

Mains Master

Challenge for Modi-Macron

Context

The foundation of the India-France Strategic Partnership, established in 1998, has evolved to encompass diverse domains such as maritime security, counterterrorism, climate change, and sustainable growth. This enduring collaboration emphasizes a shared commitment to international law, democratic values, and multilateral cooperation. The Indo-Pacific component further signifies the partners' alignment in addressing geopolitical dynamics. The relationship extends beyond strategic aspects, fostering robust economic, cultural, and academic ties, solidifying its position as a comprehensive and resilient strategic partnership.

Recent Cooperation

- **Preceding meeting:** Emmanuel Macron and Narendra Modi met in Paris in July 2023 during Bastille Day celebrations.
- **Domestic pressures:** Both leaders face internal challenges - Macron seeks to revitalize his presidency, while Modi navigates criticism regarding India's secularism.
- **Established framework:** "Horizon 2047," a comprehensive plan for cooperation in various areas, was launched in July.

Key Discussion Points:

- **Progress on existing deals:**
 - **Rafale Marine aircraft and Scorpene submarines:** An in-principle agreement exists for India to purchase 26 Rafale Marine aircraft and build three Scorpene submarines. However, concrete progress made in the last six months remains unclear.
 - **Jet engine technology transfer:** Whether progress has been made on transferring jet engine technology to India is uncertain.
- **Shifting regional and international landscape:**
 - **Stalled Ukrainian counter-offensive:** The counter-offensive by Ukraine against Russia has stalled, reigniting the debate about war and peace in Europe.
 - **Escalating tensions in the Middle East:** Hamas attacks on Israel and Houthis attacks on Red Sea shipping have heightened the risk of a wider regional conflict.
 - **Potential Trump return and its implications:** Donald Trump's potential return to the White House raises concerns about renewed political chaos and a shift in US foreign policy.
- **Challenges for India and France:**
 - **Adapting to a new US dynamic:** Both countries need to adjust to a potentially reduced US role in global affairs under a second Trump term.
 - **Managing the consequences of Trump's policies:** India and France must navigate the complex effects of Trump's regional and global policies.

- Redefining foreign policy concepts: The concepts of "multipolarity" and "strategic autonomy" may need redefinition in light of US retrenchment.

• Focus for Modi and Macron:

- Shifting focus from slogans to real issues: The leaders should move beyond grand declarations and address pressing concerns like:
 - **Stabilizing Europe:** Contributing to a peaceful resolution in Ukraine and establishing a stable security order in Central Europe.
 - **Boosting European security:** Exploring India's potential role in bolstering European security.
 - **Strengthening India's deterrence:** France can play a crucial role in enhancing India's capabilities to deter potential conflicts in Asia.
 - **Protecting vital shipping lanes:** Both countries need to develop strategies for securing vital shipping lanes in West Asia if the US scales back its involvement.

Conclusion:

The changing global landscape demands that India and France move beyond the traditional pomp and show associated with diplomatic visits. Instead, they must focus on concrete actions that address the current crises and work collaboratively to stabilize Eurasia and its critical waterways in the face of potential US retrenchment.

Analysing the rising gap in incomes

This article challenges the simplistic narrative of declining income inequality in India, using PLFS data to reveal underlying trends of uneven decrease and income polarization, particularly among self-employed workers.

Methodology:

- Analyzes data from the 2017-18 and 2022-23 rounds of the PLFS, disaggregating income inequality by nature of employment (self-employed, regular wage, casual wage).
- Examines changes in both the Gini coefficient (aggregate inequality) and the 90/10 ratio (income polarization).
- Acknowledges limitations of taxpayer data (SBI report) in capturing inequality for the bottom 10% earners.

