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IRAN

AUTOS REPORT

INCLUDES 5-YEAR FORECASTS TO 2019

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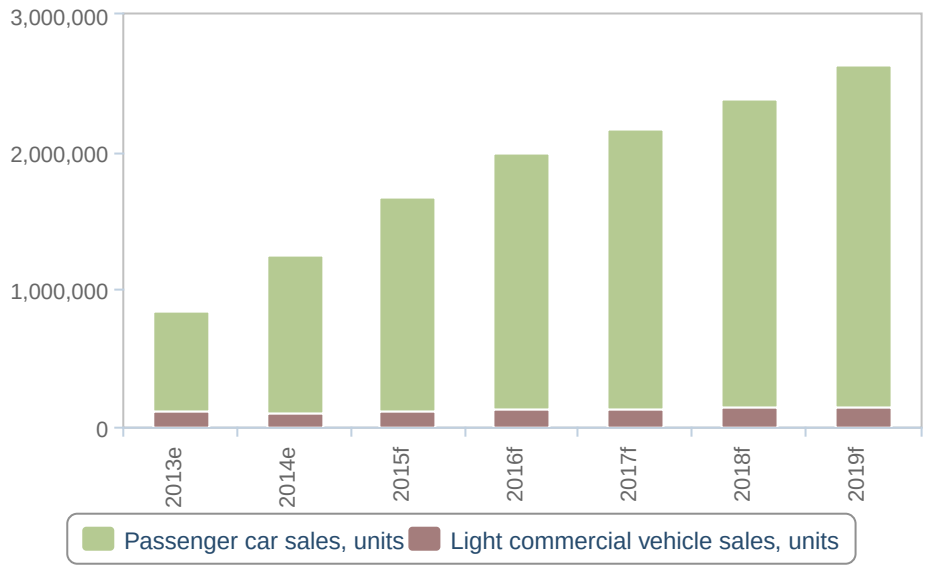
BMI Industry View

BMI View: *The autos sector will be one of the biggest beneficiaries of the lifting of sanctions in 2016, as the consumer base has shown its preference for Western brands. The improved outlook for infrastructure project financing is also supportive for the commercial vehicle segment.*

Passenger Car and Light Commercial Vehicle Sales

(2013-2019)



National Sources/BMI

Key Views

- Western brands will be well received post-sanctions, given the backlash against domestic carmakers.
- European brands will be best positioned to gain market access quickest.
- Improved infrastructure project financing will be supportive for 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	▪ Agreement on a permanent nuclear deal will increase Iran's attractiveness to foreign manufacturers, as it offers a significant new market. ▪ 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 OEMs
Threats	▪ A collapse in the agreement before implementation would continue to cut the country off 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 2013-2019)

	2013	2014	2015f	2016f	2017f	2018f	2019f
Vehicle production, units, mn	0.65	1.09	1.14	1.27	1.40	1.52	1.74
Vehicle production, units, % y-o-y	-35.9	67.5	4.7	11.2	9.9	9.0	14.1
Vehicle sales, units, mn	0.87	1.27	1.69	2.01	2.19	2.40	2.65
Vehicle sales, units, % y-o-y	-2.6	46.5	33.1	18.9	9.0	9.7	10.3

