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IRAN

AUTOS REPORT

INCLUDES 5-YEAR FORECASTS TO 2020

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Iran Autos Report Q4 2016

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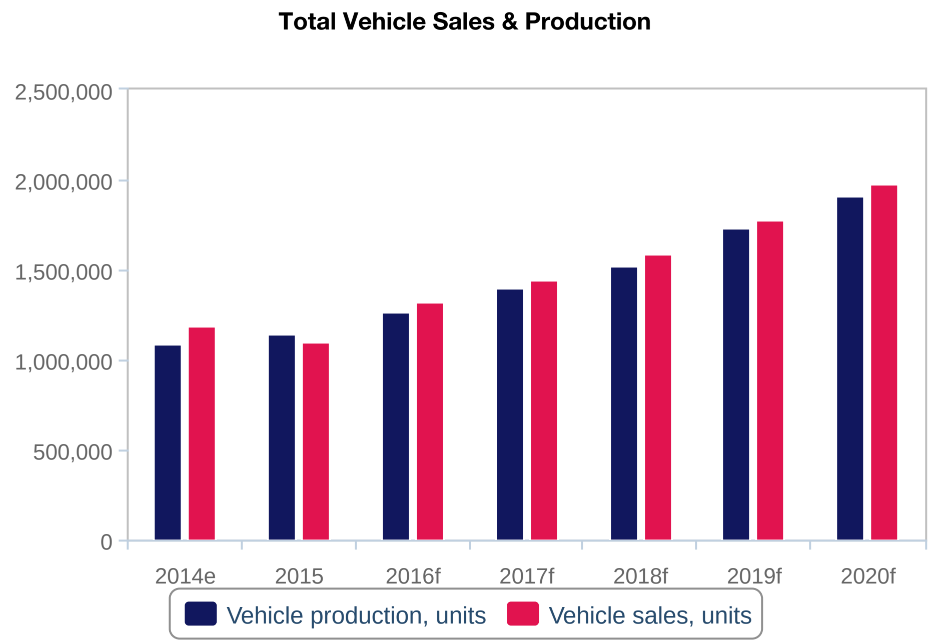
BMI Industry View

BMI View: *Total vehicle sales will grow significantly in 2016 off the back of easing sanctions and returning western brands. A preference for western brands will boost passenger vehicle sales as consumers that delayed purchases under sanctions, as they waited for these brands to return to market, move to purchase vehicles. Additionally, the booming construction industry will support commercial vehicle sales in 2016.*

Total Vehicle Sales And Production Boosted By Easing Sanctions



f = BMI forecast. Source: National Sources,BMI

Key Views

- Preferences for Western brands re-entering the market will drive vehicle sales.
- Ban on American vehicle manufacturers will prevent them from entering the market.
- Improved financing for infrastructure projects will support the commercial vehicle segment.
- Investment into vehicle production will facilitate investment into the component supply chain industry.

SWOT

Iran Auto Industry SWOT

Strengths	▪ The largest car-producing nation in the Middle East. ▪ Growing middle class should provide high demand for new cars over the medium term. ▪ New car sales and production both look set for strong growth over the forecast period.
Weaknesses	▪ Iran is insisting on tough new preconditions before allowing foreign carmakers back into the country, which could deter some inward investment. ▪ Aging equipment and technology in need of investment and knowledge sharing from Western investors. ▪ Domestic brands facing a backlash regarding quality and pricing after years without competition.
Opportunities	▪ As Iran's car sector grows, it will increasingly rely on outsourcing for parts and components. ▪ Domestic manufacturers are also looking to boost exports over the coming years. ▪ Nuclear deal paves the way for the arrival of new brands, not least American original equipment manufacturers.
Threats	▪ A collapse in the agreement before implementation would continue to cut off the country from international investment. ▪ Political instability remains a key concern for the whole Iranian economy.

Industry Forecast

Industry Forecast Scenario

Table: Autos Total Market - Historical Data And Forecasts (Iran 2014-2020)

	2014e	2015e	2016f	2017f	2018f	2019f	2020f
Vehicle production, units, mn	1.09	1.14	1.27	1.40	1.52	1.74	1.91
Vehicle production, units, % y-o-y	67.5	4.7	11.2	9.9	9.0	14.1	10.0
Vehicle sales, units, mn	1.19	1.10	1.32	1.44	1.59	1.77	1.98
Vehicle sales, units, % y-o-y	48.2	-7.3	19.8	9.4	10.4	11.4	11.8

e/f = BMI estimate/forecast.Source: National sources, BMI

Latest Developments

- Foreign brands continue to show interest in local sales and/or production, with Citroën now to be produced locally.
- Low base effects, pent up demand, and consumer preferences for foreign brands will drive growth in the automotive market.
- A booming construction sector underpins our upbeat outlook for commercial vehicle sales.

Structural Trends

The outlook for Iran's economy is the best it has been in decades as sanctions on the economy are lifted. Our Country Risk team forecast that almost all sanctions preventing European and Japanese brands from operating in the Iranian market should be lifted in the first half of 2016. Therefore, we look to 2016 for real growth in vehicle sales as Western brands, except US brands, move to re-enter the market. We forecast total vehicle sales to grow 19.8% in 2016 and then at an annual average of 12.6% to 2020. As the economy works its way back from the dire effects of the sanctions over the next decade, large infrastructure deficits, pent-up demand, a youthful population, a skilled work force and a robust consumer story will result in Iran's having some of the most positive growth in the Middle East.

Before sanctions were imposed, Iran was the 11th largest automotive producer in the world, and the government's aim to regain its position as a major global competitor is supported by its drive to privatise the industry. The automotive industry is Iran's second biggest industry while the oil and gas industry is its largest. This means that the lifting of sanctions has sparked the imminent return of major Western brands which were present in the market before sanctions were imposed.

Given the large infrastructure deficits due to years of underinvestment during the period when sanctions were imposed, our Country Risk team forecast that the economy will not undergo a boom but will rather enter a period of steady acceleration in growth. In line with our Country Risk team's view, we forecast GDP to grow 3.8% in 2016 and at an annual average of 4.6% over our five-year forecast period to 2020.

