WORKSHOP

Growth and Inclusion:
Theoretical and Applied Perspectives

Session I

Food Inflation:
Drivers and Policy Implications

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January 12, 2012

The Claridges Hotel
12 Aurangzeb Road
New Delhi, India

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Drivers and Policy Implications

Subir Gokarn
Deputy Governor
Reserve Bank of India

Seminar on
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Structure of Presentation

- ◆ Characteristics of food inflation

- ◆ Demand factors

- ◆ Supply factors

- ◆ Policy implications

CHARACTERISTICS OF FOOD INFLATION

# Food Inflation in India
A Long View
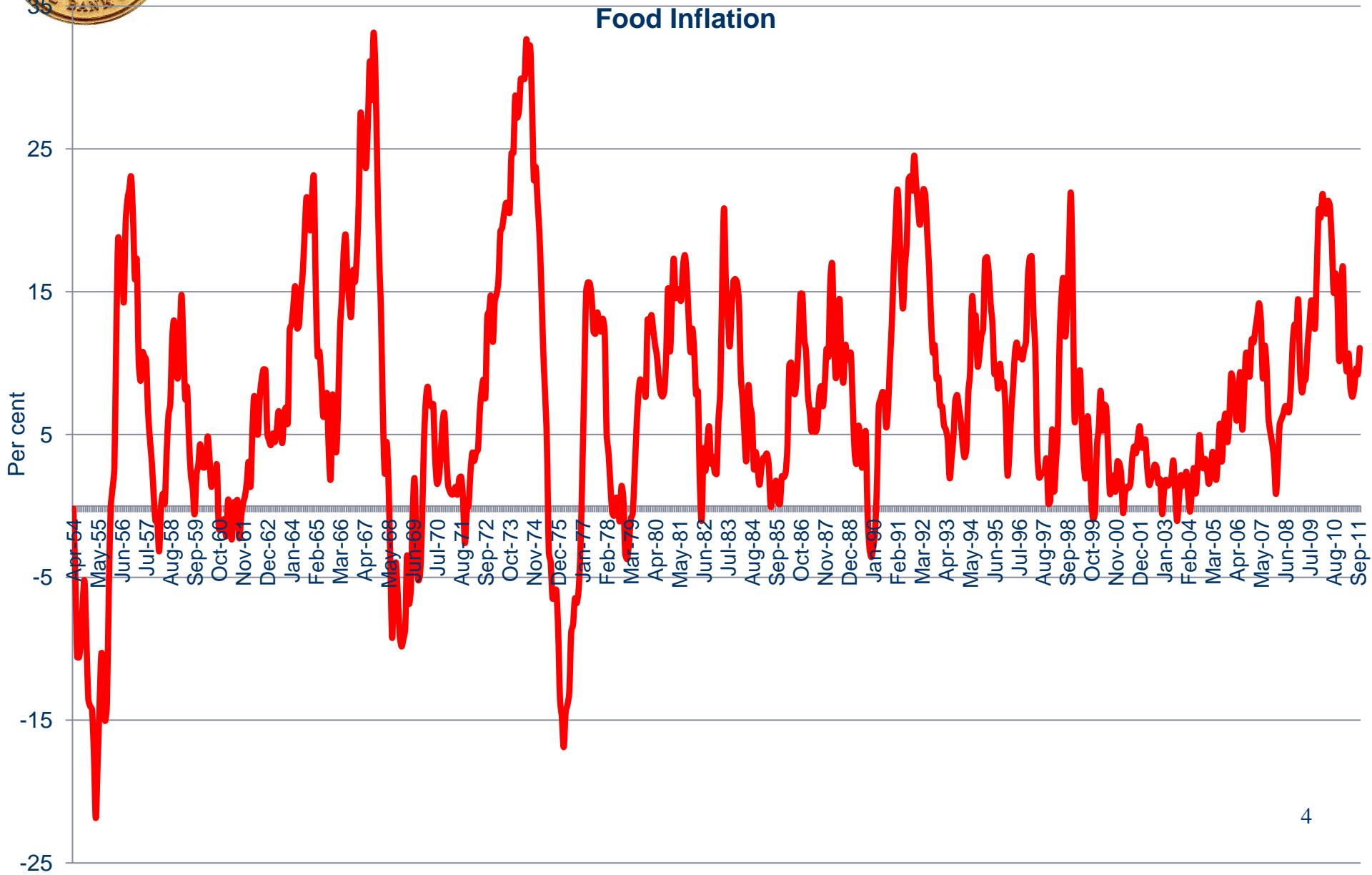
Food Inflation

Persistence of Food Inflation

Per cent

| | 1954:3-57:7 | 1963:12-65:8 | 1966:5-1968:1 | 1972:7-75:5 | 1979:8-82:3 | 1983:3-84:2 | 1987:8-89:1 | 1990:10-92:12 | 1994:4-95:11 | 1996:4-97:4 | 1998:5-99:4 | 2006:1-07:8 | 2008:9-11:10 |

