PowerTALK



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Worldwide News & Analysis

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North America Report

By Yosyf Sheremeta, Director of Product Management & Customer Experience

Strong Fundamentals, But No Clear Signs of Growth

This is excerpted from the Q3 2019 Update Bulletin prepared for PSR clients

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Yosyf Sheremeta

SUMMARY. During the first nine months of 2019, the economy remained stable and pure economic conditions as well as fundamentals in the region were favorable. Most industries performed very well, and the short-term outlook remains stable to flat for most market segments. However, we see many new developments that could suggest a shift in the trend.

Consumer confidence declined in September, following a moderate decrease in August. The Conference Board's

consumer confidence index stood at 125.1 in September. Per Lynn Franco, Senior Director of Economic Indicators at The Conference Board, "Consumers were less positive in their assessment of current conditions and their expectations regarding the short-term outlook also weakened. The escalation in trade and tariff tensions in late August appears to have rattled consumers."

Most major economic indicators--such as earnings outlook, revenue projections, capital spending, and technology spending –are down compared to just 3-6 months ago. The Federal Reserve made two changes (a decrease of 25 base points each time) to interest rates but has indicated that given macroeconomic performance and the state of the economy, future rate cuts in Q4 2019 are unlikely.

The reduced optimism about the overall U.S. economy likely reflects continued uncertainty about trade policy and weaker global economic growth.

Trade-related issues continue to spook the markets, and we expect such uncertainty to continue over the short to near term. Furthermore, we do not expect any major trade deals to take place in 2019-2020. Some minor agreements or temporary policy deals will keep the markets on their feet. If the economy continues on this path, it could enter a recession in 2020. Tariffs on Mexico and China could be major reasons for this to happen as we look at the impact China's retaliation has had on American soybean farmers.

The US economy is still growing; however the job growth has been flat to steady. The reported number for August was 130,000. Government reports from Sept. 6, 2019, showed a healthy unemployment rate at 3.7%. This rate was steady for the past three months. Employment continued to show steady numbers in several industries, including mining, manufacturing and transportation. Job growth in these industries has moderated thus far in 2019 compared with 2018.

As of Sept. 6, 2019, the labor force participation rate, at 63.2%, and the employment-population ratio, at 60.9%, were slightly higher from the previous



Click Here To Go To Page 1

North America Report Continued from page 2



quarter. We estimate the labor market will be stable for the remainder of 2019 with a projected unemployment rate of 3.8%.

The general economy in the U.S. is in its tenth year of growth, and overall markets are still performing well. This has been an uncommon economic cycle with a very prolonged, low and slow recovery. At the same time, we see that some segments experienced a series of shorter cyclical growth patterns within a growth cycle.

Across all market segments, we expect overall total OEM equipment production numbers to be almost flat for 2019, which is in line with our previous projection in Q2 2019 at 0.76%. We see an almost flat to slightly lower level of overall activity in 2020 at -2.8%, as the overall economy reached its peak in productivity, and as demand levels decline going into 2020-2021.

Across other markets, we forecast that short-term growth is expected to be flat to slightly positive at low-single digits annually for some segments such as Construction and Industrial, with the mining sector performing better than others.

The Agricultural segment experienced setbacks in H1 2019 and has not yet delivered the promised recovery, but we expect activities to improve in 2020-2022. Other segments, such as Passenger Cars, and Minivan/SUV, experienced a slowdown in 2018 and will further turn into negative territory in 2019-2020.

AGRICULTURAL. For the overall segment in 2019, we expect a decline of 3.7%. The agricultural machinery market will remain on the recovery trend going into 2020-2023 with mid-single digit rate of expected growth.

CONSTRUCTION EQUIPMENT. Our most recent overall projection on equipment and machinery production is rather flat to slightly positive at 0.8% in 2019, compared to 2018; this is slightly lower than our projections from last quarter (at 1.2%). With future uncertainty in the economy, we project rather flat growth at 0-1% over the next few years.

Extremely low housing inventory levels and high demand also help drive the prices and the segment forward. A strong economy certainly has a major impact on the high level of demand. A word of caution came from home builders when they reported reduced housing starts during June of 2019, a trend that has continued since the start of the year. Additionally, in some regions the housing market became buyers' market, which signals temporary oversupply.

Major OEMs in the Construction and Industrial segments reported significant increases in orders and activities in 2018 and 2019, but future demand seems to be tapering off, mainly due to overall economic uncertainty.

As in the Agricultural sector, we have started to see the introduction of new technologies and electric drive types. We project this trend will rapidly increase over the next few years, and it may start gaining significant market share within 5-10 years.





North America Report Continued from page 3

Given current market trends and economic conditions, PSR does not project any rapid recovery of machinery equipment for the mining sector, due to the prolonged market decline and stagnation.

