Today's Prelims Topics

UPI Launched in Qatar

Context

Union Minister of Commerce and Industry Piyush Goyal launched India's Unified Payments Interface (UPI) in Doha.

About Unified Payment Interface (UPI)

- It is a **real-time payment system** developed by the **National Payments Corporation of India (NPCI)** that facilitates instant money transfers between bank accounts via smartphones.
- **Launched** in 2016.
- **Regulated by:** Reserve Bank of India (RBI)
- **Features:**
    - **Leveraging Existing Systems:** Such as Immediate Payment Service (IMPS) and Aadhaar Enabled Payment System (AEPS).
    - **Interoperability:** Works across different banks and apps.
    - **No need for bank details:** Just mobile number or UPI ID.
    - **Supports both push & pull transactions.**
    - **Multiple Use Cases:**
        - Person-to-Person (P2P) transfers
        - Person-to-Merchant (P2M) payments
        - Utility bill payments, ticket booking, QR code payments, etc.
- **Growth & Adoption:**
    - It accounts for **85% of all digital transactions in India** & nearly 50% globally.
    - It handles 640+million transactions every day, ahead of Visa.
    - Operational in **8 countries (earlier 7)** - **Bhutan** (1st country to adopt 2021), **France, Mauritius, Nepal, Singapore, Sri Lanka, UAE, and Qatar.**

- **UPI123Pay:** Enables feature phone users to make UPI payments without internet through an IVR (Interactive Voice Response) system, launched in 2022.
- **UPI Lite:** Facilitates quick offline payments for small-value transactions up to ₹500.

UPSC PYQ

Q. Consider the following countries: **(2025)**

1. United Arab Emirates
2. France
3. Germany
4. Singapore
5. Bangladesh

How many countries amongst the above are there other than India where international merchant payments are

accepted under UPI?

(a) Only two
(b) Only three
(c) Only four
(d) All the five

Answer: B

Source: Newsonair

Abhidhamma Divas

Context

The International Buddhist Confederation (IBC), in collaboration with Gautam Buddha University (GBU), Greater Noida, Antarrashtriya Baudh Shodh Sansthan (Lucknow), and the Ministry of Culture, celebrated International Abhidhamma Day on the full moon day of Śharada Pūrṇimā.

About Abhidhamma Divas

- It commemorates the day when Lord Buddha descended from the celestial realm, Tāvatimsa-devaloka to Sankassiya (now Sankisa Basantapur) in Uttar Pradesh.
    - The **Asokan Elephant Pillar at Sankassiya** marks this significant event.
- **Abhidhamma:** It refers to the third "basket" (pitaka) of the Pali Canon which forms the doctrinal foundation of Theravada Buddhism.
    - The primary texts of the Abhidhamma are: **Dhammasangani**, **Vibhanga**, **Puggalapaññatti**.
- **Tripitaka of Buddhism:**
    - Vinaya Pitaka (monastic rules)
    - Sutta Pitaka (Buddha's discourses)
    - Abhidhamma Pitaka (Buddhist philosophy and psychology)
- **Important Buddhist Texts:**
    - Buddhacarita - **Ashvaghosha**
    - Mahavibhasa Sastra - **Vasumitra**
    - Visuddhimagga, Sumangala-vilasini, Atthakathayen - **Budhhaghosh**

UPSC PYQ

Q. Sanghabhuti, an Indian Buddhist monk, who travelled to China at the end of the fourth century AD, was the author of a commentary on: **(2024)**

(a) Prajnaparamita Sutra
(b) Visuddhimagga
(c) Sarvastivada Vinaya
(d) Lalitavistara

Answer: C

Source: PIB

Diethylene Glycol (DEG)

Context

Recently, over 14 children in Madhya Pradesh and Rajasthan have reportedly died after consuming cough syrups suspected to be contaminated with Diethylene Glycol (DEG).

More in News

- Similar incidents have occurred in the past — notably in **Gambia (2022)** and **Uzbekistan**, where contaminated cough syrups from India were linked to multiple child deaths.

What is Diethylene Glycol (DEG)?

