



TODAY'S ANALYSIS

(21 February 2025)

TOPICS TO BE COVERED

- **THE WATERWORTH PROJECT**
- **UKRAINE'S DRONE ATTACK ON RUSSIAN PIPELINE**
- **ECONOMIC SURVEY: CHAPTER 2**
 - **MONETARY & FINANCIAL SECTOR DEVELOPMENTS IN INDIA**
- **MCQs**

ADDRESS:

19/1A Shakti Nagar, Nagiya Park Near Delhi University, New Delhi - 110007 (India)



THE WATERWORTH PROJECT



- **Meta Platforms** (formerly Facebook) has announced plans to build the **world's longest subsea fibre-optic cable**, known as **Project Waterworth**.
- This massive project will span **50,000 kilometers**, connecting **5 continents** and enhancing the company's digital infrastructure to support its growing services.

KEY FEATURES

- **Global Connectivity:**
 - The cable will connect: the **United States, India, Brazil, South Africa**, and other key regions.

ADDRESS:

19/1A Shakti Nagar, Nagiya Park Near Delhi University, New Delhi - 110007 (India)



- **Advanced Technology:**

- The cable will use **24-pair fibre-optic technology**, offering the highest capacity available for data transfer.
- It will ensure faster data transfer, promoting **economic cooperation** and helping bring more people online, particularly in **emerging markets**.

- **Subsea Cable's Importance:**

- **95%** of intercontinental data traffic is **transmitted via subsea cables**, making them vital for **global communication**.
- The cable will be laid at a depth of up to **7,000 meters (23,000 feet)**, avoiding **sea traffic** and disturbances typically found in shallow waters.

- **Cable Protection:**

- In vulnerable areas like coastlines, special **burial techniques** will be used to safeguard the cable from damage, especially in **high-risk zones** (e.g., earthquake-prone areas).

- **Supporting Meta's AI Growth:**

- The cable will aid Meta's growing focus on **artificial intelligence (AI)**, improving its **AI-powered data centers** and other technologies.

ADDRESS:

19/1A Shakti Nagar, Nagiya Park Near Delhi University, New Delhi - 110007 (India)



- Meta has announced plans to invest up to **\$65 billion** in AI infrastructure this year, supporting initiatives like **AI-powered humanoid robots**.

- **Project Cost:**

- The exact cost of Project Waterworth hasn't been disclosed, but estimates suggest it could cost around **\$2 billion**.
- The project will take **several years** to complete, representing a **multi-billion-dollar investment**.

COMPARISON WITH OTHER SUBSEA CABLE PROJECTS

- Meta contributed to the construction of the **2Africa subsea cable** launched in **2020**, which held the title of the longest subsea cable at **45,000 kilometers**.
- The **2Africa cable** connects **33 countries** across **Africa, Europe, the Middle East, and Asia**, and is supported by telecom giants like **Telecom Egypt, China Mobile, and Vodafone**.

INDIA'S ROLE IN SUBSEA CABLE EXPANSION

India is **actively investing in new subsea cable systems to enhance global internet connectivity:**

ADDRESS:

19/1A Shakti Nagar, Nagiya Park Near Delhi University, New Delhi - 110007 (India)



- **India Asia Xpress (IAX):**
 - Connects **Chennai** and **Mumbai** in India to **Singapore, Thailand, and Malaysia.**
- **India Europe Xpress (IEX):**
 - Connects **Chennai** and **Mumbai** in India to **France, Greece, Saudi Arabia, Egypt, and Djibouti.**
- **Total Cable Length:** Over **15,000 km** collectively.
- **Ownership:** Both cables are owned by **Reliance Jio.**

IMPORTANCE OF CABLE RESILIENCE & SECURITY

- India is focusing on **submarine cable security**, addressing threats such as **physical damage** and **cyberattacks**.
- India is a key member of the **International Advisory Body for Submarine Cable Resilience (IABSR)**, a global initiative aimed at enhancing submarine cable resilience.

Impact of Submarine Cable Disruptions:

- In March, **3 submarine cables** were disrupted, affecting traffic to India.
- However, **alternative routes** and **Indian data centers** helped to maintain internet services during these disruptions.

