IHS AUTOMOTIVE

Presentation

Around the World Global Sales and Production Forecast Asia

24 November 2015

ihs.com

Masatoshi Nishimoto Charles Chesbrough Gao Tao Andy Bae Puneet Gupta

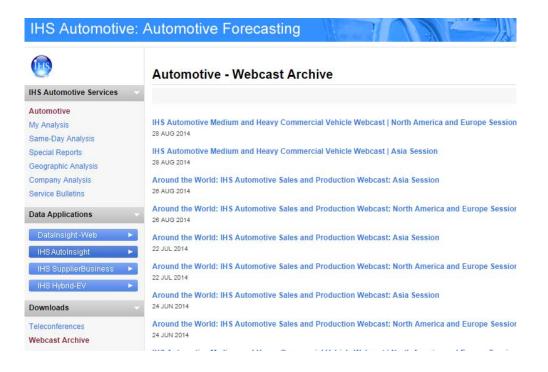




© 2015 IHS

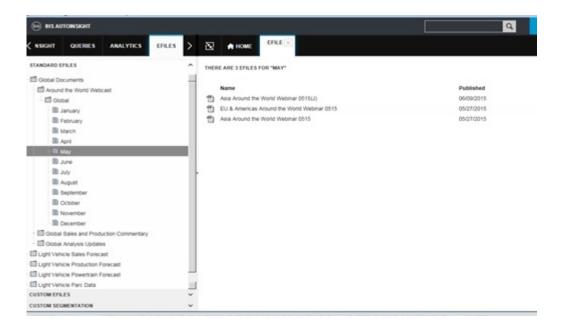
Next Global Sales and Production webcast Thursday, 17 December 2015

 The November 2015 and historical audio webcast can be downloaded at: <u>http://automotive.ihs.com/servlet/cats?group=home%3B1&serviceID=167</u> <u>5&documentID=2308515&pageContent=homePage</u> under the webcast archive section



Next Global Sales and Production webcast Thursday, 17 December 2015

• The November 2015 PDF webcast can be downloaded on AutoInsight under the standard e-files section



Questions and answers

To ask a question, please type your question in the "Ask a Question" box within the webcast system and click "Send."