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

Latest Developments

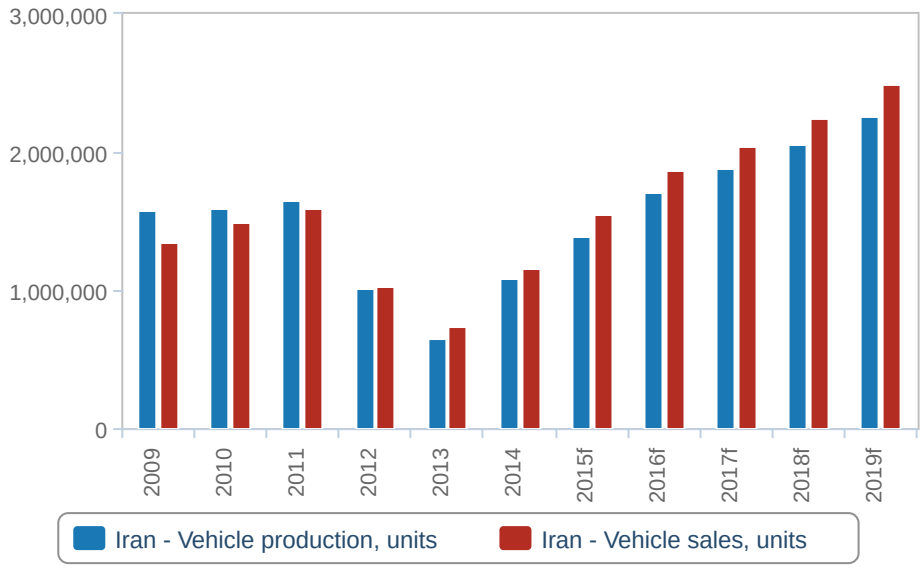
- Foreign brands continue to show interest in local sales and/or production, with Daimler, VW, Skoda and Fiat among the brands reportedly in talks to enter the market.
- Renault alone reported sales to have risen 2.5 times y-o-y in October 2015.
- Domestic brands will be hit by a social media campaign against locally produced cars, considered to be overpriced and low quality.

As Iran's biggest non-oil industry, the Autos sector will benefit greatly from the lifting of international sanctions. The market's size and growth potential will see brands which were already active in Iran and newcomers alike racing to stake their claim.

We factored a permanent deal into our sales and production forecasts earlier in the year, as it was the core view of our Country Risk team that a deal would be reached. At the moment, growth is still coming from the effects of the interim deal that was agreed and allowed some imports to recommence.

Stabilisation Before Growth Kicks In

Iranian Vehicle Sales And Production



f = BMI forecast. Source: National sources, BMI

As the lifting of sanctions will only be fully finalised in H116, we look to 2016 for the real results. We forecast passenger car sales growth of 20% as more brands enter the market and consumers take advantage of an unprecedented level of variety. This would take to the market to 1.8mn units - a new high for Iran and a reflection of real growth rather than just a return to pre-sanction levels. By 2017, we see the volumes surpassing 2mn units, with an improved economy and favourable demographics adding to the choice of brands as key drivers of growth.

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 (*see, 'No End To Risks As Sanctions Eased', May 5 2015*).

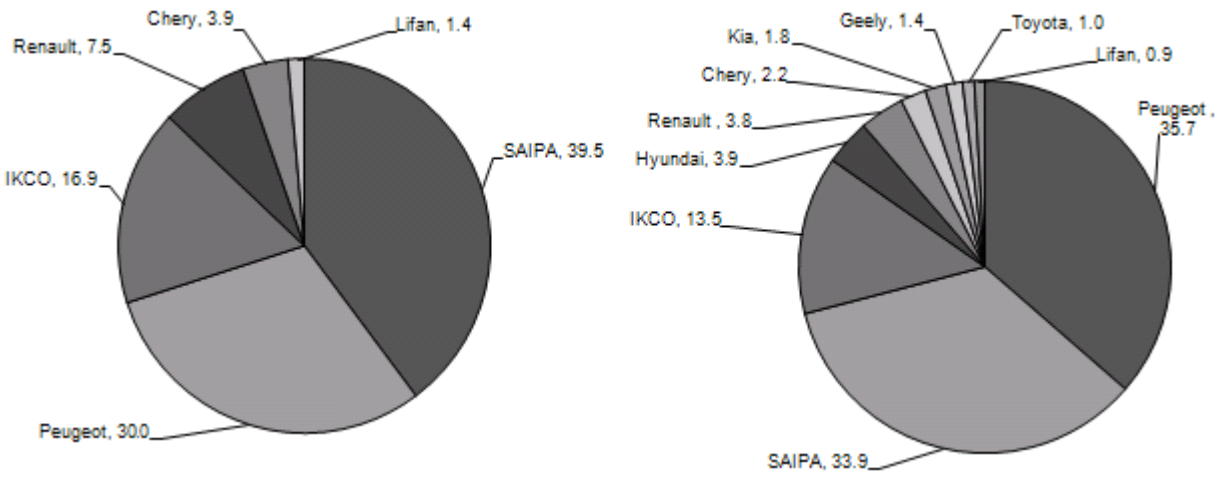
France's **PSA Peugeot Citroen** will be the main beneficiary through its Peugeot brand, which has long dominated the market. The company felt a significant financial blow from its absence from Iran and its keenness to return is underlined by the deal it already has in place with local firm **IKCO** 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 (*see, 'Iran Consumer Potential To Attract Western Firms Following Nuclear Deal', April 14 2015*).