INDUSTRIAL. We see very similar trends in growth for this segment, with a gain of 1.4% in 2019 over 2018. This rate is slightly higher than previously projected in Q2 2019. The overall growth dynamic is closely mirroring the Construction segment. The main drivers for the segment are material handling and forklift applications, where the demand remains strong.

MINING EQUIPMENT. The main catalysts for the change have been increased commodity prices, new developments within the oil and gas industries and speculation on future administration policies and infrastructure spending.

We see overall positive growth for the segment in 2019-2025. Given current market trends and economic conditions, PSR does not project any rapid recovery of machinery equipment for the mining sector, due to the prolonged market decline and stagnation. Instead, it is shaping up to be a long but steady recovery. It will take several years for the industry to reach its previous production levels.

Consumer sectors, including **LAWN AND GARDEN**, **PASSENGER CARS**, **MINIVANS AND SUVs** as well as **RECREATIONAL PRODUCTS**, continue to benefit from the strong economy. These segments performed very well over the past few years (2016-2019).

LAWN AND GARDEN segment shows steady demand, and the growth trend will remain flat to positive in 2019 at 0.8%, shifting into a slight downward trend at -2.5% in 2020. The key drivers for this segment are solid housing starts and a strong economy; however, lower housing starts will slow down the growth in this segment.

PASSENGER CARS AND MINIVAN/SUVs segments have experienced a slight slowdown in demand since late 2016. New vehicle sales as well as profits continued to decline in 2019. August YTD 2019 Passenger Car sales registered 8% decline vs 2018 YTD. Most of the drop was caused by waning interest in compact cars, mid-size sedans and full-size cars. Consumer preferences are shifting to roomier rides, and steady, low gasoline prices have given confidence in buying larger vehicles (SUVs)

Minivan/SUVs segment showed better sales growth, as many customers switch from cars to SUVs. Minivan/SUVs segment registered 4% growth YTD 2019.

Overall, for 2019 we expect the Passenger Car segment production volumes to be negative at -7.5%, as many consumers transition into the small SUV sector. Additionally, the average lifespan of a vehicle remains above 11.6 years and that does not add to the demand for new cars. The key drivers for longer average vehicle life are improved overall quality and durability of the products.

Many consumers have switched from a car to an SUV, and that has helped to drive demand for the segment even more. The production rate for 2018 was positive at 6.8%, a very healthy overall production number in comparison to record high levels and demand in previous years.





North America Report Continued from page 4



We project that this growth trend for Minivan/SUVs will continue in H2 2019, but at a slightly lower annual rate of 3.8%. We see high replacement rates playing an important role that will drive overall growth. The smaller size SUV market is rapidly gaining momentum vs. large SUVs with many products coming from major global OEMs. We expect this niche market to continue to develop and be solid in the next few years with many more new product offerings from major OEMs.

Another point worth mentioning is the adoption of electric vehicles, which has been gaining ground very rapidly. Most OEMs have--or will have--solid electric product offerings within a couple of years, and we expect to see a more rapid increase in sales of electric vehicles.

At this point, the overall share of electric vehicles is still insignificant, but it is growing very rapidly; we expect the trend will accelerate much faster over the next five years. While we expect electric cars to gain in popularity, they will not gain any significant share of the market in the near term.

Considering the rise of public transportation during the last decade, we believe the personal transportation segment reached its peak in 2018, but that it will remain healthy to slightly negative over the next couple of years. We forecast production levels in North America for Cars and SUVs together will decline 2-3% in 2020.

MEDIUM AND HEAVY VEHICLES. While demand for medium and heavy commercial trucks remained very strong this year, a slowdown in demand has started and PSR expects significantly lower class 8 truck production in 2020 as a result of a slowing economy, lower freight rates, uncertainty surrounding the tariff situation and an overcapacity of heavy trucks in the market.

We estimate the growth rate for the MHV segment in 2019 to be about 5.1% above 2018, which is in line with our previous quarter projections. Going into 2020, the segment will experience a decline in the production rate of -13.3% vs 2019.

POWER GENERATION. Things look good for this segment but underlying weaker global economic conditions will put pressure on the power generation markets. According to PowerTrackerTM, our quarterly survey of 200 North American dealers, when the economy turns sour, generator sales are one of the first items to dry up.

We can see this concern reflected in the power generation market, which appears to be at a turning point. Overall, the power generation production market was up 0.9% in 2018-2019, but considering all fuel types and power ranges, we are projecting it down about 1% over the next year. Traditional fuel types are going to bear the brunt of the downturn. Diesel was about flat over the last year but is projected down 1.8% over the next year.

We are forecasting the strongest growth in the 301 to 500 kW and 501 to 1000 kW ranges for LPG & natural gas at about 2%. The weakest growth will be in the very largest power ranges which will be about flat, with all other power ranges growing between 1 to 2%. For more information, please our detailed analysis on the segment, published in Diesel Progress, September 2019 edition.





