

Overweight (Maintain)

Company Visit Note
September 5, 2016

Mirae Asset Daewoo Co., Ltd.

[Auto/Auto Parts/Tire]

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Auto

Visit to Kia's new plant in Mexico

1. Visit to Kia Motors' new Mexico plant, and Mexico operations of Hyundai Mobis and Hyundai Wia

At the end of August, we visited Kia Motors' (Kia) new plant in Mexico, as well as the Mexico operations of Hyundai Mobis and Hyundai Wia and several US sites. Our agenda was as follows:

August 29th: 1) Kia Motors Mexico (KMM), 2) Hyundai Mobis Mexico 3) Hyundai Wia Mexico, 4) Kia dealerships in Sendero and Linda Vista

August 30th: Kia Motors America and Car Pros Kia Carson (dealership in Los Angeles)

August 31st: Mobis Parts America (MPA)

2. Production of over 300,000 units (finished vehicles and parts)

Kia will gear up the Mexico plant's production capacity, aiming to increase its annual capacity to 300,000 units (including three or more types of compact and mid-sized vehicles) by end-2017 and far more than that over the medium and long term.

Of the Mexico plant's output, 60% will be exported to North America, while 40% will be supplied to the domestic Mexican market and neighboring Latin American countries.

Given the high growth potential of the Mexican market, the plant will be in full operation even if the Latin American market recovery is delayed.

3. Opportunity for revitalization amid low growth cycle

Kia now has a production facility dedicated to high-efficiency compact cars, which will contribute to an improved profit structure for North American sales. The high growth potential of the domestic Mexican market is another plus. In our view, it will be even better if Kia begins to produce SUVs, which are in high local demand, at the Mexico plant.

Hyundai Mobis and Hyundai Wia can expect greater economies-of-scale effects. We forecast Hyundai Mobis to improve the profitability of parts sales in North America over the medium to long term.

All in all, we see the Mexico plant providing an opportunity for revitalization amid the auto industry's low growth cycle.

Panorama of Kia's Mexico plant



Source: Mirae Asset Daewoo Research

1. Visit to Kia's Mexico plant and Mexico operations of Hyundai Mobis and Hyundai Wia

On August 29th, we visited Kia Motors Mexico (KMM), the Hyundai Motor Group's (HMG) first manufacturing plant in Mexico. We also visited Hyundai Mobis Mexico, Hyundai Wia Mexico, and Kia dealerships in the country. On August 30th, we visited Kia Motors America (KMA; sales subsidiary) and Car Pros Kia Carson (dealership in Los Angeles), and on August 31st we visited Mobis Parts America (MPA; after-sales service subsidiary).

Figure 1. Entrance to Kia's Mexico plant



Source: Mirae Asset Daewoo Research

Figure 2. Kia's Mexico plant



Source: Mirae Asset Daewoo Research

Figure 3. Kia's dealership in Mexico (Sendero)



Source: Mirae Asset Daewoo Research

Figure 4. Kia's dealership in Mexico (Linda Vista)



Source: Mirae Asset Daewoo Research

2. KMM evaluation and outlook

Kia's Mexico plant was built in the state of Nuevo Leon, Mexico's major industrial region. Commercial operation started on May 16th with production of the K3 model (four-door sedan). Kia plans to start production of the K3 five-door hatchback model in 3Q16, and a new B-segment model (similar in size to the Rio) and a new five-door model in 2017. Kia will likely introduce a three-shift production system to the plant and increase its annual capacity to 300,000 units by end-2017. Total investments are expected to reach more than W3tr (US\$3bn), including W1.1tr for automotive production.

In 2018 and beyond, Kia aims to expand the new plant's annual capacity to far more than 300,000 units in the medium to long term. We think Kia will utilize it as a cross production base with Hyundai Motor Company (HMC) and expand its B-segment lineup (including variation models).

