

MONTHLY POLICY NOTE

Navigating

"If you want to walk fast, walk alone. If you want to walk far, walk together" – Ratan Tata

INSIDE THIS EDITION

As we enter another year, it is important to attempt to push our boundaries. India is in the right direction where across sectors – including ESG, defence, automotive, banking, infrastructure and agriculture – new avenues are being explored and old / new relations are being further strengthened / developed while finding more efficient means of optimally utilizing existing resources.

In this edition, we highlight similar developments and put forth ideas along these lines, that are currently structuring and can further help structure India in this decade. This decade will drive India's growth and rise in this century.

The team at Primus Partners wishes you and yours a very Happy New Year! Take care, Be well, Stay safe – but let us keep pushing our boundaries!

CLICK ON THE TOPIC BELOW

- 1 In this issue
- 2 <u>Policy Square Policy in Review (Data</u> Protection Bill)
- 3 Economy update
- 4 ESG Rice cultivation
- 5 Aerospace and Defence Quad to AUKUS
- 6 <u>Expert Interview Nishant Arya (VC, JBM</u> <u>Group)</u>





MONTHLY POLICY NOTE



Policy in review | Policy Square



Interview Series by Primus Partners In Association with BW BUSINESSWORLD

Primus Partners launched Policy Square on December 28th 2021

A Primus Partners initiative to not just read, analyze and advise on policy matters when they are released...

...but to understand the fundamental questions like "how, why, what and for whom" aspects that contributed in the framing of the policy.

ECONOMY

Indian economy coming back strong, GDP surpasses pre-pandemic levels

Recent data on High Frequency Indicators (HFIs) report that 19 out of 22 indicators have outperformed pre-pandemic levels with the exception of steel consumption, air traffic and domestic auto sales. Rising gap seen in retail and wholesale inflation over the past few months is a cause for concern. As the formal sectors see greater growth, the informal section struggles to keep up the contribution.



ESG



Smart agriculture and systemic changes to tackle climate change

India is the second largest producer of rice, a highly resource-intensive crop responsible for high levels of GHG emissions. Solutions like adopting climate smart crops like millets, inclusion of these crops in the PDS, schemes to encourage diversification of crops, and better procurement policies can better prepare farmers to safeguard their livelihoods against climate change.

AEROSPACE AND DEFENCE

Quad to AUKUS: India's convergence with France / Europe

Australia, UK and US (AUKUS) entered into a trilateral security pact in September 2021 aimed to militarily counter China in the Indo-Pacific region. India is presently focused on a more conciliatory approach while being resolutely opposed to any Chinese belligerence on its borders. France has expressed its commitment to fully support the 'Atmanirbhar Bharat' vision via defence industrialization and joint R&D in India across a wide range of advanced equipment.



EXPERT SPEAK



The EV wave is ready to hit India and the automobile industry has pulled up its sleeves to get ready for it

Mr. Nishant Arya, Vice Chairman of the USD 2.2bn global Indian conglomerate JBM Group and Chairman of Linde Wiemann GmbH, Germany shares his opinion on whether India's policy ecosystem is ready to handle the Electric Vehicle era and future steps that can make India the global hub for EV manufacturing.



Policy Square | A Primus Partners initiative to understand fundamentals

On December 28th, Primus Partners launched **Policy Square** in association with Businessworld.

Policy Square, an initiative by Primus Partners, is a monthly expert interview series wherein key constituents of the publicpolicy ecosystem - senior policy-makers, civil society members, business executives etc. – will be interviewed on critical issues and policies of national-importance and explore their impact on the country and industry at-large.

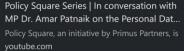


The motivation for Policy-Square series is driven by Primus Partners' rich policy-regulatory knowledge, as well as experience of delivering projects across multiple sectors, with an aim to leverage this knowledge and create a platform to table in-depth discourse.

The maiden episode of Policy-Square, released on the Primus Partners YouTube channel, hosted a rich-and-timely conversation on the Personal Data Protection Bill with Dr. Amar Patnaik, Member of Parliament, and an influential member of the Joint Committee of Parliament which was deliberating on the Bill.