Key Findings:

Aggregate Inequality:

- Slight decrease in Gini coefficient across all income earners (0.4297 to 0.4197).
- Uneven trends: decline for wage workers, slight increase for self-employed.
- Income Polarization:
 - Top 10% income earners experiencing faster growth than bottom 30%.
 - Widening 90/10 ratio, particularly pronounced among self-employed (increase from 6.7 to 6.9).
- Role of Self-Employment:
 - **Self-Employed Paradox:** While wage earners witness a

reduction in inequality, the self-employed segment presents a counter-intuitive narrative. A worrying increase in the 90/10 ratio among this group points towards a growing disparity within its ranks. The surge in low-paid, part-time self-employment, particularly among women, potentially fuels this internal divergence, demanding further investigation into the underlying structural factors.



Table 1: Gini coefficients

| | 2017-18 | 2022-23 |
|----------------------|---------|---------|
| Overall | 0.4297 | 0.4197 |
| Self-employed | 0.37077 | 0.3765 |
| Regular wage workers | 0.43947 | 0.43198 |
| Casual wage workers | 0.27619 | 0.263 |

Table 2: The 90/10 ratio

| | 2017-18 | 2022-23 |
|----------------------|---------|---------|
| Overall | 6.667 | 6.94 |
| Self-employed | 6 | 8.33 |
| Regular wage workers | 8.75 | 7.25 |
| Casual wage workers | 4 | 3.56 |

Implications:

- **Policy Prioritization:** The uneven decline and rising polarization demand a recalibration of policy priorities. Interventions must specifically target the factors driving the self-employed inequality: boosting formal employment opportunities, enhancing skill development, and addressing the gendered dimensions of low-paid self-employment.

- **Beyond Aggregate Measures:** The limitations of aggregate measures like the Gini coefficient are laid bare. Policymakers must embrace comprehensive analyses that disaggregate inequality by employment type, income level, and gender to formulate effective interventions targeted at specific cohorts facing the brunt of economic disparity.

- **Breaking the Cycle:** The perpetuation of low-paid self-employment can trap individuals and families in a cycle of economic vulnerability. Investing in social safety nets, promoting access to quality education and healthcare, and fostering entrepreneurship with adequate support services are crucial to break this cycle and ensure equitable opportunities for all.

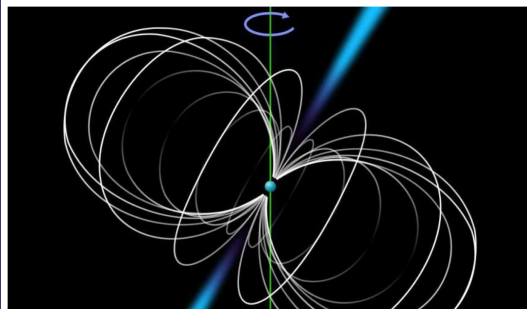
Conclusion:

This analysis debunks the notion of a uniformly decreasing income gap in India. Underlying trends reveal uneven reduction in inequality and a concerning rise in income polarization, especially among self-employed workers. Policy interventions and further research are needed to address the drivers of polarization and promote a more equitable income distribution.

Prelims Booster

How physicists are making sense of the mystery of pulsar glitches

- 🚀 Discovery of Pulsars:
 - In 1967, astronomers at the University of Cambridge, including Jocelyn Bell Burnell and Antony Hewish, discovered the first pulsar, named PSR B1519-21.
 - Pulsars are rotating neutron stars emitting periodic radio signals.
- ⭐ Neutron Stars and Glitches:
 - Neutron stars form from the collapse of heavy star cores, creating super-dense objects with solid crusts and superfluid cores.
 - Glitches observed in pulsars involve a sudden and brief increase in rotation rate, challenging physicists to explain this phenomenon.
- 🧊 Superfluid Dynamics:
 - Pulsar glitches hint at the presence of superfluidity inside neutron stars, where neutrons exhibit a frictionless state.
 - Superfluids in motion lead to vortices, and their interaction with the crust causes glitches.



