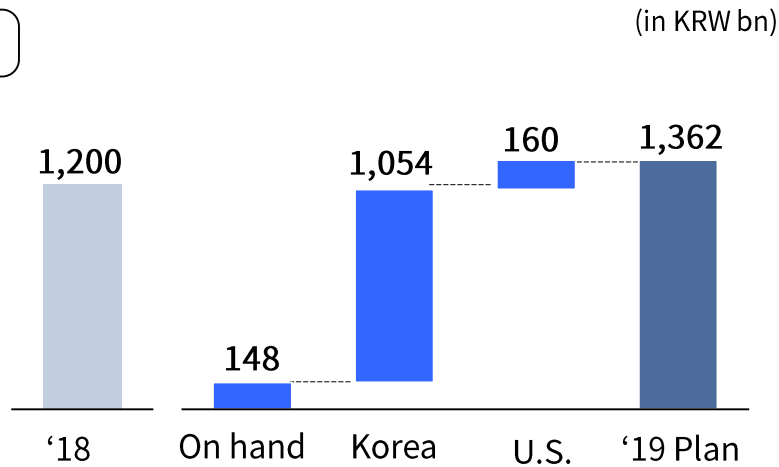
- In 2019, Sales and OP will decline 8% and 13% on YoY basis due to base effect according to rapid growth in the Chinese market
- Expand supply to the Indian excavator market (M/S Target : 7.6%)
 - Due to the continuous development of SOC* in India, construction equipment market will grow by 60% until 2021

* SOC : Social Overhead Capital



Fuel Cell

Order



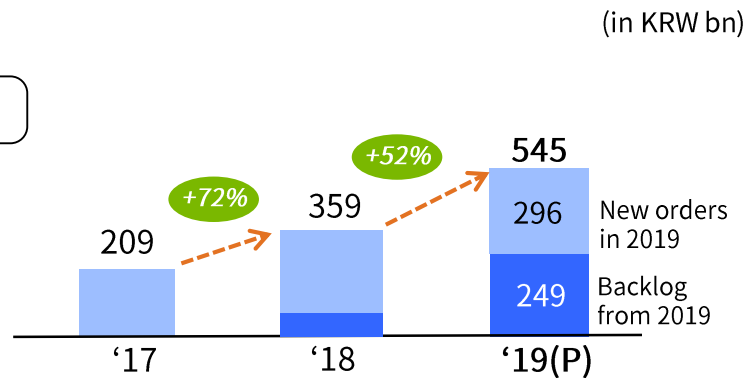
2018 Performance

- Achieved 1,200 KRWtn of order amount in 2018, four times higher than the previous year
- In 2019, sales increased 72% YoY but OP decreased due to one-time cost
 - One-time cost includes supply chain management cost

2019 Plan

- In 2019, sales and OP will continuously increase through additional orders from Korea and U.S.
 - 46% of sales in 2019 is a backlog from the orders received in 2018.
- In 2019, the fuel cell market in Korea will keep growing through the Korea government policy called 'Roadmap for Hydrogen Economy'