Dr. Amar Patnaik during the Policy-Square interview, interacting with Mr. Nilaya Varma, CEO Primus Partners and Mr. Ruhail Amin, Senior Editor Business World, touched upon diverse subjects around the Data Protection Bill, including Dr. Patnaik's viewpoints on Data-ownership, foreseen implementation challenges of the bill, foreseen benefits of data-localization, and on the overall deliberations of the Committee. Policy Square Conversation on the Personal Data Protection Bill

Link to the full interview: Policy Square S01 E01



In the next episode we speak to an expert who takes us behind the scenes into how the yearly budget is planned and expectations from Budget 2022!

Subscribe to Primus Partners on **Primus** YouTube

Stay Tuned for more!

Our Take on the Data Protection Bill



The Committee has recommended some fundamental changes to the Bill, including a change to the name itself. It recommends broadening its scope to include non-personal data, has toned down some of the penalties and provided a transition period for organizations

While some clarity and respite has been achieved, the next course of discussion hinges on a (new) version of the Bill which is awaited to be presented in coming session(s) of Parliament.



Economy Update – India looks towards stabilization in FY22

- The **manufacturing sector** in India, constituting 77.6% of the **IIP**, grew at around 3% in September 2021 as compared to 1% in the same month in 2020.
- CPI, primarily driven by prices of food and beverages, averaged 5.1% in Q2 FY22,
- WPI remained in double digits for the eight month in a row with a record high of 14.2% in Nov 2021.

Macro-Economic Scenario

RESEARCH

Projected % growth	% Share of World	GDP per Capita (\$),	Quarterly GDP Growth	Inflation
in GDP (FY 2021-22)	GDP, 2020	2020	(Q2 FY 2021-22) (%)*	(y/y, %)*
9.5	3.1	1,901	8.4	4.4 (Sep)

Source: CEIC, World Bank; * Calendar Year 2021; IMF

The Real GDP in Q2 of 2021-22 showed a growth of 8.4% as compared to 7.4% contraction in Q2 of 2020-21.

Reference period	IIP	All India CPI	CPI for Industrial Workers	WPI
Sept 2020	1.0	7.3	5.6	1.3
Sept 2021	3.1	4.3	4.4	10.7

Source: RBI; Business-Standard

The Indian economy has shown strong signs of recovery with GDP surpassing its pre-pandemic levels. In recent reports, the Government released data of High Frequency Indicators (HFI) which are monitored to track the progress of Indian economy. 19 out of the 22 economic indicators show full recovery and are higher in comparison to the pre-pandemic level, barring three sectors – steel consumption, air traffic and domestic auto sales (excluding commercial vehicles).

While the manufacturing PMI has been rising in the last 2-3 months and economic growth is gathering momentum, certain critical indicators of the economy need attention. For instance, the rising gap seen between retail and wholesale inflation over the past few months is a cause for concern. The latest PMI prices (Manufacturing PMI for the month of October 2021 increased to 55.9 as compared to 53.7 in September), fall in index of eight core sector industries, and sharp rise in WPI inflation is expected to lead to increased retail prices of goods and services in future.

India continues to present a mix of both achievements and concerns, which is a pandemic-induced new normal. The bright signs come from a quantum jump in exports, anticipated to touch US\$400 billion, is also fuelling healthy growth in the domestic economy.

The area of concern is exhibited by growth concentration in the formal sector, with the **informal sector contribution winding down**. This is seen in lower labour force participation rate, and in higher demand for MGNREGA wages.

Government's focus will be on decreasing rural stress and on job creation, not just in Q4, but with the same thrusts expected to continue in the February Annual Budget.





Rice cultivation – time to look at options in product and process

Globally, India is currently the 3rd largest producer of greenhouse gas emissions, after China and the US. Although per capita emissions remain below the world average, coal power stations, rice fields, vehicular pollution and livestock are key sources of rapidly growing emissions in the country. Agriculture, responsible for ~16% of India's GHG emissions, is regarded as a major contributor to anthropogenic global warming with almost 2/3rds of it due to methane from livestock and rice cultivation while balance comes from fertilizers.