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 R&D.

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 (*see 'IKCO Conditions Highlight Mutual Reliance', May 8 2014*).

We expect more partnerships to follow these lines as brands to 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 2013-2019)

	2013	2014	2015f	2016f	2017f	2018f	2019f
Passenger car production, units, mn	0.54	0.93	1.02	1.14	1.25	1.37	1.57
Passenger car production, units, % y-o-y	-38.3	72.1	10.0	12.0	10.0	9.0	14.6
Passenger car sales, units, mn	0.74	1.15	1.56	1.87	2.04	2.24	2.49
Passenger car sales, units, % y-o-y	-0.3	56.5	35.0	20.0	9.0	10.0	11.0

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

Latest Developments And Segment Drivers

- Passenger cars remain the dominant vehicle segment and are 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.
- 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 in recent years.
- Passenger car production forecast for 2015 and 2016 has been revised down to reflect the negative consumer sentiment, although increased exports will offer some support.

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

Iran Car Sales By Brand Top 10 - Continued

	2013	2014	% chg y-o-y	Market share (%)
Lifan	8,201	7,741	-5.6	0.9

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

Commercial Vehicles

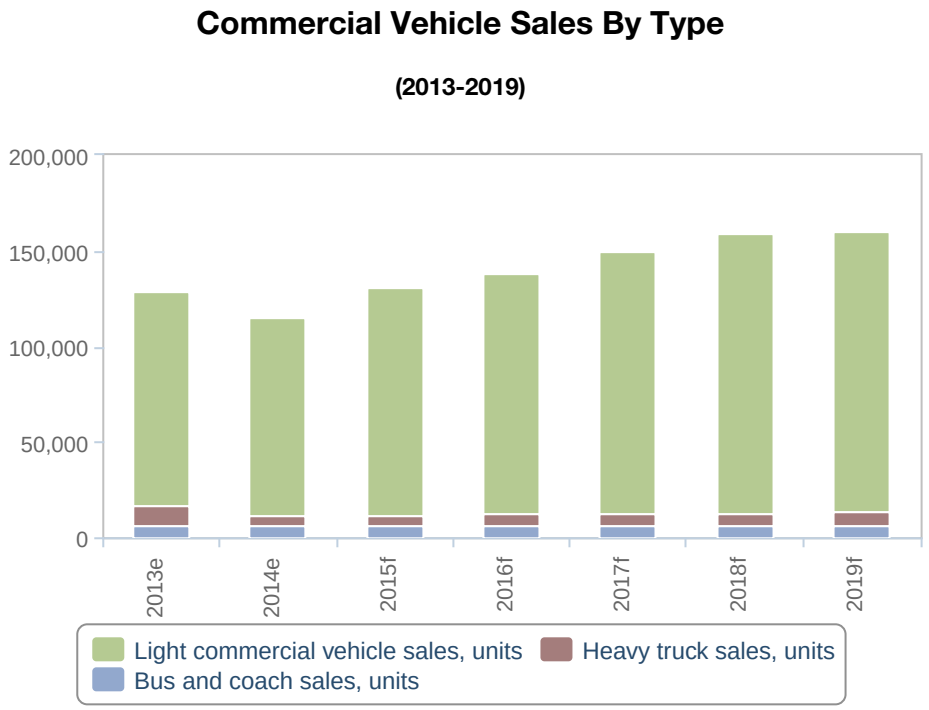
Table: Historical Data And Forecasts

	2013e	2014e	2015f	2016f	2017f	2018f	2019f
Commercial vehicle production, units	113,041	164,871	123,488	129,693	141,054	153,655	167,432
Commercial vehicles production, units, % y-o-y	-21.0	45.9	-25.1	5.0	8.8	8.9	9.0
Commercial vehicle sales, units	128,688	114,755	130,492	137,776	150,255	159,328	159,772
Commercial vehicle sales, units, % y-o-y	-14.0	-10.8	13.7	5.6	9.1	6.0	0.3

National Sources/BMI

Key Developments And Segment Drivers

- Return of major western brands will give the segment a lift.
- Volvo Trucks has opened a new production line for its FH range of trucks.
- 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.
- Improved outlook for infrastructure project financing post-sanctions is positive for commercial vehicle demand.
- Positive vehicle outlook is also creating opportunities for suppliers as Apollo Tyres has stepped up supplies of truck radials to Iran.