Sales



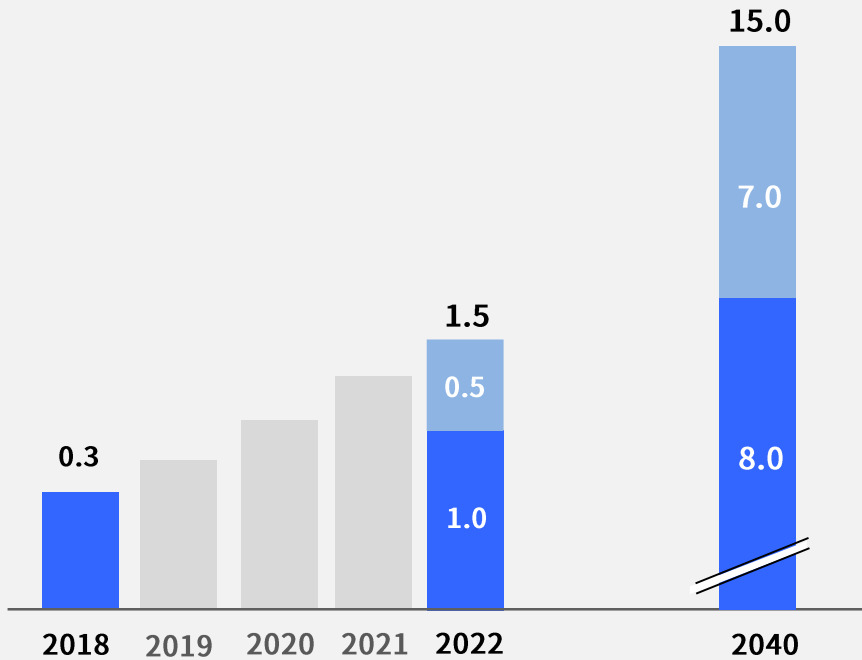
Back-up) Roadmap for Hydrogen Economy



Supply expansion of fuel cell for power plant

(Units: GW)

■ Domestic
■ Overseas



• According to Roadmap for Hydrogen Economy, the fuel cell market in Korea will continuously expand and this exceeds Doosan's capacity

- Government's Target
: ('18)0.3GW → ('22)1.5GW → ('40)15GW

• It is able to capture new business opportunity through various hydrogen application

Hydrogen Production

Byproduct Hydrogen



Reformer



Application Expansion

Fuel Cell Drone



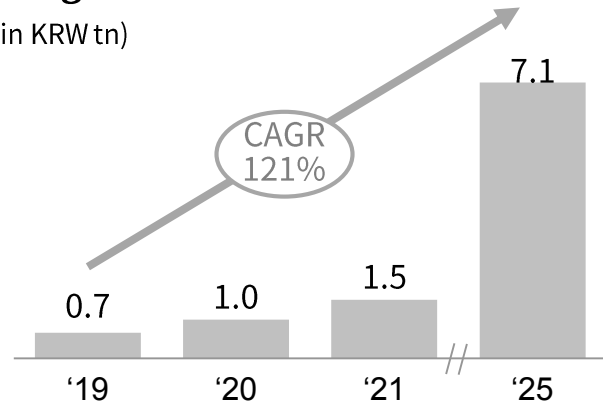
Fuel Cell Forklift



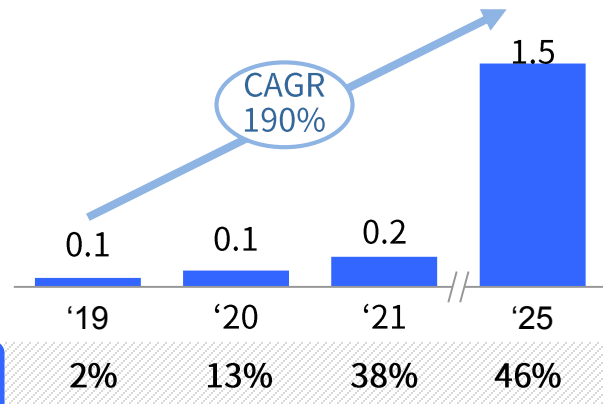
Back-up) Fuel cell drone

- Based on Doosan's fuel cell original technologies, DMI(Doosan Mobility Innovation), where Doosan Corporation holds 100% shares, was established in order to develop fuel cell drone in Dec 2016. Long Endurance Powerpack that can fly more than 2 hours was developed and this would launch in 4Q19.

Long-term forecast of commercial drone
(in KRW tn)



Long-term forecast of fuel cell drone
(in KRW tn)



[DP20
(Powerpack)]



[DF20]



- Power source of fuel cell drone is battery stack applying PEMFC technologies
- Commercial drone market is expected to reach about 7.1 KRWtn and fuel cell drone market will occupy 1.5 KRWtn, which is 21% of commercial drone market
- Improvements in payload compared to Li-Polymer battery
 - Flying time: 2hours
(Four times higher than Li-Polymer battery)
 - Payload: 1~5Kg
- It will be used for various purposes, such as public infrastructure monitoring, fire fighting, forest fire monitoring, reconnaissance, and logistics delivery

1)PEMFC(Polymer Electrolyte Membrane Fuel Cell)