Contents

Macroeconomic outlook

Global sales and production outlook

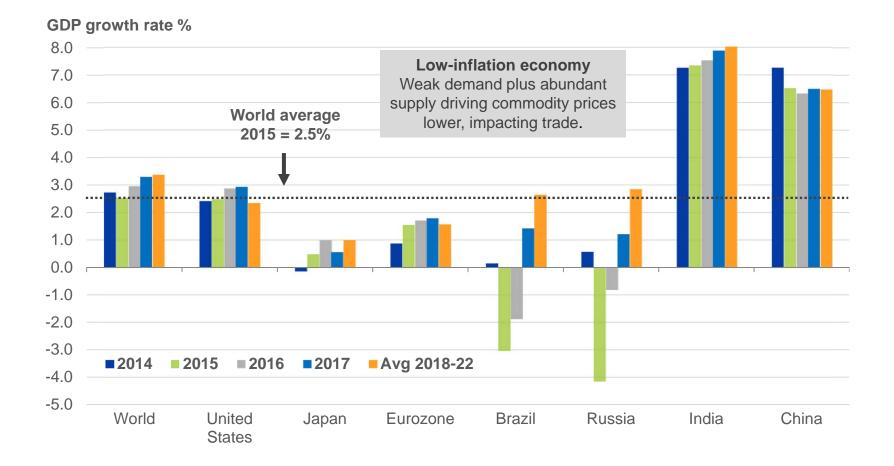
Asia outlook

The rest of the world

Questions and answers

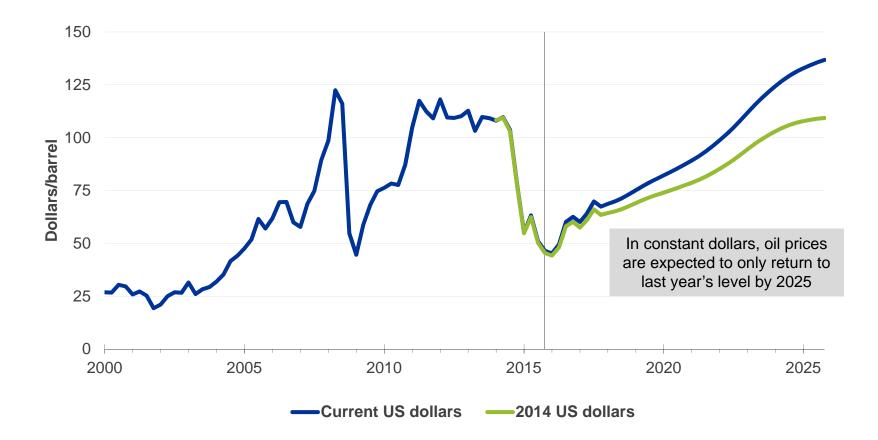
World: Economic growth rates

Emerging market slowdown having global implications



World: Brent crude oil price forecast

Gradual increase expected as weak global economy improves



World: Automotive Materials Cost Index

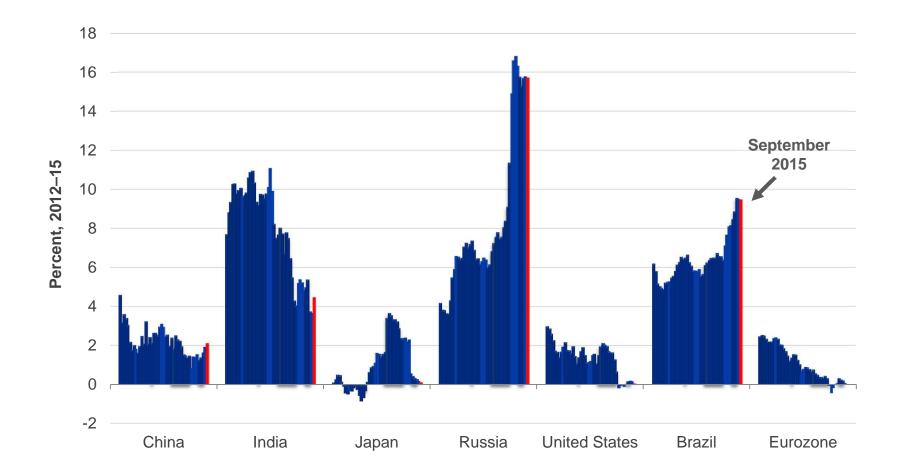
Falling commodity prices reduce production costs—profit margins strengthening

Materials costs in typical 3,500lb US vehicle \$2,200 -51% from In-vehicle cost index: 2011 \$2,000 Steel Aluminium \$1,800 **Plastic resins** Rubber \$1,600 Glass Iron \$1,400 \$1,200 \$1,000 \$800 \$600 \$400 998 1999 2003 2006 2015 2000 2002 2004 2005 2007 2008 2009 2010 2012 2014 2001 2013 2011

Source: IHS Automotive Material Cost Index of combined commodities, monthly data

World: Consumer prices

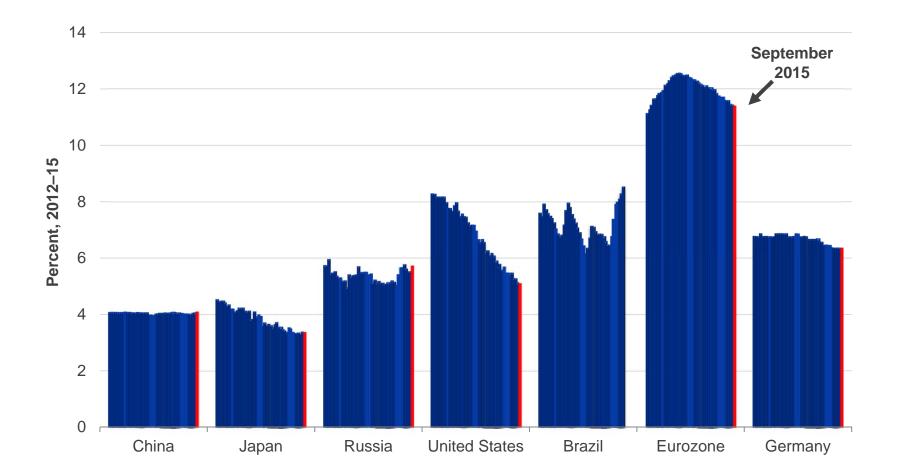
Low oil and commodity prices keeping inflation muted in most markets



Source: IHS Economics, monthly index annual percentage change, historical actual and current estimate

World: Unemployment rate

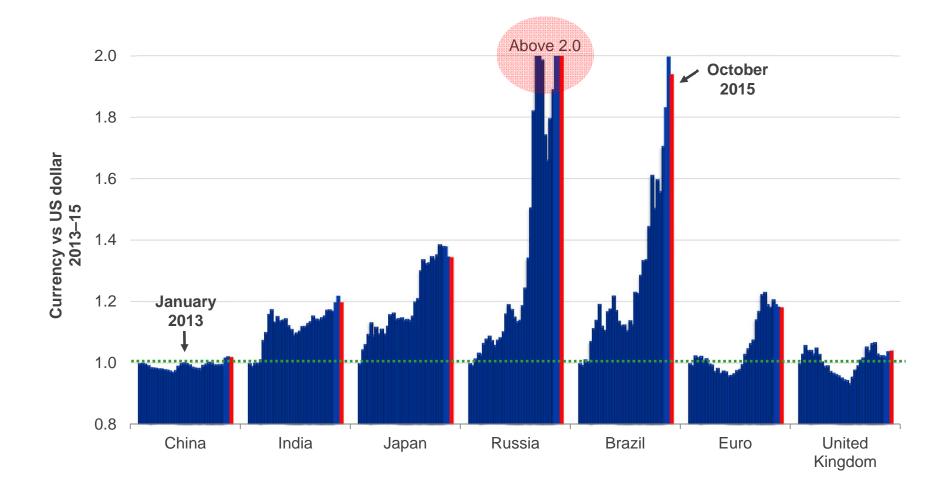
Most labor markets tightening; Russia/Brazil feeling impact of recession



