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IRAN

AUTOS REPORT

INCLUDES 5-YEAR FORECASTS TO 2020

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Iran Autos Report Q2 2016

INCLUDES 5-YEAR FORECASTS TO 2020

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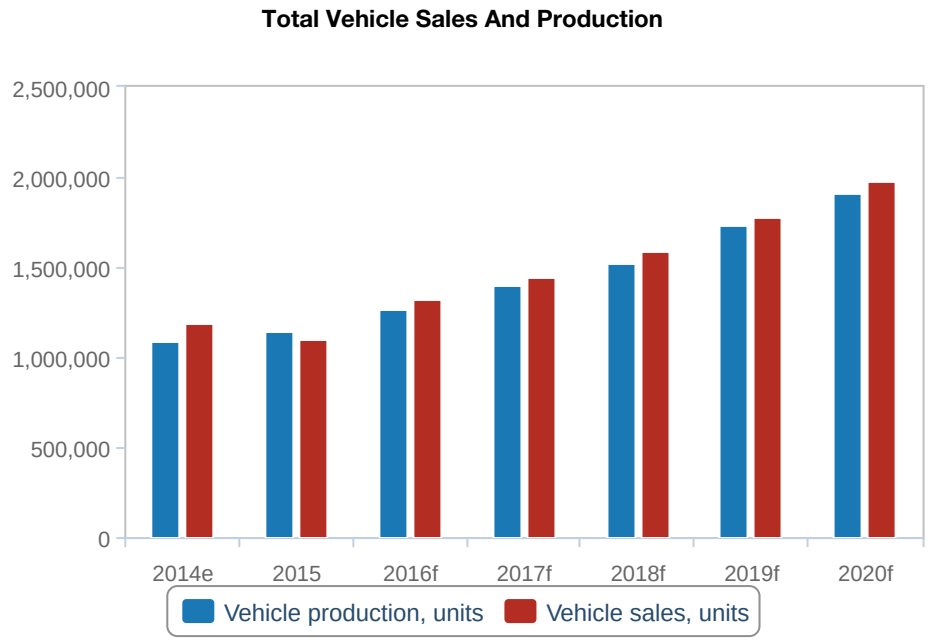
BMI Industry View

BMI View: *The automotive industry is Iran's second biggest industry with oil and gas being its largest. Passenger vehicles will receive a significant boost as western brands, which are preferred by local consumers, re-enter the automotive market as sanctions are eased in 2016. The positive outlook for the infrastructure industry will provide support to the commercial vehicle segment.*

Total Vehicle Sales And Production Boosted By Easing Sanctions



f = BMI forecast. Source: National Sources,BMI

Key Views

- Western brands will be well received post-sanctions due to strong customer preferences.
- European brands will be best positioned to gain market access quickest.
- Improved infrastructure project financing will support the commercial vehicle segment.

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

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 Daimler, VW, Skoda and Fiat and Peugeot among the brands reportedly in talks to enter the market.
- Low base effects and pent up demand will drive growth in the automotive market.
- Delayed purchases as consumers wait for the re-entry of Western brands will boost passenger vehicle sales in 2016.

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 should be lifted in the first half of 2016. Therefore, we look to 2016 for real growth in vehicle sales as Western brands move to re-enter the market. We forecast total vehicle sales to grow 19.8% in 2016 and 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