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RECREATIONAL VEHICLES This sector follows consumer sector trends and is expected to add 5.5% in 2019 and a decline of 2.7% in 2020. The key drivers for the segment are a peak in economic cycle, higher interest rates as well as a change in demographics.

RAILWAY. This segment trend is flat (up 0.5% to 2.0%), mainly following the natural (organic) rate of replacements. **PSR**

Europe Report

Innovation Is the Name of the Game at Agritechnica 2019

Here's a complete report on Agritechnica 2019 with photos.

John Deere Wins Innovation Award at Agritechnica 2019

By Dalibor Sablic, Senior Business Development Manager – Europe



Dalibor Sablic

HANNOVER, Germany-- The impressive Gold Award for Innovation at the Agritechnica 2019 Show was awarded to John Deere for its electro-mechanical power split gearbox.

Stepless transmissions with a hydrostatic-mechanical power split have been used in agricultural tractors for over 20 years. Previously, additional generators for electric drives with a higher power requirement were installed on tractors (fan, compressedair/air conditioner compressor, etc.) or on implements.

The eAutoPower gearbox for the new 8R large tractors from John Deere represents the first electro-mechanical power split gearbox in agricultural technology. Technically, the hydro unit (pump/motor) is completely dispensed with; instead, two electric motors are used as a continuously variable actuator.

Used in combination with an axle drive on a manure spreader, the results in practical use include, among other things, higher traction, reduced slip and improved track guidance on side slopes.

Innovation Is the Name of the Game at Agritechnica 2019

By Emiliano Marzoli, Senior Business Development Manager - European

HANNOVER, Germany--For many years, Agritechnica has been growing and strengthening its role as the top European agricultural trade show. Despite the struggles that the industry is facing, with declining order books and a less than enthusiastic outlook for 2020, Agritechnica 2019 held here Nov. 11-16, 2019, reaffirmed its position as the most important ag tech event in Europe. The show reported 2,820 exhibitors and 450,000 visitors, more than 130,000 of them from outside Germany.

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Europe Report Continued from page 6

It is no a surprise that the focus of [Agritechnica] was on electrification and automation. OEMs and component suppliers brought many innovations, with sustainability and efficiency as key factors in the development of the industry. It is no a surprise that the focus of the show was on electrification and automation. While the former is still far from being a practical solution for the entire ag industry, the latter has consolidated as essence of farming and it's rapidly evolving in more autonomous vehicles.



Emiliano Marzoli

BONDIOLI & PAVESI introduced their new **Continuously Variable Transmission Unit (CVT)**. The proposed transmission won the award Systems & Components Engineers' Choice

Trophy organized by DLG (German Agricultural Society). The

CVT splits the machine's drive shaft between the tractor's power take-off (PTO) and the machine and can be used for any applications where the speed of the implement needs to be continuously varied to match different working conditions – while the speed of the tractor PTO remains constant.

One of the benefits claimed by the company is an increased productivity of the machinery. The CVT unit can adapt the speed according to the task required by the implements, independently from the engine speed. The high efficiency and the increased performances allow for lesser fuel consumption. The unit is coupled with an electronic control unit made by Bondioli & Pavesi, that monitors the CVT functions.

Dana Incorporated brought many innovations to their stand and in many products showcased around the fair. The Spicer® 980 independent suspended axle is featured on the Fendt 942 Vario tractor, the winner in the premier "Tractor of the Year" category. Dana also supplies the front axle for the Fendt 314 Vario Profi+, which topped the "Best Utility" classification.

Additionally, high-precision gears and shifting solutions from Dana are used in the transmissions of the New Holland T 4.110 N, which was named "Best Specialized" tractor, and the New Holland Methane Power Tractor, which was honored as the "Sustainable Tractor of the Year."

Dana was showcasing drive systems for telehandlers and field sprayers to illustrate the company's modular approach for seamlessly packaging hybrid and electric drivetrain solutions into current internal combustion vehicle architectures. The system comprises Spicer® Electrified™ e-Axles and e-Gearbox that in combination with Dana's SpicerSmart Suite™ Intelligent Load Monitoring System (ILMS) allow increased safety and productivity.

Another engine introduced at Agritechnica was the F28. It delivers maximum power of 55 kW at 2,300 rpm and maximum torque of 375 Nm at 1,400 rpm. Compliant with Stage V and Tier 4 Final emission standards, F28 takes advantage of FPT's ultra compact after-treatment solution, which uses a Diesel Oxidation Catalyst (DOC) + Diesel Particulate Filter (DPF) for the European market, and a DOC for North America, maintaining the same packaging for both regions.





Europe ReportContinued from page 7

Agritechnica
posted impressive
attendance
numbers. More than
450,000 visitors and
2,820 exhibitors
participated.