- It is a **colorless, odorless, and toxic industrial chemical** used as an **industrial solvent**, **antifreeze**, and in the manufacture of **resins and plastics**.
- When **industrial-grade propylene glycol** (meant for non-medical use) is used instead of **pharma-grade**, it may contain **high levels of DEG or ethylene glycol**.
- When ingested, it can **damage kidneys, liver, and the central nervous system**, and can be **fatal**, especially for children.
- According to the **World Health Organization (WHO)**, the **acceptable limit** for DEG in pharmaceutical formulations is **less than 0.1%**.

What is Ethylene Glycol (EG)?

- It is a colorless, odorless, bittersweet-tasting liquid.
- **Usage:**
    - **Antifreeze & De-icing:** Prevents freezing in car engines and aircrafts.
    - **Polymer Production:** Used to make **PET plastics** (bottles, containers) and **PEG** (cosmetics, pharma).
    - **Desiccant:** Removes water vapor in **natural gas dehydration systems**.
    - **Fiberglass Manufacturing:** Used in making fiberglass materials like tanks and tubs.
    - **Wood Treatment:** Prevents rot and fungal decay in wooden artifacts.
    - **Ink & Explosives:** Improves ink viscosity and used to make **ethylene glycol dinitrate (EGDN)** for dynamite.
- Ingestion causes **metabolic acidosis**, **renal failure**, **neurological damage**, and **can be fatal**.

Source: Businessline

Tigers Outside Tiger Reserves (TOTR) Project

Context

The Union Environment Minister launched 5 key conservation projects (such as Tigers Outside Tiger Reserves) and 4 national-level wildlife monitoring programmes during Wildlife Week 2025.

What is TOTR Project

- It aims to **manage and protect tiger populations living outside designated tiger reserves**, while **reducing human-tiger conflicts** through:
  - **Rapid Response Teams** for quick conflict management.
  - **Use of Technology: AI tools, drones, and camera traps** for tiger tracking.
    - **MSTrIPES app** and **wireless networks** for real-time monitoring.
  - **Capacity Building:** Training forest staff, veterinarians, and local volunteers.
  - **Community Engagement: "Bagh Mitra" initiatives**, school awareness programmes, and eco-development projects.
  - **Rescue and Rehabilitation:** Equipped rescue teams and medical facilities.
- **Implementation:**
  - **National Tiger Conservation Authority (NTCA)** acts as the **central coordinating body**.
  - **State forest departments** will execute the plan on the ground.
- **Need?**
  - India is home to **70% of the world's wild tigers**, with **3,682 tigers (as of 2022)**.
  - Around **35–40% (≈1,325 tigers)** now live **outside tiger reserves** due to population growth and territorial expansion.
  - This has increased **human-tiger conflicts**, **livestock losses**, and **retaliatory killings**.

Other Conservation Projects Launched

- **Project Dolphin (Phase II):** Focuses on the conservation of **river and marine dolphins**, particularly the **Ganga River Dolphin** and **Indus Dolphin**.
- **Project Sloth Bear:** India's **first national framework** dedicated to **sloth bear conservation**, covering **habitat protection, rescue operations, and conflict mitigation**.
- **Project Gharial:** Aims to **revive and protect gharial populations** in the **Chambal** and **Gandak river ecosystems**.
- **Centre of Excellence for Human–Wildlife Conflict Management (CoE–HWC):** Set up at the **Sálim Ali Centre for Ornithology and Natural History (SACON)** to develop **AI-based conflict prediction systems** and **capacity-building programmes**.

Source: Hindustan Times

Supermoon

Context

A supermoon was visible on the night of October 7 and will appear twice more in November and December.

What is a Supermoon?

- A **Supermoon** occurs when a **full moon or new moon** coincides with the **Moon's closest approach to Earth** in its **elliptical orbit**, a point called **perigee**.
- Because the Moon's orbit is slightly oval, its distance from Earth varies by about **50,000 km** each month.
- When the full moon occurs near perigee, it appears about **14% larger** and **30% brighter** than when it is farthest (at **apogee**).
- The term **"Supermoon"** was coined by astrologer **Richard Nolle** in the 1970s.

Impacts on Tides During a Supermoon

- **Perigean Spring Tides:** These are **unusually high and low tides** that occur during a supermoon.
    - Caused by the combined gravitational pull of the Moon (at perigee) and the Sun (during full/new moon alignment).
- **Higher High Tides (Perigean Highs):** Coastal water levels rise slightly more than usual — leading to **stronger tidal currents** and **higher coastal inundation risks**.
- **Lower Low Tides:** Similarly, low tides drop further than average, affecting **navigation and marine ecosystems** near shallow coasts.
- **Coastal Flooding Risk:** Although the increase is modest (a few centimetres), when **supermoons coincide with storms or heavy winds**, they can **intensify storm surges** and **cause temporary coastal flooding**.