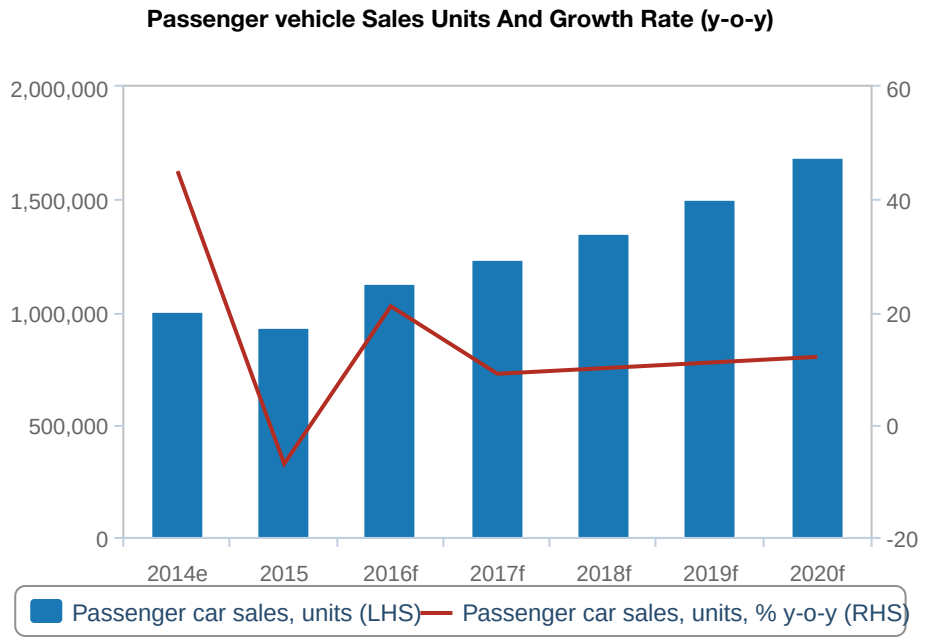
enter a period of steady acceleration in growth. In line with our Country Risk team's view, we forecast GDP to grow 2.8% in 2016 and at an annual average of 4.0% over our five year forecast period to 2020.

Passenger Vehicle Sales Driven By Consumer Preferences

The poor quality of locally produced vehicles coupled with a drastically inflated price 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, further supported by positive consumer fundamentals will drive passenger vehicle sales. We forecast passenger vehicle sales to grow 21% in 2016 to 1,130,244 units. The rapid growth in 2016 will be followed by years of steady growth as the economy and more specifically the automotive industry is revived.

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

Sanctions Removal Driving Passenger Vehicle Sales



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 as a result of years of underinvestment. The induced trade, both in and through Iran, as sanctions are eased, 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, a key driver in commercial vehicle sales. Furthermore the opportunity for logistics as trade begins to improve will support commercial vehicle sales. Our Infrastructure team forecast construction industry value to grow 4.5% in 2016 and at an annual average of 5.8% over our 2016-2020 forecast period.

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

- 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

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 11.2% in 2016 and will continue growth at a yearly average of 9.5% 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.

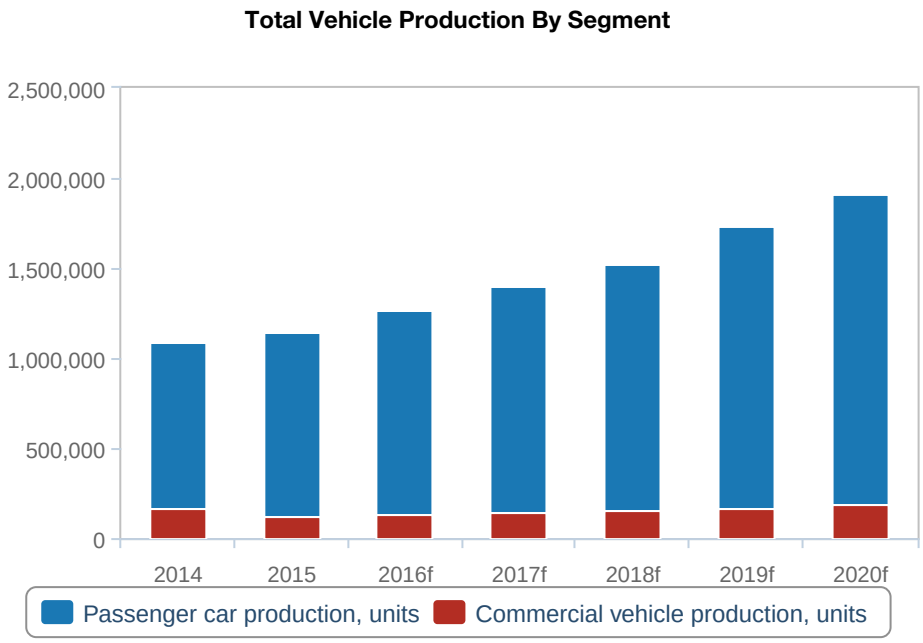
Motorcycle Sales Remain Below Peak Levels

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. Furthermore, the ease at which motorcycles can be manoeuvred in a congested city will provide support to motorcycle sales. However, motorcycle sales will grow to 700,601 units in 2020 remaining well below its peak level of some 1,000,000 units in 2005.

