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DATAPOINT: *North American Combines*

6,300

By Carol Turner, Senior Analyst, Global Operations

6,300 units is the estimate by Power Systems Research of the number of combines to be produced in North America during 2021.

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

Market Share: With 59% of total units produced (3,476 units), John Deere leads in production of combines in the U.S. In second position is Case (1,587 units) with 27%. Third Class Omaha with 520 units or about 9%.

Trends: In 2020, production of combines in North America decreased nearly 8% to 5,854 units. Production is expected to rebound 7% in 2021 to about 6,300 units. COVID-19 related factors played a role in the decline especially for parts availability and drop in orders for new machinery. Sales of combines picked up in Q4 2020 after a tough spring for sales.

Combines overall boost crop output and farm income. “The increase reflects farmer sentiment about the future of their operations. It’s a really good early indicator of whether folks are enthusiastic about where markets are headed,” says Curt Blades, senior VP of agriculture for AEM.

This is a favorable sign. A few years ago, farmers were reluctant to buy or trade in pricey equipment because of lower commodity prices. For instance, in 2017, production and purchases of new combines rebounded as portrayed in production figures. That gain can be attributed to an increase in commodity prices such as corn and soybeans that peaked in 2013/2014. Expect production to increase 10% by 2025. **PSR**

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Truck Production Index

By Chris Fisher, Senior Commercial Vehicle Analyst
and Jim Downey, Vice President - Global Data Products

Q3 2021 Truck Production Index (PSR-TPI) Falls 10.7%

St. Paul, MN — The Power Systems Research Truck Production Index (PSR-TPI) dropped from 131 to 117, or 10.7%, for the three-month period ended Sept. 30, 2021, from Q2 2021. The year-over-year (Q3 2020 to Q3 2021) loss for the PSR-TPI was 141 to 117, or 17%.

Power Systems Research TPI Truck Production Index

Except for China, all regions are expected to experience solid commercial vehicle demand growth this year and into 2022. Chinese heavy truck demand is expected to decline this year primarily due to the implementation of the China VI emission regulations that adds cost to the vehicles but no significant improvement in fuel economy.

Chris Fisher

Jim Downey

The PSR-TPI measures truck production globally and across six regions: North America, China, Europe, South America, Japan & Korea and Emerging Markets.

This data comes from OE Link™, the proprietary database maintained by Power Systems Research.

Global Index. Overall, medium, and heavy truck demand will finish the year on a strong note and continued strength is expected into 2022. On-going supply chain disruptions will continue to impact production throughout the rest of the year and well into 2022.

North America. While freight demand continues to be strong particularly in the consumer segment, the continued worker shortage along with on-going supply chain disruptions are hurting vehicle production across all segments. The production disruptions are expected to continue well into 2022. While the overall economy is expected to remain strong through next year, rising inflation will continue to be a concern moving forward. **PSR**

North American Report

Strong Growth Will Continue into 2022-23

By Yosyf Sheremeta, PhD, Director of Product Management and Customer Experience

The third quarter of 2021 brought steady economic activities and strong economic recovery in North America. Despite this strong economic recovery, many existing

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North America Report

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With the help of government support and targeted fiscal policies, the US economy is showing a strong comeback in 2021. Furthermore, it is on a positive trajectory to continue to grow in the next few years.

and new challenges developed. Pandemic-related supply chain disruptions, logistics backlogs, shortages within semiconductor products and new virus re-problems, labor market issues (shortages across service industry as well as skilled labor)- have contributed to slower growth in Q3 2021 than previously expected.

Yosyf Sheremeta

With the help of government support and targeted fiscal policies, the US economy is showing a strong comeback in 2021. Furthermore, it is on a positive trajectory to continue to grow in the next few years. There are many reasons for us to be optimistic about this trend. Our positive outlook is based on the reviews of key economic indicators, including GDP, unemployment, and inflation. In our previous forecasts, we discussed recovery trends for the post-pandemic period, and we called for a return of demand for most markets in 2021, especially during H2 2021.