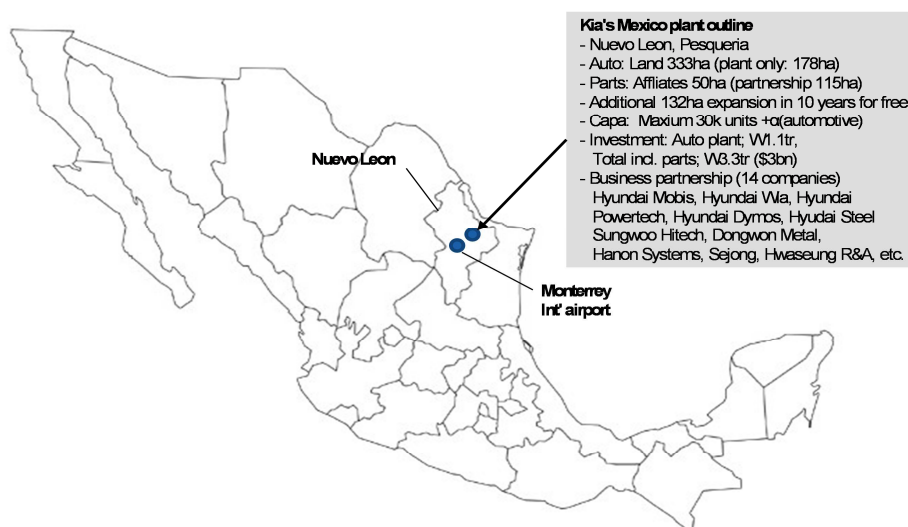
Of the Mexico plant's output, 60% will be exported to North America, while 40% will be supplied to the domestic Mexican market and neighboring Latin American countries. Supply to the domestic Mexican market is likely to account for 10-20%, depending on Latin American market conditions and Mexican market growth.

Of note, it took only 19 months for the Mexico plant to start commercial production after groundbreaking on October 1st, 2014, despite unfavorable construction conditions, including 81 rainy days. The plant's assembly lines display a productivity of 68 units per hour (UPH), above the average of the HMG's global plants with a capacity of at least 300,000 units. We believe the plant displays productivity of 74 UPH at full capacity.

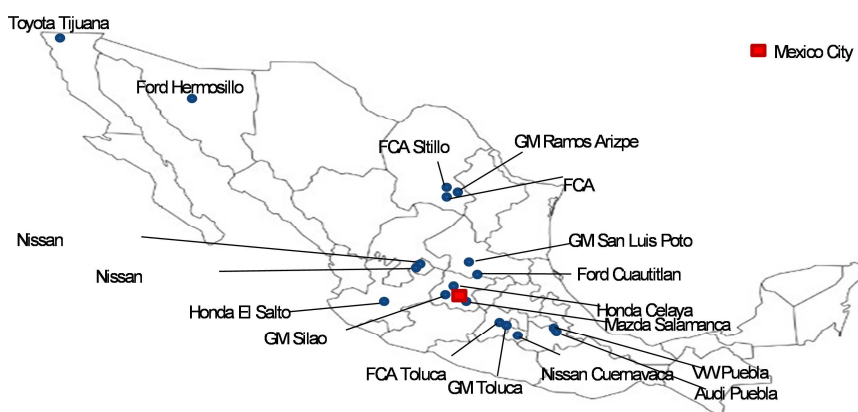
The Mexico plant's core competitiveness lies in cost efficiency and labor productivity. With its large population (120mn; 11th largest in the world) and low average age of 27.4 years, Mexico boasts low labor costs (US\$2.2 per hour as of 2015). This is equivalent to 68% of the level in China and 20% of that in Korea. Since 2000, the country's labor cost has increased at a CAGR of just 3%.

In terms of labor productivity and cost efficiency, the Mexico plant is similar to the company's production facilities in China in the early 2000s. The company succeeded in achieving full utilization and recouping investments at its Chinese plant in a very short period of time on the back of sharp growth in local demand and strong production efficiency. In addition, the Mexico plant is well-positioned to serve as a mass-production base for compact cars, which should help the company shift its Korean production facilities to high-margin products, including mid/large-sized cars and light truck/SUV models.