Source: IHS Economics, monthly, in percent, historical actuals and current estimate

World: Exchange rates

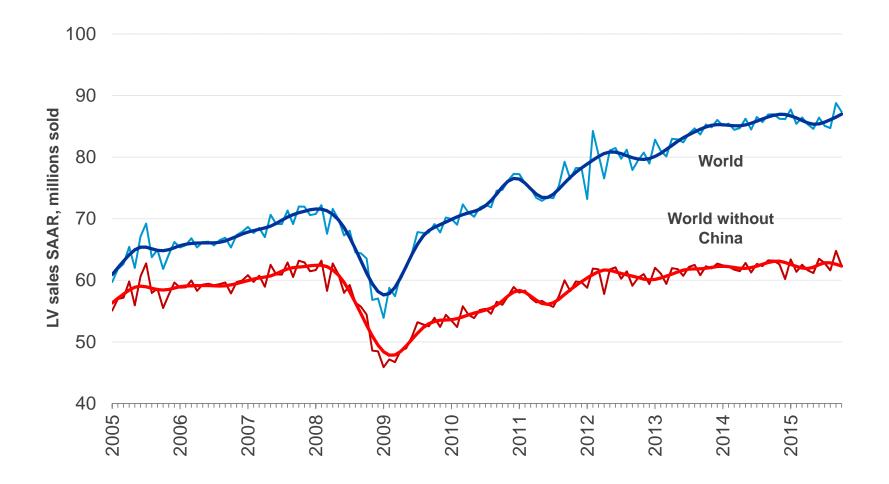
Dollar remains strong against most currencies



Source: IHS Economics, monthly exchange rate vs US dollar, indexed to rate in January 2013

World: Light vehicle selling rates

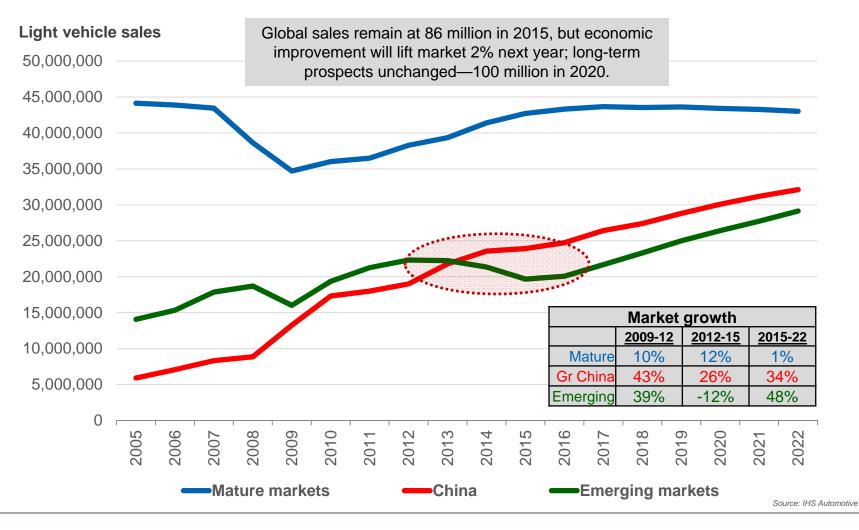
Upward momentum changed about one year ago



Source: IHS Automotive analysis, monthly data with X12 seasonal adjustment

World: Light vehicle sales forecast

Market flat in 2015 but will improve in 2016; weakness in emerging markets temporary