During Q3 2021, we have witnessed a strong level of activities and a rebound for many industries. Despite the latest mandates and increasing mask regulations from local governments, business and public have adjusted quite well to these realities; service-oriented industries are gaining traction and that translates to an overall increase of economic activities across many industries.

We believe the current challenges and setbacks to the recovery are temporary. While the latest COVID variants spikes are expected to go down by end of the year, we also expect the logistics and supply chain challenges to improve significantly. While employment has significantly improved in the last few months, service-oriented industries are still experiencing significant labor shortages. The same challenges have also impacted manufacturing industries where factories can not find enough skilled workers to meet the current increased demand, which has been on the rise. **PSR**

Europe Report

By Christopher Bamforth, Analyst, European Operations

Volvo Launches Loader Made of Fossil-Free Steel

Christopher Bamforth

Volvo Group and SSAB have unveiled an autonomous loader made of fossil-free steel, claimed to be the world's first vehicle made from that material. Manufactured at Volvo Construction Equipment's facility in Braås, Sweden, this is said to be "just the start" as a few more will be produced in 2022 with mass production set to follow.

This machine is a load carrier for use in mining and quarrying and is built using a new fossil-free steel from SSAB. Volvo's CEO Martin Lundstedt has already said that this new machine is a first step in

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Europe Report

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incorporating this new steel in all of their products and components to help reach their goal of being completely carbon neutral by 2040.

Along with the electrification of its vehicles and machines, Volvo adds that it is determined to reduce the carbon footprint of its entire supply chain and this latest innovation is one step forward on this path.

Lindqvist says that this first machine is a true milestone in proving that it is possible to find carbon free alternatives and working together that transition is possible and brings results while ensuring high quality fossil-free steel.

Source: *Aggregates Business* **Read The Article**

PSR Analysis: We already knew about Volvo's engagement to be completely carbon neutral by 2040, and with this we most likely think about the engines and the drive train. This new initiative shows that not only are there more ways to reach this goal but that they are really analysing all the different elements that come together to manufacture their products.

Although this new steel is very interesting and promising it is still some ways away, projected to be mass produced and available on the market in 2026. This new technology has the potential to change the way we think of our materials and could be adopted by many manufacturers. At this stage, there are still some questions and tests that need to be met, but this really has the potential to be a significant change in the way our industry operates. **PSR**

Brazil/South America Report

By Fabio Ferraresi, Director Business Development South America

Fabio Ferraresi

Komatsu To Expand Autonomous Truck Operation in Brazil

In line with global trends of automatization, Komatsu is expanding its autonomous Truck operation in Brazil. It already has six trucks operating in the mining complex of Carajás (PA) and other four trucks will be introduced this year. Komatsu says the autonomous driving technology brings 40% savings on tires and brakes, 13% on overall maintenance and 15% on productivity, considering the elimination of stops for driver changing and rest.

Source: *M&T* **Read The Article**

PSR Analysis: Carajás is the biggest mining complex in the world. It makes sense that the leading edge of the technology is being used here. These trucks are a reality, and they will progressively replace trucks driven by people in the next few years in mining complexes such as Carajas and other big ones in Brazil and South America. **PSR**

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Brazil/South America Report

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Volkswagen Truck and Bus and CBMM To Develop Niobium battery for EV

Volkswagen Truck and Bus, part of the Traton Group, and CBMM, a Brazilian giant of niobium mining, announced an agreement to develop batteries with Niobium for Electric Vehicles. It promises to recharge a Truck Battery in less than 10 minutes and provide a traveling higher range. Volkswagen will start tests in 2022 to develop a functional vehicle with Niobium batteries by the end of 2022.