Source: The Hindu

UNESCO Nominated New Chief

Context

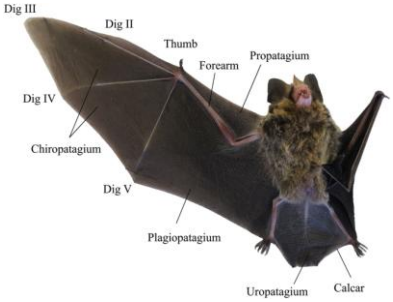
UNESCO nominated Egyptian former tourism and antiquities minister, Khaled el-Anani as its new chief.

About United Nations Educational, Scientific and Cultural Organization (UNESCO)

- **Established: 1945** (came into force on **4 November 1946**)
- **Headquarters:** Paris, France
- **Parent Organization:** United Nations (UN)
- **Member States:** 194 countries. India joined UNESCO in 1946.
- **Mandate:**
    - **Education:** Promotes inclusive, equitable, and quality education for all.
        - Leads the **Education 2030 Agenda** (part of **SDG 4: Quality Education**).
    - **Science:** Supports scientific research, environmental sustainability, and water resource management.
        - Oversees the **Man and the Biosphere (MAB) Programme** and **World Water Assessment Programme**.
    - **Culture:** Protects and promotes cultural heritage.
        - Designates **World Heritage Sites**, **Intangible Cultural Heritage**, and **Creative Cities**.
    - **Communication & Information:** Promotes **freedom of expression**, **press freedom**, and **media development**.
        - Observes **World Press Freedom Day (May 3)**.
- **Major UNESCO Programmes and Lists:**
    - **World Heritage Sites:** Natural and cultural sites of "outstanding universal value" (e.g., Taj Mahal, Machu Picchu).
    - **Intangible Cultural Heritage (ICH):** Safeguards living traditions such as dance, music, and rituals (e.g., Yoga, Kumbh Mela, Durga Puja).
    - **UNESCO Global Geoparks:** Promote geological heritage and sustainable development.
    - **Biosphere Reserves (under MAB):** Focus on biodiversity conservation and human-environment harmony.

Source: Deccan Herald

News in Short

Viksit Bharat Buildathon 2025	**News?** Registration to participate in Viksit Bharat Buildathon 2025 is extended. **What is Viksit Bharat Buildathon 2025** ● It is a **nationwide innovation movement** aimed at promoting creativity, innovation, and problem-solving skills **among school students (Class 6-12)**. ● It is organised by the Department of School Education & Literacy (DoSEL), Ministry of Education, in collaboration with Atal Innovation Mission, NITI Aayog. ● Students will ideate or prototype on four core themes: **Swadeshi, Atmanirbhar Bharat, Vocal for Local, and Samriddh Bharat**. **Source:** PIB
Pazan Gas Field	**News?** A new natural gas discovery of about 10 trillion cubic feet has been made in the Pazan gas field. **About it** ● **Location:** Southern Iran, Fars Province. **Related Facts:** ● Iran is the 9th largest oil producer globally and the 4th largest within OPEC. ● Also, Iran holds the world's second largest natural gas reserves, after Russia and 3rd highest producer of natural gas behind the US and Russia. ● Iran's biggest operating gas field is South Pars, the world's largest natural gas discovery, which Iran shares with Qatar in the Persian Gulf. **Source:** Reuters
How Bats Learned to Fly  	**News?** A new study published in Nature Ecology & Evolution has uncovered how bats evolved the ability to fly, despite sharing the same five-fingered limb structure as other mammals. **What are the Key Findings?** ● Their ability to fly comes not from new genes, but from **regulatory evolution** — changes in **when, where, and how** existing genes are activated during development. ● **Formation of the Wing Membrane (Chiropatagium):** The **chiropatagium** is the thin skin stretched between bat fingers that forms the wing surface. ○ In most mammals, this skin disappears before birth due to **apoptosis** (programmed cell death).