Statistical Centre of Iran

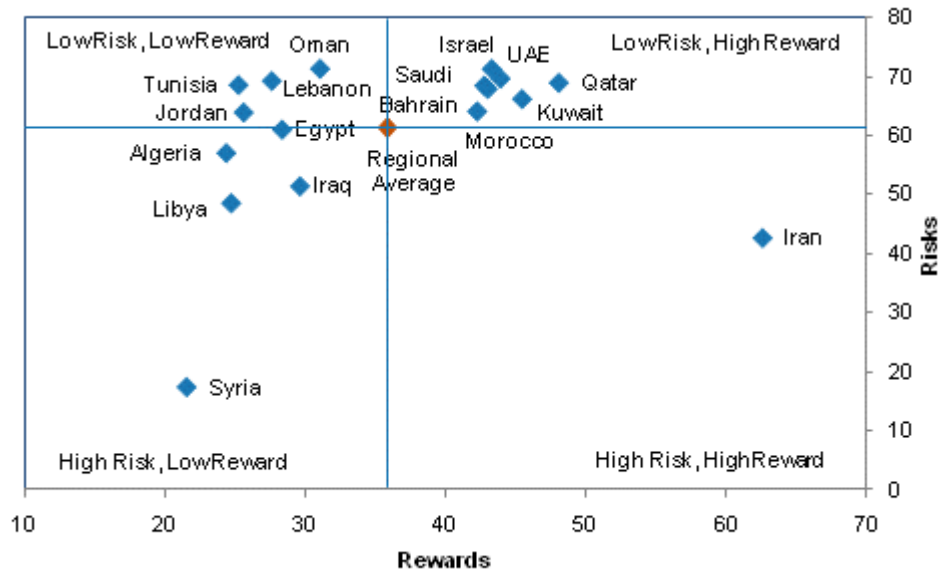
Industry Risk/Reward Ratings

MENA - Risk/Reward Index

In the latest update of our Risk/Reward Index for the Middle East and North Africa's Autos sector, Iran's overall score has risen, as the potential for the country to open up to Western brands has increased its sales and production growth scores. It is an outlier in the high risk, high reward segment, as the Gulf Cooperation Council (GCC) states still offer the most stable and attractive environments for doing business.

GCC Still The Safe Haven For Growth

MENA Autos Risk/Reward Index (scores out of 100)



Notes: Higher scores = higher rewards/lower risk. Source: BMI

Iran The Epitome Of 'High Risk, High Reward'

Iran is the notable outlier as the only country in the high risk, high reward quadrant. Its rewards score reflects the growth potential on offer; the country is the region's biggest car market with more than 1mn units. In addition, carmakers will once again have the opportunity to produce locally when the nuclear agreement reached in July is finalised.

However, these rewards are still very much tempered by risk, as highlighted by our Operational Risk team. Although a thawing of relations with the West will see Iran improve its position in **BMI**'s Operational Risk Index, 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 (*see 'No End To Risks As Sanctions Ease', May 5*).

GCC Leads On Stability

Perhaps unsurprisingly, the GCC states are grouped together in the low risk, high reward quadrant. 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. Qatar is slightly ahead of the pack, as its much higher GDP per capita (on a purchasing power parity basis) buoys its sales growth forecast.

Morocco has also joined this group, reflecting the increased investment activity in the country over the year so far. Strong private consumption makes the country a regional economic outperformer. This, coupled with its low-cost manufacturing base and favourable geographical position, means carmakers have been targeting Morocco as a new production and sourcing base (*see 'Five Reasons Carmakers Are Choosing Morocco', May 27*). From a business environment perspective it is also one of the most stable North African states, and this has carried it just over the average score for risks (*see 'Security Risks Less Onerous Than Other North African States', July 31*).