Sales

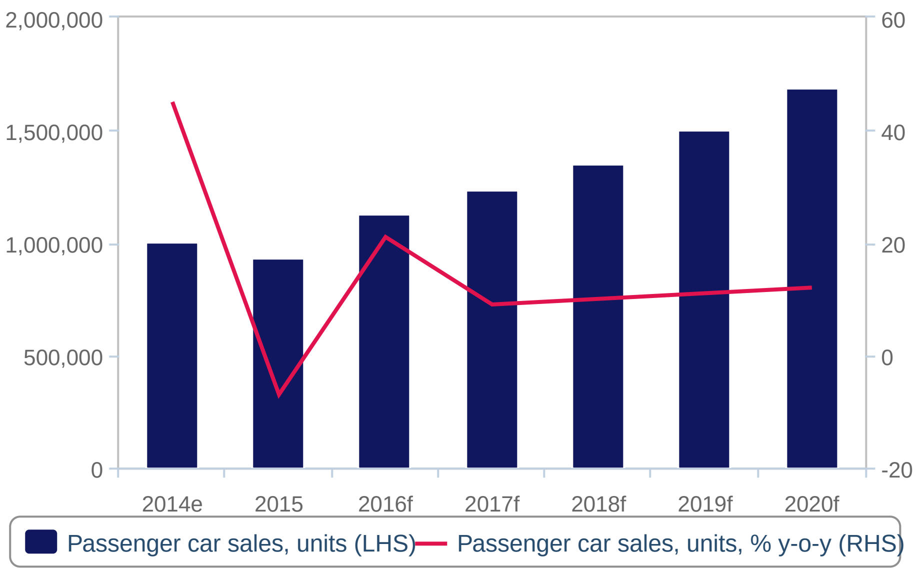
Passenger Vehicle Sales Driven By Consumer Preferences

The poor quality of locally produced vehicles coupled with drastically inflated prices due to the sanctions has resulted in passenger vehicle sales falling well short of the market potential. As sanctions are lifted and Western brands return to the market, passenger vehicle sales will experience a significant uptick in growth. Years of pent up demand, as well as consumers' delaying vehicle purchases as they wait for the return of the preferred Western brands (supported by positive consumer fundamentals), will drive passenger vehicle sales. We forecast passenger vehicle sales to grow 21.0% in 2016 to around 1,1mn units. The rapid growth in 2016 will be followed by years of steady growth as the economy and the automotive industry are revived.

Our Country Risk team rank Iran as one of the leading emerging markets for consumer potential based on the population size, GDP growth, and GDP per capita. A young and sophisticated consumer base, supported by steady growth in private consumption levels, will inform the consumer story in Iran over the next decade. We forecast private consumption to grow 4.0% in 2016 and to continue a positive growth trend averaging 4.6% over the rest of our five-year forecast period.

Sanctions Removal Driving Passenger Vehicle Sales

Passenger Vehicle Sales Units & Growth Rate (y-o-y)



f = BMI forecast. Source: Statistical Centre of Iran, BMI

Commercial Vehicles Carried By Construction

The lifting of sanctions will attract significant investment into the infrastructure sector of the economy due to the large infrastructure deficits resulting from years of underinvestment. As sanctions are eased, the induced trade in and through Iran, as well as the scope for investment into infrastructure, will provide an environment which is conducive to commercial vehicle sales growth. The need for upgrades to ports, roads, rail and heavy industries will ramp up construction levels, which act as a key driver in commercial vehicle sales. The opportunity for logistics as trade begins to improve will also support commercial vehicle sales. Our Infrastructure team has revised up their forecast the construction industry value from a previous growth forecast of 4.5% in 2016 to 7.9% to reflect the impact of easing sanctions. Furthermore, construction industry value will grow and at an annual average of 6.3% over the rest of our forecast period to 2020.

As a result of the positive outlook in terms of infrastructure investment and the associated construction growth, we forecast the following sales growth over the next five years:

- Commercial vehicles - 13.2% in 2016 at an annual average of 12.4% to 2020

- Light commercial vehicles - 13.5% in 2016 at an annual average of 12.8% to 2020
- Heavy trucks - 15.0% in 2016 at an annual average of 11.8% to 2020
- Buses and coaches - 1.5% in 2016 at an annual average of 2.4% to 2020

Furthermore, the removal of sanctions on Iran will continue to attract investors from Asia and Europe to the country's mining sector. Iran is home to a wealth of minerals, with more than 37 billion tonnes of proven reserves lying beneath the ground. These reserves include coal, iron ore, copper, lead, zinc, chromium, uranium, and gold. Since the lifting of sanctions began, the Iranian government has moved to open up the mining industry and has offered up to USD29bn worth of mining projects to foreign investors. Consequently, our Commodities team expects Iran's mining industry to be one of the global bright spots over the next five years. We forecast the mining industry's value to grow to USD21.89bn by 2020, up from USD18.44bn in 2016, as investment continues to be directed into the industry.

The mining and construction sectors are key drivers of growth in the commercial vehicle segment. These industries support commercial vehicle sales due to their demand for heavy duty vehicles, which are used in everyday operations. As a result of the strong growth forecast in both the mining and construction industries to 2020, we maintain our bullish view on the commercial vehicle segment in Iran in 2016 and over the remainder of our forecast period.

The bus and coach segment will underperform relative to the other vehicle segments. The key driver of growth in this segment will come from growth in tourism. Our Tourism team forecast total tourist arrivals to grow 18.1% in 2016 and will continue growth at a yearly average of 10.9% to 2020. The increase in tourist arrivals as well and the increasing demand for public transport as the economy continues to expand will drive bus and coach sales.

Motorcycle Sales Remain Below Peak Levels

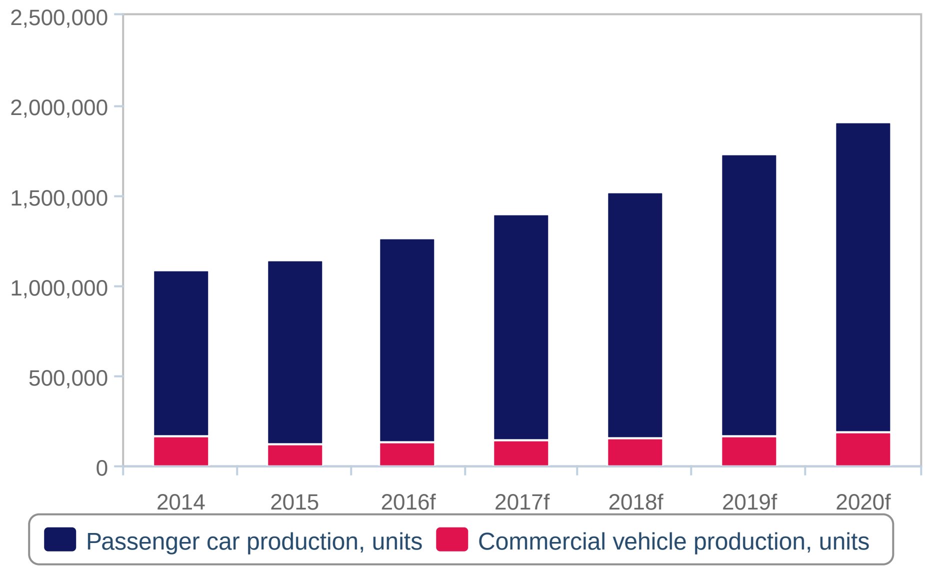
We forecast motorcycle sales to grow 11.4% in 2016 at an annual average of 14.6% to 2020. The cost benefits associated with owning a motorcycle when compared with a passenger vehicle will continue to drive growth in this segment. The ease at which motorcycles can be manoeuvred in a congested city will also provide support to motorcycle sales. However, motorcycle sales will only grow to 701,116 units in 2020, remaining well below its peak level of some 1.3mn units in 2004.

