Prelim Bits 15-05-2022 & 16-05-2022 | UPSC Daily Current Affairs

Macolin Convention

The 12th meeting of Interpol's Match-Fixing Task Force (IMFTF) concluded with a call for harmonised global efforts to curb competition manipulation and establishment of national platforms, as outlined by Macolin Convention.

> It was the first major event held under the banner of its newly created Financial Crime and Anti-Corruption Centre (IFCACC).

- The Macolin Convention is the other name for the Council of Europe Convention on the Manipulation of Sports Competitions.
- It is a multi-lateral treaty aimed at **checking match-fixing**.
- It is the only rule of international law on the manipulation of sports competitions.
- It centralizes and analyses information on irregular and suspicious trends.
- It came into force in 2019, and has been signed by 32 countries and ratified by 7 countries.

Interpol's Match-Fixing Task Force

- The INTERPOL Match-Fixing Task Force (IMFTF) was created in 2011.
- It brings together law enforcement agencies around the world to tackle match-fixing and corruption in sport.
- It focuses on sharing experiences and best practices and acts as a platform for investigations and international case coordination.
- **Members** - It has 100 member units, with more than 150 national points of contact worldwide.
- The Central Bureau of Investigation (CBI) is a member of the IMFTF.
- **Tools** - Specific tools developed by INTERPOL are available to law enforcement worldwide, dedicated to data collection on sport corruption (project ETICA) and financial crimes analysis (FINCAF).

Reference

1. https://www.thehindu.com/news/national/interpols-match-fixing-task-force-calls-for-harmonised-global-efforts-to-curb-competition-manipulation/article65407783.ece
2. https://www.interpol.int/en/Crimes/Corruption/Corruption-in-sport
3. https://www.coe.int/en/web/sport/t-mc

Cause and Effect of Rising Inflation

Retail Inflation had grown by 7.8% in April, 2022. This is at its highest in the last 8 years, and almost twice the Reserve Bank of India's (RBI's) target.

Causes of Rising Inflation

- The war in Ukraine and the associated inflation via higher prices of crude oil are a significant contributor to the April's high inflation data.
- But, the headline inflation, which is calculated using the Consumer Price Index (CPI), has been above the 4% mark since 2019-20.
- The CPI has different categories with varying weights.

Category of the CPI	**Weightage**
Food Items	46% of the index
Fuel & Light	7% of the index
Core Inflation (All other items)	47% of the index

- In 2020-21, when the pandemic hit the economy, there was a 7.3% spike in food prices and even core inflation rose by 5.5%. This spiked the overall inflation.
- In 2021-22, the year when the global economy started recovering sharply, even though food price inflation moderated to 4%, fuel prices rose by 11.3% and core inflation went up to 6%.
- In the current FY 2021-22, it is estimated that all three components will experience an inflation rate of 6% or more.

Effects of High Inflation

- In the short term, inflation creates winners and losers. But in the eventual analysis, everyone suffers if it stays persistently high.
- It **reduces purchasing power** of the people.
- The eventual fallout of reduced purchasing power will **reduce the overall demand** for goods and services of the consumers.
- Typically, non-essential demands such as a vacation get curtailed while households focus on the essentials.
- It **harms savers and helps borrowers**.
- Inflation helps the **government meet debt obligations**.
- It also allows the government to meet its fiscal deficit targets.
- It **worsens the exchange rate**. High inflation means the rupee is losing its power and, if the RBI doesn't raise interest rates fast enough, investors will increasingly stay away because of reduced returns.
- It leads to expectations of higher inflation. Persistently high inflation changes the psychology of people. People expect future prices to be higher and demand higher wages.

> The way out is for the RBI to raise interest rates in a credible fashion. The difficulty is that raising interest rates at the current juncture, when growth is iffy, could lead to concerns of stagflation.

Reference

1. https://indianexpress.com/article/explained/rising-inflation-cause-effect-explained-7915202/
2. https://www.investopedia.com/ask/answers/111314/what-causes-inflation-and-does-anyone-gain-it.asp

Infrastructure Investment Trusts

- Regulated by the Securities and Exchange Board of India (SEBI), the Infrastructure Investment Trusts (InvITs) are investment instruments that work like mutual funds.
- InvITs can be treated as the modified version of Real Estate Investment Trusts (REITs) designed to suit the infrastructure sector.
- It is a vehicle that is designed to pool money (small sums) from several investors to be **invested in income-generating assets**.
- They are mostly **structured as trusts**, and an independent trustee holds assets on behalf of unit holders.
- An InvIT consists of four elements: Trustee, Sponsor(s), Investment Manager and Project Manager.
- **Sectors** - InvITs could be set up for sectors defined under the infrastructure as per RBI guidelines.
- So far, developers engaged in the road, power transmission, gas pipelines and tower transmission have formed InvIT.
- **REITs and InvITs** - REITs and InvITs are conceptually like mutual funds, where a sponsor raises capital and invests it in infrastructure or real estate projects.