Following its strategy of offering multi-power solutions, FPT Industrial is offering a 100% Natural Gas version of F28, with the same displacement and interface as the Diesel version, using common base components, and a 3-way catalyst as the after-treatment system. The F28 NG will further reduce pollutant emissions to enable even more sustainable agriculture

Agritechnica posted impressive attendance numbers. More than 450,000 visitors and 2,820 exhibitors participated. While international visitors rose to 130,000 (+18% vs 2017) the overall figures were down slightly compared to last year (-2% in total visitors). This is in line with the general feeling of the market.

2020 forecast for machinery sales is flat to slightly negative compared to 2019. And yet another confirmation of the current state of the Ag industry comes from the exhibitor and visitor surveys organized by DLG.

These trends are reported in our machinery production forecast database, **OE LinkTM**. If you need more information about the agriculture industry, or any other power product segment, please contact us; we'll be happy to assist you with your market intelligence needs.

Electrification hybrid technology

Although not every application is suited to early electrical adoption, such as larger tractors and combines, Electrification is a hot topic for the Agricultural sector. Hybrid options seem to be slightly favored when it comes to internal combustion alternatives for mid-sized applications.

Powertrac demonstrated this option at Agritechnica 2019 with their new hybrid tractor concept. Steyr, the premium agricultural brand of CNH partnered with FPT Industrial to create the "Steyr Konzept" centered around a modular hybrid electric drive, comprising a highly efficient diesel engine, a generator and five electric motors.

New models and technology

With the introduction of Stage V for off-road applications between 56 to 130 kW next year, we have seen a number of revamped models to accommodate the new Stage V engines. Since this has already been done for other models outside of this range at the start of this year, the transition is pretty smooth. We also had a chance to see the X9 twin rotor combine by John Deere designed to be the widest body combine on the market, while staying within EU directives. We will have to wait until July to get the final details.

Staying with John Deere, they have introduced an alternative to hydrostatic drives; they have basically replaced the hydraulic part of the engine with electricity. It is still early in the product life cycle to determine exactly what the implication of this product can have, but it could have big implications.

Finally, John Deere has teamed up with Volocopter, the Germany start-up company, to develop a drone for pulverization as an alternative to helicopter





Europe Report Continued from page 8



pulverization. The drone can perform this task much more efficiently with less spread and could be very useful in fields close to habitations.

Autonomous Concept Vehicles have made their way into the 2019 Agritechnica. Case brought their autonomous tractor and John Deere brought their autonomous sprayer. These are still in the early stages, but it is good to see, in this current climate, OEMs are opening up to many different solutions for the future. **PSR**

Data Point: U.S. Commercial Zero Turn Mowers 383,700

By Carol Turner, Senior Analyst, Global Operations

This is the estimate by Power Systems Research of the number of commercial zero turn mowers that will be produced in the U.S. in 2019.

This information comes from industry interviews and from two proprietary databases maintained by Power Systems Research: **EnginLinkTM**, which provides information on engines, and **OE LinkTM**, a database of equipment manufacturers.

Market Share: With combined plant totals of 22.5%, **MTD** leads in production of zero turn mowers in the U.S. In second position is **Excel Industries** with 9.5%, and in third place is **Bad Boy** with 8%.

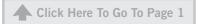
Exports: Collectively up to 30% worldwide

Trends: In 2018, production of zero turn mowers in the US was flat, slipping less than 1% from 2017. Expect production to gain 4% in 2019 over 2018. The gain is attributed to the demand for new products that enhance overall mowing productivity with increased mowing speeds. Zero turn mowers cover a lot of ground quickly, making them a growing favorite of landscapers and homeowners with large lots. In fact, zero turn mowers are designed to cut grass nearly twice as fast as other mower styles. Production is expected to gain an additional 5% over the next 3-5 years. **PSR**

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With significant production cuts in Argentina and Brazil, MWM has struggled to continue supplying independent OEMs in several segments.

Brazil/South America Report

By Fabio Ferraresi, PSR Director, Business Development, South America



Fabio Ferraresi

Volvo Cars Plans To Invest in EV Charging Stations in Brazil

Volvo Cars said it plans to greatly expand its network of 125 Brazilian charging stations in partnership with big retail groups and parking businesses. Expansion plans call for operating 500 stations within a year. In São Paulo city, there would be one re-charging station at every 9.7 km.

Source: Automotive Business Read The Article

PSR Analysis: Volvo is moving beyond the infrastructure bottleneck by setting up its own charging network to attract EV enthusiasts. Volvo currently holds 22% of EV/HEV sales in Brazil, but its goal is to reach 40% in 2020, with sales of 4,000 units. This is totally in line with the global strategy of the company that is focusing on pure EV and HEV.

MWM Closes Plant in Argentina

The economic crisis in Argentina has hurt the engine powered markets in that country, and MWM has decided to close the plant in Jesus Maria at Province of Cordoba, Argentina, and move the remaining production of parts and gen-sets to the plant in São Paulo, Brazil.

Source: Noticias Automotivas Read The Article

PSR Analysis: With significant production cuts in Argentina and Brazil, MWM has struggled to continue supplying independent OEMs in several segments. The volumes produced in Argentina do not justify keeping an operation there. Moreover, the economic and political conditions in Argentina are uncertain and the move of production to Brazil was inevitable.