Production

The return of Western brands to the Iran automotive market over the next year will boost production levels as joint ventures between foreign brands and local motor companies begin to gain traction. However, the partnerships will be more stringent than before the sanctions were imposed, with a large focus geared towards research and development and technology transfer from the established Western brands to the local motor companies. We forecast total vehicle production to grow 11.2% in 2016 at an annual average of 10.8% to 2020.

Passenger Vehicle Production Outperfromance

Total Vehicle Production By Segment



f = BMI forecast. Source: IVMA,BMI

Iran prides itself on manufacturing cars domestically but it is heavily reliant on imported components in its assembly process. The country is the biggest vehicle producer in the Middle East and the sector employs about 700,000 factory workers. The interest expressed by foreign brands is largely in the passenger vehicle space and this will provide a boost to passenger vehicle production. We forecast the following production growth:

- Passenger vehicles - 12.0% in 2016 at an annual average of 11.1% to 2020

- Commercial vehicles - 5.0% in 2016 at an annual average of 8.4% to 2020

The lifting of sanctions and the resulting opening up of the economy will drive the construction industry as infrastructure attracts investment. The expanding infrastructure industry and the associated growth in construction will increase the demand for commercial vehicles and thus it will provide support to commercial vehicle production. We forecast the following for production growth:

- Light commercial vehicles - 5.0% in 2016 at an annual average of 9.3% to 2020
- Heavy trucks - 5.0% in 2016 at an annual average of 3.2% to 2020
- Buses and coaches - 5.5% in 2016 at an annual average of 6.1% in 2020

Bus and coach production will experience growth but will remain well below its peak level of 5,000 units in 2007, reaching only 810 units in 2020. The growth in bus and coach production will be driven by low base effects and pent up demand.

Competitive Landscape Shake-Up

Despite the influx of brands expected in Iran, we believe those that already have a presence in the country will have the advantage. In addition to already having access to facilities, usually through a local partner, they will also have brand awareness on their side and local knowledge of doing business in what can be a tough operating environment.

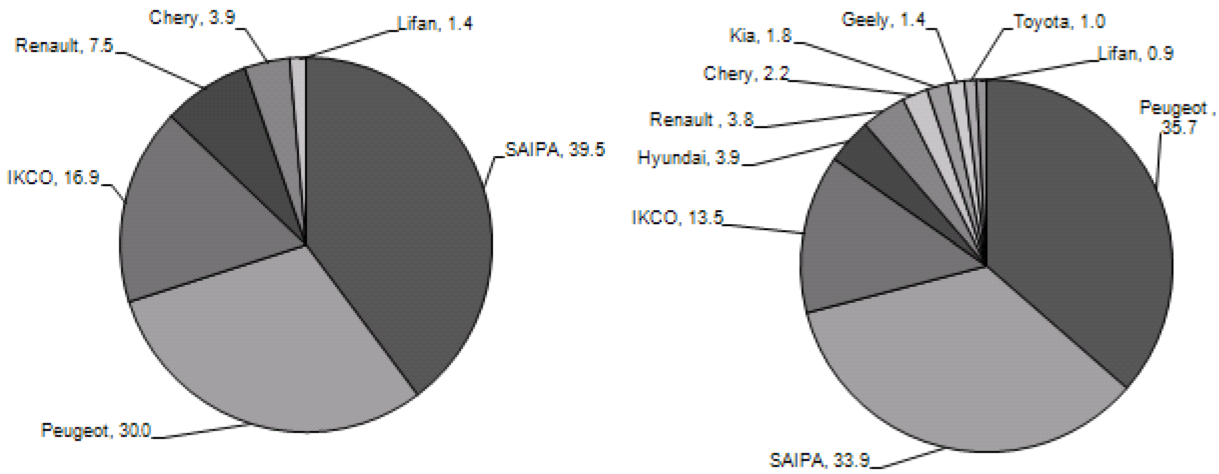
France's **Groupe PSA** (PSA) will be the main beneficiary through its Peugeot brand, which has long dominated the market. The company felt a significant financial blow from its absence from Iran; its keenness to return is underlined by the deal it already has in place with local firm **Iran Khodro Company** (IKCO) to return to the market as soon as sanctions are lifted. Furthermore, PSA has also entered into a joint venture (JV) with **SAIPA Automotive group**, which cost around EUR300mn and will see the Citroën brand brought back to the market. The JV aims to build 150,000 vehicles a year by 2022.

Thanks to IKCO's experience of producing Peugeot models, the brand still had a presence while sanctions were in place, but the implementation of the temporary nuclear deal saw Peugeot's market share increase to 35% in 2014. Chipping away at that kind of market leadership will be tough for other brands. However, we expect other returnees, including **Renault** and **Hyundai-Kia**, to also enjoy the benefits of brand loyalty.

The imposition of sanctions allowed some brands that were not covered by the restrictions to increase their exposure in Iran. Chinese brands such as **Chery** and **Lifan** made it into the top five brands in 2013 as the variety on offer became limited and cash-strapped consumers looked for low-cost options. While the addition of new brands has certainly brought change to the competitive landscape, we believe it will be difficult for these brands to maintain the level of market share that they achieved when sanctions were in place, and this is already evident in their 2014 market share.

Hard To Beat Peugeot

Iran Car Market By Brand Share (%), 2013 (LHS) & 2014 (RHS)



Source: IVMA, BMI

There is demand among Iranian consumers for established international names, and as the chart shows, the return of more brands under the temporary nuclear agreement saw these Chinese companies pushed down the rankings as Peugeot returned to its familiar place at the top.

As for new brands to come, the lifting of sanctions provides the opportunity for US brands to enter the market, which would be a momentous shift in the competitive landscape. The Iranian Auto Parts Association claims that American brands have already expressed an interest in investing in the market, however primary sanctions preventing any US owned companies from doing business with Iran remain in place and as a result we believe US brands will be playing catch-up to some of their European rivals should they be given the go-ahead to enter the market. They will not only need to build a brand presence but also a strategy in terms of logistics and distribution, which could cost them time in getting to market. A further drag on the ability of US automotive companies to enter the Iranian market is the latest announcement by Iran government that US vehicle manufacturers have been banned from entering the market.

That said, from a demand perspective, we believe American brands would be well received in Iran. As our Food and Drink team has previously pointed out, a growing young population, which is increasingly brand conscious, is positive for Western companies looking to enter the market.

While the best model for entering the Iranian market will be through a local partner, we expect to see the terms of these partnerships changing in the post-sanction era. IKCO's conditions for a partnership with Peugeot, with which it already has a long-standing relationship, reportedly included a much bigger focus on technology transfer and research and development.

We pointed out that this highlights the mutual reliance on display in partnerships such as these. While the market's size and potential is a significant draw for international brands - particularly those that have felt the financial impact of their absence such as Peugeot and Renault - the demands put forward by IKCO show where the Iranian industry has been lacking and needs support.

We expect more partnerships to follow these lines as brands look to gain entry to the market. Although it may be a deterrent for companies to have to share their technology, we believe the rewards on offer in Iran will outweigh the negatives.

