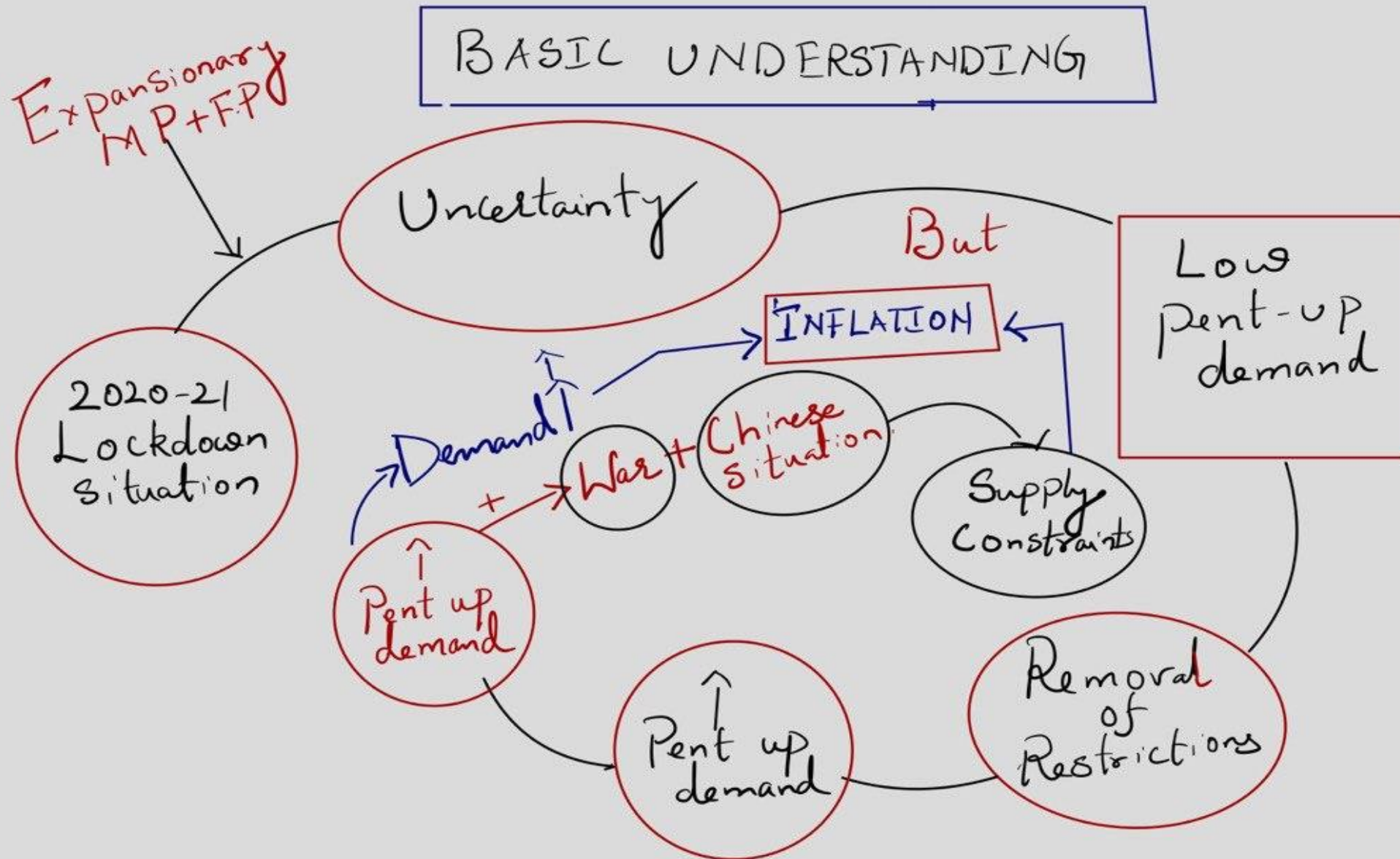
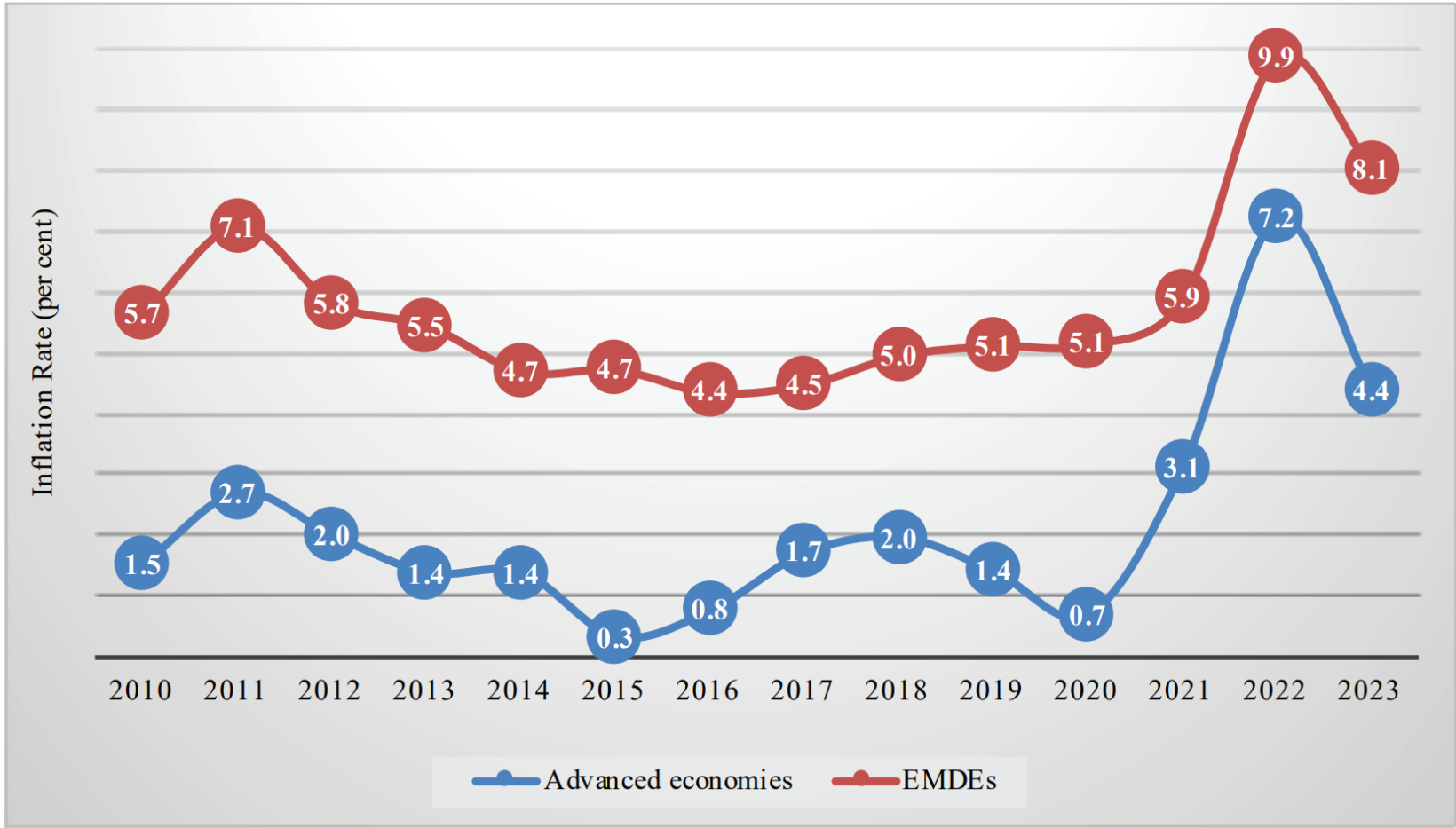


PRICES AND INFLATION: SUCCESSFUL TIGHT-ROPE WALKING



Comparison of Inflation Rate in Advanced Economies & Emerging Markets and Developing Economies

Figure V.1: Record Consumer Price Inflation in 2022 Calendar Year



Source: World Economic Outlook, October 2022, IMF

Note: *The figure are annual averages; figures for 2022 and 2023 are projections.