Grand puzzle: A schematic diagram of a pulsar. The sphere at the centre is the neutron star, the curves indicate the magnetic field lines, and the two cones show the emitted radiation. The green line is the pulsar's axis of rotation. WTSO (CC BY-SA 3.0)

- ⚙️ Glitch Mechanism:
 - Neutron star crust contains a lattice of iron-like nuclei interspersed with superfluid.
 - Pinned vortices in the superfluid, influenced by the angular momentum loss, cause glitches as they overcome pinning and move outward.
- 🔄 Angular Momentum Transfer:
 - During a glitch, the angular momentum lost by the superfluid is gained by the crust, resulting in a brief increase in rotation rate, reflected in pulsar timing data.
- 📐 Contested Details and Scientific Inquiry:
 - The specifics of glitching mechanisms, triggers in space, and evolution over time are subjects of scientific debate.
 - Pulsar glitches offer a rich field for scientific inquiry, providing insights into the complex physics within neutron stars.

Direct tax to GDP ratio at a high, cost of collection down

- 💰 Direct Tax-to-GDP Ratio:
 - Reached an all-time high of 6.11% at the end of FY23, as per detailed data released by the Central Board of Direct Taxes (CBDT).
- 📊 Components of Direct Taxes:
 - Consist of Personal Income Tax (PIT) and Corporate Income Tax (CIT).
- 📅 Historical Comparison:
 - The highest direct taxes-to-GDP ratio previously was 6.3% in 2007-08.



- Marks the third time in the last 22 financial years when the ratio has crossed the six percent level.

📊 Tax-to-GDP Ratio Significance:

- Indicates total tax revenue as a percentage of GDP, reflecting the government's share of the country's output collected through taxes.
- Serves as a measure of the extent to which the government controls the economy's resources.

📦 Net Direct Tax Collections:

- Between FY14 and FY23, net direct tax collections surged over 160% to ₹16.64 lakh crore in FY23.
- Growth attributed to a nominal GDP increase of around 140%, boosting the direct tax-to-GDP ratio.

Numbers that cheer

| FY | Direct tax to GDP ratio | | Cost of direct tax collection | | |
|---------|-------------------------|-----------------|-------------------------------|-----------------------|---------------------------|
| | Tax- GDP ratio (in %) | Buoyancy factor | Collection (in ₹ cr) | Expenditure (in ₹ cr) | Cost of collection (in %) |
| 2014-15 | 5.55 | 0.86 | 6,95,792 | 4,101 | 0.59 |
| 2015-16 | 5.47 | 0.80 | 7,41,945 | 4,593 | 0.61 |
| 2016-17 | 5.53 | 1.10 | 8,49,713 | 5,578 | 0.66 |
| 2017-18 | 5.86 | 1.59 | 10,02,738 | 6,087 | 0.61 |
| 2018-19 | 6.02 | 1.29 | 11,37,718 | 7,074 | 0.62 |
| 2019-20 | 5.23 | -1.21 | 10,50,681 | 6,952 | 0.66 |
| 2020-21 | 4.78 | NA | 9,47,176 | 7,223 | 0.76 |
| 2021-22 | 5.97 | 2.52 | 14,12,422 | 7,479 | 0.53 |
| 2022-23 | 6.11 | 1.18 | 16,63,686 | 8,452 | 0.51 |

Source: CBDT

📄 Income Tax Returns (ITR) Trends:

- Total ITRs filed in FY23 stood at 7.78 crore, showing over 104% growth compared to FY14.
- In the current fiscal, the number of returns has already exceeded 8 crore.

📊 Cost of Collection Efficiency:

- Decreased to 0.51% in FY23 compared to 0.57% in FY24, showcasing improved tax administration and technology use for cost-effective collection.

📈 Current Fiscal Performance:

- Latest data indicates encouraging direct tax collection at ₹14.70 lakh crore, 19.4% higher than the corresponding period last year.
- Represents 80.6% of the total Budget Estimates of direct taxes for FY24, suggesting a potential exceedance of budget estimates for the full fiscal year.