Passenger Vehicles

Table: Passenger Car Market - Historical Data And Forecasts (Iran 2014-2020)

	2014e	2015e	2016f	2017f	2018f	2019f	2020f
Passenger car production, units, mn	0.93	1.02	1.14	1.25	1.37	1.57	1.72
Passenger car production, units, % y-o-y	72.1	10.0	12.0	10.0	9.0	14.6	10.0
Passenger car sales, units, mn	1.00	0.93	1.13	1.23	1.36	1.50	1.68
Passenger car sales, units, % y-o-y	45.0	-7.0	21.0	9.0	10.0	11.0	12.0

e/f = BMI estimate/forecast. Source: National sources, BMI

Latest Developments And Segment Drivers

- The passenger car segment remains the dominant vehicle segment and is attracting the most investment.
- US primary sanctions will keep US firms from entering the market while European and Japanese firms benefit from easing sanctions.
- Increasing competition as more western brands return to the domestic market will result in declining vehicle prices.

Key Players

Table: Iran Car Sales By Brand Top 10 (Latest Available Data)

	2013	2014	% chg y-o-y	Market share (%)
Peugeot	181,051	318,697	76.0	35.7
SAIPA	237,724	302,346	27.2	33.9
IKCO	102,051	120,289	17.9	13.5
Hyundai*	29,987	34,485	15.0	3.9
Renault	45,221	33,869	-25.1	3.8
Chery	23,610	19,294	-18.3	2.2
Kia*	13,234	16,358	23.6	1.8
Geely*	8,532	12,680	48.6	1.4
Toyota*	6,246	9,339	49.5	1.0
Lifan	8,201	7,741	-5.6	0.9

**2013 estimated from growth rate supplied. Source: IVMA*

Commercial Vehicles

Table: Commercial Vehicle Market - Historical Data And Forecasts (Iran 2014-2020)

	2014e	2015e	2016f	2017f	2018f	2019f	2020f
Commercial vehicle production, units	164,871	123,488	129,666	140,999	153,552	168,512	184,677
Commercial vehicles production, units, % y-o-y	45.9	-25.1	5.0	8.7	8.9	9.7	9.6
Commercial vehicle sales, units	181,261	165,473	187,369	209,796	236,639	268,680	297,287
Commercial vehicle sales, units, % y-o-y	68.8	-8.7	13.2	12.0	12.8	13.5	10.7

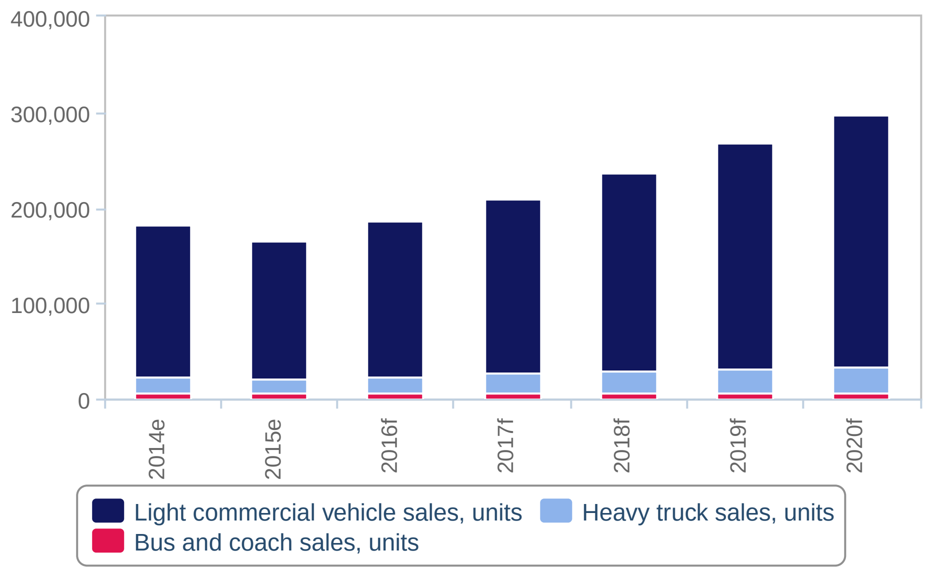
e/f = BMI estimate/forecast. Source: National Sources,BMI

Latest Developments And Segment Drivers

- The return of major Western brands (specifically European and Japanese brands) will boost the commercial vehicle segment.
- **Daimler** is set to recommence local production and sales of commercial vehicles through a partnership with **Iran Khodro Diesel**.
- Long-term logistics opportunity as infrastructure growth gains traction will boost commercial vehicle sales.

Commercial Vehicle Sales By Type

(2014-2020)



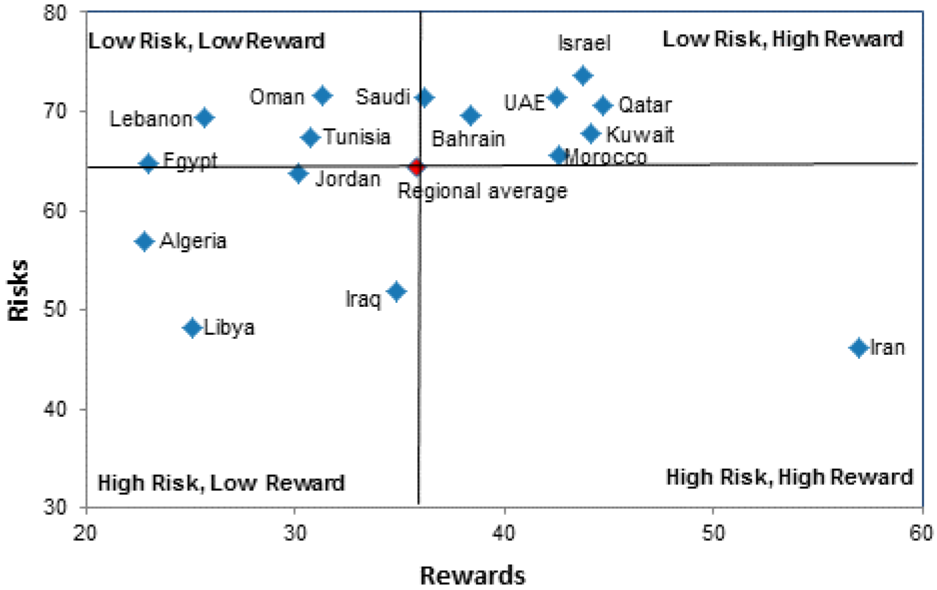
e/f = BMI estimate/forecast. Source: Statistical Centre of Iran, BMI

Industry Risk/Reward Index

The biggest moves in this latest update of our Risk/Reward Index (RRI) for the Autos sector in the Middle East and North Africa (MENA) come from Saudi Arabia, which is losing its status as a safe haven for growth in a low oil price environment, and Morocco which is rapidly gaining favour as a regional manufacturing base. Another notable point is the drop in the regional average 'Reward' score, reflecting the weak sales outlook in many oil exporting markets.