Contents

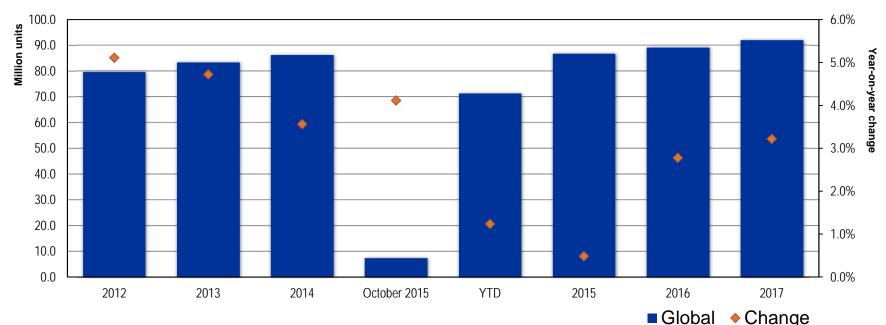
Macroeconomic outlook

Global sales and production outlook

Asia outlook

The rest of the world

Questions and answers

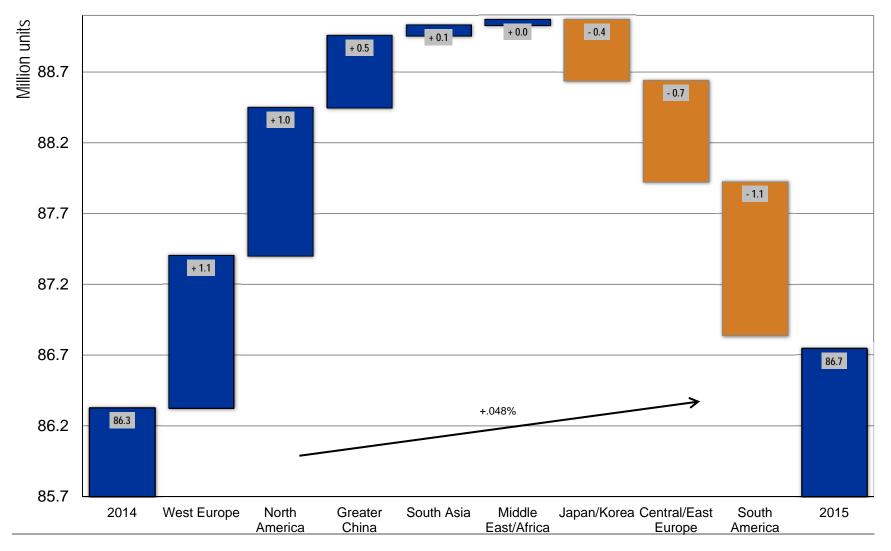


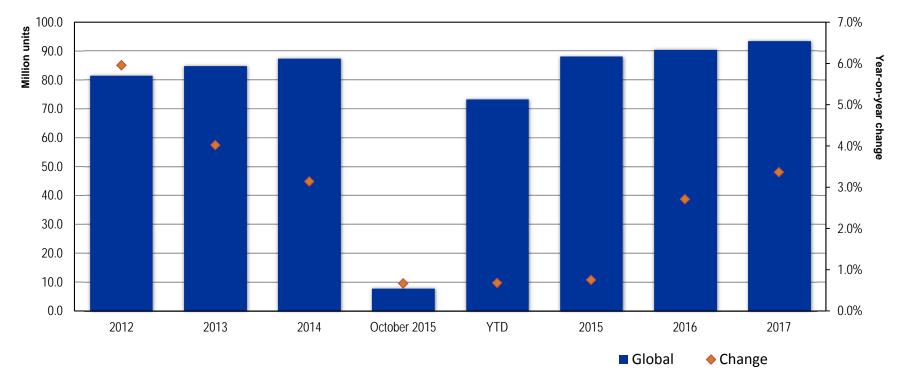
Global sales

 For October 2015, global demand rose 4.1%, leading year-to-date (YTD) demand to grow 1.2% to 71.41 million units. A particular driver for the near term is the less gloomy outlook for China—a consequence of modest tax cuts for passenger car purchases introduced by the government as a short-term economic stimulus. Our global sales forecast for full-year 2015 is set at 86.74 million units, up 0.5%. This figure represents the lowest rate of growth in six years, with a mixed picture for global demand—mature markets generally remaining in recovery or growth mode, while many emerging markets are struggling to maintain automotive sales momentum.

IHS is anticipating lower demand for the Volkswagen (VW) Group in the coming years as a result of the VW emissions
issue. Currently, we are working under a "containment scenario" where the VW brand absorbs most of the decline,
mainly in Western Europe and North America. Much of the short-term impact reflects canceled orders, stop-sells on
inventory, and some customer defections from diesel power. Beyond this horizon, we foresee limited reputational
damage hurting market share with time decay of the damage outbound. For future forecast rounds, we will further
examine estimated financial ramifications and their related investment implications for VW Group activities.