Talking of rice production, India is the world's 2nd largest producer of rice (120 MT in FY21), and also the largest exporter. **Regarded as a staple food grain, the crop is however, a water guzzler requiring an average of 5,000 ltrs of water to produce nearly 1 kg of rice.** The resource-intensive nature of the crop has driven the current climate mitigation strategies for

rice production where the focus is on reducing methane emissions by alternate wetting and drying, or intermittent flooding. Even shallow flooding can help reduce emissions at the global level by almost 60%.

While agriculture is a major contributor to GHG emissions and subsequently climate change, it also is getting severely impacted due to climate change. Changing seasonal patterns, increase in extreme weather events, erratic rainfall, water scarcity, increase in average temperatures have all contributed to low agricultural yield across the country, thereby raising an important issue of food security.

At this juncture it is extremely critical to enable and educate the Indian farmers to move from an input intensive agricultural style to a low external input system.



RESEARCH

Turning to climate smart crops: To build a resilient agriculture system, switching to climate smart crops such as millets maybe an option to explore further. Statistically, a single rice plant requires 2.5x times water than a millet plant. Millets as a crop have lesser irrigational and artificial fertilizer requirements, have better productivity under a wide range of climatic conditions, and superior nutritional value. Introducing children to millets as part of complementary feeding after 6 months of birth can tackle issues of stunting, wasting and low birth weight.

Inclusion of climate smart crops in the Public Distribution System: Wheat and rice are a part of the PDS and also fall under the Minimum Support Price (MSP) group, which may be the primary reason for inclination towards production of these crops. To increase the production of millets, they need to be included in the PDS system.





Designing and implementing dedicated schemes, aimed at encouraging farmers to diversify beyond paddy: Schemes promoting crop diversification should be encouraged, particularly in the states of Punjab and Haryana, which are one of the largest producers of wheat and rice in the country. Diversification to pulses, oil seeds etc. will not just alleviate low water table in states like Haryana, but will also benefit via reduced pollution from crop waste burning, provide cow feed via oil cakes, reduce India's reliance on imported edible oil, and enable nitrogen fixation in the soil.

Better procurement policies and MSP: As part of the agricultural reforms, a strategic shift is required in Government's procurement policies, including greater coverage of crops under the MSP group. Farmers may also be incentivized to switch to more water-efficient crops like maize or pulses if their market risk is covered by a state-assured procurement strategy similar to the ones in place now for rice and wheat.



While the above suggestions reflect upon some of the structural changes that need to be made in Indian Agriculture for it to become more resilient and climate smart, engaging with farmers and building their capacities are crucial. There is an urgent need to protect, educate and empower farmers to combat the effects of climate change on their livelihoods.





Quad to AUKUS: India's convergence with France / Europe

The Quad philosophy has been offset by AUKUS, a trilateral security pact between Australia, UK and US formed in September 2021, aimed to militarily counter China in the Indo-Pacific region. In this, amongst other areas, US and UK will help Australia acquire nuclear-powered submarines. Resultantly, Australia cancelled a French–Australian submarine deal worth €56 billion without notice, ending efforts to develop deeper strategic partnership between France and Australia leaving the former displeased.

Joining a military pact in the Indo-Pacific, overtly to counter China, being the only country in the Quad sharing a landboundary with China may not be in line with India's preference. India is presently focussed on a more conciliatory approach while being resolutely opposed to any Chinese belligerence on its borders.

In this context, India's land boundaries and its geo strategic location astride maritime routes through the Indo-Pacific, pitch it in a serious position of consideration for partnership with France. Both India and France, support a peaceful Indo-Pacific region in a multi-polar world. France, having overseas territories in the Southwest and military bases in Northwest Indian Ocean rim, needs to maintain strategic status quo in the region for which an Indian partnership now is essential. India is guided by its concept of Indo-Pacific Oceans Initiative (IPOI), which stresses on economic prosperity conceptualized as Security and Growth for All in the Region (SAGAR).

With the EU's support, the actualization of IPOI would become easier. France, being the current chair of the Indian Ocean Naval Symposium and due to take over the Presidency of the EU in January 2022, would be a key enabler.