Few But Significant Moves

MENA Autos Risk/Reward Index



Scores out of 100, with 100 the best. Higher scores = higher rewards/lower risk. Source: BMI

Region Losing Global Standing

One of the most notable changes in this latest RRI update is the regional average score. The index measures the attractiveness of countries in a region relative to each other using the regional average as the pivot point. When we put the latest regional average scores up against the other regions globally, however, we see that MENA is second-lowest, particularly for its Rewards score, ahead of only Sub-Saharan Africa. As a our five-year sales forecast is a big component of the Rewards score, this is not surprising, as we have highlighted in our regional forecasts that the MENA region's first place globally in terms of sales growth is mostly down to Iran and that without Iran included, much of the region is struggling (*see 'MENA Autos: Iran Boom Masks Regional Weakness', June 14*).

Saudi Arabia On The Brink

Saudi Arabia is very close to falling out of the most attractive 'low risk, high reward' segment after a considerable drop in its Rewards score. This is largely due to downward revisions in the country's vehicle sales forecast as a result of the government cutbacks in the country and the impact this is having on state, business and consumer spending (*see 'Government Spending Cuts Prolong CV Slowdown', May 27*).

If the regional average had not also fallen due to a similar outlook in several other major oil exporting economies, it is safe to say Saudi Arabia would have dropped into the 'low risk, low reward' segment. This is particularly notable as Saudi Arabia and the UAE have long been the safe havens for growth when other regional markets have been suffering periods of instability. Given the size of the Saudi market and its importance to the region, this is unlikely to be a permanent shift.

Morocco Becomes A Regional Bright Spot

A boost in Morocco's five-year average production growth forecast thanks to continuing investment in the country, as well as an upward revision to its sales forecast, have boosted its Rewards score, ranking it alongside some of the biggest and most attractive markets in the region. Its position as one of the most stable North African countries, along with its favourable labour costs and good transport links for exporters have secured an ongoing stream of investment from carmakers and suppliers alike (*see 'Investments In Moroccan Supply Base Boosting Localization', July 6*).

With the outlook for manufacturers and importers gradually worsening in Egypt (*see 'Downbeat Outlook For Domestic Manufacturing Playing Out', March 18*), this is an opportunity for Morocco to step up as an alternative North African base.

Company Profile

Iran Khodro Company (IKCO)

Latest Developments

- IKCO aims has exported 30,000 vehicles since March 2016
- The company signed a memorandum of understanding in September 2015 to export 500 vehicles to Tajikistan.
- It developed a new company in August 2015 to manage co-operation between Iranian suppliers and their international counterparts.
- It is looking into designing and producing hybrid-electric cars.
- Peugeot will partner with IKCO as it looks to re-enter the Iranian market.

Strategy

IKCO is the largest auto manufacturer in Iran and was established in 1963. The firm also has foreign production facilities, including sites in Azerbaijan, Belarus and Venezuela.

In recent years, IKCO has concentrated on expanding its own ranges, as opposed to those it produces under licence to other manufacturers. These models include the Dena, Runna, Soren, Sarir, Samand and Bardo. In addition, the company still produces variants of the Peugeot 405, 206 and 207 models, according to its website.

The company has announced that it plans to expand its production and export base beyond Iran's borders as sanctions are lifted. IKCO has also met its target to export a total of 30,000 units to international markets within its stipulated 12 month period.. The company has also signed a memorandum of understanding to begin assembly of completely knocked down kits in Azerbaijan while highlighting its intention to promote assembly in Belarus, Egypt, Senegal, and Venezuela. IKCO has also begun assembling the Arisun pickup truck at its plant in Iraq and it intends to open an additional assembly line to add more models to its product offering by the end of Q317.

While production and sales abroad receive attention, the partnership that IKCO has formed with **Peugeot** as the foreign brand re-enters the market will support technology and skills development within the domestic motor company. The deal struck between the two does not only consist of an agreement to assemble Peugeot vehicles, but will also include the transfer of technology and technological know-how between the two firms.

In light of the nuclear deal, IKCO has also established a new firm to expand cooperation between Iranian suppliers and their international counterparts. According to the company's CEO, Hasehm Yekke Zare, the newly-formed Avrand Plastic Company aims to develop the capabilities of domestic suppliers and enhance the quality of their final products. He said: 'Given the recent nuclear deal reached between Iran and the P5+1 group of countries and the subsequent positive atmosphere, Avrand Plastic can play a leading role in supplying necessary parts and exporting new Iranian products to the international markets.'

New Products

In June 2015, IKCO signed a memorandum of understanding with Sharif University of Technology and Amirkabir University of Technology to design and produce hybrid electric cars in the country. The company expects to manufacture the first model within three years. The Iranian government is arranging a support package to encourage hybrid electric car production under a long-term fuel economy plan, according to Minister of Industry, Mines and Trade, Mohammad Reza Nematzadeh.

Societe Annonyme Iranienne de Production Automobile (Saipa)

Latest Developments

- Saipa subsidiary joint venture, Renault Pars, launched a new assembly line for the Renault Sandero in September 2015.
- Saipa signed a joint venture agreement with Groupe PSA to produce Citroën models domestically.
- The company started production of Volvo trucks in 2015 through Saipa Diesel.
- Unconfirmed reports suggest Renault is interested in buying a minority stake in Renault Pars facilities and infrastructure.

Strategy

Saipa Group, with its various subsidiaries, is the second-largest auto manufacturer in Iran. The company produces a wide range of passenger and commercial vehicles, some of which are based on models previously developed by Kia (Pride) and Renault (Logan). The company also develops its own models, such as the Tiba, which is reportedly selling well at present.

Saipa Company is the main subsidiary and is the key branch of the company's passenger vehicle manufacturing and sales. Although the company produces its own engines and vehicles, it has a history of entering into joint ventures with and carrying out local assembly for French, Korean and Japanese Automobile companies. Saipa has signed an agreement with Citroën to assemble vehicles for the French automotive company as it looks to re-enter the Iranian market in 2016 as sanctions are eased. Another subsidiary, Zamyad, is responsible for the production of light commercial and heavy commercial vehicles. Zamyad has had a strong history of producing trucks for Nissan Motor and Iveco Trucks.

In July 2015, reports surfaced that Renault is in talks with its Saipa-owned joint venture partner Pars-Khodro to acquire a minority stake in the local firm. The deal is said to include infrastructure, including production plants, but Renault has not commented on the reports. Pars-Khodro has a joint venture with Nissan and Renault under which it produces passenger vehicles in Iran.

Saipa group is also geared towards expanding its brand presence outside of its domestic market as it attempts to take advantage of the easing sanctions. The motor company exports its vehicles and semi-knocked down vehicles into markets such as Iraq, Sudan, Syria, Egypt, Algeria, Senegal, Ukraine, Cameroon and Ghana. Saipa also has production operations in Syria, Venezuela, Iraq, Sudan and Senegal.