Source: *Revista Oeste* **Read The Article**

PSR Analysis: Primarily used to improve the strength of high grade steels, Niobium is also used for super conductors and has been tested by CBMM and Toshiba in batteries for three years with positive results. The solution applied for MHV may put Brazil in a strong position in MHV EV segment, since 97% of the Niobium reserves in the world are in Brazil. **PSR**

Motorcycle In-Service Population Grows in Brazil

During the pandemic, the number of motorcycles in Brazil grew with the demand for delivery and e-commerce and boosted other business, from clothes for motorcyclists to spare parts.

Source: *M&T* **Read The Article**

PSR Analysis: The effect is seen not only because of the incremental sales and consequent in-service population increase, but because of the profile of utilization that changed. Motorcycles in Brazil are used for last mile delivery and delivery in urban centers, because of the low cost of acquisition and the low cost of operation, flexibility, and agility in traffic. The pandemic accelerated some changes in e-commerce and food delivery and created some demands above the standards already in place. It's time for many to analyze and grab opportunities that sudden changes bring. **PSR**

China Report

By Jack Hao, Senior Research Manager - China.

China Faces Restrictions on Power and Production

The global energy structure has accelerated the adjustment to green energy, and the investment in traditional energy is insufficient. Under the influence of COVID-19, energy supply and demand are disrupted, exacerbating the contradiction between supply and demand, resulting in global power shortage.

China recovered from the epidemic earlier than many other countries and is now almost the only major manufacturer, so industrial power consumption has increased significantly. Power rationing is mainly to alleviate the power shortage

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In 2021, China's electricity demand will grow by more than 10%, which greatly exceeds the previously estimated demand growth of 6% to 7%.

and achieve the goal of energy conservation and emission reduction. China is dominated by thermal power generation, and there is a serious shortage of clean energy. There are still big problems in the energy structure.

Source: *Weixunso* **Read The Article**

Jack Hao

PSR Analysis: In 2021, China's electricity demand will grow by more than 10%, which greatly exceeds the previously estimated demand growth of 6% to 7%. At present, the substantial growth of power demand has put great pressure on power supplies. Coal accounts for about 70% of China's electricity consumption, but the output of coal is far lower than the demand for electricity.

For China's thermal power, the consumption of thermal coal required for power generation has remained high since last year, accounting for nearly 8% of domestic thermal coal imports, while overseas supply has declined. Domestic power plants are short of coal and coal prices are rising, resulting in losses and low enthusiasm for power generation

The power restriction on high energy consuming industries may aggravate the pressure of PPI rise, thus suppressing production and dragging down China's economic growth in the second half of the year. The slowdown in production caused by supply side restrictions may also affect the global market and push up global inflation.

Energy consumption per unit of GDP and total energy consumption are two leading indicators. In order to achieve the double control goal of annual energy consumption, various restrictive measures include strictly controlling the growth rate of total energy consumption.

Switching off and power rationing will bring certain negative effects to some high energy consuming industries, but it is good for photovoltaic, green power and other energy industries, so as to accelerate the transformation of energy structure and bring new demand and opportunities to the new energy supply chain. **PSR**

Far East: Japan Report

By Akihiro Komuro, Research Analyst, Far East and Southeast Asia

TSMC Plans Plant in Japan, Operation Set for 2024

TSMC, the world's largest semiconductor foundry, has announced that it will build a new plant in Japan, with plans to begin construction in 2022 and mass production in 2024. The Sony Group and Denso Corporation are expected to participate in the construction of the new plant.

The new plant will produce logic semiconductors with a circuit line width of 22 to 28 nanometers. They are generally used in signal processing that requires large

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Far East Report

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amounts of data, and in high-performance microcomputers used in car control. TSMC envisions the site adjacent to the Sony Group's image sensor plant in Kumamoto Prefecture as the planned construction site.

Source: The Nikkei

Akihiro Komuro

PSR Analysis: The Japanese government has been working to attract the project since 2019 and plans to allocate subsidies for this announced plan. According to current reports, the Japanese government is planning to subsidize about 500 billion yen out of the total investment of about 1 trillion yen for the new plant, although the subsidy is being considered from various angles as it may be questioned whether it is consistent with WTO rules.