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



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 vehicle - 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 that is expected in Iran, we believe those that already had a presence in the country previously 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.

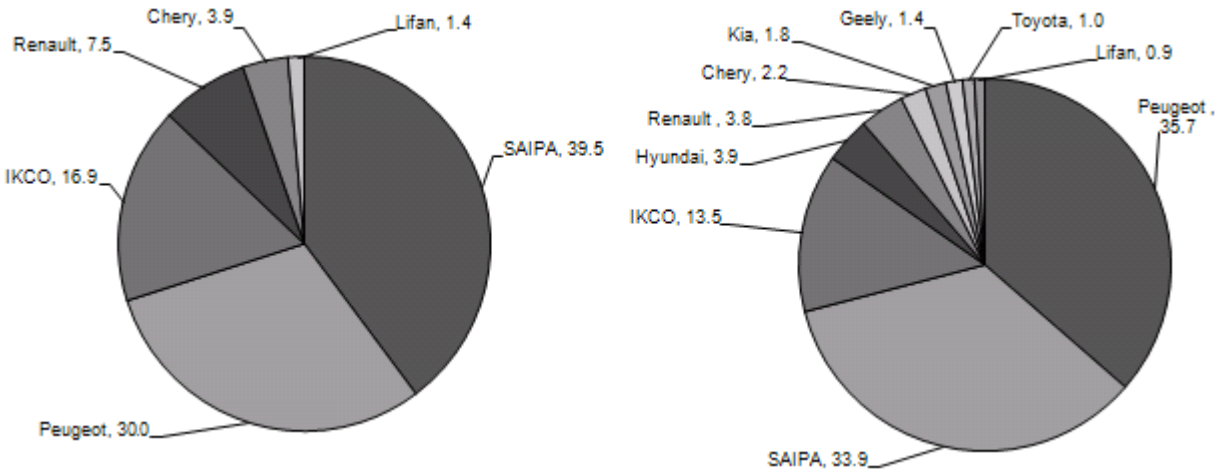
France's **PSA Peugeot Citroen** will be the main beneficiary through its Peugeot brand, which has long dominated the market. The company felt a significant financial blow from its absence from Iran and its keenness to return is underlined by the deal it already has in place with local firm **Iran Khodro Company** (IKCO) to return to the market as soon as sanctions are lifted.

Thanks to IKCO's experience of producing Peugeot models, the brand has 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 scare 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) and 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, where we believe they will be playing catch-up to some of their European rivals. 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.

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 at the time 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 in return.

We expect more partnerships to follow these lines as brands look gain entry to the market. Although it can sometimes 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

- The passenger car segment remains the dominant vehicle segment and is attracting the most investment.
- Iran National Auto Loan, covering up to 80% of a car's value, was introduced in November 2015 to boost sales of domestically produced cars over six months, but funds lasted just six days.
- The Iran Auto Loan showed the extent of pent-up demand, although critics say consumers want quality not subsidies.
- Domestic cars are facing a backlash regarding low quality and prices that have tripled under the imposed sanctions.
- Passenger vehicle sales are forecast to grow 21.0% to 1,130,244 units in 2016.