Regional Overview

MENA

BMI View: *Relative stability and a positive business environment are helping Morocco to become a rapidly growing automotive manufacturing hub for the MENA region. The biggest focus will be on developing the supply chain with a view to doubling domestic vehicle production in the next 10 years.*

In BMI's regular round-up of production investments, we track the latest projects from the production side of the industry and analyse trends that we see developing on a regional basis. In doing so, we hope to build a picture of any potential hubs that may be developing, as well as company strategy in terms of production bases and export programmes.

Table: MENA Autos Production Investment

Date Announced	Country	City/State/ Region	Company	Value	Brief Description	Date Onstream
May-16	Morocco	Tangier	Acome	EUR25mn (USD28.5mn)	New automotive wiring plant, creating 150 new jobs	TBC
Jun-16	Oman	Duqm	Karwa Automobiles	USD160mn	New plant, in conjunction with Oman Investment Fund, for production of cars, trucks and buses with an annual production capacity of 2,000 units	TBC
Jun-16	Iran	Tehran	PSA Peugeot Citroen	EUR400mn (USD443.5mn)	Confirmation of joint venture with IKCO, for production of 208, 301 and 2008 models, with an annual production capacity of 100,000 units, with goal of 200,000 by 2018	2017
Jul-16	Morocco	TBC	Linamar	MAD2.7bn (USD27.4mn)	New plant for production of engine parts, initially supplying PSA Peugeot Citroen and eventually other plants coming online	TBC
Jul-16	Morocco	TBC	Delphi	n/a	Seven projects including a new plant and research and development centre	TBC

n/a = not available, TBC = to be confirmed; Source: BMI

Morocco Makes Its Mark

The most notable feature of our investment round-up for the second quarter of the year is the number of projects in Morocco. The relative stability of the country compared with many of its regional peers, plus a business friendly environment and proximity to the European market have attracted manufacturers to Morocco, particularly in the supplier segment, which is rapidly growing to meet the needs of carmakers investing in the country.

In Q216, there were three such projects, which are an endorsement of the plan to develop the country's supply chain in line with the government's target to double local production to 1mn units over the next 10 years (*see 'Investments In Moroccan Supply Base Boosting Localization', July 6*). It also supports our long-held view that countries such as Morocco and Algeria could become alternatives to Egypt as North African manufacturing bases (*see 'Cracks Appearing In Autos Hub Status', March 24 2015*).

Oman Becoming A GCC Hub

While Saudi Arabia had once appeared the most likely manufacturing hub in the Gulf Cooperation Council (GCC) states, a number of investments over the last year so show Oman gaining ground as a production location of choice. The latest project from **Karwa Automobiles**, to build a range of buses, trucks and cars, shows an element of diversification in the sector's production capabilities. The sector is very much supported by the creation of the Duqm Special Economic Zone, which has been the most popular choice for investment along with Sohar, which has the benefit of port facilities.

PSA Commitment A Win For Iran

In the more established production base of Iran, French carmaker **PSA Peugeot-Citroën**'s (PSA) commitment to a joint venture with domestic carmaker **Iran Khodro** is a significant boost for the recovering autos industry. The company has confirmed it will invest EUR400mn in the joint venture, which will produce three **Peugeot** models, with an ultimate goal of selling 200,000 units by 2018. This is a significant vote of confidence in the Iranian market, especially after PSA was forced to pay compensation for withdrawing from the country under sanctions, but as we highlighted at the time, the market's potential is too much of a draw to avoid (*see 'Peugeot Payout Shows Value Of Iranian Market', February 9*).

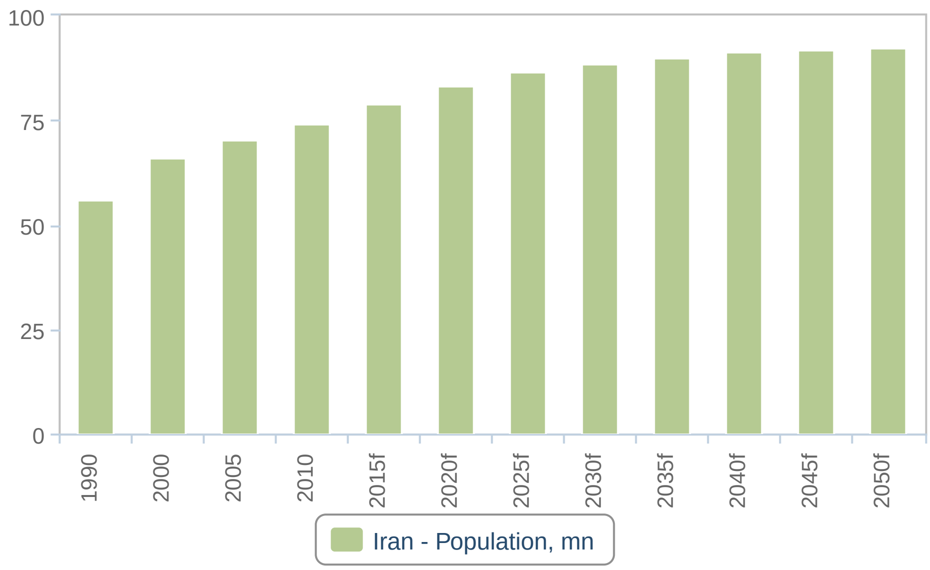
Demographic Forecast

Demographic analysis is a key pillar of **BMI**'s macroeconomic and industry forecasting model. Not only is the total population of a country a key variable in consumer demand, but an understanding of the demographic profile is essential to understanding issues ranging from future population trends to productivity growth and government spending requirements.

The accompanying charts detail the population pyramid for 2015, the change in the structure of the population between 2015 and 2050 and the total population between 1990 and 2050. The tables show indicators from all of these charts, in addition to key metrics such as population ratios, the urban/rural split and life expectancy.

Population

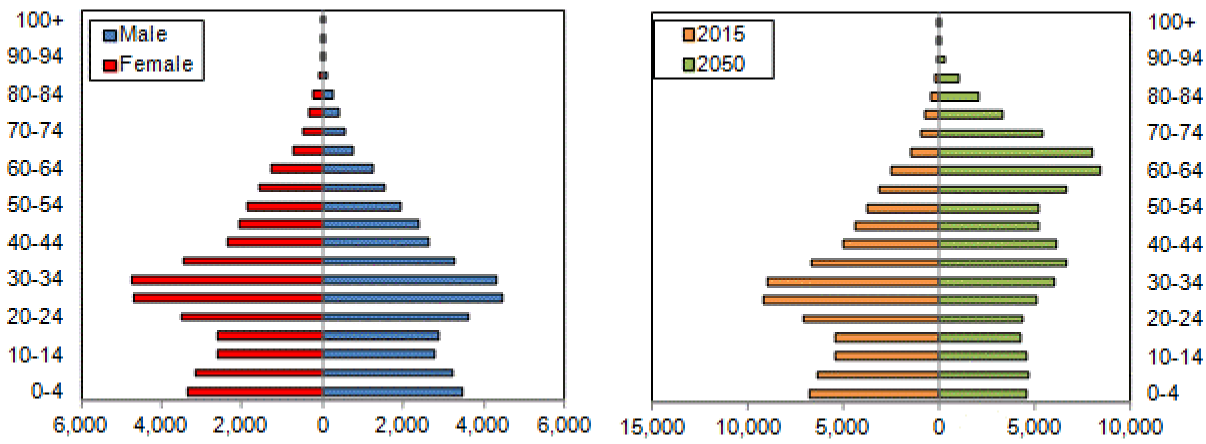
(1990-2050)



f = BMI forecast. Source: World Bank, UN, BMI

Iran Population Pyramid

2015 (LHS) & 2015 Versus 2050 (RHS)