The TSMC plants that Japan relies on for procurement are concentrated in Taiwan, and against the backdrop of China's increasing pressure on Taiwan, there are concerns about future procurement risks. For Japan, this announcement is welcomed as it will enhance the indispensability and independence of its semiconductor industry.

Of course, the story is not so simple, and the fact that the new plant will be located in Japan does not mean that the current shortage will be solved at once. Semiconductors are used not only in automobiles, but also in electrical appliances and PCs. It remains to be seen whether the struggling automakers will be able to conclude supply contracts with TSMC. But of course, this is good news that should be viewed positively by automakers with plants in Japan, and with the shortage of semiconductors not only affecting recent production, but also predicting that the problem will be prolonged, we are looking forward to an early start. **PSR**

極東 > 日本レポート:

小室 明大 – 極東及び東南アジア リサーチアナリスト

TSMC、日本に新工場表明　22年着工24年稼働

世界最大の半導体受託生産会社（ファウンドリー）であるTSMCは日本に新工場を建設すると発表した。2022年に工場の建設を始め、2024年から量産する計画だ。新工場の建設には、ソニーグループとデンソーが参画する方向だ。

生産するのは回路線幅が22~28ナノメートルの演算用（ロジック）半導体だ。一般的に画像などデータ量の多い信号処理や、車の制御などに使う高性能のマイコンなどに用いられる。

ソニーグループが画像センサー工場を構える熊本県を進出先として想定している。ソニーの画像センサー工場の隣接地にTSMCが新工場を建設する見通しだ。

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About half of those who received South Korean government aid to scrap their old diesel vehicles early have purchased diesel vehicles again, according to a new study.

出典: 日経（一部筆者により元記事内容を改編しました）

PSR 分析: 日本政府は2019年から誘致を提案しており、2年越しで実ったこの誘致に対して補助金を計上する予定だ。補助金の出し方によってはWTOルールとの整合性が問われる可能性もあるため多角的に検討が進められているが、現在の報道によれば、新工場への投資総額約1兆円のうち、約5,000億円を政府が補助金として負担する方向で調整がされているということだ。

現在日本が調達を頼っているTSMCの工場は台湾に集中しており、中国が台湾に対して圧力を強めている背景から、今後の調達リスクが懸念されている。日本にとっては半導体産業の不可欠性と自立性を高めるためにも、この発表は歓迎されている。

もちろん話はそう単純ではなく、新工場が国内にできるからといって、現在の不足が一気に解消されるわけではない。半導体は自動車だけでなく電化製品やPCなどにも使用される。現在困っている自動車メーカーがTSMCからの供給契約を締結できるかは未知数である。だがもちろんこれは日本に工場を構えている自動車メーカーにとってもポジティブに捉えられるべき朗報であり、半導体の不足が直近の生産台数に影響を与えているだけでなく、問題が長期化するという予測が示されているなかで、早期の稼働が待たれる。**PSR**

Far East: South Korea Report

By Akihiro Komuro, Research Analyst, Far East and Southeast Asia

Subsidy Program for Scrapping Diesel Vehicles Ineffective

About half of those who received South Korean government aid to scrap their old diesel vehicles early have purchased diesel vehicles again, according to a new study. The government spent 845.4 billion won (about 79.6 billion yen) in the last five years (2016-2020) to scrap 959,000 aging diesel vehicles, but the number of all diesel vehicles increased by 9% during the same period. The government has pointed out that diesel vehicles are the main culprit of particulate matter such as PM2.5 and has implemented a policy to "eliminate" them, but this policy has not been effective.

There is subsidy support if old diesel cars are scrapped depending on the level of emissions in operation. In addition, there are additional subsidies if you buy an eco-car or a gasoline/LPG car.