Global light vehicle sales outlook 2014–15 sales volume

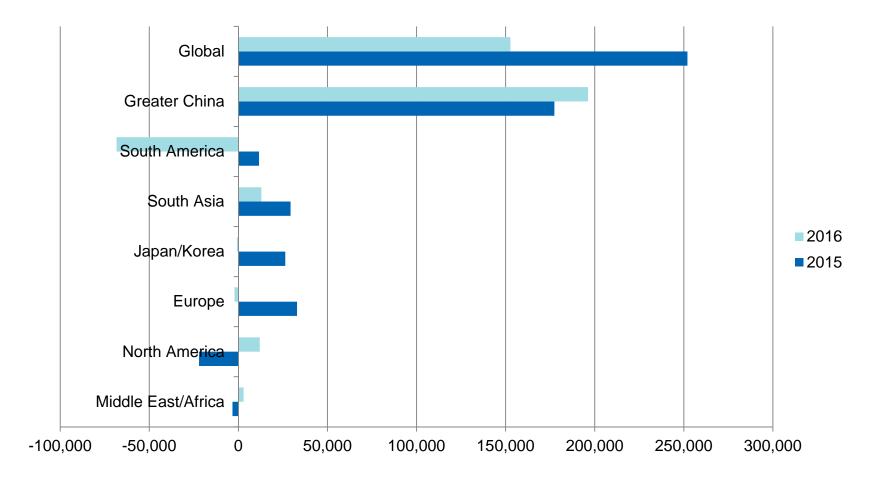




Global production

- Production is estimated to have reached 7.80 million units in October 2015, a 0.7% year-on-year (y/y) increase over October 2014. The YTD comparison has eased to 0.7% ahead after the first 10 months of 2015, at 73.30 million units. The full-year 2015 forecast is increased to 88.05 million units, 252,000 units stronger than the previous forecast and 0.8% above full-year 2014. This largely reflects the Chinese government's cut to the purchase tax on vehicles with engine sizes up to 1.6L to stimulate the slowing market. This intervention is expected to provide support in 2016, where we have boosted the forecast by 152,000 units.
- In addition to the revision in China, we have cumulatively increased the 2015 outlook by 100,000 units across Europe, Japan/Korea, South America, and South Asia, while the outlooks for North America and the Middle East/Africa have been trimmed by 22,000 units and 3,000 units, respectively.

Global light vehicle production variance (November vs. October forecast)



Contents

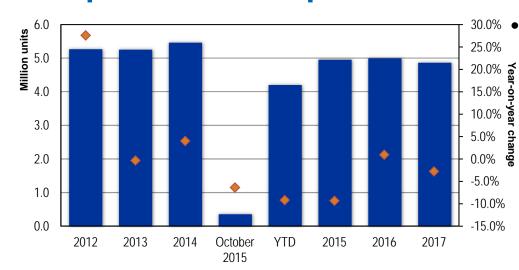
Macroeconomic outlook

Global sales and production outlook

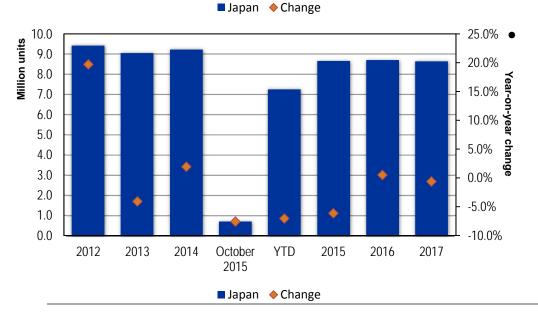
Asia outlook

The rest of the world

Questions and answers

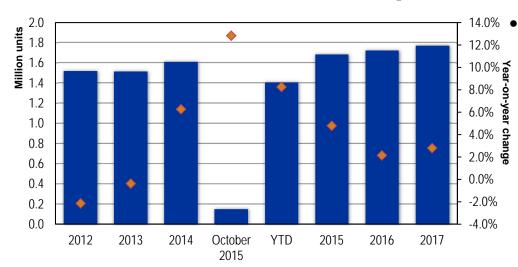


Japan sales and production outlook

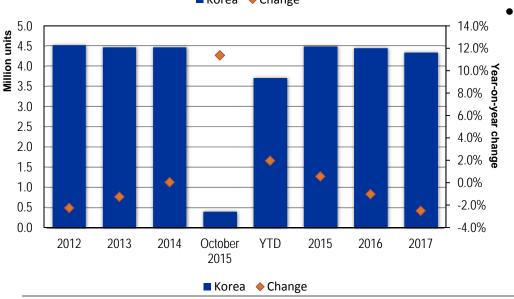


Japanese light vehicle sales fell 6.4% y/y in October 2015 to 374,964 units, mainly because of the negative payback effect from the April 2015 minivehicle tax hike. Most Japanese OEMs except Toyota reported y/y sales contractions; for example, Nissan was down 6.1% and Honda dropped 6.5%. On the other hand, Toyota (including Lexus) rose 3.0%, owing to sales of the new Sienta minivan. Import car sales were down 9.9% y/y, mainly because of Volkswagen (VW)'s deteriorating brand image, including the Audi brand. The Japanese sales outlook for full-year 2015 projects a 9.3% decline to 4.96 million units.

Production in Japan and Korea declined 1.6% y/y in October. Japan decreased 7.6% because of stagnant domestic demand, particularly for minicar models, which has contributed to the sharp 7.1% decline in YTD production. Full-year 2015 domestic production will shrink 6.2% to 8.66 million units. Favorable export circumstances due to the depreciated Japanese yen will encourage Japanese OEMs to increase exports from Japan, which will moderate domestic production's downward trend.