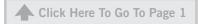
Honda Stops Producing Cars in Argentina and Will Focus on Brazil

Honda said it has stopped producing cars in Argentina but said it will continue producing motorcycles there. Production of the compact HR-V SUV at the plant of Campana, great Buenos Aires, has been moved to Brazil. The company has been producing motorcycles in Argentina since 2006, and the plant now produces several motorcycles: the Wave, CG 150 e XR 150L.

Source: G1 Read The Article

PSR Analysis: The low volumes because of the crisis in the second largest economy in South America set back the growth plans of the Japanese OEM in that





Brazil/South America Report

Continued from page 10



country. The volumes were never even close to those in the company's business plans. In Brazil, despite the crisis from 2014-2017 and the volumes below business plan, volumes are strong, and the Honda brand is well recognized, providing profitability and room for growth. **PSR**

China Report

By Qin Fen, 秦奋 PSR Business Development Manager-China. 业务拓展经理



BAIC, Aulton To Cooperate on 20,000 Beijing Electric Taxis

Beijing Automotive Group Co., Ltd. (BAIC) and Aulton have signed a strategic cooperation pact to accelerate and expand battery-powered taxis in Beijing and the rest of the country. The program also will explore battery swapping and its application in commercial vehicles. A battery swap program involves replacing

Qin Fen

batteries at a public station rather than charging individual vehicle batteries.

Source: D1EV Read The Article

PSR Analysis: When it comes to massive implementation of electrification in public transportation, it's hard to skip Beijing. The city is the place where such a policy is first published. And the rest country follows what happens in Beijing—although Shanghai may disagree. When China makes the move in the EV market, the rest of the world will follow.

What's important about this news is that it will significantly change the way people look at battery-powered cars, especially if the rest of the country follows Beijing and builds battery swap stations downtown. What used to be a subsidized EV will soon be dropped because the demand is too big.

Think about it, how many days in a week do we commuters drive out of the cities? When major hubs of cities are surrounded by such quick switch stations, like gas stations today, will you be concerned about distance? Distance will cease to be a major problem. Besides, the battery swap stations are not going to put some old batteries in your car, are they?

Currently there are fewer than 4,000 EV taxis with quick battery swaps running in Beijing. Imagine when all of China has such taxis, if everything goes well. Hmm, I'm going to add them to my stock portfolio. **PSR**

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China Report Continued from page 11

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新闻来源:第1电动 - 阅读原文链接

PSR分析: 还记得中国第一个开始实行交通电动化的城市吗? 大家可能记得不是很清楚。但说到在公共交通领域最早开始大规模推广电动化的城市,北京是跳不过去的。当然了,这座城市也是公交电动化政策首先发布的城市,所以说,基本上北京怎么做了,全国各地很快也会这么做(上海可能会不同意……)。而电动车方面,中国怎么做,基本上也就是世界在怎么做了。

这个新闻令人兴奋或者震惊的地方在于,如果全国其他城市效仿北京,在城市中心建设电池换电站,这将会极大改变人们对于电动汽车的许多负面印象,以往需要补贴才能卖出去的电动车,很快在市场上会变得供不应求,因为对于大多数人来说,一周能有几天离开城市呢?当主要城市的连接点都布满了这种换电站,像加油站一样方便,你真的还会在乎电池跑不远这个事实吗?更何况换电站也不会给你换上跑不了几公里远的电池,对吧?

北京市目前已经有不到4,000辆快速换电的出租车在路上运行。想象一下全中国都跑着这种出租车的情形吧,如果一切顺利,不说了,我去买电池企业的股票去了。**PSR**

Far East: Japan Report

By Akihiro Komuro, Research Analyst, Far East and Southeast Asia 小室 明大 極東及び東南アジア - リサーチアナリスト

Japan Considers Compact EV Subsidies



Akihiro Komuro

Japan is considering subsidizing purchases of ultracompact electric vehicles to reduce traffic accidents involving elderly drivers. The industry ministry is weighing a maximum allocation of about US\$ 915 (100,000 yen) per purchase, government officials said. The one-seater and two-seater EVs are looked at as a way to provide Japan's rapidly aging population with an easier and safer means of mobility, particularly in rural areas where public transport is limited.

Ultracompact EVs, which are smaller than normal automobiles, are considered easier to drive and are designed to travel at comparatively low speeds. Drivers of ultracompact EVs require a regular driver's license and are only permitted to use a limited number of public roads in the country.



♠ Click Here To Go To Page 1

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The transportation ministry is looking at relaxing regulations in the current fiscal year that ends in March to allow the [EV] vehicles to be driven on most public roads.

The transportation ministry is looking at relaxing regulations in the current fiscal year that ends in March to allow the vehicles to be driven on most public roads. They are designed for use on short trips and are expected to play a key role in reducing the number of major accidents.