Figure 5. Outline of Kia's Mexico operations



Source: Company data, Mirae Asset Daewoo Research

Figure 6. Major automakers' expansion in Mexico

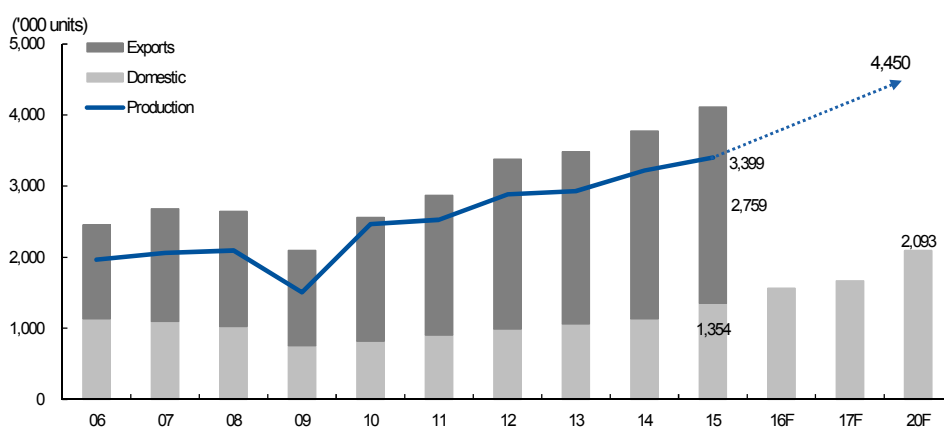
Source: Company data, Mirae Asset Daewoo Research

Table 1. Major automakers' Mexico operations

('000 units)

	Production base	Current capacity	Planned capacity	Capacity (current + planned)	Production models	Notes
Nissan	Cuernavaca	250		250	Versa, Tsuru, NV200, Frontier	
	Aguascalientes	600	175	775	Sentra, Note, Versa, micra	
	Aguascalientes new plant	175	425	600	Sentra, Versa, B Seg. SUV new model	Came online Nov. 2013
	Total	1,025	600	1,625		
GM	Ramos Arizpe	240		240	Cadillac SRX, Chevrolet Sonic/Captiva	
	San Luis Poto	156		156	Chevrolet Aveo/Trax, GMC Sierra	
	Silao	400		400	Chevrolet Silverado/Avalanche	
	Total	796		796		
VW	Puebla	550		550	Jetta, New beetle, Golf	
	San Jose Chiapa		150	150	Audi Q5, Q6	To come online in 2016
	Total	550	150	700		
Ford	Cuautitlan	200		200	Fiesta, Focus, Escape new model('17)	
	Hermosillo	300		300	Fusion, Lincoln MKZ	
	Total	500		500		
FCA	Saltillo	250		250	RAM pickup/van	
	Toluca	280		280	Dodge Journey, Dart, Fiat 500/Fremont	
	Total	530		530		
Toyota	Tijuana	50		50	Tacoma	
Honda	El Salto	150		150	CR-V	
	Celaya	200		200	Fit, HRV	Came online Feb. 2014
	Total	350		350		
Mazda	Salamanca	140	90	230	Mazda 2/3, Toyota B-Seg. Car	To expand in 2016
Total		3,941	840	4,781		

Source: Company data, Mirae Asset Daewoo Research

Figure 7. Automotive production and sales trends in Mexico

Source: Company data, Mirae Asset Daewoo Research

3. Outlook for Kia's sales in Mexico

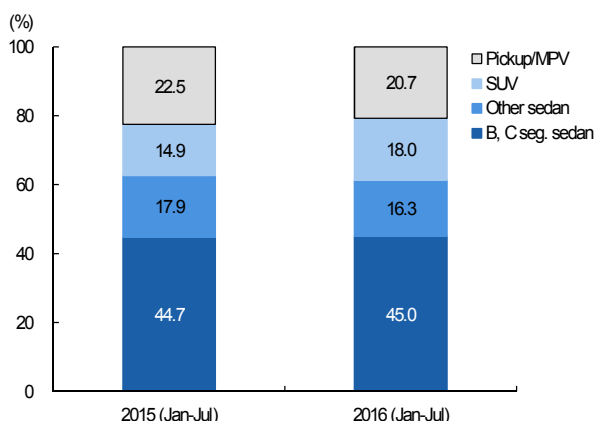
Mexico's total car demand is projected to grow by a double-digit figure this year, following a 19.3% YoY increase to 1.35mn units in 2015. The country is enjoying benefits from the economic recovery of the US, with the income level of the middle income class rising recently.

Mexico is strengthening regulations on used car imports due to environmental concerns. In addition, the country is expanding tax benefits for new car purchases. Such efforts are serving as dual drivers for new car sales. Over the medium to long term, total car demand is anticipated to grow at a CAGR of at least 8% to exceed 2mn units by 2020.

