



15 April, 2024

Global Trade Outlook and Statistics

Context: The World Trade Organization (WTO) anticipates a gradual recovery in global goods trade this year after a decline in 2023.

World Merchandise Trade Volume Projections:

- In 2024, world merchandise trade volume is forecasted to grow by 2.6%, followed by a further increase of 3.3% in 2025 after a significant decline of -1.2% in 2023.
- Weak import demand in real terms was observed in 2023 across most regions, particularly in Europe, North America, and Asia, except for notable increases in the Middle East and the Commonwealth of Independent States (CIS) region.

World Real GDP Growth and Inflationary Pressures:

- World real GDP growth at market exchange rates slowed from 3.1% in 2022 to 2.7% in 2023 but is anticipated to remain relatively stable at 2.6% in 2024 and 2.7% in 2025.
- The contrast between steady GDP growth and the slowdown in merchandise trade volume is attributed to inflationary pressures, which affected the consumption of trade-intensive goods, especially in major trading nations.

US Dollar Value of World Trade:

- The US dollar value of world merchandise trade decreased by 5% in 2023 to US\$ 24.01 trillion, although this was partly offset by a robust 9% increase in commercial services trade, reaching US\$ 7.54 trillion.
- Declines in merchandise exports were influenced by falling commodity prices, such as oil and gas, while commercial services trade benefited from recovering international travel and growing digitally delivered services.

Resilience of World Trade:

- Despite significant economic shocks, world trade exhibited remarkable resilience in recent years, with merchandise trade volume up by 6.3% by the end of 2023 compared to 2019, and commercial services experiencing a 21% increase in annual US\$ values between 2019 and 2023.

Outlook and Risks:

- In 2024 and 2025, a gradual abatement of inflation is expected, leading to growth in real incomes in advanced economies and a subsequent increase in consumption of manufactured goods.
- Risks to the forecast include geopolitical tensions and policy uncertainty, with conflicts in the Middle East impacting sea shipments between Europe and Asia, potential trade fragmentation due to tensions elsewhere, and rising protectionism posing threats to trade recovery in 2024 and 2025.

Chart 7: Contributions to world trade volume growth by region, 2022-2025
Annual % change



Source: WTO-UNCTAD.

Dragon's Egg nebula

Context: Astronomers have encountered a perplexing puzzle with two massive stars located within a stunning cloud of gas and dust known as the "Dragon's Egg" nebula.

Formation of the Dragon's Egg Nebula:

- The Dragon's Egg Nebula originated from the intense stellar winds emitted by a massive, hot central star.
- This star, estimated to be approximately 40 times more massive than the Sun, expels its outer layers into space at speeds reaching up to 4 million kilometers per hour.
- The collision between these high-velocity stellar winds and the surrounding interstellar medium generates complex structures and shock waves, contributing to the nebula's distinct appearance.

Complex Structure of NGC 6164/6165:

- NGC 6164/6165 comprises two distinct regions: NGC 6164, the brighter and more compact area surrounding the central star, and NGC 6165, which extends outward in intricate filaments and bubbles.
- These two regions collaborate to form the overall shape of the nebula, resembling a dragon's egg, hence its popular moniker.
- The presence of ionized hydrogen gas further enhances the nebula's structure, emitting a characteristic red glow when stimulated by the intense ultraviolet radiation from the central star, creating a striking contrast against the backdrop of space.

Nebulae

- Definition:** Nebulae are vast clouds of gas and dust scattered throughout space, often serving as the birthplaces of stars.
- Emission Nebulae:** These nebulae emit light due to the ionisation of gases by nearby hot stars. Examples include the Orion Nebula and the Lagoon Nebula.

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- **Reflection Nebulae:** These nebulae shine by reflecting light from nearby stars, often appearing blue due to the scattering of starlight by dust particles. The Witch Head Nebula is a notable example.
- **Dark Nebulae:** Also known as absorption nebulae, these clouds obscure light from background stars, creating dark patches against the backdrop of space. The Coalsack Nebula is a prominent dark nebula.
- **Planetary Nebulae:** Formed when a dying star sheds its outer layers, planetary nebulae exhibit a variety of shapes and colours. The Helix Nebula and the Ring Nebula are well-known examples.
- **Supernova Remnants:** These nebulae result from the explosion of a massive star at the end of its life cycle. They often display intricate filamentary structures and are rich in elements forged in the supernova explosion. The Crab Nebula is a famous supernova remnant.
- **Galactic Nebulae:** These nebulae are vast clouds of gas and dust within galaxies, contributing to the overall structure and dynamics of the galactic environment. Examples include the Orion Molecular Cloud Complex in our own Milky Way galaxy.