Source: The Mainichi

PSR Analysis: In recent years, there have been a series of fatal accidents caused by elderly drivers in Japan, and there is a movement for elderly people to turn in their driver's licenses. However, especially in rural areas where transportation infrastructure is scarce, it is a problem because there is no means of moving elderly people other than in cars.

Nissan's New Mobility Concept ultra-compact EV may solve this problem. In many cases, the maximum speed is less than 60 km/h, and it can be a single or two-person. The price is still around 1 to 1.5 million yen, but this price will go down as production increases. As the convenience of this class is recognized, it is likely that the compact EV will invade the market for mini cars, the smallest class in Japan.

PSR

極東 > 日本:

東京新聞:超小型EV購入に補助金 新移動手段

自動車メーカーが開発を進める1~2人乗りの「超小型電気自動車(EV)」について、経済産業省が購入時の補助金支給を検討していることが9日、分かった。高齢者の運転による深刻な交通事故や過疎化を背景にした地方の公共交通衰退が社会問題となる中、扱いやすい超小型EVは安全性が高い新たな移動手段として期待される。経産省は導入費用を支援して普及を促す狙いだ。補助額は最大で10万円程度となる可能性もある。軽自動車より小さい超小型EVは小回りが利き運転しやすく、速度も必要以上には出ない設計だ。

出典:東京新聞

PSR 分析: 日本では近年高齢者ドライバーによる死亡事故が相次いでおり、高齢者が運転免許証を返還する動きがみられる。だが、特に交通インフラが乏しい地方では、自動車を代替する高齢者の移動手段がないために、社会問題になりつつある。ここで紹介されているウルトラコンパクトEVはこの問題を解決する可能性がある。多くの場合最高時速は60km/h未満であり、一人乗りである。価格はまだ100万円から150万円程度だが、この価格は生産台数が伸びるにつれて下がるだろう。このクラスの利便性が認知されていくにつれて、今後コンパクトEVが現在の日本における最小クラスである軽自動車の市場を侵蝕する可能性は充分にある。PSR

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Far East Asia: South Korea

South Korea's EV Exports Double YTD

South Korean exports of electric vehicles (EVs) more than doubled in the first 10 months of this year on brisk demand from advanced markets.

The country's overseas shipments of EVs were valued at US\$2.57 billion in the January-October period, up a whopping 103.3% from a year earlier. EVs took up 9.2% of South Korea's total auto exports last month, up from 4.4% for the whole of 2018.

Given the uptrend, South Korea's EV exports are very likely to surpass the \$3 billion mark for all of 2019, compared with \$1.8 billion a year earlier.

Buoyed by more EV launches, South Korea's overseas shipments of rechargeable batteries climbed 4.6% on-year to \$6.19 billion during the 10-month period, according to data from the industry ministry and the Korea International Trade Association.

Source: Yonhap News Agency

PSR Analysis: The South Korean automobile industry suffers from sluggish sales, but EVs are growing rapidly. Exports have contributed significantly to this growth, especially in North America and Europe, the largest EV markets.

One reason for this growth is a successful pricing strategy. For example, Kona, Hyundai's EV flagship model, sells for about \$ 36,450, and it is competitive with other brands when comparing specs. **PSR**

極東 > 韓国:

1~10月のEV輸出額が前年比2倍に 年間30億ドル突破へ

韓国で自動車の輸出が伸び悩んでいるなか、電気自動車(EV)は健闘している。国内メーカーがEVへの投資を増やし海外マーケティングを強化していることに加え、先進国を中心に価格が下がり普及が進んでいるためで、EVが韓国輸出の新たな軸になっていると評価される。産業通商資源部や韓国貿易協会などによると、今年1~10月のEV輸出額は25億6600万ドル(約2800億円)で、前年同期比103.3%増となった。1~10月の自動車全体の輸出額が前年同期比6.7%増だったのと比べると、驚くべき成長を遂げたことになる。EVの輸出額は今年10月まで33カ月連続で前年同月に比べ増加している。この勢いなら、今年の年間のEV輸出額は初めて30億ドルを突破すると見込まれる。昨年は18億200万ドルで初の10億ドル台に乗せていた。

出典: Yonhapニュース

PSR分析: 韓国の自動車産業は全体として売り上げ低迷に苦しんでいるが、対照的にEVは急速に成長している。特に輸出がこの成長に大きく貢献している。



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最大市場である北米と欧州向けが伸びている。これは彼らの価格戦略が成功しているためと分析するのが自然だ。例えばHyundaiのEVフラッグシップモデルであるKonaは約3万6450ドルで販売されているが、スペックを比較すると他社EVとの競争力は充分にあると言える。このニュースは国内の自動車産業を勇気づけるだろう。PSR

Southeast Asia: Philippines Report

Philippines Consider Safeguard Duty on Imported Cars

The Philippine government is seriously evaluating slapping a safeguard duty on automobile imports following the surge in imports of completely built-up (CBU) cars to protect the local car manufacturing. Some believe the influx of CBU imports have reduced the number of car models assembled in the Philippines. Data show that the volume of imported CBU cars grew from only 153,000 units in 2014 to 270,000 units in 2018. Total imports for the period 2014-2018 reached more than a million units.