Advanced Economies include 40 economies and EMDEs include 156 economies as per IMF classification

1. Introduction

- Rise in prices hurt the common man the most, a big concern for the policy makers
- Supply-side disruptions (2020) pushed inflation beyond the RBI's upper tolerance limit – 6%

➤ Pandemic caused supply chain disruption of

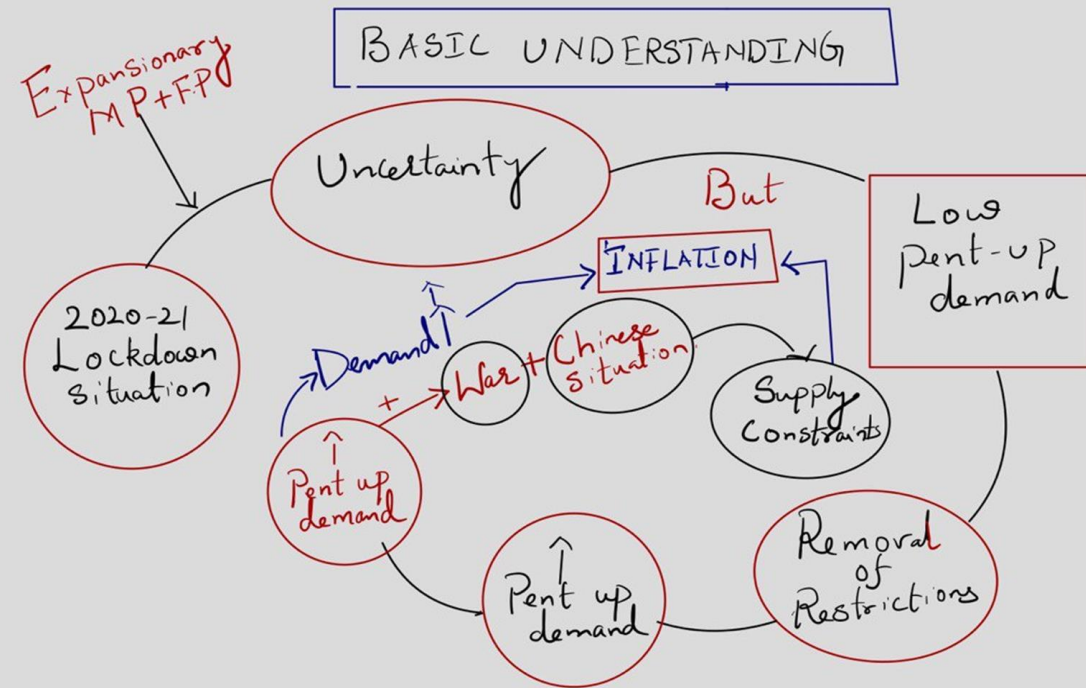
- Essential goods
- Food
- Medicines
- Raw materials
- Clothes & Footwear

➤ Russia – Ukraine crisis led to

- Crude oil
- Fertilisers
- Wheat
- Sunflower oil

Surge in →

➤ Excessive heat & uneven rainfall affected farm sector



- India's inflation rate peaked in April 2022 at **7.8 %** before moderating to 5.7 % in December 2022 on the back of
 - Good monsoon
 - Global economic slowdown
 - Rise in interest rates
- The above factors contributed to a substantial decline in wholesale price inflation.

2.Domestic Wholesale Price Inflation

WPI (Basket)

Sl.	COMPONENT	Weight
1	Primary Articles	22.6%
2	Fuel & Power	13.2%
3	Mfd Products	64.2%
	Total	100%
	Food	24.4%

Food = 15.3%
Other = 7.3%
(Mineral)

LPG = 0.6
Petrol = 4.7
Other = 7.9

Food = 9.1%
55.1%

WPI headline = 100%

WPI Food
= 15.3% + 9.1%
= 24.4%

WPI Core
= 55.1%

No Services

More stable

Table V.2: Average Annual Wholesale Inflation Based on WPI (per cent) (Base: 2011-12=100)

Groups/Subgroups	Weight	FY20	FY21	FY22	FY23*
Primary Articles	22.6	6.8	1.7	10.3	12.3
Food articles	15.3	8.4	3.1	4.1	8.3
Cereals	2.8	7.5	-2.6	1.6	10.7
Pulses	0.6	15.9	11.6	6.9	0.0
Vegetables	1.9	31.2	3.4	0.4	13.2
Fruits	1.6	3.2	1.4	11.3	10.4
Non-Food Articles	4.1	4.5	1.4	21.1	12.0
Minerals	0.8	13.2	6.7	19.6	6.2
Crude Petroleum & Natural Gas	2.4	-7.7	-17.5	56.7	57.7
Fuel & power	13.2	-1.8	-8.0	32.6	33.8
LPG	0.6	-8.3	-2.7	43.3	16.9
Petrol	1.6	-3.2	-11.8	62.9	41.9
High Speed Diesel	3.1	-3.5	-14.4	59.9	60.8
Manufactured Products	64.2	0.3	2.7	11.1	7.1
Food products	9.1	4.1	5.6	11.7	6.0
Edible oils	2.6	1.4	20.3	30.5	1.4
<i>Food Inflation (Food articles + Food products)</i>	<i>24.4</i>	<i>6.9</i>	<i>3.9</i>	<i>6.8</i>	<i>7.5</i>
<i>Core Inflation (Manufactured Products-Food products)</i>	<i>55.1</i>	<i>-0.4</i>	<i>2.2</i>	<i>11.0</i>	<i>9.2</i>
<i>Headline Inflation</i>	<i>100</i>	<i>1.7</i>	<i>1.3</i>	<i>13.0</i>	<i>11.5</i>

Source: Office of Economic Adviser, DPIIT

Note: *April-December 2022, WPI data for November and December 2022 are provisional

A. Wholesale Price Inflation Caused by Global Supply Chain Disruption

- WPI based inflation peaked at **16.6 % in May 2022** given the supply chain disruptions and Ukraine Russia conflict.
- Prices of items with maximum exposure to international pricing (petroleum products, basic metals, chemicals & chemical products, and edible oils) translated into a rise in the domestic WPI inflation.
- Regulatory actions reduced the WPI from its peak of **16.6% in May 2022 to 5%** by the year end.
- WPI inflation is imported inflation – RBI study indicates , **1% rise in inflation globally** would lead to **1% +0.63 % increase in inflation in India**.
- In the current financial year, global prices of edible oils, rubber, cotton, crude oil and metals decreased.

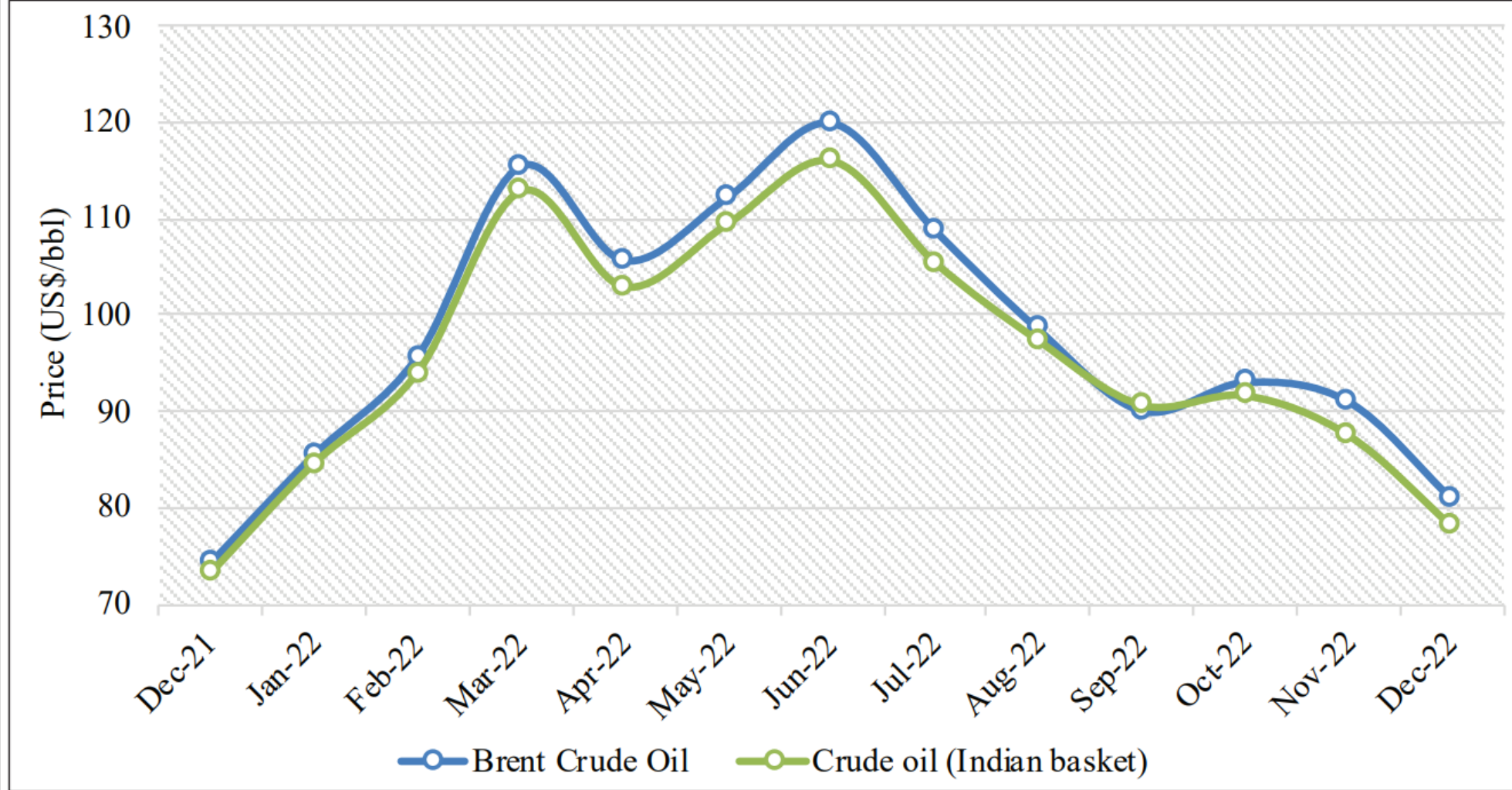
B. Measures to contain Inflation in Input prices