ADDRESS:

19/1A Shakti Nagar, Nagiya Park Near Delhi University, New Delhi - 110007 (India)



VULNERABILITIES

- **Bangladesh** halted plans to sell **bandwidth** to **Northeast India**, but this has had **minimal impact** as Northeast India is already connected via **fiber on Power Grid transmission lines**.
- Over **half** of **Bangladesh's internet traffic** comes from India.

Other Choke Points:

- The **Malacca Strait** is a **key vulnerability, being a crucial route** for undersea cables between India and Singapore.
- Disruptions in this area could impact multiple cables.
- India is exploring **alternative routes** to bypass the Malacca Strait, but no current solution is in place.

CONCLUSION

Meta's **Project Waterworth** is a monumental investment in global connectivity, with the potential to reshape international data transfer by connecting **five continents** through the world's longest subsea fibre-optic cable. Additionally, **India's role** in submarine cable expansion, coupled with increasing attention to **cable resilience and security**, highlights the growing importance of secure, reliable internet infrastructure for global communication.

ADDRESS:

19/1A Shakti Nagar, Nagiya Park Near Delhi University, New Delhi - 110007 (India)



UKRAINE'S DRONE ATTACK ON RUSSIAN PIPELINE



- On **February 17, 2025**, Ukraine launched a **drone attack** on a pumping station of the **Caspian Pipeline Consortium (CPC)** in southern Russia.
- The CPC pipeline carries **Kazakh oil** to the **Black Sea** for export, including to **Western Europe**.

IMPORTANCE OF CPC PIPELINE

- The **CPC pipeline** is **1,500 kilometers long** and transports **80% of Kazakhstan's oil exports**.

ADDRESS:

19/1A Shakti Nagar, Nagiya Park Near Delhi University, New Delhi - 110007 (India)



- It is vital for Kazakhstan's economy and supplies **about 1% of global oil**.
- The pipeline is owned by **Kazakhstan, Russia**, and Western companies like **Chevron, ExxonMobil**, and **Shell**.

DAMAGE & IMPACT

- The attack has caused a **30% reduction in oil exports** from Kazakhstan.
- It will take **1.5 to 2 months** to repair the damage to the pipeline.
- This could lead to a significant drop in **Kazakhstan's oil exports** during this period, affecting the **global oil supply**.

Kazakhstan's Energy Vulnerability:

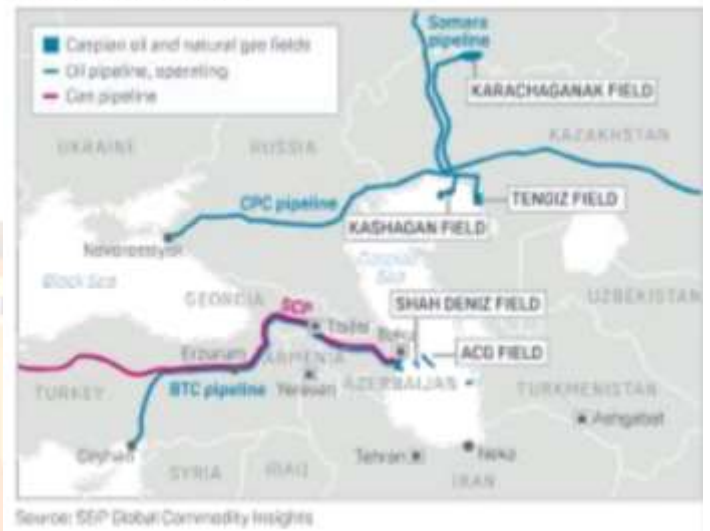
- Kazakhstan is **heavily reliant** on Russian infrastructure for its oil exports, making it vulnerable to disruptions like this.
- This attack highlights the need for Kazakhstan to **diversify its energy routes** and reduce dependence on Russia, a goal the country has been working on during the ongoing conflict.

ADDRESS:

19/1A Shakti Nagar, Nagiya Park Near Delhi University, New Delhi - 110007 (India)



CASPIAN OIL AND GAS



UKRAINE'S STRATEGY

- Ukraine has been targeting **Russian energy infrastructure** throughout the war.
- It has been aiming to weaken Russia's economy and military by hitting energy sites that fund the war effort.
- The CPC pipeline attack is part of this strategy to **disrupt Russia's energy supplies** and hit its financial resources.

GLOBAL CONSEQUENCES

- The **30% drop in Kazakh oil exports** could affect **oil prices** globally.