Mexico's light vehicle market is broken down into sedan-type vehicles (61%), SUVs (18%), and other light trucks (21%). The proportion of light trucks is higher than the global average but lower than the US's level. In line with the recent global light vehicle market trend, SUV sales are displaying outstanding growth in the country. Furthermore, growth in compact sedan (B and C segments) sales is also robust. As of July 2016, growth in SUV and B/C segment sales stands at 43.3% and 19.1% on a cumulative basis, respectively.

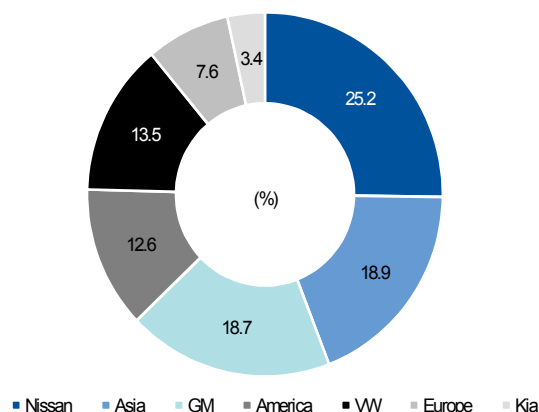
Asian players, led by Japanese carmakers, claim the largest market share in Mexico, followed by US players (31.3%), including GM, and European firms (21.2%), including Volkswagen. The combined market share of Nissan (25.2%), GM (18.7%), and Volkswagen (13.5%), three early entrants into the market, is nearing 60%.

Figure 8. Sales breakdown in Mexico



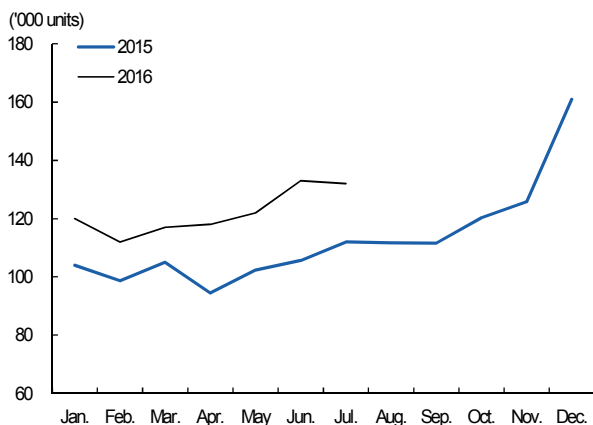
Source: Company data, Mirae Asset Daewoo Research

Figure 9. Major automakers' M/S in Mexico



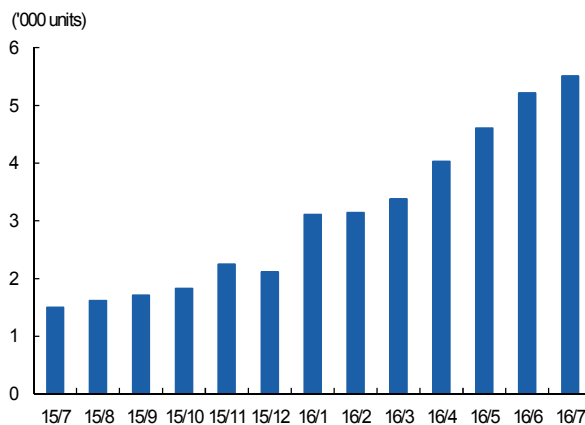
Source: Company data, Mirae Asset Daewoo Research

Figure 10. Monthly light vehicle sales in Mexico



Source: Company data, Mirae Asset Daewoo Research

Figure 11. Kia's monthly sales in Mexico



Source: Company data, Mirae Asset Daewoo Research

Kia started to sell cars in Mexico in July 2015, after being granted import duty waivers for its local production (up to 30,000 cars exported from the Mexican production subsidiary will be duty-exempt). First-month sales came in at a strong 1,499 units, and since its entry into the market, Kia has sold a total of 29,000 cars (a market share of 3.4%) as of July 2016, with small/medium-sized SUVs (Sportage and Sorento) leading sales growth. For the full year, Kia is targeting sales of 55,000 units and a market share of 3.5%. We think the automaker will be able to comfortably achieve this target in light of its solid performance so far this year.