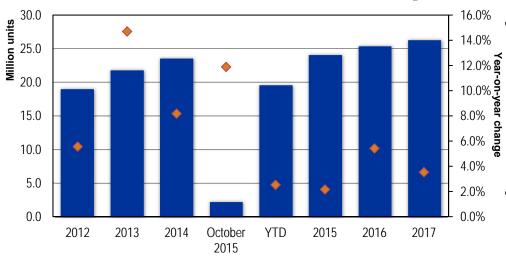
South Korea sales and production outlook



■Korea ◆Change

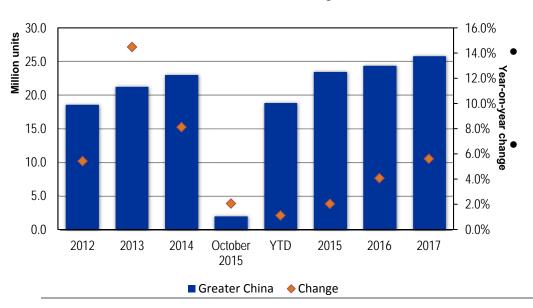
Korean light vehicle sales grew 18.7% y/y in October 2015 to 158,985 units. Most domestic OEMs except Renault Samsung posted y/y increases. Hyundai was up 16.6%, while Kia was up 25.9%. Imported car sales continued to perform well, up 6.0% y/y. Overall YTD sales for the Korean market were up 8.9% with 1.42 million units sold, compared with the same period in 2014. However, VW poses some concerns on the market based on its sales, down more than 46% (y/y).

Production in Korea increased 11.4% in October, mainly because of the government cutting the consumption tax on automobiles. YTD production has also maintained its momentum, increasing 2% y/y. Domestic demand has driven domestic production because of the consumption tax cut and the popularity of SUVs, while exports have struggled because of lower demand in emerging markets such as Russia and Brazil. Full-year 2015 domestic production will grow 0.6% to 4.49 million units, thanks to a healthy demand for SUVs in both the domestic and export markets, although General Motors Korea continues to suffer from Chevrolet's withdrawal from Europe.



Greater China <a> Change

Greater China sales and production outlook

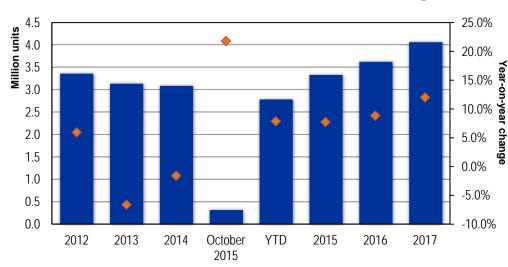


In In October 2015, Greater China light vehicle sales increased 11.9% y/y to 2.23 million units. YTD passenger vehicle sales in mainland China have increased 5.6% to 15.33 million units. After sagging for several months in a row, most mass-market automakers have gotten a boost from the central government's decision to reduce the purchase tax on small vehicles, which took effect on 1 October.

We are looking at annual sales of 23.60 million units for 2015 in our latest forecast, reflecting growth of 2.2% compared with 2014. We will not rule out a further upgrade in the vehicle sales forecast if we see further positive signs ahead.

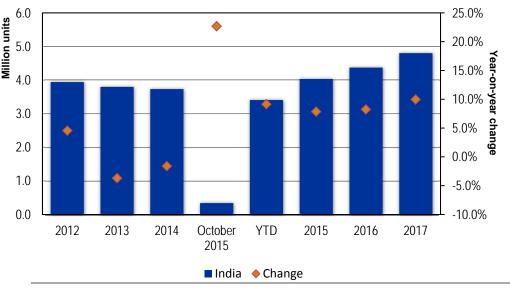
Light vehicle production in October in Greater China is estimated at 2.04 million units, an increase of 2.1% y/y, while YTD production is up 1.1% y/y, at 18.86 million units.

Light vehicle production is expected to get a boost from a tax cut for smaller vehicles, which has been in effect since 1 October 2015 in the mainland China market. The SUV segment is expected to benefit as well, but not as much because of large-displacement vehicles taking up a majority of the segment's market share.