ADDRESS:

19/1A Shakti Nagar, Nagiya Park Near Delhi University, New Delhi - 110007 (India)



- With **1% of global oil supply** at risk, markets could see price **increases** due to reduced supply.
- **Western energy companies** involved in the pipeline, like **Chevron** and **Shell**, will also face operational disruptions.

CONCLUSION

Ukraine's drone attack on the CPC pipeline shows how the **conflict** between Ukraine and Russia is affecting **global energy markets**. Kazakhstan's **energy security** is at risk due to its reliance on Russian infrastructure, making it urgent for the country to find **alternative export routes**. This attack also strengthens **Ukraine's broader strategy** of targeting Russian energy infrastructure to disrupt the Russian war effort.

ADDRESS:

19/1A Shakti Nagar, Nagiya Park Near Delhi University, New Delhi - 110007 (India)



ECONOMIC SURVEY: CHAPTER 2

MONETARY & FINANCIAL SECTOR DEVELOPMENTS IN INDIA (PART 4)

India's Insurance Sector

- **Growth:** Total insurance premiums in India grew by **7.7%** in FY24, reaching **₹11.2 lakh crore**, although insurance penetration slightly declined from **4% in FY23** to **3.7% in FY24**.
- **Life Insurance:** Life insurance penetration saw a minor drop from **3% in FY23** to **2.8% in FY24**, while non-life insurance penetration remained stable at **1%**.
- **Insurance Density:** Insurance density rose modestly from **USD 92 in FY23** to **USD 95 in FY24**, with non-life insurance density rising from **USD 22** to **USD 25**, and life insurance density remaining at **USD 70**.
- **Premium Income:** The non-life insurance sector saw a **7.7% YoY growth**, with gross premiums reaching **₹2.9 lakh crore**. The life insurance sector recorded a **6.1% YoY growth**, with premiums reaching **₹8.3 lakh crore** in FY24.

Insurance Penetration:

It's calculated by dividing the **total amount of insurance premiums paid in a year** by the

ADDRESS:

19/1A Shakti Nagar, Nagiya Park Near Delhi University, New Delhi - 110007 (India)



country's gross domestic product (GDP).

Insurance Density:

Insurance density is a measure of how much insurance premium is collected per person in a country. It's calculated by **dividing the total insurance premium collected by the total population of the country**. It's usually expressed in US dollars.

Insurance Penetration and Density

- **Penetration Rate:** With an overall insurance penetration of **3.7%**, India remains below the global average of **7%**, offering ample opportunity for insurers to expand their reach.
- **Target Segments:** Insurers can target **tier 2 and 3 cities** and **rural areas**, where awareness and access to insurance products are limited, to tap into new customer segments and drive growth.

Future Growth Projections

- **Projections:** According to the **Swiss Re Institute**, India's insurance sector is expected to grow at **11.1%** annually, making it the fastest-growing market among the **G20 nations** from **2024 to 2028**. The expansion will be driven by an increasing **middle class**, advancements in **technology**, and supportive **regulatory measures**.

ADDRESS:

19/1A Shakti Nagar, Nagiya Park Near Delhi University, New Delhi - 110007 (India)



DEVELOPMENTS IN THE PENSION SECTOR

Pension Sector Growth

- **National Pension System (NPS) and Atal Pension Yojana (APY):** India's pension sector has experienced significant growth since the introduction of the **NPS** and **APY**.
- As of **September 2024**, the total number of subscribers reached **783.4 lakh**, marking a **YoY growth of 16%** from **675.2 lakh** in **September 2023**.
- **APY Subscribers:** The number of **APY subscribers** increased from **538.2 lakh** in **March 2023** to **629.1 lakh** in **September 2024**. **APY subscribers** now account for approximately **80.3%** of the total pension subscriber base.

DEMOGRAPHIC SHIFTS

- **Gender Distribution:** There have been notable improvements in the **gender distribution** of **APY subscribers**. The share of **female subscribers** grew from **37.9%** in **FY16** to **52%** in **FY24**.
- **Age Distribution:** The **age distribution** has increasingly favored a younger cohort, specifically those aged **18-25**, whose share rose from **29.2%** in **FY16** to **45.5%** in **FY24**.