India, while seeking to lift its indigenous defence manufacturing capabilities, has further liberalized FDI requirements and looks at support for in-house R&D and transfer of technologies (ToT) to attain self-reliance as well as upgrade its defence export potential. Due to the cloud of Countering America's Adversaries Through Sanctions Act (CAATSA), India would like to increase its range of sourcing of products and technology.

France, courtesy 36 Rafale fighter aircraft, now accounts for 12% of India's arms import kitty. Importantly, France has expressed its commitment to fully support the 'Atmanirbhar Bharat' vision via defence industrialization and joint R&D in India across a wide range of advanced equipment.

Emerging areas for defence cooperation that have been discussed at apex and working levels include:

• **Submarines** - In addition to the P75, India is further looking to build, under its strategic partnership model, another six diesel-electric submarines under the Project P75I. India also needs to boost its nuclear-powered ballistic missile submarine capabilities. France has Triumphant-class submarine with 16 vertical launch tubes for the M51 SLBMs.

• Aero engines - GTRE/DRDO and HAL are discussing the proposition of a joint venture with Safran for development of an engine with 69-110 kN thrust for the AMCA Mk2 variant. Safran, reportedly, has offered its M88-4 Core with ToT for almost all the core section (hot section).

Reportedly, Safran has asked for around \$6 bn in funding along with a minimum engine production guarantee. In addition, possibly some more work to produce the M-88 engine that powers the Rafale jets would be transferred to India, given an order of 36 more fighter jets. HAL and Safran are in talks to manufacture a **new engine jointly and indigenously for a twin-engine Multi-Role Helicopter** (IMRH) as future replacement of about 250 Mi-17.

• **Helicopters** - A naval variant of a medium lift helicopter is on the table along with a new combat helicopter in the same class as the American Apache.

•Fighter aircraft - Dassault Aviation is reportedly interested in producing Rafale fighter jets in India provided that the numbers in play were made closer to 100. France has also expressed its interest in supplying carrier-based jets to India based on the Rafale platform.

While Dassault Aviation is working on a joint venture with Anil Ambani's Reliance Defence to build a third hangar at the Nagpur plant, it is also in talks to gradually increase the number of parts produced at the Nagpur site for fighter aircraft. There has been an impediment in the discharge of offsets by MBDA for missile systems for the Rafale jet wherein a fine of ~ \in 1mn has been imposed on it. MBDA while paying the penalty has lodged its protest citing procedural problems.

Interestingly, Germany a powerhouse in metallurgy, propellants, electronics, and mechanics as well as a contender in the P75I project, is also one of the keystones in Indian defence collaboration spreading to Europe. With Olaf Scholz appointed as Germany's new Chancellor, India can possibly develop collaborations jointly with Germany and France. France and Germany have signed agreements to develop a next-generation tank by mid-2030s as well as a future stealth delta wing jet fighter, integrated drones and network structure.







Nishant Arya, Vice Chairman – JBM Group

Nishant Arya is the Vice Chairman of the US \$2.2bn global Indian conglomerate JBM Group and Chairman of Linde Wiemann GmbH, Germany. JBM Group is present across sectors such as Auto Components & Systems, Electric Vehicles & Buses, EV Charging Infra, EV Aggregates, Engineering & Design services, Renewable Energy, Environment Management, Artificial Intelligence, etc.

1. Currently the focus within the automotive segment is on EVs. While all automotive manufacturers are moving towards or developing a parallel EV assembly line, how do you see the supply chain progressing in India?

The EV market in India is expected to grow exponentially to almost \$200bn by 2030. This will parallelly involve a cumulative investment of over \$180bn in areas such as vehicle production, charging infrastructure, battery technology and other EV aggregates. The EV sector is all about collaborations between various auto OEMs as no company can singlehandedly address all these domains. Our focus is to develop all competencies locally and create the entire supply value chain in India.

The supply chain has already started to evolve as the capacity gets ramped up. There are few parts and components that are still imported and potentially may continue that way for some time, but we expect to see the supply chain growing. We, at JBM Auto have been the pioneers in setting up the EV ecosystem in India and augmenting synergies towards creating a pole position in the EV segment.

2. How do you see the market evolving in the near and midterm with both EVs and hydrogen fuel cell vehicles being the alternative options for automobiles?