- **Reduction of Import duty** - Import duty was reduced for raw materials of plastic products, major inputs of steel, among others.
- **Reduction of Excise duty on fuels** - Union & state governments across states have reduced excise duties on petrol and diesel, thereby mitigating the fuel price rise.
- **Reduction of Custom duty** - Custom duty was reduced for key items like cotton, polish diamonds and gemstones and on certain critical chemicals namely methanol, acetic acid and heavy feedstocks or petroleum refining.

3. Fuel Price Inflation: Declining Global Crude Oil Prices

Time Period	Price of Indian Basket of Crude oil	Reasons
FY 2021	US \$ 20-65/bbl	Subdued global demand because of Covid 19
FY 2022	Prices continue to rise	Cuts in crude supply by OPEC
June 2022	US \$ 116/bbl	Supply disruptions & Rising tensions in Europe
December 2022	US \$ 78/bbl	Reduction in VAT & central excise duty

Figure V.17: Moderation in Crude Oil Prices



Source: Pink Sheet, World Bank and PPAC, MoPNG

4. Domestic Retail Inflation

Table V.1: Average Annual Retail Inflation Based on CPI-C (per cent) (base: 2012=100)

Groups/Sub-groups	Weight	FY20	FY21	FY22	FY23*
Food & beverages	45.9	6.0	7.3	4.2	7.0
Cereals and products	9.7	2.8	3.8	0.5	9.3
Meat and fish	3.6	9.3	15.4	7.9	4.7
Egg	0.4	4.5	12.9	7.6	-1.0
Milk and products	6.6	2.9	5.4	2.8	6.8
Oils and fats	3.6	2.9	16.0	27.4	5.4
Fruits	2.9	0.7	2.6	6.2	4.4
Vegetables	6.0	21.3	5.8	-7.2	7.6
Pulses and products	2.4	9.9	16.4	6.0	1.8

Contd..

RAMSUDHIR K

	Weight	FY20	FY21	FY22	FY23*
Sugar and confectionery	1.4	0.8	2.5	2.3	2.7
Spices	2.5	4.4	10.9	5.3	14.9
Pan, tobacco & intoxicants	2.4	4.2	9.9	4.5	2.0
Clothing & footwear	6.5	1.6	3.4	7.2	9.7
Housing	10.1	4.5	3.3	3.7	4.1
Fuel and light	6.8	1.3	2.7	11.3	10.5
Miscellaneous	28.3	4.4	6.6	6.7	6.3
Household goods and services	3.8	3.1	3.0	5.8	7.5
Health	5.9	6.2	5.1	7.5	5.8
Transport and communication	8.6	2.4	9.9	10.1	6.4
Recreation and amusement	1.7	4.9	5.1	6.5	6.4
Education	4.5	5.5	2.8	2.9	5.2
<i>Headline Inflation</i>	<i>100.0</i>	<i>4.8</i>	<i>6.2</i>	<i>5.5</i>	<i>6.8</i>
<i>Core Inflation</i>	<i>47.3</i>	<i>4.0</i>	<i>5.5</i>	<i>6.0</i>	<i>6.1</i>
<i>Food Inflation</i>	<i>39.1</i>	<i>6.7</i>	<i>7.7</i>	<i>3.8</i>	<i>7.0</i>

Source: MoSPI,

Note: *April-December, CPI data for December 2022 are provisional

A. Headline Inflation – CPI (C) Declined from its Peak

- CPI (C) based retail inflation declined in FY 2022 as compared to FY 2021
- Despite CPI (C) declining, inflation was to be seen in

1. Oils & Fats

2. Fuel & Light

Due to

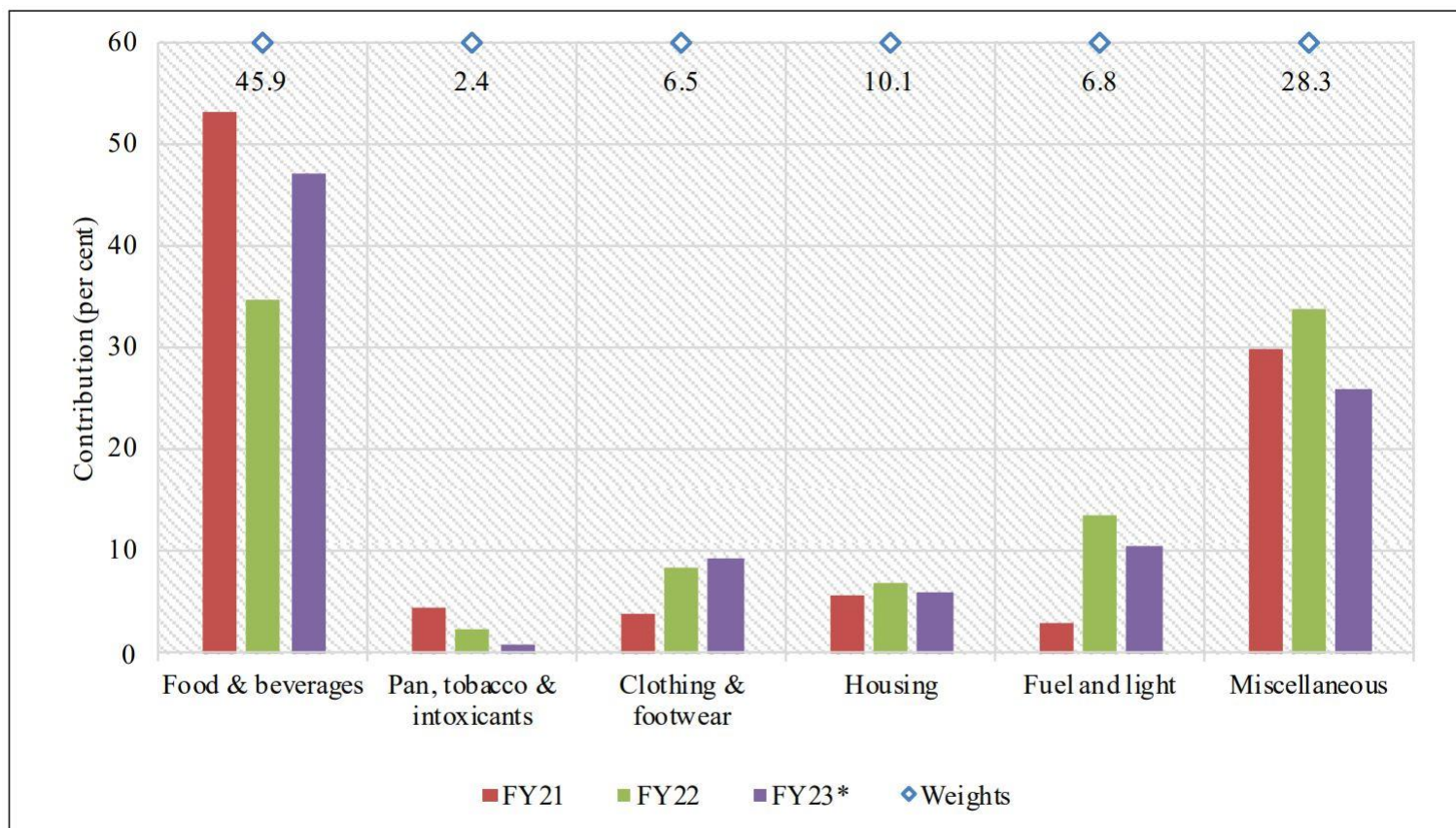
3. Transport & Communication

- Supply side disruptions
- Russia Ukraine crisis – It also increased prices of
 - Fertilisers
 - Wheat
 - Fuel & Rare earth metals

B. Retail Inflation Driven by Food Commodities

- Retail price inflation mainly stems from agriculture and allied sector, housing, textiles, and pharmaceutical sectors.