Key Players

Table: Iran Car Sales By Brand Top 10

	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

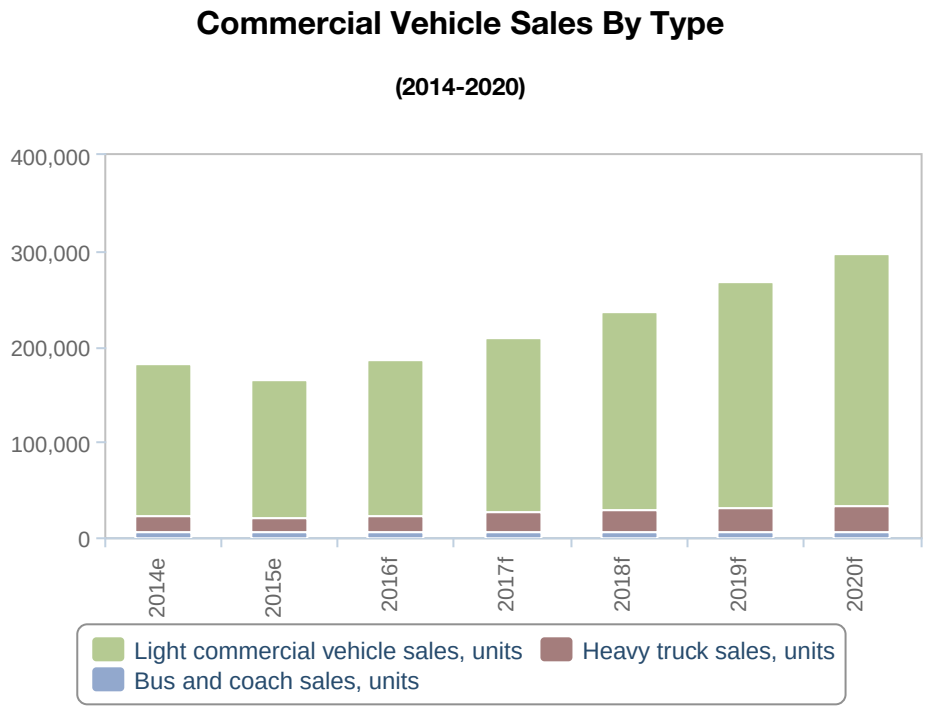
Table: Commercial Vehicle Market - Historical Data And Forecasts (Iran 2014-2020)

	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	187,367	209,745	236,541	268,469	297,108
Commercial vehicle sales, units, % y-o-y	68.8	-8.7	13.2	11.9	12.8	13.5	10.7

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

Latest Developments

- The return of major Western brands will boost the segment.
- Daimler reportedly (in December 2015) in discussions regarding a partnership to recommence local production and sales of commercial vehicles as soon as sanctions are lifted.
- Commercial vehicle demand will gain from the improved outlook for infrastructure project financing.



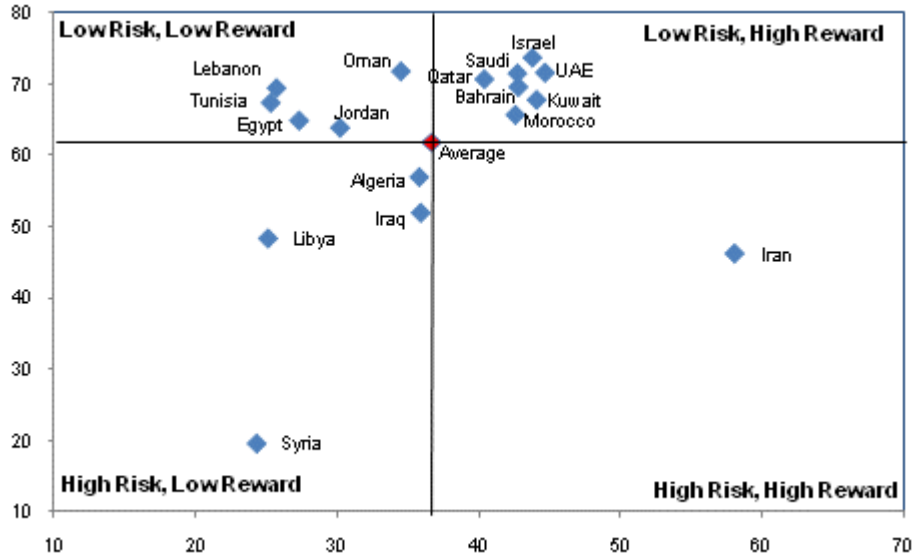
e/f = BMI estimate/forecast. Source: Statistical Centre of Iran, BMI

Industry Risk/Reward Index

BMI View: *With little movement in positions in this latest update of our Risk/Reward Index for the Middle East and North African autos sector, the states of the Gulf Co-operation Council (GCC) remain the most attractive, mostly occupying the 'low risk, high reward' segment. Elsewhere, there have been some improvements to individual country scores on the basis of their potential, making them longer term options for investment.*

Long-Term Prospects Make Their Move

MENA Autos Risk/Reward Index



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

GCC Stability Offsets Sales Downgrades

Although sales forecasts for a number of the GCC states have been lowered slightly as a result of the sustained low oil price environment and the economic impact it will have, the positive business environment makes these states the most attractive. Although most of the countries lack domestic production to contribute to their growth potential scores, they offer the most stable business environments and consistent sales growth opportunities.