Election Symbols

➤ Allotment of Election Symbols:

- The responsibility of allotting election symbols lies with the Election Commission of India (ECI), governed by The Election Symbols (Reservation and Allotment) Order, 1968.
- The order specifies the reservation, choice, and allotment of symbols for parliamentary and assembly elections, distinguishing between recognized and unrecognized political parties.
- Symbols can be reserved exclusively for recognized parties, while unrecognized parties choose from a list of free, non-exclusive symbols.
- Lists specifying parties and symbols, including six national parties, 26 state parties, and 2,597 registered unrecognized parties, are published by the EC.

➤ Preferences of Political Parties:

- Unregistered parties submit ten symbol preferences from the list of free symbols provided by the commission.
- Parties can propose three new symbols, ensuring they are distinct and free from religious or communal connotations.

➤ Resolution of Symbol Disputes:

- Disputes within recognized parties are resolved by the EC based on the aims and objects of the party constitution, the constitution itself, and internal support.
- Decisions are binding, while splits in registered but unrecognized parties are advised to seek internal resolution or legal recourse.

➤ Criteria for Recognition of Splinter Groups:

- Previously, breakaway parties were recognized based on support from MPs/MLAs, but a new rule required separate registration and post-registration electoral performance for national or state party status.

➤ Preferences of Political Parties:

- Unrecognized parties provide a list of ten symbol preferences from the free symbols notified by the EC.
- Parties may propose three new symbols for consideration, ensuring they have no resemblance to existing symbols or any religious or communal connotation.

➤ Resolution of Symbol Disputes:

- In cases of party splits, the EC resolves disputes by considering aims and objects of the party constitution, party constitution itself, and majority support within the party.
- The EC's decision is binding on rival factions, either freezing the symbol or advising them to select a new one.

➤ Criteria for Recognition of Splinter Groups:

- Before 1997, splinter groups not receiving the parent party's symbol could be recognized based on support from MPs/MLAs.
- The EC revised this approach, requiring splinter groups to register as separate parties and qualify for national or state party status based on electoral performance after registration.

NEWS IN BETWEEN THE LINES

Fort Emmanuel



Recently, it has been seen that the Fort Emmanuel situated at Fort Kochi Beach in Kochi, Kerala need for conservation.

About Fort Emmanuel:


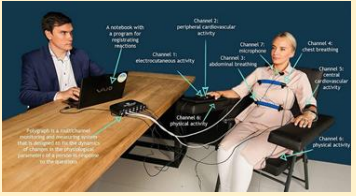
- Fort Emmanuel was built along the Fort Kochi beachfront **by the Portuguese in 1503**.
- It served as a strategic bastion and symbolized the alliance between the **Maharaja of Kochi and the Portuguese monarch**.