Figure V.4: Retail Inflation Driven by 'Food and Beverages' Group



During FY23- **Food & Beverages, Clothing, Footwear, Fuel & light** were the major contributors to headline inflation.

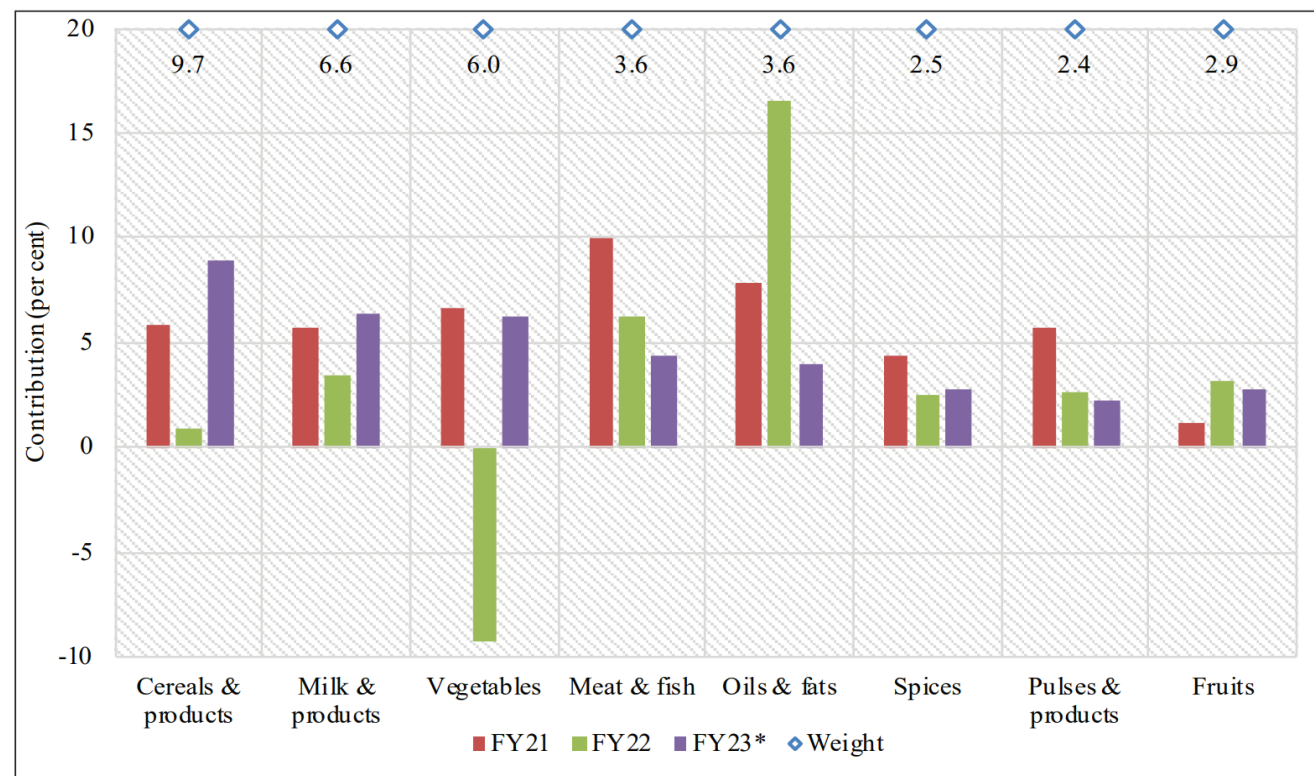
Source: MoSPI

Note: *April-December

C. Food Inflation caused by Vegetables and Cereals in FY22

- Food inflation based on Consumer Food Price Index (CFPI) **climbed to 7.0 % in FY23 from 3.8 % in FY22**, with major price rise seen in **vegetables, cereals, milk and spices**.
- Spike in vegetables due to crop damage of tomato & supply side disruptions
- RBI estimates increase in domestic prices for
 - Cereals and Spices (Supply shortage)
 - Milk (High feed cost)

Figure V.6: Drivers of Food Inflation in FY23* – Vegetables, Cereals, Milk and Spices