Table of Contents

I. In-house Business Results & Plan

II. 2018 Results and 2019 Plan

III. Appendix

2018 Results and 2019 Plan (Consolidated)

2018

2019

- Both Sales and OP grew on YoY basis thanks to earnings improvement of D.I. and Bobcat
- Net profit turned to negative thanks to setting up allowances and one-off costs in advance.
- Level of earnings will be upgraded with continued growth of Doosan Infracore and recovery of Doosan Corp and Doosan Heavy

2018 Results and 2019 Plan

(in KRW bn, %)

	'17	'18	One-off	Normalized	YoY	'19(P)
Sales	16,913	18,172		18,172	7.4%	20,153
OP	1,168	1,216	-129 ¹⁾	1,345	15.2%	1,472
(M)	6.9%	6.7%		7.4%	0.5%	7.3%
Other Expenses	-812	-1,205	-396 ²⁾	-809	-0.4%	-762
Net Income	46	-340	-525	185	-	457

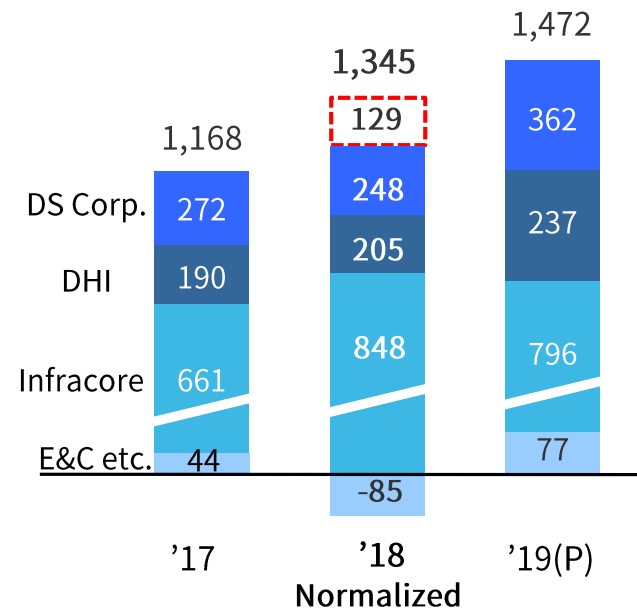
1) Bad debt -129 KRWbn(Housing -54 KRWbn, Delayed contract -75 KRWbn)

2) Other bad debt -396 KRWbn(Housing -259 KRWbn, Civil/SOC -138 KRWbn)

Annual OP Trend

One-off

(in KRW bn)



Appendix : 2018 Results and 2019 Plan (Parent)

(in KRW bn, %)

	'17	'18	YoY	'19(P)
Sales	2,625	2,919	+11.2%	3,290
OP	277	253	-8.5%	305
(M)	10.5%	8.7%	-1.8%p	9.3%
▪ In-house Biz	228	216	-5.1%	298
▪ Others ¹⁾	49	37	-24.2%	7
Interest Expense	42	57	+33.8%	58
Net Income	205	159	-22.7%	204

1) Others : dividend income, common expense, adjustments

Appendix : Financial Summary

Financial Summary

(in KRW bn, %)

	Parent	
	3Q18	4Q18
Current Asset	1,255	1,176
Non-Current Asset	3,536	3,558
Total Assets	4,792	47,34
Current Liabilities	1,426	1,404
Non-Current Liabilities	1,030	1,025
Total Liabilities	2,456	2,429
Paid-in Capital	135	135
Total Equity	2,336	2,306
L/E Ratio	105.1%	105.3%

(in KRW bn, %)

	Consolidated	
	3Q18	4Q18
Current Asset	11,877	11,586
Non-Current Asset	17,596	17,294
Total Assets	29,473	28,880
Current Liabilities	13,034	13,307
Non-Current Liabilities	8,622	8,428
Total Liabilities	21,656	21,735
Paid-in Capital	2,179	2,012
Total Equity	7,817	7,145
L/E Ratio	277.0%	304.2%

Debt

(in KRW bn, %)

	Parent	
	3Q18	4Q18
Bank	803	603
Corp. Bonds	675	749
Debt	1,478	1,352
Cash	91	114
Net Debt	1,387	1,238
Net D/E Ratio	59.4%	53.7%

E O D