Both EV and hydrogen fuel cell vehicles are zero emission technologies that foster sustainable means of mass transportation. While the EV market has matured faster, the hydrogen fuel cell vehicles market is still evolving. **The pace at which the EV market has shaped up, it has taken a clear leap of over 5-6 years over the hydrogen fuel cell vehicle segment**. The Government of India was the first to recognise EVs in 2015 with the roll out of the FAME policy.

Now, with the announcement of the Hydrogen mission this year, the government is well on its way towards institutionalising a stronger R&D and manufacturing base for both the technologies. Going ahead, I firmly believe that a collaborative approach with the best synergies from both these technologies will shape the vehicles of tomorrow.

3. With its zero-emission technology, how is JBM progressing towards commissioning e-mobility and the EV ecosystem?

As a company we have pledged that our electric buses will clock 1 billion e-kilometres in the next 3-4 years. This is driven by the fact that transportation is currently the second largest contributor to environmental pollution. But at the same time, given the size of the market, India is wellpositioned to capitalize on the huge opportunities offered by the Electric Vehicle segment. We have an entire range of inhouse solutions right from green energy generation to energy consumption i.e. Well-to-Wheel. JBM Group has been a front runner in implementing the concept of circular economy, thereby ensuring inclusive energy security and developing an inclusive EV ecosystem.

Our focus is to be a one-stop solution provider in the Electric Vehicles segment by creating a complete ecosystem solution for E-mobility i.e., Electric Bus, Battery Technology and Charging Infrastructure based on the Operating Pattern across various cities. As a company, we believe in leveraging technology to drive value and competitiveness. To this effect, we are now looking at designing products that have a second and even third life, like for example, EV batteries that can be used in power back-up applications, etc. We have already deployed our EV solutions in various cities across the country such Mumbai, Ahmedabad, Andaman & Nicobar, Bengaluru, Delhi-NCR, etc. Our zero-emission vehicle (ZEV), ECOLIFE saves about 1,000 tons of carbon dioxide and 350,000 litres of diesel, in 10 years of operation!

4. Please take us through the Gas Ecosystem that the company is synergizing to build as part of its efforts towards promoting sustainability.

Our focus has been to ensure a sustainable and green environment for the society and the country at large. As a next step in this direction, post setting up the Well-to-Wheel ecosystem for EVs, we are now envisaging setting up the Gas ecosystem in India with end-to-end green energy generation solutions. JBM is creating multiple such projects pan India in agreement with various state governments.



Towards making India the global hub for EV manufacturing

Moreover, JBM has recently signed a prestigious MoU with the Govt. of India for setting up 500 Biogas projects pan India as part of SATAT (Sustainable Alternative Towards Affordable Transportation) initiative by the government. Furthermore, we provide CNG buses for public transportation in the major metropolitan cities of the country. This is significantly contributing towards reducing the carbon footprint from public buses. The government of India has announced setting up 5000 CBG (compressed biogas) stations where we will be playing an active role in fuelling India's sustainability mission. This is just the beginning as scalability of such sustainable initiatives is a must for getting adequate benefits for future generations.

RIMUS

RESEARCH

5. What is your opinion on the PLI scheme for automobiles and auto components? Any particular tweak that you believe can further make PLI schemes more attractive?

The Union Cabinet has certainly made **progressive** announcements by way of the PLI scheme by apportioning Rs 26,058cr for the automobile sector. The announcements will provide momentum to the Make in India and Aatmnirbhar Bharat initiatives driven by the automobile sector towards establishing India as a global manufacturing base and 'Making for the World'.

In line with the governments vision towards promoting sustainability, the EV sector will be the biggest gainer with the already launched PLI for Advanced Chemistry Cell of Rs 18,100 crore and Faster Adaption of Manufacturing of Electric Vehicles (FAME) scheme of Rs 10,000 crore. As the scheme focuses on establishing the global supply chain base for advanced automotive technologies in India, there will be a spurt in employment opportunities, manufacturing capacities, and skill enhancements. These policies promote the entire EV ecosystem holistically with a focus on alternate fuels, EVs, hydrogen fuel cell vehicles and auto components & systems.