	○ In bats, this process is **partly suppressed**, so the skin **remains** and stretches between the fingers to form the **wing membrane**. ● **Repurposing of Existing Cells:** Bats did not develop new kinds of cells for their wings. ○ Instead, **cells normally found near the shoulder** in other mammals were **used between the fingers** in bats. ○ This reuse of existing cells for a new purpose is called **evolutionary co-option**. ● **Role of Important Genes (MEIS2 and TBX3):** ○ Two genes — **MEIS2** and **TBX3** — stay active for longer in bats than in other mammals. ○ These genes help form the **connective tissue (Fibroblasts)** that keeps the skin between fingers, giving bats their wing shape. **Source:** The Hindu

Mains Topics

Nobel Prize in Physics-2025

Context

The 2025 Nobel Prize in Physics has been awarded to John Clarke, Michel H. Devoret, and John M. Martinis - all working in the USA - "for the discovery of macroscopic quantum mechanical tunnelling and energy quantisation in an electric circuit."

About Quantum Mechanical Effects

- Quantum mechanics is the branch of physics that explains how **very small particles** - such as electrons, atoms, and photons - behave.
- Unlike the predictable laws of classical physics, the quantum world operates on probabilities and unusual phenomena.

Main Quantum Mechanical Effects:

- **Quantum Tunnelling:**
  - In classical physics, if a ball doesn't have enough energy, it cannot cross a wall.
  - But in quantum physics, a particle can "tunnel" through a barrier even without enough energy - as if it magically appears on the other side.
  - This happens because of the **wave-like nature** of particles - there is always a small chance that the particle's wave "leaks" through the barrier.
- **Superposition:**
  - A quantum particle can exist in **multiple states at once**. **Eg:** an electron can spin both up and down simultaneously, or a photon can take two paths at once.
  - It only "decides" its state when measured.
- **Entanglement:**
  - When two particles interact, they can become **entangled**, meaning their properties are linked even if they are separated by large distances. Changing one instantly affects the other.
  - This phenomenon was the basis of the **2022 Nobel Prize in Physics**.
- **Energy Quantisation:**
  - In quantum systems, energy does not vary continuously. Instead, it exists in **discrete packets** called **quanta**.
  - For instance, an atom's electron cannot have any random energy value - it can only occupy fixed energy levels.

Normally, such quantum effects are visible only at the **atomic or subatomic scale**. The Nobel-winning work of Clarke, Devoret, and Martinis changed that belief.

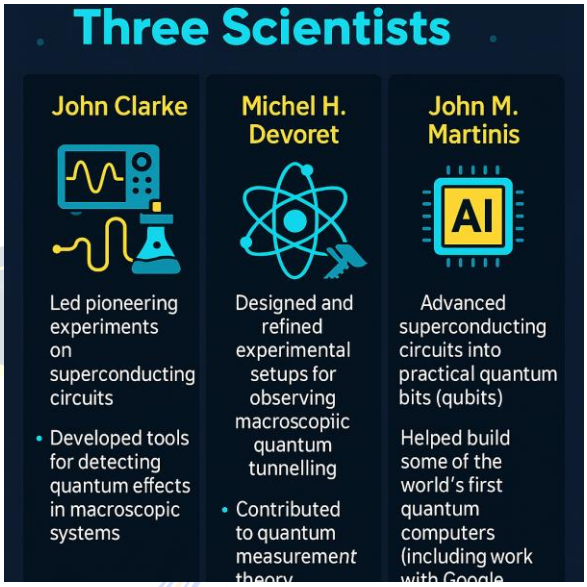
Nobel-Winning Discovery - Bringing Quantum Behaviour to the Macroscopic World

- In the **1980s**, the three scientists conducted a groundbreaking experiment showing that quantum mechanical effects can exist in larger, engineered systems - specifically in **superconducting electric circuits**.

- Their experiments used a **Josephson junction** (two superconductors separated by a thin insulator) to show **macroscopic quantum tunnelling** and **energy quantisation**.
- At near absolute-zero temperatures, they found that electric current could "tunnel" through the insulating barrier without sufficient classical energy - a purely **quantum phenomenon**.
- Their system demonstrated two quantum properties:
    - **Quantum Tunnelling** - the system switched between states as if passing through an energy barrier.
    - **Energy Quantisation** - it absorbed and emitted energy only in fixed quantities, not continuously.