For a 'clean' solution at WTO, India could promise not to export from public stocks

🌾 WTO Food Security Impasse:

- India faces a deadlock on the issue of public stockholding (PSH) for food security at the WTO.

🌐 GTRI's Suggested Solution:

- GTRI proposes that India could break the impasse by promising not to commercially export rice from its PSH stock.

🌍 Trade Partners' Concerns:

- The US and others argue that India's high price support through Minimum Support Price (MSP) has led to its status as the largest rice exporter.

🛡️ Clean, Permanent Solution:

- In exchange for the commitment not to export rice from PSH stock, India seeks a clean, permanent solution to the public stockholding issue.

💰 Economic Resilience Argument:

- The paper highlights that as rice production is water-intensive and costly, India should not suffer economically if rice exports decline.

🌱 Developing Countries' Call for Permanent Solution:

- Members of groups like G33, ACP, and the African Group, including India, advocate for a permanent solution to public stock holding due to restrictions in the Agreement on Agriculture.

🕊️ Peace Clause and Long-Term Solution:

- The Bali Ministerial decision of 2013 provided a peace clause allowing developing countries to breach subsidy limits temporarily. However, India and others seek a permanent solution enshrined in WTO rules.

📦 Blue Box Subsidies Adjustment:

- GTRI suggests India categorize support programs under 'blue box' subsidies, which have no spending limits but involve restricting support to 75% of output.

🌾 Strategic Farm Policy Adjustment:

- The note proposes India sets higher production targets for specific crops under 'blue box' subsidies, overcoming potential resistance by capping production but setting ambitious targets.

The rooftop solar plan

☀️ India's Rooftop Solar Plan:

- Prime Minister Narendra Modi announced the Pradhan Mantri Suryodaya Yojana to install rooftop solar systems on 1 crore houses.
- Aims to reduce electricity bills for the poor and middle classes while fostering energy self-reliance.

🌐 Current Status of Solar Targets:

- India's solar power capacity target of 100 GW by 2022 has been missed, with the total capacity reaching 73.3 GW.
- Grid-connected rooftop solar, part of the 40 GW target, contributed about 11 GW.

📊 Impact of COVID-19 and Revised Targets:

- The COVID-19 pandemic disrupted solar growth, contributing to the shortfall in achieving targets.
- The new target for 40 GW of rooftop solar systems is now set for 2026.

🏠 Pradhan Mantri Suryodaya Yojana Focus:

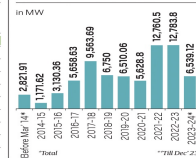
- Shifts focus from installed capacity to targeting a specific number of households, primarily untapped residential buildings.

TOP 10 STATES WITH HIGHEST ROOFTOP SOLAR CAPACITY

As on 31.12.2023 in MW

| States | Rooftop solar |
|----------------|---------------|
| Gujarat | 2,036.15 |
| Madhya Pradesh | 1,716.3 |
| Karnataka | 1,562.11 |
| Rajasthan | 1,002.44 |
| Kerala | 512.67 |
| Haryana | 486.23 |
| Tamil Nadu | 449.22 |
| Telangana | 343.78 |
| Punjab | 298.92 |
| MP | 296.02 |

YEAR WISE INSTALLED SOLAR POWER CAPACITY



🌐 Potential and Scope:

- Nearly 25 crore households in India have the potential to deploy 637 GW of solar energy on rooftops, with about one-fifth of this potential considered feasible.

🌍 Energy Objectives:

- Aligns with objectives such as ensuring energy security, transitioning to non-fossil energy, and increasing energy access.
- International commitment to achieving 50% of electricity generation from non-fossil fuel-based sources by 2030.

💡 Challenges and Needed Interventions:

- Financial incentives are essential, but additional measures are required to create an enabling environment.
- Empowering distribution companies without burdening them financially is crucial for program success.

📈 Rapid Growth for Renewable Energy:

- With renewables contributing around 30% of total installed capacity, rapid growth in solar is crucial to meet rising electricity demand.