Source: World Bank, UN, BMI

Table: Population Headline Indicators (Iran 1990-2025)

	1990	2000	2005	2010	2015f	2020f	2025f
Population, total, '000	56,169	65,850	70,122	74,253	79,109	83,403	86,496
Population, % y-o-y	na	1.7	1.2	1.2	1.2	0.9	0.6
Population, total, male, '000	28,617	33,372	35,796	37,542	39,835	41,940	43,439
Population, total, female, '000	27,551	32,477	34,325	36,710	39,274	41,463	43,057
Population ratio, male/female	1.04	1.03	1.04	1.02	1.01	1.01	1.01

na = not available; f = BMI forecast. Source: World Bank, UN, BMI

Table: Key Population Ratios (Iran 1990-2025)

	1990	2000	2005	2010	2015f	2020f	2025f
Active population, total, '000	28,800	40,064	48,413	53,171	56,428	58,737	61,495
Active population, % of total population	51.3	60.8	69.0	71.6	71.3	70.4	71.1
Dependent population, total, '000	27,368	25,785	21,709	21,081	22,681	24,665	25,000
Dependent ratio, % of total working age	95.0	64.4	44.8	39.6	40.2	42.0	40.7

Key Population Ratios (Iran 1990-2025) - Continued

	1990	2000	2005	2010	2015f	2020f	2025f
Youth population, total, '000	25,492	23,011	18,251	17,418	18,677	19,449	18,237
Youth population, % of total working age	88.5	57.4	37.7	32.8	33.1	33.1	29.7
Pensionable population, '000	1,876	2,773	3,457	3,662	4,003	5,216	6,763
Pensionable population, % of total working age	6.5	6.9	7.1	6.9	7.1	8.9	11.0

f = BMI forecast. Source: World Bank, UN, BMI

Table: Urban/Rural Population & Life Expectancy (Iran 1990-2025)

	1990	2000	2005	2010	2015f	2020f	2025f
Urban population, '000	31,640.1	42,171.7	47,373.1	52,442.2	58,046.4	63,173.8	67,253.7
Urban population, % of total	56.3	64.0	67.6	70.6	73.4	75.7	77.8
Rural population, '000	24,529.1	23,678.4	22,749.0	21,811.2	21,062.8	20,229.5	19,242.9
Rural population, % of total	43.7	36.0	32.4	29.4	26.6	24.3	22.2
Life expectancy at birth, male, years	61.6	69.2	70.4	72.5	74.5	75.1	75.8
Life expectancy at birth, female, years	66.3	71.1	73.5	75.5	76.7	77.4	78.1
Life expectancy at birth, average, years	63.8	70.1	71.9	74.0	75.6	76.2	76.9

f = BMI forecast. Source: World Bank, UN, BMI

Table: Population By Age Group (Iran 1990-2025)

	1990	2000	2005	2010	2015f	2020f	2025f
Population, 0-4 yrs, total, '000	9,346	6,379	5,494	6,402	6,855	6,228	5,197
Population, 5-9 yrs, total, '000	8,885	7,598	5,556	5,472	6,395	6,836	6,213
Population, 10-14 yrs, total, '000	7,260	9,034	7,200	5,543	5,426	6,384	6,826
Population, 15-19 yrs, total, '000	5,775	8,781	9,299	7,136	5,478	5,407	6,365
Population, 20-24 yrs, total, '000	4,674	6,868	9,123	9,148	7,086	5,434	5,369
Population, 25-29 yrs, total, '000	4,031	5,269	6,796	8,996	9,158	7,026	5,388
Population, 30-34 yrs, total, '000	3,506	4,419	5,156	6,759	9,045	9,096	6,979
Population, 35-39 yrs, total, '000	3,005	3,864	4,670	5,140	6,738	8,988	9,044
Population, 40-44 yrs, total, '000	2,123	3,344	4,091	4,580	5,029	6,688	8,931
Population, 45-49 yrs, total, '000	1,621	2,832	3,393	3,920	4,454	4,979	6,629

Population By Age Group (Iran 1990-2025) - Continued

	1990	2000	2005	2010	2015f	2020f	2025f
Population, 50-54 yrs, total, '000	1,527	1,930	2,776	3,227	3,813	4,384	4,906
Population, 55-59 yrs, total, '000	1,393	1,431	1,767	2,631	3,124	3,723	4,286
Population, 60-64 yrs, total, '000	1,140	1,322	1,336	1,629	2,497	3,009	3,594
Population, 65-69 yrs, total, '000	899	1,145	1,258	1,193	1,475	2,338	2,828
Population, 70-74 yrs, total, '000	508	826	1,055	1,054	1,009	1,299	2,075
Population, 75-79 yrs, total, '000	269	509	654	780	785	776	1,015
Population, 80-84 yrs, total, '000	136	203	347	413	477	494	502
Population, 85-89 yrs, total, '000	49	67	113	174	194	232	249
Population, 90-94 yrs, total, '000	11	18	22	40	54	63	79
Population, 95-99 yrs, total, '000	1	2	3	5	7	10	12
Population, 100+ yrs, total, '000	0	0	0	0	0	0	1

f = BMI forecast. Source: World Bank, UN, BMI

Table: Population By Age Group % (Iran 1990-2025)

	1990	2000	2005	2010	2015f	2020f	2025f
Population, 0-4 yrs, % total	16.64	9.69	7.84	8.62	8.67	7.47	6.01
Population, 5-9 yrs, % total	15.82	11.54	7.92	7.37	8.08	8.20	7.18
Population, 10-14 yrs, % total	12.93	13.72	10.27	7.47	6.86	7.66	7.89
Population, 15-19 yrs, % total	10.28	13.34	13.26	9.61	6.93	6.48	7.36
Population, 20-24 yrs, % total	8.32	10.43	13.01	12.32	8.96	6.52	6.21
Population, 25-29 yrs, % total	7.18	8.00	9.69	12.12	11.58	8.42	6.23
Population, 30-34 yrs, % total	6.24	6.71	7.35	9.10	11.43	10.91	8.07
Population, 35-39 yrs, % total	5.35	5.87	6.66	6.92	8.52	10.78	10.46
Population, 40-44 yrs, % total	3.78	5.08	5.84	6.17	6.36	8.02	10.33
Population, 45-49 yrs, % total	2.89	4.30	4.84	5.28	5.63	5.97	7.66
Population, 50-54 yrs, % total	2.72	2.93	3.96	4.35	4.82	5.26	5.67
Population, 55-59 yrs, % total	2.48	2.17	2.52	3.54	3.95	4.46	4.96
Population, 60-64 yrs, % total	2.03	2.01	1.91	2.19	3.16	3.61	4.16
Population, 65-69 yrs, % total	1.60	1.74	1.79	1.61	1.87	2.80	3.27
Population, 70-74 yrs, % total	0.90	1.25	1.51	1.42	1.28	1.56	2.40
Population, 75-79 yrs, % total	0.48	0.77	0.93	1.05	0.99	0.93	1.17
Population, 80-84 yrs, % total	0.24	0.31	0.50	0.56	0.60	0.59	0.58