Because of the surge in CBU car imports, the Philippines lost its car assembly industry and the closing of automotive parts manufacturers pose a further threat to the remaining local auto manufacturing. Today, there are only a handful of car models being produced in the country, on CKD basis.

Source: Manila Bulletin

PSR Analysis: Many countries in Southeast Asia see the automobile industry as a key to their manufacturing industry and are working hard to protect the industry. At this stage, the government is still investigating, but the proposed change could have a major impact on Japanese OEMs and other automotive OEMs in Southeast Asia.

Japan, Thailand, Indonesia and South Korea are expected to be affected. In fact, most of the finished cars exported from Thailand and Indonesia to the Philippines are Japanese brands. Currently, the Philippines prohibits the import of used cars except in specific cases in order to foster its own automobile manufacturing and knockdown (CKD) industries. As a result, imports are inevitably centered on new CBU vehicles, but the domestic manufacturing environment has not caught up with growing domestic demand. **PSR**

東南アジア > フィリピン:

完成車輸入に制限措置要請 100万台流入、雇用損失を 危惧

フィリピンで完成車(CBU)の輸入増に懸念が出ている。業界団体は2014~18年に100万台以上が輸入されたことで、部品製造や車両組み立ての雇用が奪われたと主張。緊急輸入制限措置(セーフガード)の導入を求めた通知を貿易産業省に提出し、同省は影響を精査する方針を示した。CBU輸入の流入とフィリピンで組み立てられた車種の数の減少との間には因果関係があると





Southeast Asia Report Continued from page 15

いう主張がある。データによると、輸入されたCBU車の量は2014年のわずか 153,000台から2018年には270,000台に増加した。2014年から2018年の期間 の総輸入量は100万台を超えた。CBUの自動車輸入の急増により、フィリピンは自動車組立産業と自動車部品メーカーの閉鎖を失い、地元の自動車製造業 の残りにさらなる脅威をもたらしていると見られる。これまでのところ、CKDベースで国内生産されている車モデルは一握りである。

出典: Manila Bulletin

PSR分析: 東南アジアの多くの国では自動車産業を自国の製造業のキーであると考えており産業を守るために懸命だ。現時点ではまだ政府が調査をしているという段階だが、日本ブランドをはじめ東南アジアに進出している自動車OEMに大きな影響を与えるだろう。日本、タイ、インドネシア、韓国などが影響を受けることが予想される。実態として、タイやインドネシアからフィリピンへ輸出されている完成車はそのほとんどが日本ブランドである。現在フィリピンでは自国の自動車の製造やノックダウン(CKD)産業を育成するため、特定の場合を除き中古車の輸入が禁止されている。そのため輸入は必然的にCBUの新車が中心となるが、成長する国内需要に対して国内の製造環境が追い付いていない PSR

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India Report

By Ritvik Kulkarni, Research Analyst-India

EVs Here To Stay but Industry Needs Help To Expand

EVs today are undergoing a vicious cycle of high cost, low demand and low supply. **Read The Article**



Ritvik Kulkarni

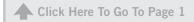
PSR Analysis: Electric Vehicles in India are still at a nascent phase when compared to global markets. Although there have been movements in the right direction, these EV movements have been slow.

Major OEMs are gearing up to launch their electric vehicles, most notably Bajaj's recent unveiling of the Chetak Electric scooter which will go on sale in January 2020. The return of the erstwhile popular Chetak as an EV is seen by many as a

step forward. The industry is still divided on their vehicle launches, and majors like Maruti Suzuki have postponed its EV launches by at least a year, citing lack of infrastructure as a major hurdle. However, incumbents like Hyundai, Tata and Mahindra all have multiple vehicles in the pipeline.

EV startup Ather Energy recently announced its arrival in the city of Chennai, the company's second venture after Bangalore. Another startup, Ultraviolette, has





India Report Continued from page 16

unveiled its second electric motorcycle which is being dubbed as India's first performance electric motorcycle. Both of these startups are backed by industry stalwarts Hero Motocorp and TVS Motors, respectively, signaling the differing mindsets OEMs have in India.

Although, the new launches by multiple OEMs are a look at the future, there remain many barriers to overcome, including:

- High battery costs leading to higher manufacturing costs.
- Higher prices for EVs when compared to traditional IC-powered vehicles.
- Lack of charging infrastructure and the concerns about range.

EESL, a major buyer that had tendered an order for 10,000 electric vehicles for government use, has recently cancelled the tender after multiple delivery deadlines were missed. The reasons cited were that the range specification in the tender was approximately 130kms on a single charge, and there are already several vehicles in the market that boast a superior range per charge.