Key Achievements

- **Macroscopic Quantum Tunnelling:** Proved that quantum tunnelling isn't limited to microscopic particles - it can occur in engineered circuits visible to the human eye.
- **Energy Quantisation in Circuits:** Demonstrated that an electrical system can absorb and emit energy in discrete amounts, confirming the quantum nature of macroscopic systems.
- **Foundation for Quantum Technology:** Their experiments laid the groundwork for superconducting qubits - the building blocks of modern quantum computers.



Significance of the Discovery

- **Bridging Two Worlds:**
    - This discovery showed that the boundary between the **quantum and classical worlds** is not as sharp as once thought.
    - It proved that quantum laws can govern even large, man-made systems.
- **Foundation of Quantum Computing:**
    - The work directly inspired the creation of **superconducting qubits**, used by companies like **Google, IBM, and Intel** in their quantum processors.
    - These qubits exploit **superposition** and **entanglement** to perform massive parallel calculations - far beyond what classical computers can handle.
- **Applications in Modern Technology:**
    - **Quantum computing:** Faster and more efficient problem-solving in cryptography, AI, materials science, and climate modelling.
    - **Quantum sensing:** Highly sensitive instruments for measuring magnetic fields, gravitational waves, and biological signals.
    - **Secure communication:** Quantum encryption systems that are nearly impossible to hack.
- **Global and Indian Context**
    - The discovery supports ongoing global efforts in **quantum technology research**.

- In India, the National Mission on Quantum Technologies and Applications (2023) - aims to build indigenous capabilities in quantum computing, communication, and sensing.

Source: **Indian Express**, **The Hindu**

India & the Multi-Polar West

Context

Recent diplomatic moves - British PM Keir Starmer's Mumbai visit, the India–EFTA trade pact, and ongoing India–EU FTA talks - highlight Europe's growing centrality in India's foreign policy. After decades of limited engagement, a resurgent Europe and India's strategic diversification mark a new phase in ties amid the rise of a **multipolar West.**

Evolution of Europe's Role in Global Politics

- **After World War II (The Atlantic Order):**
  - When World War II ended in 1945, Europe was badly damaged - both economically and militarily.
  - The **United States took the lead** in protecting Western countries through NATO (North Atlantic Treaty Organization).
  - Europe became a **junior partner** to the US in fighting against Soviet communism during the Cold War.
  - In this period, the term **"the West"** mainly meant **America and its European allies** working together.
- **After the Cold War (Unipolar World and Western Expansion):**
  - When the Soviet Union collapsed in 1991, the US became the only global superpower - this was called the "unipolar moment."
  - Liberal democracy and capitalism spread widely, and even Russia tried to join Western groups like the **G7**.
  - Europe turned its attention inward: it **expanded the European Union**, built a **common market**, and strengthened its **welfare systems**.
  - However, it didn't try to build an **independent military or foreign policy**, relying instead on the **US for security**.
- **The 21st Century (Disruption and Reassertion)**
  - The world began changing again: **China** rose as a major power, **Russia** became assertive again.
  - The **US**, especially after the 9/11 attacks, acted more on its own (e.g., in Iraq and Afghanistan).
  - Under **Donald Trump (2016–2020)**, the US questioned NATO and pushed Europe to spend more on its own defence.
  - This made Europe realise that **depending entirely on the US was risky**.
- As a result, Europe started talking about building its own **"strategic autonomy"** - the idea of a **"Europe that protects itself."**

The Rise of a Multipolar West

- **Divergence within the Western Alliance:**
  - **Differences on Russia** (energy security, sanctions), **China** (trade and technology), and **climate policy** have exposed Western fault lines.
  - US's unpredictable domestic politics and isolationist trends have pushed Europe to seek greater strategic autonomy.
- **Europe's Strategic Awakening:**

- Leaders like Emmanuel Macron and Olaf Scholz advocate for "European sovereignty" and a **Zeitenwende** (turning point) in foreign policy.
- EU's 2025 State of the Union address by Ursula von der Leyen declared Europe's need to "stand on its own feet - economically, technologically, and militarily."
- Europe is enhancing its **defence spending**, developing **independent digital infrastructure**, and pursuing **energy diversification** post the Ukraine crisis.