ADDRESS:

19/1A Shakti Nagar, Nagiya Park Near Delhi University, New Delhi - 110007 (India)



- **Pension Amount:** A significant portion of **APY accounts** (93.7%) corresponds to a pension amount of **₹1,000 per month**, while **3.7%** are for a pension of **₹5,000**.

UNIFIED PENSION SCHEME

- **UPS Introduction:** On **August 24, 2024**, the government approved the **Unified Pension Scheme (UPS)** for **government employees**, which will be implemented alongside the existing **NPS**, starting from **FY26**.
- **Features:**
 - The scheme offers a **family pension**, a **guaranteed pension amount**, and a **minimum pension** for all government employees.
 - It guarantees **50%** of the **average basic pay** of the last 12 months before retirement as the guaranteed pension, provided the employee has served the government for at least **25 years**.
 - The minimum pension under the scheme is **₹10,000 per month** for employees with at least **10 years of service** upon retirement.

PENSION COVERAGE & ASSETS

- **Pension Assets:** **Pension assets**, including major schemes like the **Employees' Provident Fund Organisation (EPFO)**, contribute **17%** of **India's GDP**. The **NPS** contributes an additional **4.5%** of the **GDP**.

ADDRESS:



- **Pension Coverage:**

- Overall pension coverage for **NPS** and **APY** increased from **0.95% of the total population in FY16** to **5.3% in FY24**.
- The **Assets under Management (AuM)** for these schemes as a proportion of **GDP** has risen from **0.86% in FY16** to **4% in FY24**.

FUTURE CHALLENGES

- **Emerging Risks:** Emerging risks, such as **climate change**, **geopolitical uncertainty**, and **increasing life expectancy**, present significant challenges for pension providers. The growing **elderly population** highlights the widening **pension gap** and raises concerns over underwriting risks related to longevity.
- **Risk Management:** Effective risk management requires a clear, quantitative understanding of **risk appetite**. Insurers and pension providers must innovate rapidly to address these emerging risks while ensuring **efficiency** and **productivity** through **simplification**, **standardization**, and **digitization**.

FINANCIAL SECTOR REGULATORS

- **Role of Regulators:** **Independent regulators** are crucial institutions responsible for implementing specific policies across several sectors, including **financial services**.

ADDRESS:

19/1A Shakti Nagar, Nagiya Park Near Delhi University, New Delhi - 110007 (India)



These regulators provide **non-discriminatory access** to essential services and ensure **fair and transparent regulations**.

- **Financial Sector IRBs:** The **financial sector** is primarily governed through

Independent Regulatory Bodies (IRBs) such as:

- **RBI** (Reserve Bank of India)
- **SEBI** (Securities and Exchange Board of India)
- **IRDAI** (Insurance Regulatory and Development Authority of India)
- **PFRDA** (Pension Fund Regulatory and Development Authority)
- **IBBI** (Insolvency and Bankruptcy Board of India)
- **FSDC** (Financial Stability and Development Council) has a broader **financial stability** mandate.

Each IRB has different structures, functions, and degrees of **autonomy**.

ADDRESS:

19/1A Shakti Nagar, Nagiya Park Near Delhi University, New Delhi - 110007 (India)



MCQs

1. Which of these continents is not covered under Project Waterworth?

- (A) Europe
- (B) Asia
- (C) Australia
- (D) South America

Ans. (A)

2. Which of these is the longest subsea cable presently?

- (A) India Asia Express
- (B) India Europe Express
- (C) 2Africa subsea cable
- (D) None of the above

Ans. (C)

3. Which of these countries do not share a boundary with Russia?

- (A) Kazakhstan
- (B) Georgia
- (C) Azerbaijan
- (D) Armenia

Ans. (D)

ADDRESS:

19/1A Shakti Nagar, Nagiya Park Near Delhi University, New Delhi - 110007 (India)



4. Consider the following statements and mark the correct one:

1. Insurance Penetration & Density increased in India in FY 24 as compared to FY 23.
2. Insurance penetration in India is above the global average.

- (A) Only 1
(B) Only 2
(C) Both 1 & 2
(D) Neither 1 nor 2

Ans. (D)

5. Which of these can be considered as a component of Social Security?

1. Insurance
2. Pension

- (A) Only 1
(B) Only 2
(C) Both 1 & 2
(D) Neither 1 nor 2

Ans. (C)

ADDRESS:

19/1A Shakti Nagar, Nagiya Park Near Delhi University, New Delhi - 110007 (India)