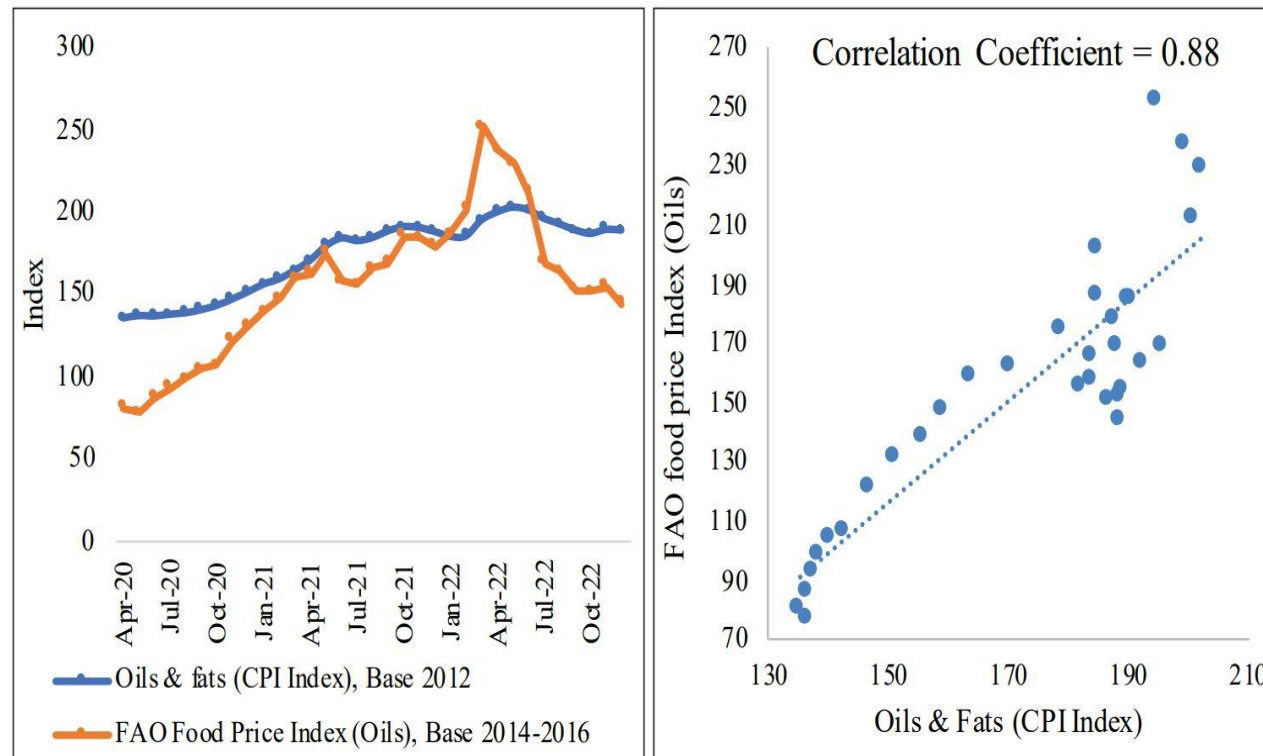


Source: MoSPI

Note: *April-December

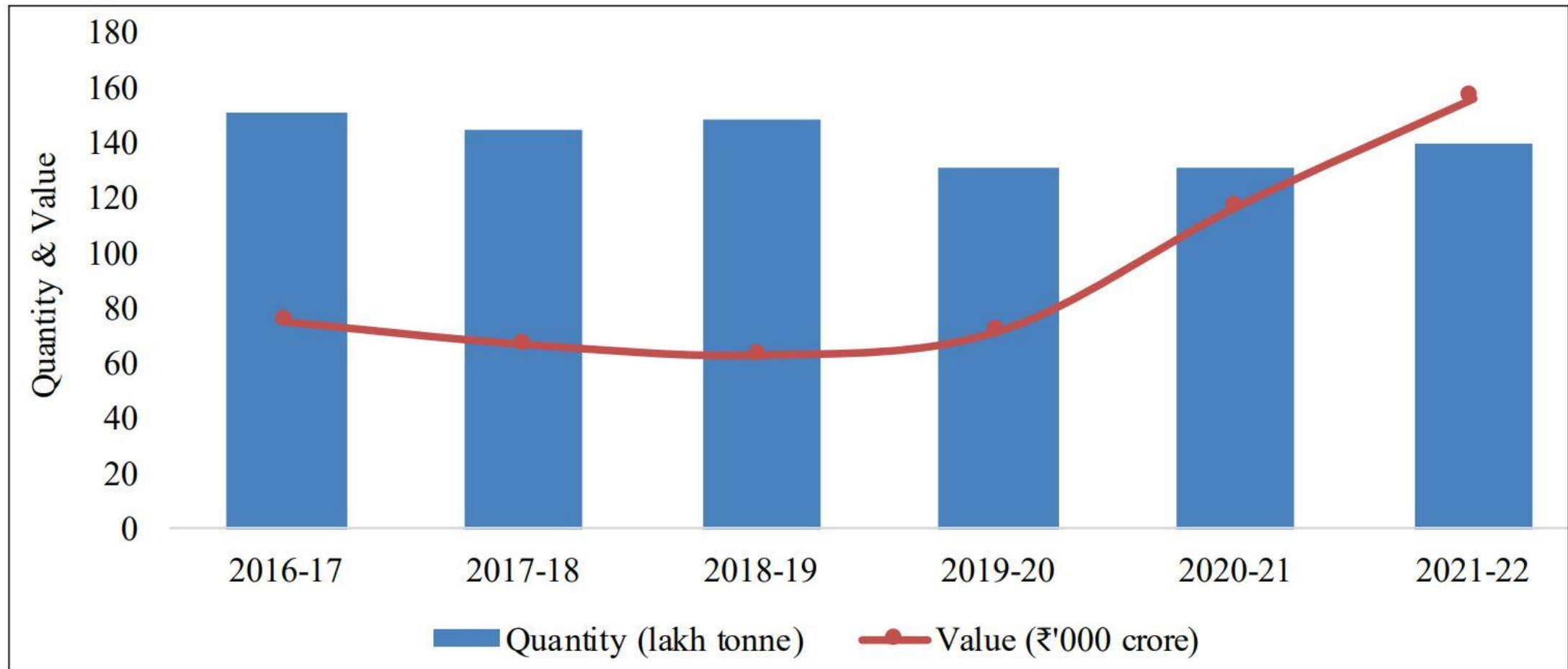
- **Rising Edible oil prices** in FY 22 – International price pressures directly affected the edible oil prices worldwide due to **shortfall in production** worldwide.
- India meets **60%** of its edible oil demand through imports.
- **Sunflower oil** which makes up 15% of our total oil imports is procured mainly from Ukraine and Russia.
- In order “**Pradhan mantra Garib Kalyan Ann Yojana**” launched to insulate vulnerable sections from the rise in prices - provide free food grains to more than **80 crore beneficiaries**.

Figure V.8: Imported Inflation in Edible Oils



Source: FAO and MoSPI

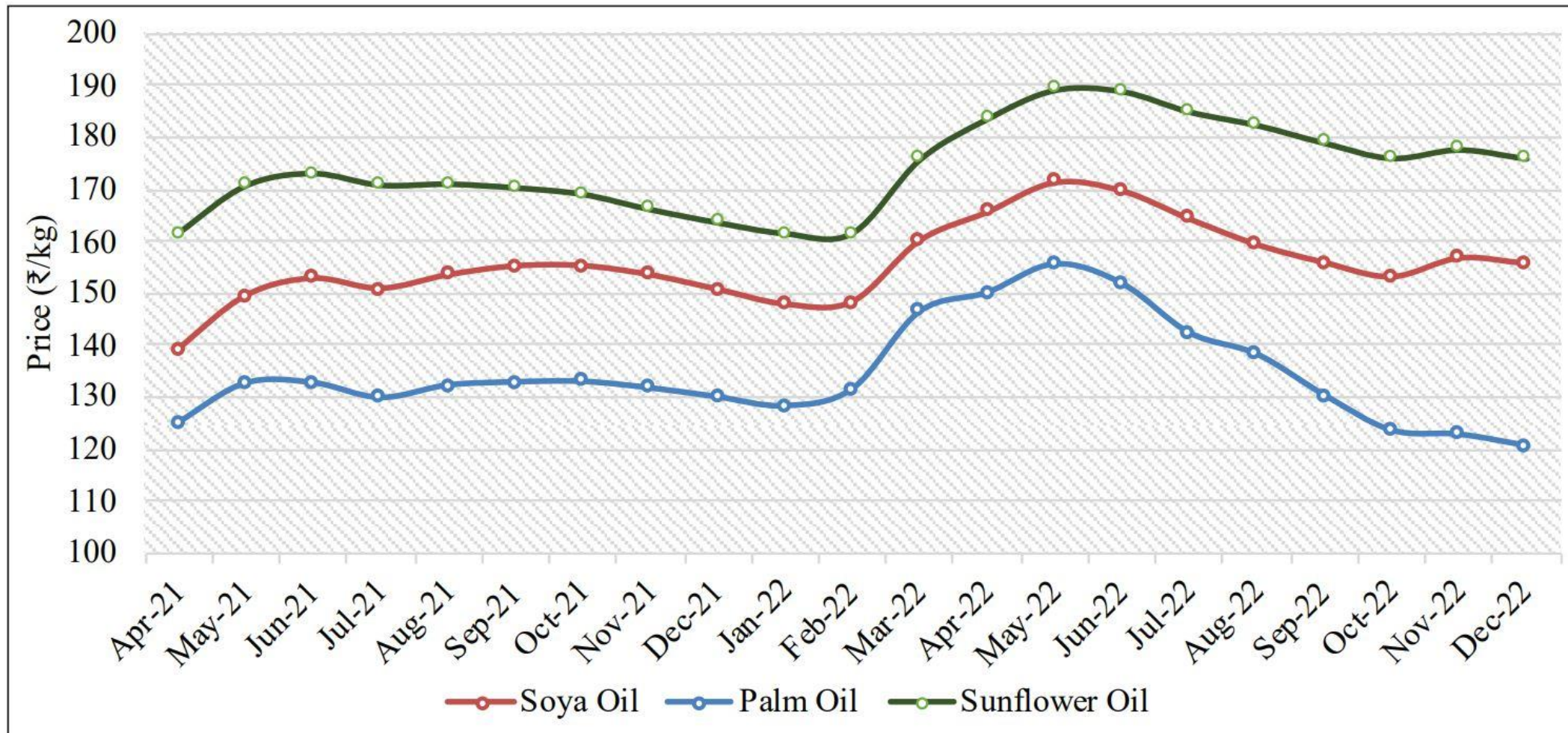
Figure V.9: Import of Edible Oils



Source: Solvent Extractors Association of India

Note: Data corresponding to oil year (November-October)

Figure V.10: Moderating Retail Prices of Edible Oils



Source: DoCA

D. Measures to Contain Inflation in Essential Food Commodities

- **Cereals** : Wheat flour exports were regulated, along with Maida and Suji. The government also imposed an **export duty of 20%** on Rice, Brown rice, & semi milled as well as wholly milled rice, except parboiled rice.
- **Pulses** : A **buffer stock** of pulses has been maintained for price stabilisation and a calibrated release was made into the market to moderate the prices.
- **Edible Oils** : The basic duty on refined palm oil and crude palm oil was reduced to curtail any unfair practices like hoarding, black marketing in the market - **stock limits** were set for all edible oils and oil seeds through notifications.