Morocco, as the most attractive North African state, is also part of this group, reflecting increased investment activity in the country as a result of its low costs and favourable location. Strong private consumption also makes it a regional economic outperformer, which feeds into vehicle demand. From a business environment perspective it is also one of the most stable North African states, and this has carried it just over the regional average score for risks.

Long-Term Potential Comes With Risk

There has been some improvement for both Algeria and Iraq, which have moved closer to the regional average line in terms of their 'reward' score. However, both of them still come with an element of risk, which keeps them in the 'high risk' half of the matrix.

We expect to see Iraq's vehicle market return to growth in 2016, although given the low rate of vehicle ownership and the low base from 2015, the market will actually perform below potential, which is why see this as longer term story in the region. This does ensure that companies are staying in the country for the long haul (*see 'Iraq Car Market A Long-Term Opportunity', December 1 2015*). The security situation in the country will keep the risk element high, which also constrains Iraq to the 'high risk' side of the matrix.

Algeria has also seen a slight upgrade in its 'rewards' score, thanks to the lifting of a ban on consumer lending. There will still be restrictions on imports, however, which is why we expect the market to be another longer term growth story.

Iran The Most Attractive Outlier

A number of countries stand out at extreme points on the matrix. In the case of Libya and Syria this is for their extremely high risk and low rewards, while in Iran's case, it is big on rewards but still a risk given the economic and business reforms that are required (*see 'Rapid Uptick In Growth As Shackles Are Removed', January 8 2016*).

Iran is the region's biggest car market with more than 1mn units, bumping up its 'rewards' score. In addition, on finalisation of the nuclear agreement reached in July 2015, carmakers will once again have the opportunity to produce locally. However, these rewards are still very much tempered by risk. Although relations with the West are improving, there are still numerous security risks. These risks, plus threats to trade and investment, including a poor rule of law, mean companies will face a challenging business environment.

Libya and Syria have no such rewards to balance out their high risk as both are involved in ongoing conflict.

Company Profile
Iran Khodro Company (IKCO)

Latest Developments

- Announced in November 2015, it is working with Syrian partner Siamco to restore operations in the country, switching from production of the Samand to the Soren, Runna and Dena.
- Signed a memorandum of understanding in September to export 500 vehicles to Tajikistan.
- Developed a new company in August to manage co-operation between Iranian suppliers and their international counterparts.
- 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 license 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.

In January 2015, the IRNA reported that IKCO had expanded its after-sale services in various Iraqi cities, with the company also looking to increase its market share in the Persian Gulf littoral countries, according to managing director Hashem Yekke-Zare'a. The governor of the Iraqi city of Karbala, Aqil al-Tarihi said: 'Foreign vehicles manufactured in various countries, including Russia, are present in Iraq but most of them do not match the geographical conditions of Iraq. They are appropriate for use in the winter season, but do not match the summer season perfectly, while the Iran Khodro products do not have that deficiency'.

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. 'This package is

a prerequisite to the promotion of hybrid and electric cars in Iran because such automobiles must be produced and presented to the market for customers to buy them,' he said.

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.
- Aiming for production of 10,000 Sanderos by end of March 2016.
- Started production of Volvo trucks in May through Saipa Diesel.
- Unconfirmed reports suggest Renault is interested in buying a minority stake in Renault Pars and facilities and infrastructure.

Strategy

Saipa 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 is also looking to develop its own models, such as the Tiba, which is reportedly selling well at present.

The Iranian government has control over the company through IDRO, an agency of the Ministry of Industry and Mines. In 1998, Saipa listed on the Tehran Stock Exchange as a first step towards privatisation. The majority 14.3% stake in private hands belongs to the Bahman Group, which is also engaged in autos manufacturing, under licence from Mazda, through Bahman Auto.

Speaking to Press TV in February 2015, Saipa's head of commerce and sales office, Mohammad Reza Abbasi, stated that Saipa saw production and sales both rise by 32% during 2014. Looking forward, Abbasi said that Saipa will start to produce a low-cost car, known as the Saina, during the first half of the new Iranian calendar year, with the company also set to launch more than 10 models at the next motor show to be held in Isfahan.

In the same month, Press TV reported on comments from Saipa's CEO, Saied Madani, that the company would soon launch three new models onto the Iraqi market. Madani said that his company is looking to boost its market share within Iraq, saying that 'Saipa products are always highly received in Iraq thanks to their competitive prices, cheap spare parts and low fuel consumption'. Saipa operates one auto plant in Iraq that primarily produces Tiba and X100 models.