We believe the strong performance stems from: 1) import duty waivers, 2) timely launch of high-demand models (small/medium-sized SUVs), 3) nationwide dealer networks, 4) low auto loan rates (lower than any offered by rivals), and 5) long warranty periods (which attest to the firm's excellent product quality). Moreover, the firm's strong brand power in the US and its securing of the top spot in JD Power's 2016 initial quality study (IQS) have also allowed the brand to easily gain a foothold in Mexico.

Kia started to build dealer networks in the country at end-2014, and now has 73 networks nationwide (94% coverage). In terms of auto loan rates, the brand holds robust price competitiveness. In Mexico, around 64% of car buyers opt for monthly payments when they take out auto loans (as opposed to lump sum payment). While the average rate is around 13%, Kia Finance offers 11.49% (in partnership with BNP Paribas).

Kia offers a five-year, 100,000km warranty for new vehicles, plus a seven-year, 150,000km powertrain warranty (engines and transmissions). Rivals typically provide a two-year warranty, with an optional further one-year warranty. We believe that the automaker's long warranty period will help boost sales.

By 2020, Kia targets Mexican sales of 100,000 units (40,000 units in local production; 60,000 units in exports to Mexico) and a market share of 5%. This target is based on the assumption that more than 10% of local production will be consumed inside Mexico. If the recovery of the Central and South American markets and medium/long-term growth momentum are weaker than expected, the company could increase the share of local sales (out of local production) to around 20%. We believe the outlook for the Mexican market and Kia's local sales is brighter than the export outlook.

Table 2. Kia dealership network in Mexico

Dealership size	Number	Lot area (m ²)	Showroom size (m ²)	Investment (US\$m)
> 10,000m ²	2	11,187	79	4.5
> 6,000m ²	9	7,398	67	3.9
> 4,000m ²	21	4,670	55	2.9
> 3,000m ²	31	3,506	55	2.7
< 3,000m ²	10	2,382	47	1.8
Total (average)	73	4,377	56	2.8
Industry average comparison	63	+8%	+21%	+30%

Source: Company data, Mirae Asset Daewoo Research

Table 3. Major automakers' installment interest rates in Mexico

(%)

Toyota	Kia	Nissan	Mazda	Honda	HMC	Ford	GM	VW	Avg.
9.95	11.49	11.99	11.99	12.49	12.49	13.40	14.40	14.90	13.0

Source: Company data, Mirae Asset Daewoo Research

Table 4. Major automakers' production trends in Mexico

(units)

	2011	2012	2013	2014	2015	2016 (Jan.-Jul.)
Nissan	607,087	683,520	680,213	805,871	822,948	489,802
GM	544,202	570,942	645,823	678,388	690,446	374,673
Ford	338,772	455,334	439,110	500,247	503,589	255,333
FCA	510,041	604,508	516,146	475,121	457,517	247,902
VW	462,462	451,648	525,220	442,583	433,752	244,258
Honda	45,390	63,256	63,229	143,832	203,657	152,587
Mazda				102,346	182,357	91,872
Toyota	49,596	55,661	63,724	71,398	104,810	74,041
Kia						27,990
Total	2,557,550	2,884,869	2,933,465	3,219,786	3,399,076	1,958,458

Source: Company data, Mirae Asset Daewoo Research

Table 5. Major automakers' export trends in Mexico

(units, %)

	2011	2012	2013	2014	2015	2016 (Jan.-Jul.)
Nissan	411,661	467,338	449,570	538,972	518,689	305,454
GM	443,242	465,277	525,733	553,502	539,933	282,445
Ford	449,925	384,665	520,217	426,574	412,703	239,158
FCA	323,096	424,754	402,105	465,718	476,633	235,108
VW	429,987	518,132	423,937	397,976	393,263	191,731
Honda	35,429	39,737	37,798	104,738	162,418	124,933
Mazda				84,009	154,166	81,996
Toyota	49,539	55,661	63,724	71,398	101,091	73,152
Kia						17,916
Total	2,142,879	2,355,564	2,423,084	2,642,887	2,758,896	1,551,893
Exports/production	83.8	81.7	82.6	82.1	81.2	79.2