- **Not Decline, but Rearrangement:**
  - A multipolar West does not signify the fall of the US but rather a reordering within the West.
  - Allies are now pursuing flexible alignments rather than blanket alignment under Washington.
  - This transformation reflects a more plural, self-reliant, and competitive Western world order.

Significance of a Multipolar West

- **Redefinition of Power Balances:** The West's pluralisation allows middle powers like India, Japan and South Korea to engage with multiple Western actors on different issues.
- **Autonomous Europe:** The emergence of a self-reliant Europe enhances global multipolarity and reduces the dominance of any single superpower.
- **Diversification of Global Partnerships:** Multiple Western centres - the US, EU, UK - create new opportunities for economic and technological collaboration for developing powers.
- **Strategic Hedge Against US Unpredictability:** Europe's rise provides a counterbalance in case of shifts in American foreign policy priorities.

Opportunities for India

- **Economic Gains and Market Access:** FTAs with EU and EFTA open high-income markets for Indian exports (pharma, textiles, machinery, IT).
- **Technology and Innovation Partnerships:** Europe's strengths in green technology, digital public infrastructure, and manufacturing complement India's growth needs.
- **Strategic Leverage:** A stronger engagement with Europe allows India to **balance ties** with both the US and Russia, maintaining strategic autonomy.
- **Connectivity and Logistics:** Cooperation under **Global Gateway** and **IMEC** enhances India's maritime and continental connectivity to Central Asia and Europe.
- **Leadership in the Global South:** Europe's outreach to the Indo-Pacific positions India as a bridge between the Global South and the developed West, amplifying India's diplomatic influence.

India's Renewed Engagement with Europe

- **Recalibrated Focus:**
  - After years of focusing primarily on the US and Indo-Pacific, India is now engaging Europe as a **strategic and economic partner**.
  - Europe's Indo-Pacific strategies increasingly identify **India as a pivotal power**.
- **Key Institutional Developments:**
  - **India-EU FTA Talks (restarted 2022):** Aims to expand trade, investment, and technology cooperation.
  - **India-EFTA Agreement (2025):** Opens markets with Switzerland, Norway, Iceland, and Liechtenstein.
  - **India-France, India-Germany Strategic Partnerships:** Cover defence co-production, AI, space, and green energy.
  - **Global Gateway Initiative:** EU's connectivity vision aligns with India's **IMEC (India–Middle East–Europe Corridor)** and **Chabahar–INSTC projects**.
- **Defence and Security Cooperation:**
  - Collaboration in maritime security, cybersecurity, and defence production is growing.
  - European defence companies are exploring **joint ventures under Make in India**.
  - India and France, in particular, are expanding cooperation in Indo-Pacific naval presence.

Way Forward

- **Institutionalise India–Europe Engagement:** Establish a Comprehensive India–Europe Strategic Council to synchronise economic, defence, and climate initiatives.
- **Accelerate Domestic Reforms:** Improve ease of doing business, digital governance, and regulatory frameworks to attract European investment.
- **Deepen Maritime Cooperation:** Strengthen coordination in the **Indian Ocean and Indo-Pacific**, leveraging Europe's renewed naval presence.
- **Promote Technology Partnerships:** Focus on joint research in AI, green hydrogen, cybersecurity, and space technologies.
- **Balance Global Relationships:** Maintain strategic autonomy - engage Europe pragmatically without alienating the US or Russia.
- **People-to-People Diplomacy:** Expand academic exchanges, diaspora networks, and cultural diplomacy to reinforce long-term ties.

Source: Indian Express

Why Indian Capital Needs to Invest Domestically

Context

As global trade faces instability from protectionism, supply chain shifts, and tariff wars, India must reorient its growth model. Long-term stability now depends on Indian private capital aligning with national priorities. Despite record-high profits, domestic investment remains low, making reinvestment within the country more crucial than ever.

The Global Economic Background - A New Age of Uncertainty

The global economy is undergoing a structural transition. The post-globalization boom that drove growth for three decades is now facing major headwinds:

- **Rising protectionism and tariffs:** The U.S.-China trade war and renewed industrial nationalism have disrupted global supply chains.
- **Slowing world trade:** Global merchandise trade growth fell from **5.6% in 2017** to **below 1% in 2023**.
- **Geopolitical tensions:** Conflicts in Europe and the Middle East, and tensions in the Indo-Pacific, have increased input costs and disrupted logistics.
- **Reorientation toward domestic markets:** Many countries are shifting focus inward - prioritizing resilience, self-reliance, and domestic demand over export dependency.