If old diesel vehicles with a gross weight of less than 3.5 tons are scrapped early, they can receive up to 6 million won (about 570,000 yen) in subsidies. According to data from the Ministry of the Environment, 48,757 people in the Seoul metropolitan area purchased new cars in the first half of last year after receiving subsidies to scrap their old diesel vehicles. However, of the cars purchased by these people, 21,686 (44%) were diesel vehicles. Moreover, 15,990 of them were used diesel cars, 2.8 times more than the number of new cars (5,696).

Source: Chosun Online

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PSR Analysis: It is hard to say that this is a flaw in the system, but the reality is that this system has not achieved its purpose and has produced the opposite effect. The reason for this situation is simple: many of the users of trucks under 3.5 tons are small businesses, and considering their expenses, they do not choose gasoline vehicles, and new vehicles are not an option, so they choose used diesel vehicles.

EVs and fuel cell vehicles, which are now being widely reported, are attracting attention as vehicles equipped with next-generation technologies. However, especially in the case of commercial vehicles, the high initial cost is frowned upon. The market should take another look at the fact that inexpensive vehicles that can easily demonstrate their contribution to business will be selected. **PSR**

極東 > 韓国レポート:

ディーゼル車廃車補助金制度が皮肉な結果に

韓国政府の支援金を受け取って古いディーゼル車を早期廃車した人の約半数が再びディーゼル車を購入したことが分かった。政府では最近5年間（2016―20年）で国費8454億ウォン（約796億円）をかけて老朽化したディーゼル車95万9000台を廃車にしたが、同期間で全ディーゼル車数はかえって9%増加していた。政府がディーゼル車を「PM2.5などの粒子状物質の主犯」と指摘し、「なくす」として実施した政策だが、効果が上がっていないのだ。

運行中の排出ガスがレベルに応じて古いディーゼル車を廃車にすると補助金の支援がある。さらにエコカーやガソリン・LPG車を購入すれば、補助金の追加がある。総重量3.5トン未満の古いディーゼル車を早期廃車すれば、補助金を最大で600万ウォン（約57万円）まで受け取ることができる。

環境部の資料によると、ソウル首都圏で昨年上半期、補助金を受け取って古いディーゼル車を廃車にした後、新たに車を購入した人は4万8757人に達したという。ところが、これら人々が購入した車のうち、2万1686台（44%）がディーゼル車だった。しかも、そのうち中古ディーゼル車が1万5990台で、新車（5696台）より2.8倍多かった。

出典: Chosun Online（一部筆者により元記事内容を改編しました）

PSR 分析: 制度の欠陥とは言いにくいが、現実としてこの制度は目的を達成しておらず、逆の効果を生んでしまっている。このような状況を生んでしまった理由はシンプルに、3.5トン未満ののトラックのユーザーは零細事業者が多く、経費を考えればガソリン車を選択することなく、新車も選択肢には含まれず、中古のディーゼルを選択した、と見るのが自然だ。今盛んに報じられているEVや燃料電池車について、次世代を担う技術が搭載された車は注目を集めている。だが、特に商用車の場合、イニシャルコストの高さは嫌われる。ビジネスへの貢献が分かりやすく示される安価な車が選択されるということに、市場はもう一度目を向けるべきである。**PSR**

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SouthEast Asia: Vietnam Thailand, Malaysia

By Akihiro Komuro, Research Analyst, Far East and Southeast Asia

Auto Production Down Sharply in Asia

At the end of September, an auto parts manufacturer operating a plant near the southern Vietnamese city of Ho Chi Minh is struggling with a sharp drop in orders. The parts produced at this plant are delivered to Toyota group companies.

On Sept. 10, Toyota revised downward its production plan for the same month and October, adding about 70,000 units to the originally planned production cut of about 360,000 units in September, and cutting production by about 330,000 units in October.

The company also announced that it would revise its full-year production plan from 9.3 million units to 9 million units. Parts suppliers in Vietnam were affected by this. It was around the same time that Toyota announced its production cutbacks that the manufacturer mentioned above was told by its business partner that it wanted to significantly reduce orders for October.