All might not be gloomy, though, with multiple foreign OEMs such as MG motors, BYD etc., lining up launches soon as well as several states putting out orders for electric bus fleets, OEM partnerships such as the Toyota-Suzuki alliance that will work on battery technology, and French IBS planning to set up a battery manufacturing in India in partnership with Ion Energy.

With the government also is shifting focus on incentives for critical battery components, EVs are here to stay. While currently they may be undergoing a vicious cycle of high cost, low demand, low supply, with all the stakeholders working together, the industry can expect to move into a virtuous cycle of low cost, high demand, high supply.

Tractor Sales Show Healthy Growth, Demand Expected To Grow

Read The Article

PSR Analysis: An erratic and extended monsoon will be a boon as well as a bane for the Indian agricultural sector.

While the monsoon overall has been good, its uneven pattern means that it may not bode well for the Kharif crops. But being plentiful will certainly help the reservoir and the ground water levels. Adequate soil moisture conditions and an expected improvement in the MSP for rabi crops will bode well for tractor demand

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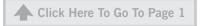


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In October, tractor production declined 26%, compared to October 2018. This is largely due to inventory correction practices adopted by OEMs.

in coming months. The Indian government increased the MSP of wheat, the most important rabi crop, by 4.6% over last year.

In October, tractor production declined 26%, compared to October 2018. This is largely due to inventory correction practices adopted by OEMs. Higher inventory levels and a softer demand led to production cuts across OEMs. Mahindra, the largest tractor maker in India reported a drop of 4% YoY in October, however, it had jumped a healthy 23% from September 2019 to October 2019. Escorts has also reported a marginal growth of 1.6%.

These growth figure indicate that festival season did bring some joy to the farm segment. The correction in retail inventory and channel sales has led to good retail sales and we expect this trend to continue in expectation of a good rabi season. The real tractor demand uptake will be seen around the months of April and May. **PSR**

Russia Report

By Maxim Sakov, Market Consultant, Russia

Mobile Phone Operators Invest in EV Charge Stations

The Russian electric car charge infrastructure is being developed by an unexpected source—mobile phone companies. For example, the Rostelecom company has installed 100 charge stations in Moscow. And another phone operator – MTS –has built 10 charge stations.



Maxim Sakov

The main reason for this investment is diversification. Rostelecom considers charge stations as a part of "Smart City" project, which it is developing in 50 Russian cities. **Read The Article**

PSR Analysis: The Russian electric car market is very small – only a few thousand units for the entire country. Unlike many other countries where the government provides direct subsidies and infrastructure investment, in Russia there are only a few

local initiatives, such as free parking in Moscow and tax exemption in some regions. Another reason: the cold climate is not good for car batteries.

Liebherr Plans Plans Several Projects in Russia

Prospects for several new projects by the German OEM Liebherr have been discussed in detail with the Ministry of Trade and Industry. Liebherr plans to start assembly of 220 ton dump trucks T264 and front end loaders L566. One more project under discussion is the production of cranes for "Arctic CPG-2". The base plant for the production is Kemerovokhimmash.



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In 2017, the OEM signed an agreement regarding local assembly of Liebherr machinery. The first dump truck produced under this pact was assembled a year later.

The first Liebherr plant in Russia was opened in 2011. It specialized in construction machinery parts and airborne production. **Read The Article**

PSR Analysis: Liebherr is following the path of OEMs such as Caterpillar, Komatsu and Hitachi, which are assembling machinery in Russia. For example, Caterpillar is making dump trucks and excavators in the St. Petersburg region. With the State strategy targeted to lock up the market for domestic manufacturers, Liebherr has a good chance to increase its local position. According to a recent speech by Russian president V. Putin, construction machinery is a segment with potentially very high demand in Russia (together with medical, telecom and garbage processing equipment, with a total forecast of US\$100 billion.)

Russian Speedboats To Be Equipped by Engines from Asia

Five years of sanctions have forced the builders of speedboats and small vessels to start shifting from European engines to ones made in Asia. With a lack of financing to develop their own engines for small fleets, International companies, like Volvo Penta, Yamaha, Mercury are looking outside Russia.

Currently, Russia does not produce world class engines for speedboats and small vessels. Local engine makers can supply relatively cheap and reliable engines in range of 100-300 kWt, but engines in the range of 300-700 kWt all are imported. Russian shipbuilders are looking to South Korea (Doosan) and China for these engines. With Chinese products, however, they face problems of product quality and communications with OEMs. **Read The Article**

PSR Analysis: Currently the State support measures targeted to creation of HHP engines (from 700 to 6500 kWt). Working samples for marine application have been presented by local companies Zvezda Energetica and UDMZ. If successful, after few years, the focus of attention should shift to lower power ranges. Meanwhile, the purchase marine engines from China could be a reasonable option, assuming that some Chinese OEMs will considerably improve their engine quality. PSR

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