In July 2015, reports surfaced once again 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.

Regional Overview

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

Table: Middle East And North African Autos Production Investments

Date announced	Country	City/state/ region	Company	Value	Brief description	Date onstream
September 2015	Algeria	Bouira	Iveco/Ival	na	JV production facility for Iveco-branded trucks; annual production capacity of 1,000-1,500 units	2016
November 2015	Morocco	Tangier	Acome	na	New plant for production of wire harnesses for customers including Renault	2016
December 2015	Algeria	Relizane	IKCO/ Famoval (funded locally)	na	Plant for assembly of IKCO models from SKD kits, including Rana, Soren, Dena and Arisun models. Annual capacity of 30,000 units. IKCO will provide technical support and training. Full production line to be added ultimately	2016-2017
December 2015	Oman	Sohar	Jiangsu Changbao Steel Tube Co	USD20mn	Plant for production of steel tubes and pipes products to be used in automotive and other heavy industries. Annual capacity of 50,000 tonnes	2016
December 2015	Morocco	El Jedida	MGI Coutier	EUR4mn (USD4.4mn)	New plant for fluid management products, initially supplying Renault	2016
December 2015	Algeria	na	Saipa	USD20mn	Production of X100, Tiba 1 and II, Saina and pride in cooperation with unnamed local company	2016
December 2015	Morocco	Tangier	Delfingen	EUR1-2mn (USD1.1-2.2mn)	New plant for rubber protection and fluid transfer systems	2016
December 2015	Morocco	Meknes	Delphi	MAD400mn (USD40.5mn)	New plant for automotive wiring products, creating 3,500 jobs. Delphi's fourth site in the country	2016
January 2016	Oman	Duqm Free Zone	IKCO	na	New production line for Runna and Dena models, 80% funded by Omani government and private sector, with IKCO providing remaining 20% through technical support and training	na
January 2016	Iran	na	Daimler	TBC	JV for production of Mercedes-Benz trucks with Iran Khodro Diesel and Mammut Group	na

Middle East And North African Autos Production Investments - Continued

Date announced	Country	City/state/ region	Company	Value	Brief description	Date onstream
January 2016	Iran	Tehran	Peugeot	EUR400mn (USD434mn)	JV with IKCO for production of 208, 301 and 2008 models. Annual production capacity of 100,000 units	2017

na = not available; JV = joint venture; TBC = to be confirmed. Source: BMI

Iran Already Drawing A Crowd...

The removal of most sanctions against Iran has already attracted major carmakers to return to the country, in line with our long-held view that autos firms would be waiting to take advantage of the country's pent-up demand and those with a previous presence would be best-placed to move (*see 'Iran Free To Join Top 10 Autos Markets', January 19 2016*). Germany's **Daimler** was the first to announce a deal, as it plans to begin production of Mercedes-branded trucks through co-operation with **Iran Khodro Diesel** and **Mammut Group**. We believe the commercial vehicle segment has a lot of potential based on projected demand from heavy industries for projects such as energy infrastructure development.

France's **Peugeot** is the first on the passenger car side, as we had expected. It will invest EUR400mn (USD436mn) over five years in developing facilities with its former local partner **Iran Khodro Co** (IKCO**)** to produce the 208, 301 and 2008 models. We expect Peugeot to expand its market leadership by once again having a presence in the country.

....But Iranian Brands Look Elsewhere

While foreign firms are looking to take advantage of projected Iranian growth, domestic brands are looking further afield. There is a trend among the latest round-up of projects for Iranian carmakers to announce production operations elsewhere in Middle East and North Africa. We believe they are increasing their options as competition is set to increase rapidly.

IKCO has two projects, one in Oman and one in Algeria, with both following the same pattern. The firm will not make a direct investment itself, this will come from the local partners, but in both cases it will provide technical support and training.

Saipa is also targeting Algeria, again in conjunction with a local company. This is the first activity outside exports for the company in Algeria and there is the possibility of the initial USD20mn investment rising to

USD100mn over time. The addition of a spare parts unit, which is under consideration, would also raise the plant's capacity.