In Vietnam, the number of people infected with COVID-19 increased rapidly from July 2021. In the suburbs of Ho Chi Minh City, where the number of infected people was particularly high, strict blockade measures were introduced. At manufacturing sites, employees were forbidden to move and were required to stay overnight to continue production. They brought cots and showers into the factories and managed to continue production. While they were working hard to maintain the supply chain in this way, they received a call from our business partner to cancel the order.

Toyota was not the only automaker to be forced to adjust production. On Sept. 17, Honda also announced that the production capacity utilization rate of its plants in Japan is expected to be about 40% of the initial plan for August and September, and only about 70% for early October. Subaru also announced on Sept. 17 that it would extend the suspension period of its domestic plants, which had been announced on Sept. 1 and Sept. 6. The finished vehicle plants of various companies in Southeast Asia are also being asked to make adjustments such as slowing down their production lines.

According to an auto parts manufacturer in Thailand, not only Toyota but also other manufacturers of finished vehicles were expecting that they would be forced to adjust their production in August and September, but that they would be able to recover in October. The impact of COVID on the supply chain in Southeast Asia was much greater than those involved had expected.

In Malaysia, a country with a high concentration of electronics-related factories, the spread of the outbreak has led to a blockade that has temporarily disrupted operations at the factories of major semiconductor companies, spurring a shortage of semiconductors.

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According to the latest information, some countries and regions have eased restrictions, but looking at Southeast Asia as a whole, there is a great deal of uncertainty.

Logistics dysfunction also plagues manufacturers. The spread of the new coronas has clogged container logistics, preventing Asian manufacturers from exporting their products as planned from mid-2020. If the U.S. stimulus package revitalizes logistics, the clog in container logistics from Southeast Asia to North America could continue. There has been a sharp increase in the number of customers wanting to rent warehouses in industrial parks in Thailand. This means that there is an increasing demand for a place to store auto parts inventory due to production adjustments.

Southeast Asia is being swept up in these massive and rapid changes in the market environment. While it is necessary to make the supply chain strong, it is unlikely that risks of this magnitude will occur frequently in future, and there will be a difference of opinion as to whether it is right to take measures to withstand such risks at great cost.

Source: Nikkei Business

PSR Analysis: Ho Chi Minh City has been locked down, Myanmar has been rocked by a coup, and the whole of Southeast Asia has been shaken up, mainly by COVID. According to the latest information, some countries and regions have eased restrictions, but looking at Southeast Asia as a whole, there is a great deal of uncertainty.

In many Southeast Asian countries, the automobile industry is an important industry that supports the nation's manufacturing industry, and if orders from Japanese manufacturers cease, the survival of smaller parts suppliers will be in jeopardy. Many parts factories have been forced to suspend operations. The supply chain that has been built over many years of history is based on a strong foundation of trust, but when the foundation of our lives is shaken, they cannot live only on niceties.

Of course, the impact of COVID is huge, but the market will not be stable due to a combination of factors such as the shortage of semiconductors, increasing political instability, and the influence of US and Chinese policies.

I believe that the optimistic view that time will solve many things is dangerous. Whether it is COVID or semiconductors shortage, it is realistic to expect a prolonged period of time. The search for the best solution for the supply chain will continue. **PSR**

東南アジア > ベトナム、タイ、マレーシアレポート:

自動車、アジアで大幅減産「まるでジェットコースター」

9月末、ベトナム南部の都市ホーチミン近郊で工場を操業する自動車部品メーカーは注文数の激減に苦慮している。この工場で生産した部品の納入先はトヨタのグループ会社だ。

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トヨタは9月10日、同月と10月の生産計画を大きく下方修正した。9月は当初予定していた約36万台の減産に約7万台を上乗せし、10月も約33万台の減産に踏み切るとした。通期の生産計画も見直し、930万台としていたところを900万台レベルにすると発表した。