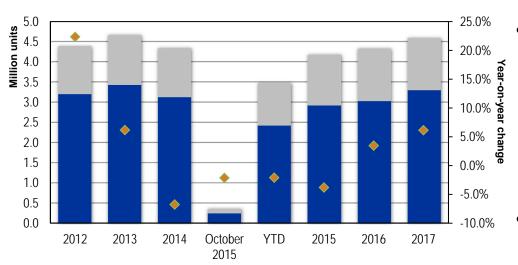
India/Pakistan sales and production outlook





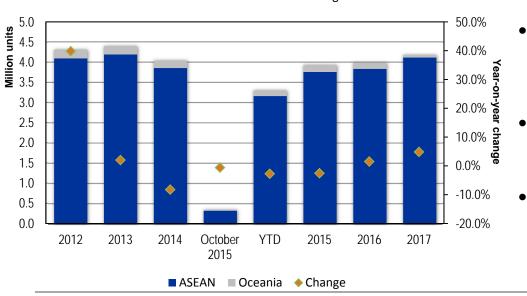
In October, Indian subcontinent light vehicle sales grew a stunning 21.8% y/y, while in India, sales grew 19.9% y/y. Passenger vehicle sales in India exploded, signaling pent-up demand in the country. However, light commercial vehicle sales grew much slower—just 4%—owing to the slow industrial recovery in India. The growth in new car sales in October can be attributed to the festival season, new model launches, lower inflation, and high consumer sentiment. We are forecasting growth of 5.7% in 2015, or 3.11 million units.

In October 2015, Indian subcontinent light vehicle production grew 22.7% versus October 2014, with 356,000 units produced. In India, production expanded on the back of festival season demand. With several auspicious buying days, the Indian automotive market registered strong growth in October. We expect further growth in the coming quarter. November will have more holidays in 2015, which enabled car manufacturers to increase production in October to fulfill upcoming demand until Diwali. In Pakistan, strong demand for the Toyota Corolla and the Punjab government's taxi scheme are supporting production in the country. For the Indian subcontinent, we expect production to reach 4.0 million units in calendar year 2015, up 7.9% y/y.



■ ASEAN ■ Oceania ◆ Change

ASEAN/Oceania sales and production outlook



- October 2015 light vehicle sales in the markets of the Association of Southeast Asian Nations (ASEAN) dipped 2.3% compared with October 2014 to 255,000 units. For full-year 2015, the ASEAN market is expected to decline 6.7% to 2.92 million units. Thailand light vehicle sales declined 6% y/y in October to 64,000 units, the smallest y/y decline in 2015. Indonesia's car market dropped 4.4% month on month in October 2015 to 81,000 units.
- In Oceania, new vehicle sales finished up 3.6% y/y in October 2015, an average result.
- In October 2015, ASEAN light vehicle production slightly declined 0.7% y/y to 330,610 units. Full-year 2015 production is expected to decline 2.5% y/y to 3.76 million units.
- Thai light vehicle production increased 8.4% in October, and YTD production slightly increased 1.5% versus the same period in 2014.
 - Indonesian light vehicle production plunged 16.7% y/y in October 2015, primarily because of the sluggish domestic car market and slowing economic growth.

Contents

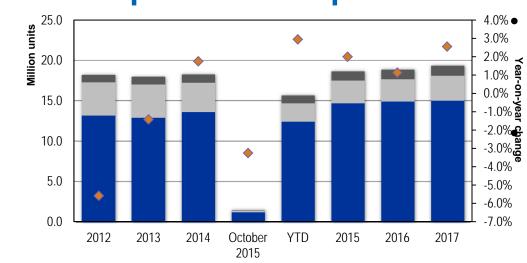
Macroeconomic outlook

Global sales and production outlook

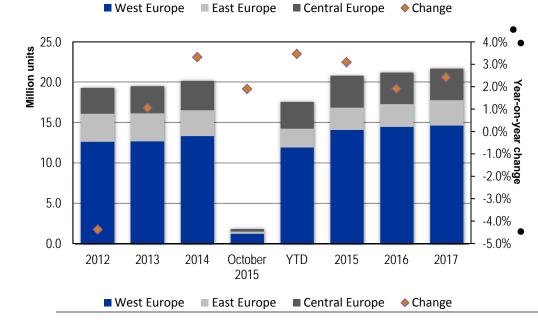
Asia outlook

The rest of the world

Questions and answers



Europe sales and production outlook

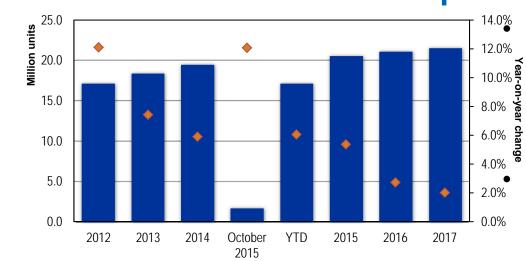


In October 2015, European sales declined 3.3% y/y to 1.52 million units. Western and Central European sales suffered a clear slowdown at only 3.1% y/y, while the situation in Eastern Europe remained depressing (down 29.2% y/y).

In the YTD, the European continent grew 2.9% y/y. Despite October's deceleration, Western and Central Europe confirmed they are rebounding, rising 8.0% y/y. The general environment is supportive (with, notably, quantitative easing from the European Central Bank and lesser pressure on households' wallets thanks to relatively low resources prices). Meanwhile, Eastern Europe remains in dire straits.