REITs	**InvITs**
REITs comprise a portfolio of commercial real estates; a major portion is already leased out.	InvITs comprise a portfolio of infrastructure assets such as highways and power transmission assets.
REITs are investment vehicles that own and manage investment grade and income-producing **real estate properties** (such as offices, malls, industrial parks, hospitality, etc.)	InvITs are investment vehicles that invest in **infrastructure projects** (such as roads or highways).
REITs must be publicly listed.	InvITs can be publicy listed, private listed or private unlisted.
REITs provide stable income and yield as 80% of REIT assets are income-generating assets with long-term rental contracts.	InvITs' cash flows are less certain as they are dependent on multiple factors, including the capacity utilisation of the underlying assets and scalability of tariffs.
REITs are more accessible to small investors and have higher liquidity due to lower unit prices and trading lots.	InvITs have a bigger trading lot size and thus somewhat poor liquidity.
REITs own the property leased out and their underlying assets see growth in value over time and have high terminal value. REITs have greater visibility of growth, which can be achieved by redeveloping existing assets, new construction, and acquiring completed leased assets.	For InvITs, growth depends on the successful acquisition of concession assets through a bidding process. InvITs comprise concessions where the projects are returned to the authority or rebid post the concession period.

- **Working** - A REIT/InvIT is established as a trust settled by the sponsor under the Indian Trusts Act, 1882 and the trust deed registered in India under the Registration Act, 1908.
- Also, a Certificate of Registration as REITs and InvITs needs to be obtained from the SEBI.
- Distributions by REITs and InvITs are based on Net distributable cash flows (NDCF), unlike companies where dividends are based on profits.
- These distributions are declared and made at least,
    1. Once every 6 months for publicly offered REITs and InvITs and

2. Once a year for privately placed InvITs.

- **Related Links** - Marquee Institutional Investors

Reference

1. https://www.thehindubusinessline.com/blexplainer/all-you-need-to-know-about-invits-and-infrastructure-funding/article65403672.ece
2. https://economictimes.indiatimes.com/definition/infrastructure-investment-trusts

RNA Granules to Treat Neurodegenerative Disorders

- In the cytoplasm of a cell, there are structures made of the messenger RNA (mRNA), and the proteins known as RNA granules.
- Unlike other structures in the cell (such as mitochondria), the RNA granules are not covered and confined by a membrane.
- This makes them highly dynamic in nature, thereby allowing them to constantly exchange components with the surrounding.

Under normal conditions, the RNA granules are present in the cytoplasm at low numbers.

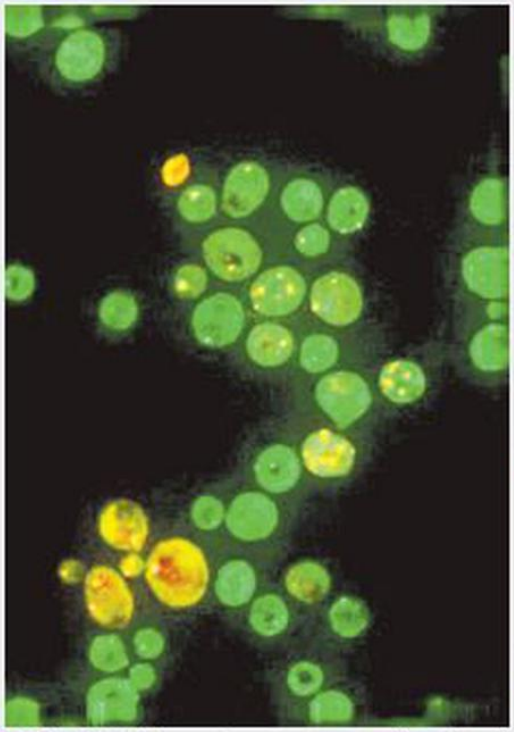
But, they increase in number and size under stressful conditions including diseases.

- **Stretches** - The **presence of stretches** containing repeats of certain amino acids is a defining feature which **does not change** from one organism to another of the RNA granule protein components.
- Such stretches are referred to as low complexity regions.
- Repeats of arginine (R), glycine (G) and glycine (G) - known as RGG - are an example of low complexity sequence.
- **Protein synthesis** - mRNAs are converted to proteins (building blocks of the cell) by the process of **translation**.
- RNA granules determine mRNA fate by deciding when and how much protein would be produced from mRNA.
- Protein synthesis is a multi-step and energy expensive process.
- Therefore, a common strategy used by cells when it encounters unfavorable conditions is to shut down protein production and conserve energy to deal with the stressful situation.
- RNA granules help in the process of shutting down protein production.
- Some RNA granule types (such as Processing bodies or P-bodies) not only regulate protein production but also degrade and eliminate mRNAs, which in turn helps in reducing protein production.

A protein to dissolve aggregates in the neurons

Knowledge obtained from yeast is very often applicable to humans

- Researchers at IISc Bangalore have identified a protein in yeast cells that dissolves RNA-protein complexes, also known as RNA granules
- This finding is critical for many neurodegenerative disorders such as Amyotrophic Lateral Sclerosis (ALS) and Frontotemporal Dementia (FTD)
- These neurodegenerative disorders are characterised by the accumulation of aggregates that resemble RNA granules. These aggregates are believed to contribute to the disease



Naked: Unlike other structures in the cell, the RNA granules are not covered and confined by a membrane.

- In yeast cells, a protein (Sbp1) promotes the disintegration of RNA granules. The protein dissolves only the P-bodies
- The study found that the Sbp1 protein helps in reducing the aggregates of human proteins involved in neurodegenerative disorders
- The next step is to experimentally test the effect of repeat sequences in genetically engineered mice
- This study once again suggests that knowledge obtained from yeast is very often applicable to humans

Reference

https://www.thehindu.com/sci-tech/science/first-step-in-treating-some-neurodegenerative-disorders/article65412013.ece