5. Rural-Urban Comparison

		Rural	Urban
1	Food & beverages	54.18	36.29
2	Pan, Tobacco, intonincants.	3.26	1.36
3	CLOTHING, FOOTWEAR	7.36	5.57
4	HOUSING	=	21.67
5	FUEL & LIGHT	7.94	5.58
6	Miscellaneous	27.26	29.53
	Total	100%	100%
	Food	47.25	29.62

2022-23

Rural > Urban
{Most of the states}

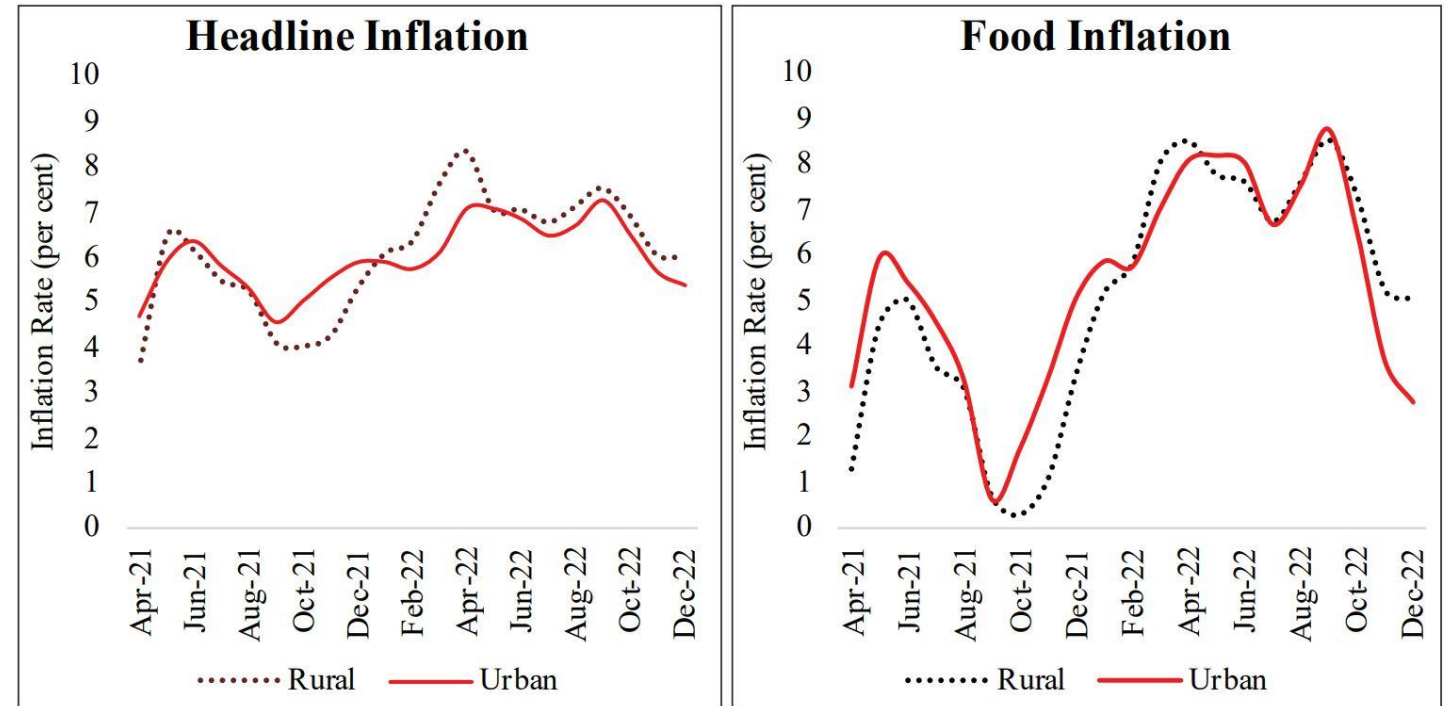
* Inflation reduced
due to fall of
global food prices.

* Rural-urban inflation
gap reduced (2022-23)

➤ Rural-Urban Inflation Differential has Declined

- Higher **Rural Inflation** than Urban Inflation was to be seen.
- Rural Fuel inflation remained lower than its urban counterpart due to subdued prices on traditional fuels.
- Gap between rural & urban inflation reached its **widest in March 2022**.
- The current fiscal year 2023 saw rural and urban inflation closely tracking each other.

Figure V.11: Urban and Rural Inflation



Source: MoSPI

6. Convergence of WPI & CPI Inflation

GAP BETWEEN WPI AND CPI

WPI

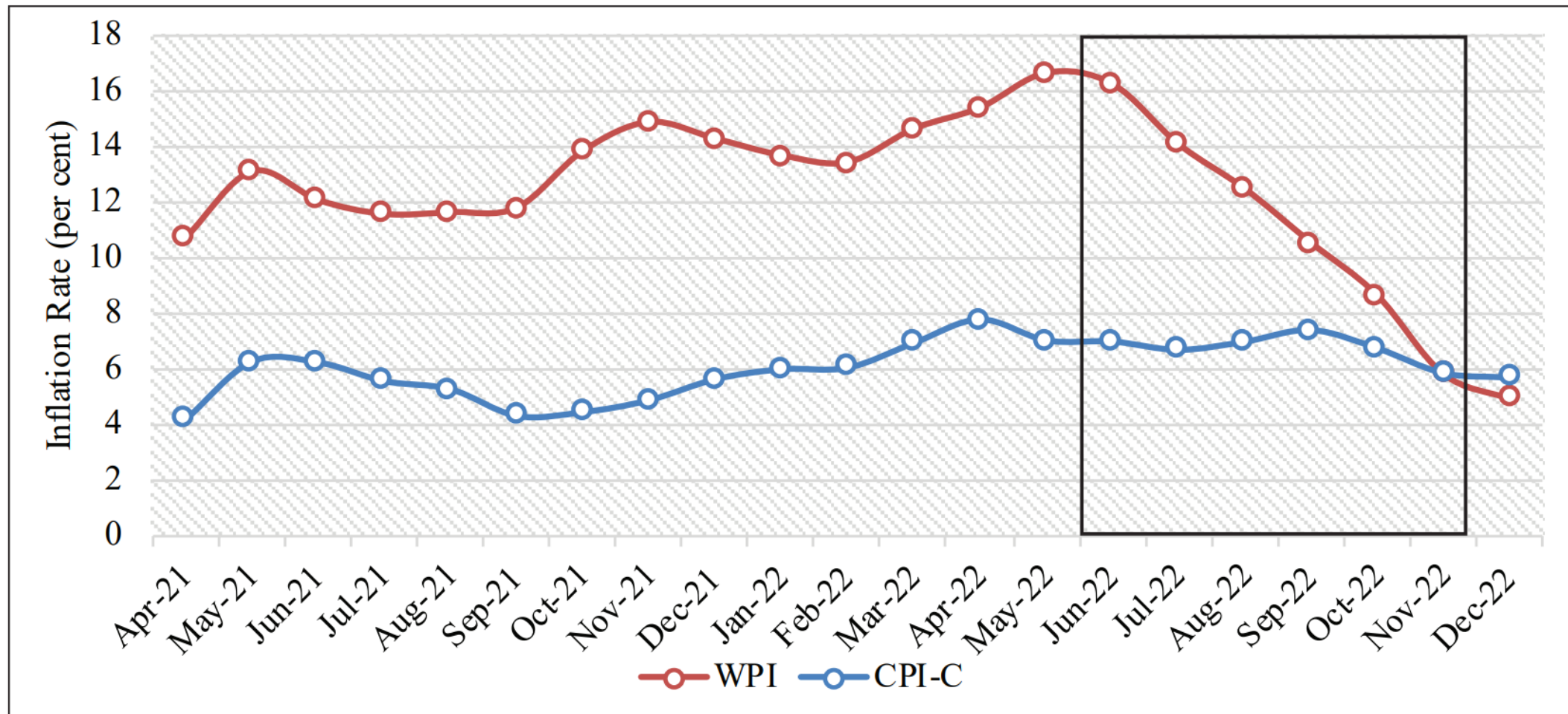
Sl.	COMPONENT	Weight
1	Primary Articles	22.6%
2	Fuel & Power	13.2%
3	Mfd Products	64.2%
	Total	100%
	Food	24.4%

No Services.