Evolution of Indian Capitalism

- **Pre-Liberalisation Era (1947–1991): Protection and Patronage**
  - Indian businesses thrived under a highly protected, inward-looking economy.
  - Heavy licensing, tariff barriers, and State control led to limited competition and supernormal profits.
- **Post-Liberalisation Era (1991–2010): Global Integration**
  - The 1991 reforms opened India's economy, deregulated industry, and integrated it into global markets.
  - Indian firms began **investing abroad**, acquiring global brands, and entering competitive export sectors (e.g., IT, pharma, auto components).
- **The Present Phase (2010–2025): Global Uncertainty and Domestic Hesitation**
  - Global volatility - from financial crises to COVID-19 and trade disruptions - has made export markets unstable.
  - Despite **record corporate profits**, domestic private investment remains stagnant.
  - Indian capital is increasingly **flowing outward**: outward FDI from India grew at **12.6% CAGR (2018–2023)**, compared to the global average of 3.9%.

This paradox - **profits rising but domestic investment falling** - highlights the need for Indian capital to realign with India's developmental priorities.

Why Indian Capital Should Reinvest in India

- **Reviving Private Investment for Growth:**
  - India's **public capital expenditure** has surged from ₹3.4 lakh crore in FY20 to ₹10.2 lakh crore in FY25 - a **25% CAGR** - but **private investment has stagnated**.

- The Finance Ministry (June 2025 review) warned that "slow credit growth and private investment appetite may restrict acceleration in economic momentum."
- Without robust private participation, **public spending alone cannot sustain long-term growth**.

- **Strengthening Domestic Demand through Wages:**
  - The Economic Survey 2024–25 noted rising corporate profits but stagnant wage growth.
  - Real wage growth is projected to decline to 6.5% in FY26 from 7% in FY25.
  - For demand-driven growth, Indian firms must **ensure fair and moderate wage increases**, strengthening domestic purchasing power and boosting aggregate demand.
- **Investing in Innovation and R&D:**
  - India spends only **0.64% of GDP on R&D**, far lower than China (2.1%), Japan (3.4%), and South Korea (4.9%).
  - Private sector contribution to R&D in India is **only 36%**, compared to over 70% in advanced economies.
  - To achieve Atmanirbhar Bharat and global competitiveness, Indian businesses must expand domestic R&D, focusing on deep technology, manufacturing, and sustainability.
- **Reducing External Dependence:**
  - With **global trade uncertainty**, relying on exports as the main growth driver is risky.
  - Domestic capital investment in infrastructure, manufacturing, and services can **stabilize growth** against external shocks.
  - A strong domestic economy will also help India leverage its demographic dividend and strengthen supply chain resilience.

Role of Government

The government has done much to create a business-friendly ecosystem:

- **Simplified regulations** and tax structures.
- **Infrastructure push** under Gati Shakti and National Infrastructure Pipeline.
- **Production-Linked Incentive (PLI) schemes** to promote manufacturing.
- **Public investment** driving growth momentum.

However, **public investment alone cannot sustain growth indefinitely**.

The private sector must now **complement the State's efforts** through domestic reinvestment and alignment with developmental goals.

Way Forward

- **Reignite Domestic Private Investment:**
  - Encourage Indian corporations to channel retained earnings into domestic projects through fiscal incentives and credit facilitation.
  - Link incentives with **domestic job creation, innovation, and sustainability outcomes**.
- **Promote Wage-Led Growth:** Foster labour reforms that ensure **fair wage increases** while maintaining productivity.
- **Strengthen R&D and Technological Capability:**
  - Establish public-private innovation clusters to drive technology development.

- Provide tax breaks and co-funding mechanisms for private R&D in critical sectors like energy storage, green tech, and advanced manufacturing.

- **Align Private Capital with National Goals:**
  - Encourage **responsible capitalism** - where profit maximization coexists with long-term national development.
  - Integrate ESG (Environmental, Social, Governance) principles and sustainability into business models.
- **Enhance Coordination between State and Industry:**
  - Institutionalize a Government–Industry Growth Council to regularly assess sectoral bottlenecks and coordinate policies.
  - Promote joint strategies for exports, investment, and skill development.

Source: The Hindu