Conflict Risks Are Pertinent

One link between most of the countries in the high risk, low reward segment is that they are involved in ongoing conflicts. Syria, Libya and, to some extent, Iraq are low on investment opportunities, and market growth is limited. As reflected in the chart, Iraq is the best positioned of the three, relatively speaking. Companies are still operating in the country, but increasing instability at the borders, particularly that with Jordan, one of its major trading partners, is impacting its growth potential (*see 'Border Instability Favours Iranian Carmakers', May 22*).

Egypt sits right on the average score between high and low risk, and this is a clear reflection of the country's precarious security situation, with fresh formal security talks with the US having only just restarted after a six-year break. The autos market itself is enjoying a period of recovery after the Arab Spring dampened demand, but we believe there are still fundamental risks to the manufacturing sector (*see 'Viability Of Vehicle Production At Risk', May 15*).

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 design and production of hybrid electric cars.

Company Overview

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.

Strategy

In January 2015, the IRNA reported that IKCO had expanded its after-sale services in various Iraqi cities, with the country 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.

Company Overview

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.

Strategy

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

Industry Trend Analysis

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 identifying company strategy in terms of production bases and export programmes.

Table: MENA Autos Production Investments

Date Announced	Country	City/State/ Region	Company	Value	Brief Description	Date Onstream
Jun-15	Oman	Sohar	Unnamed South Korean Company	TBC	Spare parts production plant, mainly focussed on aluminium wheels	TBC
Jun-15	Morocco	Kenitra	PSA Peugeot Citroen	EUR557mn (USD630mn)	New plant for small and compact cars for Africa and the Middle East with an annual capacity of 90,000 units, initially aiming for 60% local content rising to 80%	2019
Jul-15	Algeria	TBC	Sovac, Hyundai and Nissan	TBC	Alliance to form three manufacturing plants for VW, Hyundai and Nissan cars	TBC
Jul-15	Morocco	Tangier	Volkswagen	TBC	New vehicle plant to supply MENA markets	Under negotiation
Sep-15	Iraq	Babel	Chery and Kia	n/a	New assembly line for production of Kia and Chery cars with a maximum capacity of 44 cars a day	2015

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

North Africa Fulfilling Potential

We have long held the view that North Africa has the potential to become a vehicle production hub, and we have particularly highlighted the potential of Morocco and Algeria to develop as alternatives to Egypt in the region . This is being reflected increasingly in the projects in our investment round-ups, and this latest round-up includes two major carmakers looking to Morocco as a hub for the Middle East and Africa.

After rumours circulated earlier in the year, French carmaker **PSA Peugeot Citroen** has confirmed plans to build a plant in the country for its small and compact cars, underlining the country's competitiveness in manufacturing high volume, low margin vehicles. In another win for Morocco, Germany's

Volkswagen (VW) has reportedly chosen Tangier over Tunisia for a new vehicle plant, owing to Morocco's stability. The carmaker is yet to confirm exact details.

Algeria, which has already shown its ability to replace Egypt through **Daimler**'s decision to stop assembly in Egypt and concentrate on its Algerian facilities instead, is lined up to secure multiple new production plants. The owners of local dealers **Sovac**, **Nissan Motors Algeria** and **Hyundai Motors Algeria**, have formed an alliance to propose and plan three manufacturing plants for the brands they sell - VW in the case of Sovac. They will aim to locate on the same site to share sourcing and logistics.