Source: Company data, Mirae Asset Daewoo Research

4. Local production of Hyundai Mobis and Hyundai Wia

1) Hyundai Mobis

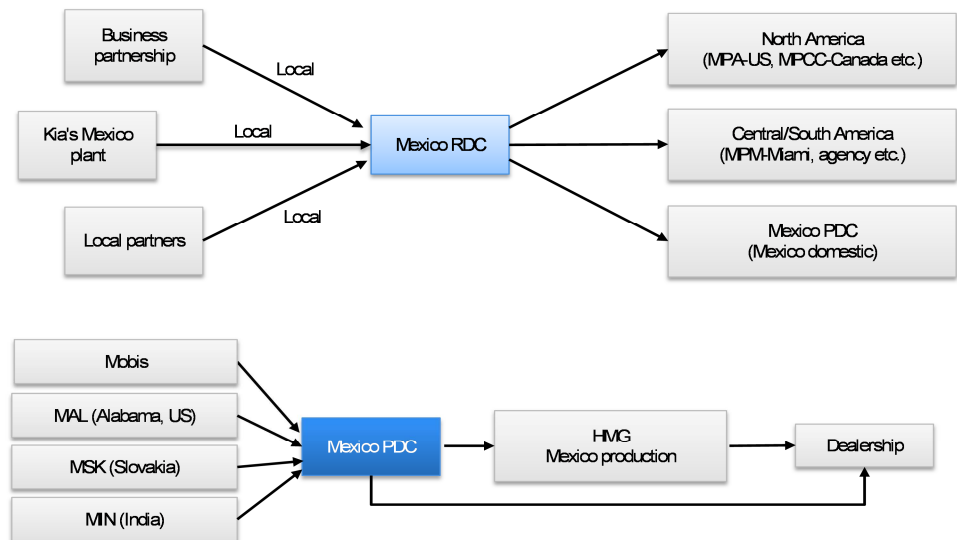
The Mexican subsidiary of Hyundai Mobis is equipped with: 1) a module line, 2) an injection molding line, 2) a line for lamps, airbags, and brake systems, and 4) a line for parts for use in after-market services. The module line produces chassis modules, cockpit, and front-end modules (bumper systems, lamp, radiator, and heating ventilating and air conditioning systems). The injection molding line is for bumpers, instrument panels, and bumper carriers modeling. The brake line produces conventional brake systems such as brake calipers, boosters, and master cylinders.

With regard to after-market service parts production, the company established the Parts Redistribution Center in Nuevo León (for parts supply at home and abroad) in April 2014 and the Parts Distribution Center in Mexico City (for domestic parts distribution) in April 2016.

Table 6. Hyundai Mobis' Mexico plant outline

Parts system	Item	Capacity	Investment amount
Module	Chassis, cockpit (driver), FEM, bumper	300,000 units +α	W235.7bn (module+parts)
Parts	Bumper, instrument panel, bumper carrier modeling	300,000 units +α	
Lamp, Airbag	Front and rear lamp, driver/passenger/side/curtain airbag	300,000 units +α	W237.2bn (core parts)
Brake	Brake caliper, booster & master cylinder	300,000 units +α	
Total			W472.9bn

Source: Company data, Mirae Asset Daewoo Research

Figure 12. Hyundai Mobis' production and distribution system in Mexico

Source: Company data, Mirae Asset Daewoo Research

Production capacity of each line is meant to meet demand from Kia's Mexican factory (300,000 units). Over the long term, the company plans to expand capacity for modules and injection molding up to 550,000 units, while increasing capacity for core parts (e.g., lamps, airbags, and brake systems) up to 1mn units. Hyundai Mobis plans to expand supply to non-HMG manufacturers in North America. Indeed, we believe the company has already secured new orders from new clients. Over the medium to long term, Hyundai Mobis aims to increase non-HMG supply to 40% out of overall supply (vs. 60% for HMG).

We estimate that the company's Mexican subsidiary will generate revenue of US\$300mn in 2016 and US\$2bn in 2020. Labor cost per head is just 85% that of Kia's Mexican factory. Imports of CKD parts from Korea are denominated in the US dollar. Although only around 60% of core parts are procured through local suppliers, the company plans to increase the share to 90% over the long term so as to ease F/X risks and boost operation stability.

Figure 13. Hyundai Mobis' Mexico plant

Source: Mirae Asset Daewoo Research

2) Hyundai Wia

Hyundai Wia's Mexico plant will produce three types of small/mid-sized engines (which will be installed in Kia's B and C segment vehicles) and their related materials. The plant will also manufacture constant-velocity (CV) joints, which are applied to the front axles of front wheel drive vehicles to keep the transmission of power even.