S.No	Description	Weight (%)
1	Food & beverages	45.86
2	Pan, Tobacco	2.38
3	CLOTHING, Foot	6.53
4	Housing	10.07
5	Fuel & light	6.84
6	Miscellaneous	28.32
	Total	100%
	Food	39.06

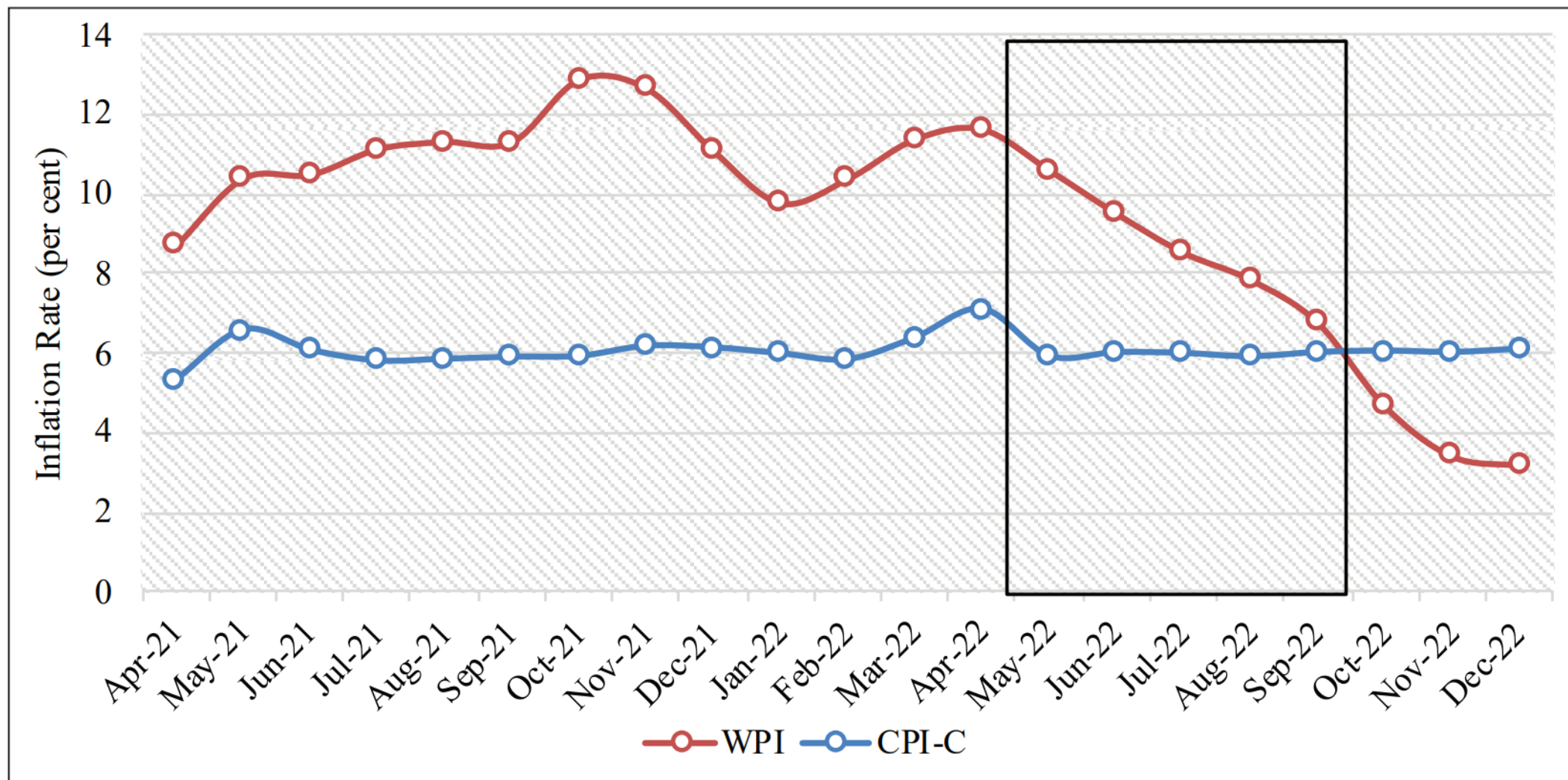
Services ↑ → Impact on CPI.

Figure V.18: Convergence of Headline WPI Inflation with Headline CPI-C Inflation



Source: MoSPI and Office of Economic Adviser, DPIIT

Figure V.19: Convergence in Core Inflation – CPI-C vs WPI



Source: MoSPI and Office of Economic Adviser, DPIIT

- Why a gap between WPI & CPI ?
 1. Pass-through of international prices to wholesale prices is relatively quick, it impacts retail prices with a lag.
 2. Due to the difference in composition and weights assigned to different commodities in the two indices.
- **Divergence Phase** – The WPI & CPI - C started diverging in March 2021, as WPI inflation touched double digits due to unfavourable base effects while CPI - C inflation remained stable and the difference between the two reached a peak of 10% in November 2021 .
- **Convergence Phase** – Convergence between WPI and CPI indices was mainly driven by two factors
 1. A cooling in inflation of commodities such as crude oil, iron, aluminium and cotton lead to a lower WPI.
 2. Inflation in services sector – As services form a core component of CPI – C but are not include in WPI.

7. Falling Inflationary Expectations

- Inflationary expectations are decisive in charting the course of inflation regulation.
- RBI – Anchoring (Tightening of - Repo Rate & CRR and reducing Gov't security purchases) of inflationary expectations & helping guide trajectory of Inflation.
- Business & Household inflationary expectations are falling.

8. Monetary Policy Measures for Price Stability

- Reserve Bank of India's Monetary Policy Committee (MPC) increased the policy repo rate by 250 bps from **4% to 6.5%** between **May 2022 & Feb 2023**.

Table V.3: Monetary Policy Statements – Tightening Monetary Policy

Date of MPC Statements	Changes in the Policy Repo Rate under the LAF
8 April 2022	Unchanged at 4 per cent
4 May 2022	Increased from 4.0 per cent to 4.4 per cent (40 basis points)
8 June 2022	Increased from 4.4 per cent to 4.9 per cent (50 basis points)
5 August 2022	Increased from 4.9 per cent to 5.4 per cent (50 basis points)
30 September 2022	Increased from 5.4 per cent to 5.9 per cent (50 basis points)
7 December 2022	Increased from 5.9 per cent to 6.25 per cent (35 basis points)

Source: RBI

9. Difference between Current Inflation & the Inflation of 1970's

- Current global scenario & the inflation is similar to the experience of 1970s, particularly the aftermath of the oil crisis in 1973 & 1979. But the environment & intensity of the crisis differ in various aspects.

	Current Inflation	Inflation of 1970's
Rise in oil price	Smaller rise	Oil price rose to historic heights
Effect on commodities	Price increase in Ag goods, Fertilisers & Metals	Price rise confined to Oil
Supply Chain Disruptions	Smaller role in recent price increase	Played huge part in increasing prices
Inflation	Rise in inflation was followed by several years of low inflation	1970's crisis took place against backdrop of steadily rising world inflation

10. Housing Prices: Recovering Housing Sector After the Pandemic


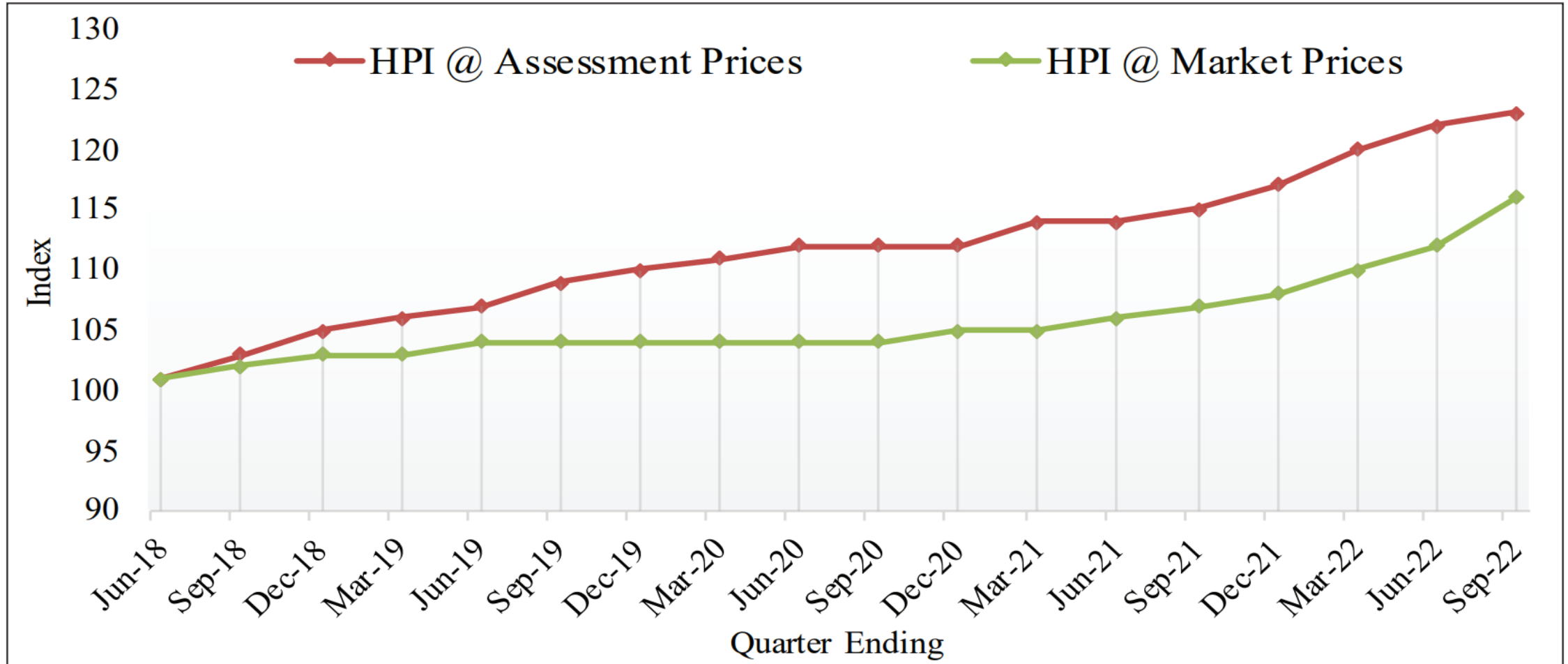
- Housing prices provide information on the state of the economy via booms and busts in asset markets.
 - National Housing Bank (NHB) **publishes two Housing Price Indices (HPI)**
 - HPI assessment price
 - HPI market price quarterly With FY 18 as Base Year
 - HPI market price index - Out of 50 cities, 43 cities saw an increase & 7 cities experienced a decline.
 - HPI assessment price index - Out of 50 cities, 46 registered increase & 4 cities experienced a decline.
 - Overall increase in composite HPI assessment and HPI market prices indicates a revival in the housing finance sector.
 - Stable to moderate increase in HPI offers confidence to homeowners and home loan financiers in terms of the retained value of the asset.
-
- ✓ **“Market Price”** – Price at which the property would sell for in the open market
 - ✓ **“Assessed Price”** – Value assigned to a home or other piece of real estate for property tax purposes. It takes into account the value of comparable properties in the area among other factors