ベトナムの部品メーカーはそのあおりを受けた。冒頭のメーカーが取引先から「10月の発注を大きく減らしたい」と告げられたのはトヨタが減産を発表したのとちょうど同じころだった。

ベトナムでは新型コロナウイルスの感染者数が2021年7月ごろから急増した。特に感染者が多かったホーチミン近郊では、厳しい封鎖措置が導入された。製造業の拠点では従業員の移動が禁じられ、宿泊して生産を続けることを求められた。工場内に簡易ベッドやシャワーを運び込み、何とか生産を続けてきた。そうやってサプライチェーンの維持に懸命に努力を続けてきた中で、取引先から発注キャンセルの連絡が入ってしまった。

生産調整を余儀なくされたのはトヨタだけではない。ホンダも9月17日、国内工場の生産稼働率が当初計画比で8～9月は4割程度、10月上旬は7割程度にとどまる見込みだと発表した。スバルも9月17日、同月1日と6日に発表していた国内工場の操業停止期間を延長すると発表した。東南アジア域内にある各社の完成車工場も生産ラインの速度を遅くするといった調整が求められている。

タイの自動車部品メーカーによれば、トヨタだけでなく他の完成車メーカーも「8月や9月は生産調整を迫られたものの、10月には盛り返せる」との見通しを持っていたらしい。ただ実際には国内向けも輸出向けも厳しい状況が続いている。COVIDが東南アジアのサプライチェーンに与えた衝撃は関係者の想定以上に大きかった。

電子機器関連の工場が集積するマレーシアでは、感染拡大に伴う封鎖措置で半導体大手の工場の操業が一時ままならなくなり、半導体不足に拍車がかかった。

物流の機能不全もメーカーを悩ませる。新型コロナの感染拡大によりコンテナ物流に目詰まりが生じ、2020年中頃からアジアの製造業が予定通りに製品を輸出できなくなった。米国の景気刺激策によって物流が活性化すると、東南アジア発北米向けコンテナ物流の目詰まりが続く恐れがある。タイの工業団地では倉庫を借りたいという顧客が急増している。生産調整の影響で自動車部品の在庫を保管する場所としての需要が増加しているということだ。

このような大規模かつ急激な市場環境の変化に東南アジアは振り回されている。サプライチェーンを強靭にすることは必要だが、今回のような大規模なリスクが頻繁に起こることは考えにくく、莫大なコストをかけてこれに耐えうる対策を取ることが正解と言えるのかどうかは議論が分かれるだろう。

出典: 日経ビジネス（一部筆者により元記事内容を改編しました）

PSR分析: ホーチミンではロックダウンが行われ、ミャンマーはクーデターで揺れ、主にCOVIDにより東南アジア全体は大きく揺さぶられている。最新の情報によれば国や地域によっては制限を緩和されたりもしているが、全体として東南アジアを見ると、不安要素が非常に多い状態にある。

多くの東南アジアの国々では自動車産業は国家の製造業を支える重要産業だが、日系メーカーからの注文が途絶えてしまうと規模が小さい部品メーカーは存続が

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SouthEast Report

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危うくなる。操業停止に追い込まれた部品工場も多い。これまで長年の歴史の上に築かれたサプライチェーンは強固な信頼が基礎になっているわけだが、生活基盤が揺るぐ事態にあっては綺麗事ばかりでは生きていけない。COVIDの影響はもちろん非常に大きいが、半導体の不足、政情の不安定性の増大、米国や中国の政策に影響を受ける、などの要素が複合的に絡み合って市場はなかなか安定しない。

時間が多くを解決する、という楽観論は危険だと筆者は考えている。COVIDにせよ半導体にせよ、長期化するという見方が現実的であるからだ。サプライチェーンにとっての最適解がどういうかたちなのか、模索の日々**PSR**

India Report

By Aditya Kondejkar, Research Analyst – South Asia Operations.