The three engine models are 1.4-liter Kappa, 1.6-liter Gamma, and 2.0-liter Nu. More specifically, the Mexico plant will produce MPI and turbo GDI engines for Kappa; MPI, GDI, turbo GDI, FFV (for Latin America-only vehicle models) engines for Gamma; and MPI, GDI and Atkinson Cycle engines (for hybrid cars) for Nu. The plant can benefit from strong scale effects, as it employs a flexible assembly pallet with a two-tier adaptor structure, which makes it possible to produce up to four different types of engines on a single automated line. For materials, the Mexico plant will manufacture engine blocks and six-speed automatic transmission cases (for Hyundai Powertech) through an aluminum casting process.

Table 7. Hyundai Wia's Mexico plant outline

Item	Models	Trim	Models corresponding to the plant	Capacity
Engine	Kappa (1.4L)	MPI (normal), GDI (direct compression)	B, C segment sized-vehicles, such as K3	300,000 units+α
	Gamma (1.6L)	MPI, GDI, GDI turbo, FFV (flexible pure)		
	Nu (2.0L)	MPI, GDI, Atkinson cycle type		
CV joint			Kia's Mexico plant, offshore production, local OE, etc.	
Engine and transmission	Engine block, 6-speed automatic transmission case			600,000 units+α

Source: Company data, Mirae Asset Daewoo Research

For engines and CV joints, the Mexico plant will initially focus on meeting Kia's 300,000 unit capacity, but will take into account a ramp-up to 700,000 vehicles over the long term. For materials, the plant has the capacity to respond to 600,000 vehicles and is expected to increase that number to 1.4mn vehicles over the medium and long term. We believe the materials line is eventually looking to supply to HMG's ex-Mexico auto plants as well as non-group automakers.

In 2016, we forecast Hyundai Wia's Mexico plant to generate revenue of around W230bn. If the plant runs at full capacity (based on over 300,000 vehicles), we estimate total revenue would exceed W700bn. Labor cost per head is in line with Hyundai Mobis' level at around 85% of Kia's Mexico plant. Hyundai Wia is procuring the core engine parts (cylinder heads, pistons, crank shafts, etc.) either in the form of CKD from Korea or through local suppliers.

Figure 14. Hyundai Wia's Mexico plant



Source: Mirae Asset Daewoo Research

5. Opportunity for revitalization amid low growth cycle

Kia's Mexico plant is optimized for small-/mid-sized sedan production and has high productivity and cost efficiency, backed by cheap labor costs (lower than China) and an abundant young labor force.

Even in the face of fiercer promotional competition in the North American market, we believe the Mexico plant will reach a decent level of productivity thanks to strong production cost competitiveness of compact sedans (C segment and smaller) and economies-of-scale effects. The Korea plant will likely adjust its production mix, lowering the proportion of compact sedans with poor price competitiveness and increasing the mix of SUVs, light trucks, and mid-/large-sized vehicles with high added value.

Mexico's domestic market has high growth potential and is favorable to Kia thanks to 1) the robust economy, 2) young demographic structure, and 3) government policy to promote new car sales. Although competition in the industry may grow fiercer in the medium and long term, we forecast Kia to gain a competitive edge over its peers for the time being and expand its market share in a short period of time given its strong price competitiveness and new models. If the demand recovery in Latin America is delayed or the Latin American market remains sluggish, we believe domestic sales will have room to expand, making up for lower exports.

Kia plans to mainly produce sedans at the Mexico plant. In our view, the automaker would do well to use the Mexico plant to produce SUV models, which can attract more local demand. This could be challenging, however, as it would affect the global production mix (including at the Korea plant).

We believe Hyundai Mobis and Hyundai Wia will gear up with core parts production systems, with production capacity of at least 300,000 units over the medium and long term. We expect to see increases in 1) production volume at the Mexico plant, 2) production volume of non-affiliate customers in Mexico, and 3) both group-related and non-group-related production volume in North and Central America. However, at production levels of less than 300,000 units, the fixed cost burden would increase. The Mexico operation will be crucial, as it should begin to contribute significantly to consolidated earnings growth as production capacity expands further and further above 300,000 units.

We forecast Hyundai Mobis' A/S will supply parts with stronger price competitiveness to the North American market through RDC (redistribution center) if the Mexico operation successfully expands local procurement. As a result, profitability of parts businesses in North America including MPA (Mobis Parts America) will likely be improved in the mid- and long term.