Figure V.25: Composite HPI for All-India – Recovering Housing House



Source: RESIDEX, NHB

11. Keeping a check on Pharmaceutical Prices

- **Regulation** : *National Pharmaceuticals Pricing Policy, 2012*, administered by the Department of Pharmaceuticals, lays the basic principle of regulation of the prices of drugs in the market.
- **Price ceiling and fixed prices** : National Pharmaceuticals Pricing Policy, administers the ceiling prices of almost **119 formulations** under National List of Essential Medicines, (NLEM) 2022 whose prices have been fixed until December 2022.
- In addition to the 119 formulations, the retail prices for **2196 formulations** have been fixed under the **Drugs (Prices Control) order 2013**.
- **Pradhan Mantri Bhartiya Janaushadhi Pariyojana (PMBJP) & Janaushadhi Kendras** – Ensures **quality generic medicine** available at affordable prices.
- More than 9000 Janaushadhi Kendras have been opened with **1759 medicines** and **280 surgical devices** available for sale.

Conclusion

- Consumer Price Inflation in India went through three phases in 2022
 1. Rising Phase - April 2022 - 7.8 % (Ukraine – Russia war, Shortfall in crop harvests)
 2. Holding Phase - Aug 2022 -7.0%
 3. Declining Phase - December 2022 - 5.7% (Good monsoon, Prompt Government Measures & Adequate Food Supply)
- Gap between high **WPI inflation** and lower **CPI inflation** widened in May 2022 due to -
 1. Differences in relative weights of two indices
 2. Lagged effect of imported input costs on retail prices
- However, the Gap between the two measures of inflation has reduced since then, demonstrating a tendency towards **convergence**.

- Rising **Housing Price Index (HPI)** published by **National Housing Bank (NHB)** indicates the revival in the housing finance sector.
- RBI's Monetary Policy committee increase the policy Repo Rate up to 250 basis points (May 22 – Feb 23) from 4% to 6%.
- Central Government has undertaken **fiscal measures** to tackle inflation -
 - ✓ Reduction in excise duty on petrol and diesel
 - ✓ Prohibition of export of wheat products
 - ✓ Imposition of export duties on rice
 - ✓ Reduction in import duties
 - ✓ Cess on pulses
 - ✓ Rationalization of tariff and imposition of stock limits on edible oils and oil seeds
 - ✓ Maintenance of buffer stock for onion and pulses
 - ✓ Rationalisation of import duty on raw materials used in manufacturing
- Climate across the world has become erratic further strengthening upside risks to food prices.
- In general, the year 2022 was marked by a return of high inflation in the advanced world after three to four decades.
- **Overshoot of inflation** above the upper end of the target range in India was one of the lowest in the world.



What does the Budget Say?



Pharma Innovation: A new programme to promote research and innovation in pharmaceuticals will be taken up through centres of excellence.



Chemicals and Petrochemicals: To support Ethanol Blending Programme, exempting Custom Duty on denatured ethyl alcohol and reducing Custom Duty on acid grade fluorspar and on crude glycerine to 2.5 %. This reduces our dependency on Crude and can reduce the price and positive impact on our FOREX.



Prelims – Questions for practice

1. With reference to the domestic retail inflation in 2022, consider the following statements:

1. Headline inflation declined from its peak by the year end.
2. The retail inflation was mainly driven by higher food inflation.

Which of the statements given above is/are correct?

- a. 1 only b. 2 only c. Both 1 and 2 d. Neither 1 nor 2

2. The convergence between the WPI and CPI indices was seen in November 2022, after a gap of 21 months. In this context, which of the following is/are the driving factors?

1. An increase in inflation of commodities such as crude oil, iron, aluminum and cotton led to a lower WPI.
2. CPI inflation decreased due to a decrease in the prices of services.

Select the correct answer using the code given below.

- a. 1 only b. 2 only c. Both 1 and 2 d. Neither 1 nor 2

3. How is the current Inflation different from the 1970's?

1. The recent oil price rises are proportionally smaller than the 1970s crisis levels.
2. The recent crisis has seen price increases across a broader range of commodities, whereas the 1970's crisis was confined to oil prices only.
3. The commodity supply disruptions have played a smaller role in recent price increases than in the 1970s

Select the correct answer using the code given below

- a. 1, 2 and 3 b. 2 and 3 only c. 1 and 2 only d. 1 and 3 only

4. Consider the following statements regarding the Housing price index ?

1. It is published by the National Housing bank.
2. It is calculated with financial year 2012 as the base year.
3. It is calculated only for metropolitan cities across India using the population of the cities as weights.

Which of the statements given above is/are correct?

- a. 2 and 3 only b. 1 only c. 1 and 2 only d. 1 and 3 only

5. According to Economic Survey 2022-23, consider the following statements regarding the causes of rise in CPI:

1. largely due to the fallout of the Russia-Ukraine war
2. shortfall in crop harvests due to excessive heat in some parts of the country

Which of the above statements is/are correct?

- a. 1 only b. 2 only c. Both 1 and 2 d. Neither 1 nor 2

6. According to Economic Survey 2022-23, consider the following statements:

1. RBI's Monetary Policy Committee increased the policy repo rate under the liquidity adjustment facility (LAF) by 250 basis points from 4.0 per cent to 6.25 percent between May 2022 and Feb 2023.
2. The RBI forecasts elevated domestic prices for cereals and spices in the near term, owing to supply shortages

Which of the above statements is/are correct?

- a. 1 only b. 2 only c. Both 1 and 2 d. Neither 1 nor 2

7. According to Economic Survey 2022-23, consider the following statements:

1. FY22 witnessed lower CPI-Combined (CPI-C) based retail inflation as compared to FY21.
2. During FY22, some sub-groups such as 'oils & fats', 'fuel & light' and 'transport & communication' reported high inflation

Which of the above statements is/are correct?

- a. 1 only b. 2 only c. Both 1 and 2 d. Neither 1 nor 2

8. According to Economic Survey 2022-23, consider the following statements:

1. The headline inflation based on WPI and the CPI-C started converging in March 2021
2. The wedge between CPI-C and WPI inflation continued to widen before reaching its peak at 10 per cent in November 2021.
3. The gap began to narrow until April 2022.

Which of the above option(s) is/are correct?

- a. 1 and 3 only b. 2 and 3 only c. 1 and 2 only d. 1, 2 and 3 only

Practice Question for Answer Writing Skills

1. Unprecedented global inflation in the current year recalls the experience of the aftermath of the oil crisis in 1973 and 1979. In this context, discuss how the current inflationary trend is different from that of the 1970s.

THANK YOU