North African Hub Expanding

As we highlighted in our last round-up (*see 'Autos Investment Round-Up: North Africa Emerges As Production Hub', September 7 2015*), North Africa is gaining traction as a production hub and the number of projects in Algeria and Morocco in this latest update are evidence of this continuing.

Morocco is seeing rapid development in its supplier network, which has been cited as a necessity if more original equipment manufacturers (OEMs) are to invest in vehicle production in the country. In December 2015 a representative of government trade department 'Invest In Morocco', said the 200 suppliers in the country are not enough and that the government is looking to expand this in order to double the country's vehicle production capacity. Local content in Moroccan-built cars is currently around 40% and the short-term goal is to increase this to 60% and then to 80% by 2020.

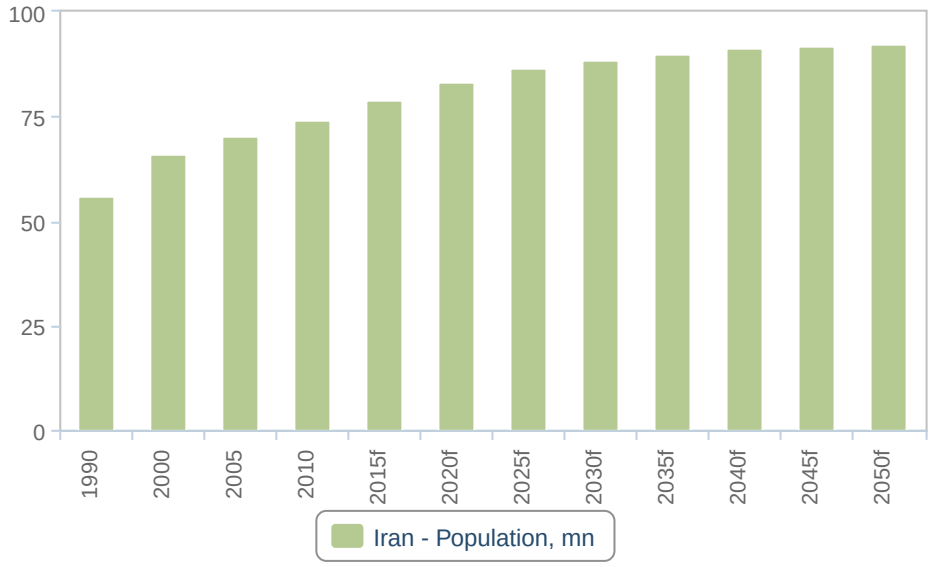
Demographic Forecast

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

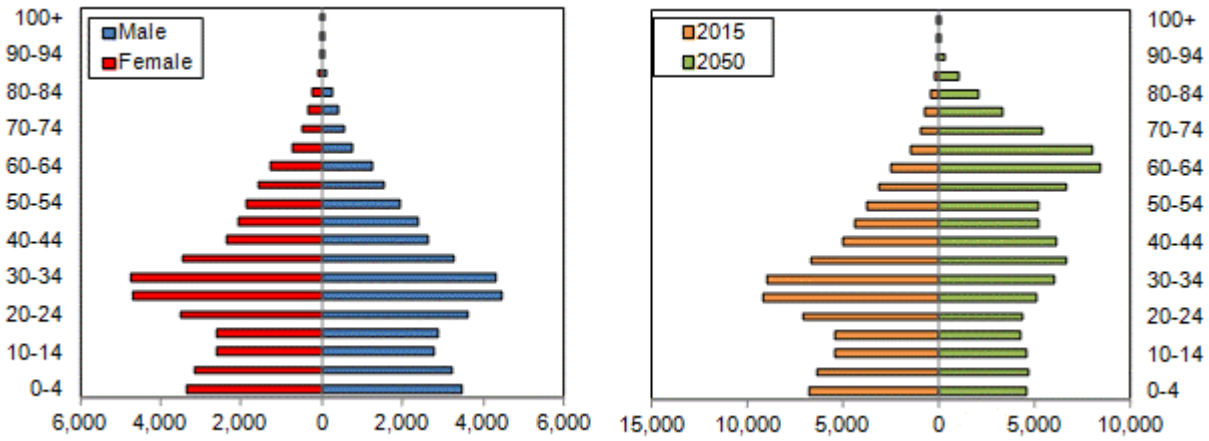
(1990-2050)



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