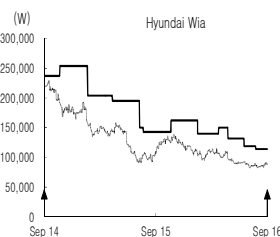
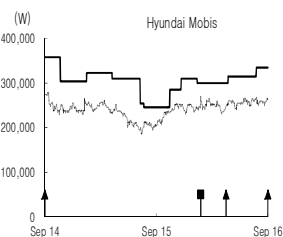
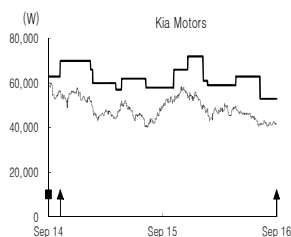
We believe the Mexico operation will provide an opportunity for revitalization amid a low growth cycle as HMG 1) is making inroads into Mexico, a new market with high growth potential, 2) will likely improve profitability of small-/mid-sized vehicle sales, and 3) may expand revenue of non-affiliate customers.

APPENDIX 1

Important Disclosures & Disclaimers

2-Year Rating and Target Price History

Company (Code)	Date	Rating	Target Price	Company (Code)	Date	Rating	Target Price
Kia Motors(000270)	07/13/2016	Buy	53,000	Hyundai Wia(011210)	10/19/2015	Buy	285,000
	04/27/2016	Buy	63,000		07/26/2015	Buy	246,000
	01/27/2016	Buy	59,000		07/14/2015	Buy	254,000
	01/13/2016	Buy	61,000		04/13/2015	Buy	310,000
	11/25/2015	Buy	72,000		01/20/2015	Buy	323,000
	10/11/2015	Buy	66,000		10/26/2014	Buy	304,000
	07/14/2015	Buy	58,000		07/28/2014	Buy	358,000
	04/27/2015	Buy	62,000		07/28/2016	Buy	114,000
	04/09/2015	Buy	57,000		06/20/2016	Buy	119,000
	01/25/2015	Buy	60,000		04/28/2016	Buy	132,000
	01/18/2015	Buy	66,000		03/29/2016	Buy	150,000
	10/13/2014	Buy	70,000		01/20/2016	Buy	140,000
	09/02/2014	Trading Buy	63,000		10/25/2015	Buy	162,000
Hyundai Mobis(012330)	07/28/2016	Buy	335,000		07/26/2015	Buy	143,000
	04/27/2016	Buy	315,000		07/14/2015	Buy	150,000
	04/20/2016	Buy	300,000		04/16/2015	Buy	195,000
	01/28/2016	Trading Buy	300,000		01/25/2015	Buy	204,000
	01/17/2016	Buy	300,000		10/26/2014	Buy	254,000
	11/25/2015	Buy	310,000		08/20/2014	Buy	237,000



Stock Ratings

Buy : Relative performance of 20% or greater
 Trading Buy : Relative performance of 10% or greater, but with volatility
 Hold : Relative performance of -10% and 10%
 Sell : Relative performance of -10%

Industry Ratings

Overweight : Fundamentals are favorable or improving
 Neutral : Fundamentals are steady without any material changes
 Underweight : Fundamentals are unfavorable or worsening

Ratings and Target Price History (Share price (—), Target price (—), Not covered (■), Buy (▲), Trading Buy (■), Hold (●), Sell (◆))

* Our investment rating is a guide to the relative return of the stock versus the market over the next 12 months.

* Although it is not part of the official ratings at Mirae Asset Daewoo Co., Ltd., we may call a trading opportunity in case there is a technical or short-term material development.

* The target price was determined by the research analyst through valuation methods discussed in this report, in part based on the analyst's estimate of future earnings.

* The achievement of the target price may be impeded by risks related to the subject securities and companies, as well as general market and economic conditions.

Equity Ratings Distribution

Buy	Trading Buy	Hold	Sell
70.73%	17.56%	11.71%	0.00%

* Based on recommendations in the last 12-months (as of June 30, 2016)

Disclosures

Mirae Asset Daewoo Co., Ltd.'s analyst attended the IR meeting held by Hyundai Wia, Hyundai Mobis, Kia Motors within recent one month. Expenses related to the meeting were covered by Hyundai Wia, Hyundai Mobis, Kia Motors.

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