Population By Age Group % (Iran 1990-2025) - Continued							
	1990	**2000**	**2005**	**2010**	**2015f**	**2020f**	**2025f**
Population, 85-89 yrs, % total	0.09	0.10	0.16	0.23	0.25	0.28	0.29
Population, 90-94 yrs, % total	0.02	0.03	0.03	0.05	0.07	0.08	0.09
Population, 95-99 yrs, % total	0.00	0.00	0.01	0.01	0.01	0.01	0.01
Population, 100+ yrs, % total	0.00	0.00	0.00	0.00	0.00	0.00	0.00

f = BMI forecast. Source: World Bank, UN, BMI

Methodology

Industry Forecasts

BMI's industry forecasts are generated using the best-practice techniques of time-series modelling and causal/econometric modelling. The precise form of model we use varies from industry to industry, in each case being determined, as per standard practice, by the prevailing features of the industry data being examined.

Common to our analysis of every industry is the use of vector autoregressions. Vector autoregressions allow us to forecast a variable using more than the variable's own history as explanatory information. For example, when forecasting oil prices, we can include information about oil consumption, supply and capacity.

When forecasting for some of our industry sub-component variables, however, using a variable's own history is often the most desirable method of analysis. Such single-variable analysis is called univariate modelling. We use the most common and versatile form of univariate models: the autoregressive moving average model (ARMA).

In some cases, ARMA techniques are inappropriate because there is insufficient historic data or data quality is poor. In such cases, we use either traditional decomposition methods or smoothing methods as a basis for analysis and forecasting.

BMI mainly uses OLS estimators and, in order to avoid relying on subjective views and encourage the use of objective views, we use a 'general-to-specific' method. **BMI** mainly uses a linear model, but simple non-linear models, such as the log-linear model, are used when necessary. During periods of 'industry shock', for example poor weather conditions impeding agricultural output, dummy variables are used to determine the level of impact.

Effective forecasting depends on appropriately selected regression models. **BMI** selects the best model according to various different criteria and tests, including but not exclusive to:

- R^2 tests explanatory power; adjusted R^2 takes degree of freedom into account;
- Testing the directional movement and magnitude of coefficients;
- Hypothesis testing to ensure coefficients are significant (normally t-test and/or P-value);
- All results are assessed to alleviate issues related to auto-correlation and multi-collinearity.

BMI uses the selected best model to perform forecasting.

Human intervention plays a necessary and desirable role in all of **BMI**'s industry forecasting. Experience, expertise and knowledge of industry data and trends ensure that analysts spot structural breaks, anomalous data, turning points and seasonal features where a purely mechanical forecasting process would not.

Sector-Specific Methodology

A number of principal criteria drive our extrapolations and forecasts for each autos variable.

- **Production And Sales**

At a general level, we approach our forecasting from both a micro and a macro perspective, assessing the expansion plans of relevant multinationals/indigenous firms, while also taking account of the prevailing economic outlook. In this latter respect, our projections for macro variables such as industrial output, private consumption, government investment, monetary policy and GDP growth play a key role.

Figures for production are derived from a generic source (thereby ensuring maximum comparability between country data-sets), and include all vehicles with four wheels or more. For sales, we rely on data from government agencies and national automobile associations. Unless otherwise stated, sales numbers include domestically produced and imported vehicles, but not exports. The sector's contribution to GDP is projected by taking the US dollar production value as a proportion of nominal GDP, using our own macroeconomic and demographic forecasts.

- **Auto Imports And Exports**

These variables are mainly calculated at the micro level, using individual company reports. Changes in government policy, particularly with regard to tariffs and quotas, also have a significant bearing.

Sources

Aside from government departments and official company reports, we rely on the International Organization of Motor Vehicle Manufacturers (OICA), other established think tanks, institutes, and international and national news agencies.

Risk/Reward Index Methodology

BMI's Risk/Reward Index (RRI) provides a comparative regional ranking system evaluating the ease of doing business and the industry-specific opportunities and limitations for potential investors in a given market. The RRI system divides into two distinct areas.

Rewards

Evaluation of sector's size and growth potential in each state, and also broader industry/state characteristics that may inhibit its development. This is further broken down into two sub categories:

- Industry Rewards. This is an industry-specific category taking into account current industry size and growth forecasts, the openness of market to new entrants and foreign investors, to provide an overall score for potential returns for investors.
- Country Rewards. This is a country-specific category, and the score factors in favourable political and economic conditions for the industry.

Risks

Evaluation of industry-specific dangers and those emanating from a state's political/economic profile that call into question the likelihood of anticipated returns being realised over the assessed time period. This is further broken down into two sub categories:

- Industry Risks. This is an industry-specific category whose score covers potential operational risks to investors, regulatory issues inhibiting the industry and the relative maturity of a market.
- Country Risks. This is a country-specific category in which political and economic instability, unfavourable legislation and a poor overall business environment are evaluated to provide an overall score.

We take a weighted average, combining industry and country risks, or industry and country rewards. These two results provide an overall RRI, which is used to create our regional ranking system for the risks and rewards of involvement in the autos industry in a particular country.

For each category and sub-category, each state is scored out of 100 (100 being the best), with the overall RRI a weighted average of the total score. As most of the countries and territories evaluated are considered by **BMI** to be 'emerging markets', our index is revised on a quarterly basis. This ensures that the score draws on the latest information and data across our broad range of sources, and the expertise of our analysts.

In constructing this index, the indicators in the table below have been used. Almost all indicators are objectively based. Given the number of indicators/datasets used, it would be inappropriate to give all sub-components equal weight. The weighting given is described in the table.

Table: Automotive Risk/Reward Index Indicators And Weighting Of Indicators

	Weighting, %
Rewards	70, of which
Industry Rewards	65, of which
Vehicle ownership, % of population	10
Total vehicle stock, mn	10
Total production	10
Production growth, five-year forecast average	10
Total vehicle sales	10
Sales growth, five-year forecast average	10
Country Rewards	35, of which
Urban/rural split	10
Rigidity of employment	10
Labour costs	10
GDP per capita, USD	10
Risks	30, of which
Industry Risks	50, of which
Regulatory environment	10
Competitive landscape	10
Country Risks	50, of which
Corruption	10
Bureaucracy	10
Market orientation - openness	10
Legal framework	10
Long-term monetary risks	10
Long-term external risks	10
Long-term financial risks	10
Long-term policy continuity	10

Source: BMI