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	<ul style="list-style-type: none"> Most of Fort Emmanuel's walls and bastions were destroyed by the Dutch and later the British by 1806. Presently, remnants of the fort remain submerged along the coast, with occasional visibility during low tides. Situated from Bastion Bungalow (now a heritage museum) to the southern end of the beach, Fort Emmanuel holds historical importance for its role in colonial history and maritime trade. The construction of forts like Fort Emmanuel was part of the Portuguese strategy to protect their coastal colonies, including Fort Kochi, Goa, Kollam, Kozhikode and Kodungalloor. These forts were crucial for securing trade routes and repelling attacks from rival powers.
<p style="text-align: center;">Muria Tribe</p> 	<p>Recently, it has been seen in the Chukkalapadu settlement of the Muria tribe in Andhra Pradesh's Alluri Sitarama Raju district, the tradition of the baby-father 'cradle bond' persists.</p> <p>About the Muria Tribe:</p> <ul style="list-style-type: none"> The Muria tribe lives in the Bastar district of Chhattisgarh and in the states of Telangana, Andhra Pradesh and Odisha. They speak Koya, a Dravidian language and has no caste system. This tribe is predominantly agrarian and cultivates rice. The Muria tribe mandates that a man must weave a bamboo cradle, called 'vookada,' for his newborn child as a lifetime memory. Traditionally, they follow a folk religion, worshipping nature and deities like Budhadev (Dev) of their villages and clans. They practiced shifting cultivation or slash-and-burn agriculture for subsistence. As many as 54 Muria settlements exist in Andhra's reserve forests. They held ST status in Chattisgarh but they were not granted ST status in their migrated states such as Telangana.
<p style="text-align: center;">Polygraph Test</p> 	<p>Recently, the BRS leader K.T. Rama Rao, who is under attack over phone tapping of politicians, has offered to undergo a polygraph test.</p> <p>About Polygraph Test:</p> <ul style="list-style-type: none"> A polygraph test, also known as a lie detector test, is a machine that records a person's physiological responses when they answer questions. During the test, instruments like cardio-cuffs or electrodes are attached to the person. The test measures and records things like blood pressure, pulse, respiration, and skin conductivity. Polygraph tests are utilized for event-specific investigations, employee screenings and security screening to identify potential threats to national security. The Supreme Court invoked Article 20(3), protecting the Right against self-incrimination, stating that no accused can be forced to testify against themselves. In the case of D.K. Basu vs. State of West Bengal (1997), the Supreme Court ruled that subjecting individuals to involuntary polygraph and narco tests constitutes cruel, inhuman and degrading treatment, violating Article 21, the Right to Life and Liberty. Moreover, the Indian Evidence Act of 1871 does not accept the results of these tests as evidence. In 1999, the National Human Rights Commission adopted guidelines for administering the Polygraph Test, emphasizing aspects like consent and proper documentation of the test process.
<p style="text-align: center;">Cryogenics</p>	<p>About Cryogenics:</p> <ul style="list-style-type: none"> Cryogenics is the science of materials at temperatures below negative 153 degrees Celsius, where common gases like hydrogen and nitrogen become liquid. Helium and nitrogen are primary cryogenic fluids, with boiling points of negative 269 degrees Celsius and negative 196 degrees Celsius, respectively. Cryogenic hydrogen and oxygen are crucial rocket fuels, powering advanced rockets like ISRO's LVM-3.

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- Cryogenic hardening enhances materials like **steel, making them harder and stronger.**
- Cryogenic fluids are **vital in Magnetic Resonance Imaging (MRI) devices** for medical diagnostics.
- Refrigeration technology is utilized to achieve and maintain cryogenic temperatures required for various applications.
- It enables the use of materials and fuels in extreme conditions, facilitating **advancements in space exploration**, industry and medical diagnostics.
- Cryogenic **fluid needs to be stored in vacuum flasks to prevent leakage** and damage to surroundings, posing engineering challenges.

Recently, Ecuador's National Court of Justice declared the seizure and arrest of former Vice-President Jorge Glas from inside Mexico's embassy in Quito as "illegal and arbitrary."

Ecuador (Capital: Quito)

Location: Ecuador is a country located in northwestern South America.

Boundaries: Ecuador shares its borders with **Peru** (East and South) and the **Pacific Ocean** (West) and **Colombia** (North).

Physical Features:

- The major rivers of Ecuador include the **Amazon, Napo, Guayas, Esmeraldas** and **Pastaza rivers.**
- The **Galápagos Islands** are renowned for their unique ecosystems and played a crucial role in **Charles Darwin's theory of evolution.**
- The highest point in Ecuador is **Chimborazo Volcano.**
- Ecuador is rich in minerals, with significant deposits of **gold, silver, copper** and **oil.**

Economy: Ecuador **adopted the United States dollar on 13 April 2000** as its national currency.



Place in News

Ecuador

POINTS TO PONDER

- Which Indian state is the birthplace of the classical dance form Kuchipudi? – **Andhra Pradesh (Kuchipudi village)**
- Who did the Financial Stability and Development Council (FSDC) recently recommend for the position of Chairman and Managing Director of the Small Industries Development Bank of India (SIDBI)? – **Manoj Mittal (Mittal will replace S Ramann, who joined SIDBI in April 2021)**
- What significant initiative has NASA recently undertaken regarding data from its latest Earth-observing satellite, the Plankton, Aerosol, Cloud, ocean Ecosystem (PACE)? – **It is now publicly distributing science-quality data**
- Which part of the Indian Constitution contains Article 371, and what does it entail for certain states? – **Part XXI, granting temporary, transitional and special powers for certain States.**
- In the case of D.K. Basu vs. State of West Bengal (1997), what was the Supreme Court's ruling regarding the practice of subjecting individuals to involuntary polygraph and narco tests? – **It violates Article 21 of the Indian Constitution**

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