Positive Signs For Iraq

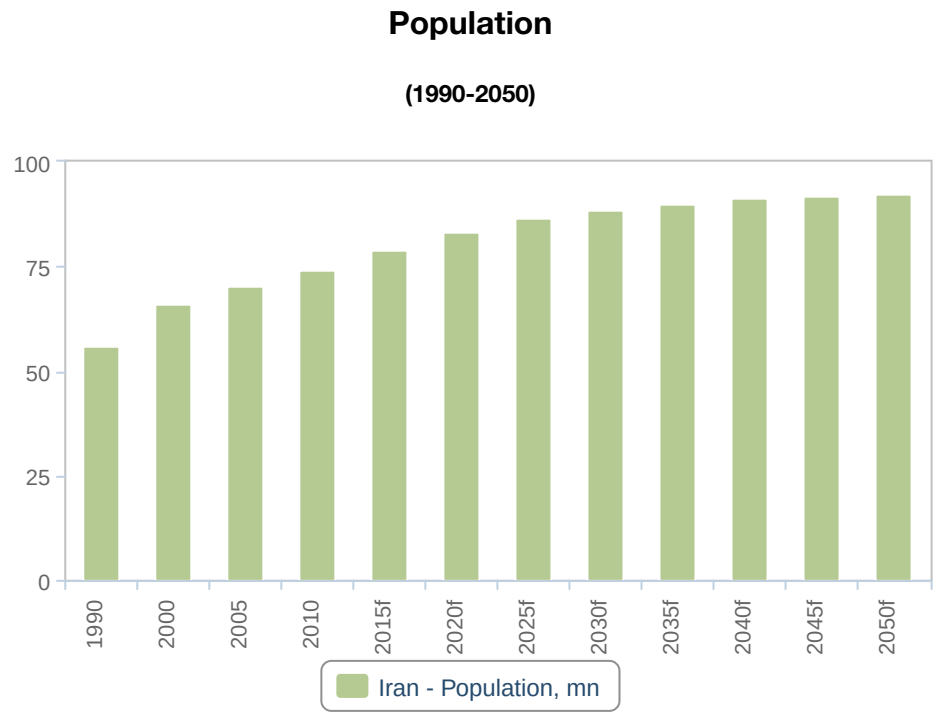
Echoing the sentiment of a number of carmakers who have claimed to be staying in Iraq for the long-haul, despite the current security situation, a new assembly line has opened at the **General Company for the Automotive Industry** in Babel province. Sedans and crossover from China's **Chery** and South Korea's **Kia Motors** will be built at the two plants, which, according to the press release, will be staffed by a 100% local workforce.

The plants will provide some competition for the Iranian brands that we have previously highlighted as being in a sound position to outperform in Iraq, owing to their local production and close proximity for imports of parts and components over a border other than those that are being closed off as part of the ongoing fight against Islamic State (*see 'Border Instability Favours Iranian Carmakers', May 22*).

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.

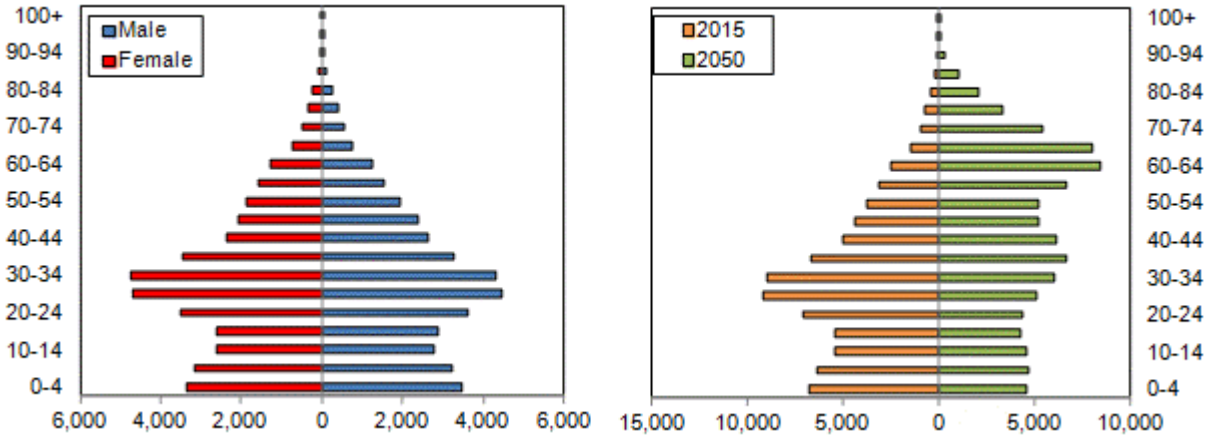
The accompanying charts detail the population pyramid for 2015, the change in the structure of the population between 2015 and 2050 and the total population between 1990 and 2050. The tables show indicators from all of these charts, in addition to key metrics such as population ratios, the urban/rural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



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