Within the European Union (plus Turkey) perimeter, production increased 7.2% during the first 10 months compared with the same period a year earlier The seasonally adjusted annual rate (SAAR) of production is now above all pre-2007 levels, at the 19.6-million-unit mark. We expect growth of 4.8% in the third quarter and 6.8% for the full year. For the Commonwealth of Independent States (CIS), output is expected to decrease by 29.0%.

Looking at total European production, the YTD performance is up 3.5%. We expect an increase of 1.4% in the fourth quarter and 3.1% growth on an annual basis.



North America sales and production outlook



■ North America ◆ Change

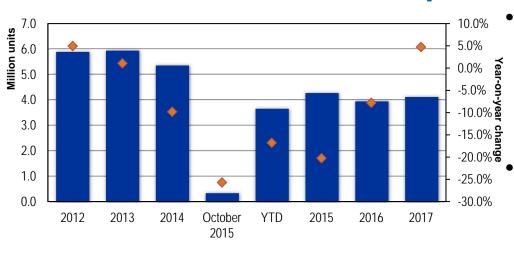
Light vehicle sales in North America continued their record-setting pace in October. On the heels of an impressive 14.7% increase in September, regional sales were up 12.1%, with demand growth spread over all the countries. With momentum expected to last as we exit 2015, sales in the United States and Canada are on pace to break annual volume records.

Regional growth reached 6% in 2014, with volume of 19.51 million units. With the strong October results, regional sales volume in 2015 is projected to reach 20.5 million units.

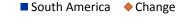
 North American production in October 2015 increased 1.0% y/y, or 16,259 units, with 1.64 million units produced, which translates to a SAAR of 17.3 million units.

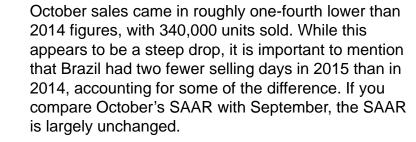
As US sales and North American production reach record levels in 2016, the lower growth-rate environment points to increasing competition, with intensifying pressure to not only maintain, but grow share.

• Despite strong October sales, US inventory increased 4.3%, or 145,733 units, from a month earlier, with inventory at the end of October at 3.55 million units on hand, or a 68-day supply.



South America sales and production outlook





We caution clients to expect vehicle demand to continue deteriorating into 2016, with a very modest recovery beginning in 2017.



Although production in South America soared 9.1% in October 2015 compared with September 2015, October's y/y decline hit 27.6%. South America built 259,645 light vehicles. In Brazil, where 76% of the total was built, output was down 28.8%.

Exports from Brazil skyrocketed 71.9%, but did not help reduce inventories below 50 days of sales. On the other hand, weak demand in Brazil made exports from Argentina shrink 48.7%, and Argentine production was down 25%. We expect 2015 to close marginally above 3 million units built in South America.

Contents

Macroeconomic outlook

Global sales and production outlook

Asia outlook

The rest of the world

Questions and answers

Questions and answers

To ask a question, please type your question in the "Ask a Question" box within the webcast system and click "Send."

Save the date!



Thursday, 17 December 2015

- Asia session
 - 11:00 a.m. Japanese Standard Time
- Europe and the Americas session
 - 10:00 a.m. Eastern Standard Time (United States)
 - 4:00 p.m. Central European Time

Thank you for your participation

Masatoshi Nishimoto Masatoshi.Nishimoto@ihs.com

Charlie Chesbrough Charles.Chesbrough@ihs.com

Gao Tao Gao.Tao@ihs.com

Andy Bae Andy.Bae@ihs.com

Puneet Gupta Puneet.Gupta@ihs.com

IHS Customer Care:

Americas: +1 800 IHS CARE (+1 800 447 2273); CustomerCare@ihs.com Europe, Middle East, and Africa: +44 (0) 1344 328 300; Customer.Support@ihs.com Asia and the Pacific Rim: +604 291 3600; SupportAPAC@ihs.com

IHS[™] AUTOMOTIVE

COPYRIGHT NOTICE AND DISCLAIMER © 2015 IHS. For internal use of IHS clients only.

No portion of this report may be reproduced, reused, or otherwise distributed in any form without prior written consent, with the exception of any internal client distribution as may be permitted in the license agreement between client and IHS. Content reproduced or redistributed with IHS permission must display IHS legal notices and attributions of authorship. The information contained herein is from sources considered reliable, but its accuracy and completeness are not warranted, nor are the opinions and analyses that are based upon it, and to the extent permitted by law, IHS shall not be liable for any errors or omissions or any loss, damage, or expense incurred by reliance on information or statement contained herein. In particular, please note that no representation or warranty is given as to the achievement or reasonableness of, and no reliance should be placed on, any projections, forecasts, estimates, or assumptions, and, due to various risks and uncertainties, actual events and results may differ materially from forecasts and statements of belief noted herein. This report is not to be construed as legal or financial advice, and use of or reliance on any information in this publication is entirely at client's own risk. IHS and the IHS logo are trademarks of IHS.