6. The scrappage policy in India is a major step towards ensuring a more sustainable and environment friendly nation. How do you envision the Indian automobile market growing with this initiative?

The Scrappage Policy, specifically on the commercial vehicle side, would give a boost to the sector. These are primarily BS-II and BS-III vehicles which would be moving out of the roads and thus reducing vehicular pollution as well. There will be a thrust towards the M&HCV and HCV segments. I expect there to be substantial purchasing in the coming financial year, thereby giving a much-needed fillip to the sector. Moreover, the phase out of older vehicles shall pave the wa to the use of newer technologies in vehicles which shall ensure safer and smarter vehicles, thereby enhancing vehicle and passenger safety and reducing accidents. The new race of vehicles will cater to aspects such as reduced driver fatigue, advanced vehicle ergonomics, connectivity, commitment to carbon footprint reduction, etc.

7. Any industry specific challenge that you intend to address?

For Electric Vehicles, it is pertinent to understand that the duty structure is inverted wherein the duty to taxes on output or final product is lower than the taxes on inputs. In such scenario, the EV manufacturers tend to lose out on the tax benefits offered by the government. It is important to understand that EV is a sunrise sector for the country and requires intensive investment towards aspects such as skill development, strengthening the power infrastructure, industry-academia interactions, etc. in addition to incentivising the R&D to create & design in India.

Moreover, it is critical to integrate the start-ups in the ecosystem because the EV arena is all about collaboration and synergising towards emerging concepts and technologies. The EV segment is about tailoring the experience for customers with products and solutions that are not only eco-friendly but also safe, comfortable and hassle free. India's 'one size fits all' approach may not work in the case of EVs. Products and solutions need to be consciously customized to suit the demands and usage patterns across various geographies of our country.

I believe that the **public transportation segment in India is best suited to embrace EVs at a much faster pace. Also, the 2-wheeler segment looks promising in this arena.** Auto OEMs in India must come together and synergise towards designing global products & solutions in our vision towards making India the global EV manufacturing hub for the world.





MONTHLY POLICY NOTE

About Primus Partners

Primus Partners has been set up to partner with clients in 'navigating' India, by experts with decades of experience in doing so for large global firms. Set up on the principle of 'Idea Realization', it brings to bear 'experience in action'. 'Idea Realization'— a unique approach to examine futuristic ideas required for the growth of an organization or a sector or geography, from the perspective of assured on ground implementability.

Our core strength comes from our founding partners, who are goal-oriented, with extensive hands-on experience and subject-matter expertise, which is well recognized in the industry. Our core founders form a diverse cohort of leaders from both genders with experience across industries (Public Sector, Healthcare, Transport, Education, etc), and with varied specialization (engineers, lawyers, tax professionals, management, etc).



PASSION	RESPECT	NTEGRITY	MASTERY	US	STEWARDSHIP
for providing solutions to help clients achieve their goals		actions	of our chosen subject to drive innovative and insightful solutions	Representing the Primus collective, where each individual matters	for building a better tomorrow
Contact Details	Bengaluru	Chandigarh	Delhi	Jaipur	Mumbai
Amit Dugar amit@primuspartners.in	T1, GN, 25th A Cross, 25th Main, HSR Layou Bengaluru - 560102	2nd Floor, Netsmartz, c, Rajiv Gandhi Chandigarl Technology Park, Chandigarh - 160019	Rear Block, Upper Ground Floor, ALPS Building, 56 Janpath, New Delhi - 110001	86/SP, 63, Behind Yes Bank, Pratap Nagar, Jaipur, 302033	601, 6th floor, Raheja Centre, Nariman point. Mumbai - 400021

DISCLAIMER

The report is prepared using information of a general nature and is not intended to address the circumstances of any particular individual or entity. The report has been prepared from various public sources and the information received from these sources is believed to be reliable. The information available in the report is selective and subject to updation, revision and amendment. While the information provided herein is believed to be accurate and reliable, Primus Partners Pvt. Ltd. does not make any representations or warranties, expressed or implied, as to the accuracy or completeness of such information and data available in the public domain.

While due care has been taken while preparing the report, Primus Partners Pvt. Ltd. does not accept any liability whatsoever, for any direct of consequential loss arising from this document or its contents.