Aditya Kondejkar

Personal Mobility Segment Lacks Sparkle, Stocks, Demand Drop

Passenger vehicles sales dropped 41% to around 160k units in September as the shortage of semi-conductors disrupted production at most of the OEMs. OEMs are facing supply shortages rather than demand problems. We are seeing robust customer demand as increasing preferences towards personal mobility increase.

2-wheel sales declined 17% to 1.5 million units in September. The Motorcycle segment is heavily impacted as sales is dropped 23% in September. Owing to high vehicle acquisition costs and high fuel prices, inquiries regarding new vehicles have dropped significantly compared with last years' level.

"Indian automobile industry continues to face new challenges, said Kenichi Ayukawa, President, SIAM. "While on one hand, we are seeing a revival in vehicle demand, on the other hand, shortage of semi-conductor chips is causing a major concern for the industry. Many members have curtailed their production plans."

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PSR Analysis: So, we believe the on road segments have witnessed a V-shaped recovery since the second wave of COVID-19 and won't see a regular festive season spike for this year **PSR**

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Russia Report

By Maxim Sakov, Market Consultant, Russia Operations

KAMAZ Increases Nine-Month Production 21%

Maxim Sakov

KAMAZ has significantly increased production for the first nine months of 2021 versus the same period last year. Through September, the OEM produced 30,979 vehicles, up 21% from the same period in 2020, reports the company.

In September, KAMAZ made 4,067 vehicles (versus 3,676 vehicles in September 2020.

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PSR Analysis: KAMAZ has found ways to resolve the problem with components (mostly by offering simpler models), working with pent-up demand and increasing its market share. **PSR**

Russian Car Sales in September Drop 22.6%

Sales on new passenger cars and LCVs in September 2021 declined 22.6%, according to the Association of European Businesses (AEB). In total, automotive salons and dealers have sold 119,4 000 cars, which is 34,9 vehicles less than in 2020 September.

According to AEB head Tomas Schterzel, "negative trend is going on" (in August the sales dropped 17%), although the totals for the first nine months of 2021 are showing 15.1% growth versus the same period in 2020. The shortage of vehicles on the market is connected to decreased production and the deficit of semiconductors. The energy crisis in China and UK, growing prices of raw materials and other problems will support negative trend in the market during the near term.

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PSR Analysis: The problem here is not only in components deficit, but primarily in the car prices going up and the consumer's incomes going down. So, the negative trend will develop further. **PSR**

Almaz-Antey Group To Develop Car with Hydrogen Cells

OEM is developing the passenger car dubbed E-NEVA which will use hydrogen as a fuel.

Almaz-Antey is a group of 60 enterprises, specializing in air defense weapons. With this current effort, OEM is making civilian products based on the developments from the military industry. In August, the concern introduced a self-propelled electric chassis that could be used to create passenger cars on the

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Russia Report

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basic chassis. The chassis includes two electric motors and a set of batteries of 90 kWt/hrs, providing up to 400 km on a single charge.

The organization's engineers are working on the E-NEVA car that will have two modifications. One will be a gas vehicle with electric drive, with 1000 km on a single charge. The second one will be an electric-gas unit with a 52-liter gas fuel system and 70 kWt/hrs batteries, which can be charged from the grid, with 810 km on a single charge. Both versions will be sped up to 100 km/hr for 8.5 seconds, maximum speed will be set at 180 km/hr.

E-NEVA is one of several Russian car projects that operate on alternative fuel. Similar projects are developed by Aurus and KAMAZ.

Read The Article

It looks like the topic of electric and hydrogen passenger cars has gotten support on the government level. So, we can expect some electric and hydrogen car models of domestic origin in serial production soon.

PSR Analysis: It looks like the topic of electric and hydrogen passenger cars has gotten support on the government level. So, we can expect some electric and hydrogen car models of domestic origin in serial production soon. **PSR**

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