■ Avg. food inflation   ◆ Peak food inflation

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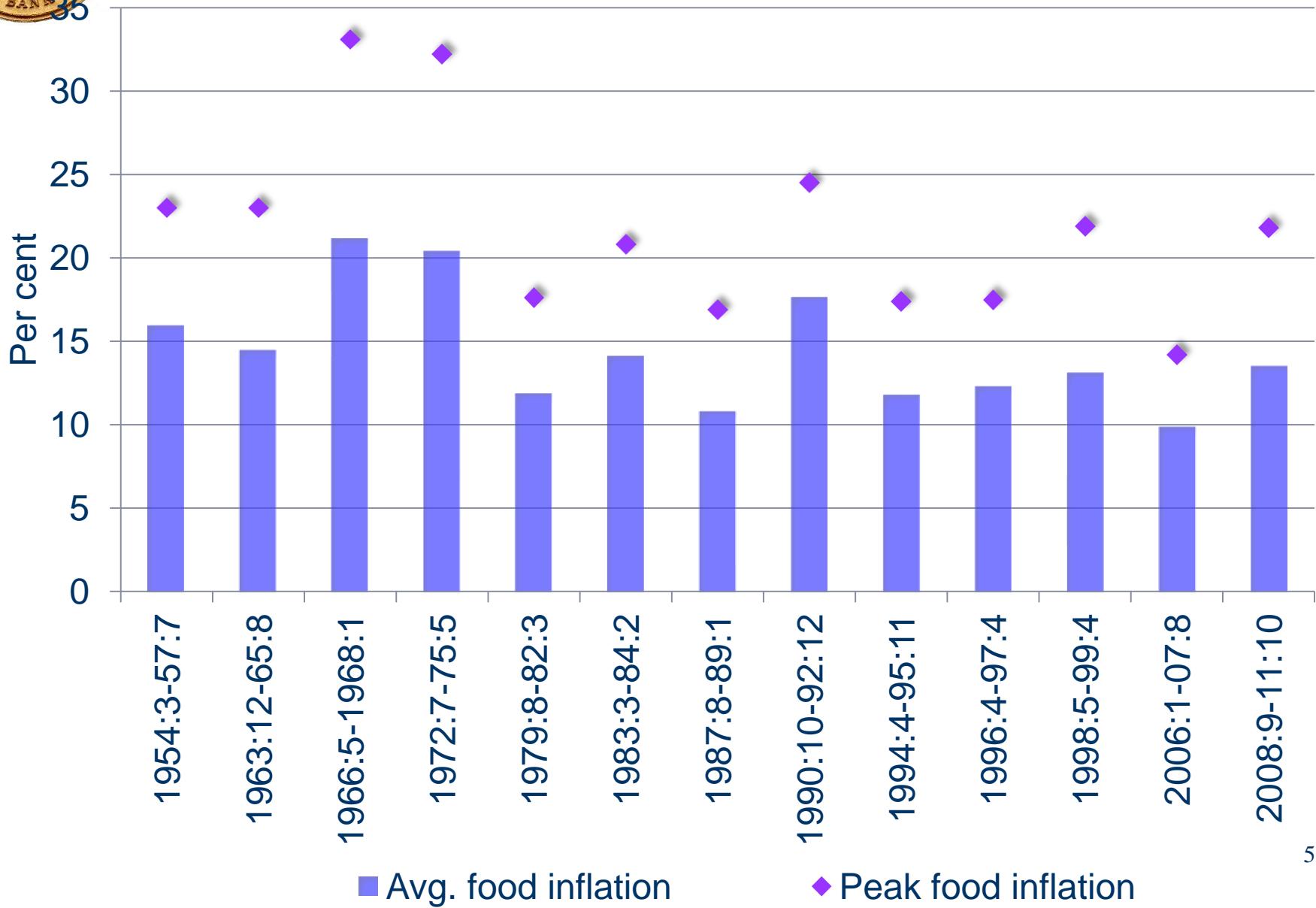
Persistence of Food Inflation…2

Number of months
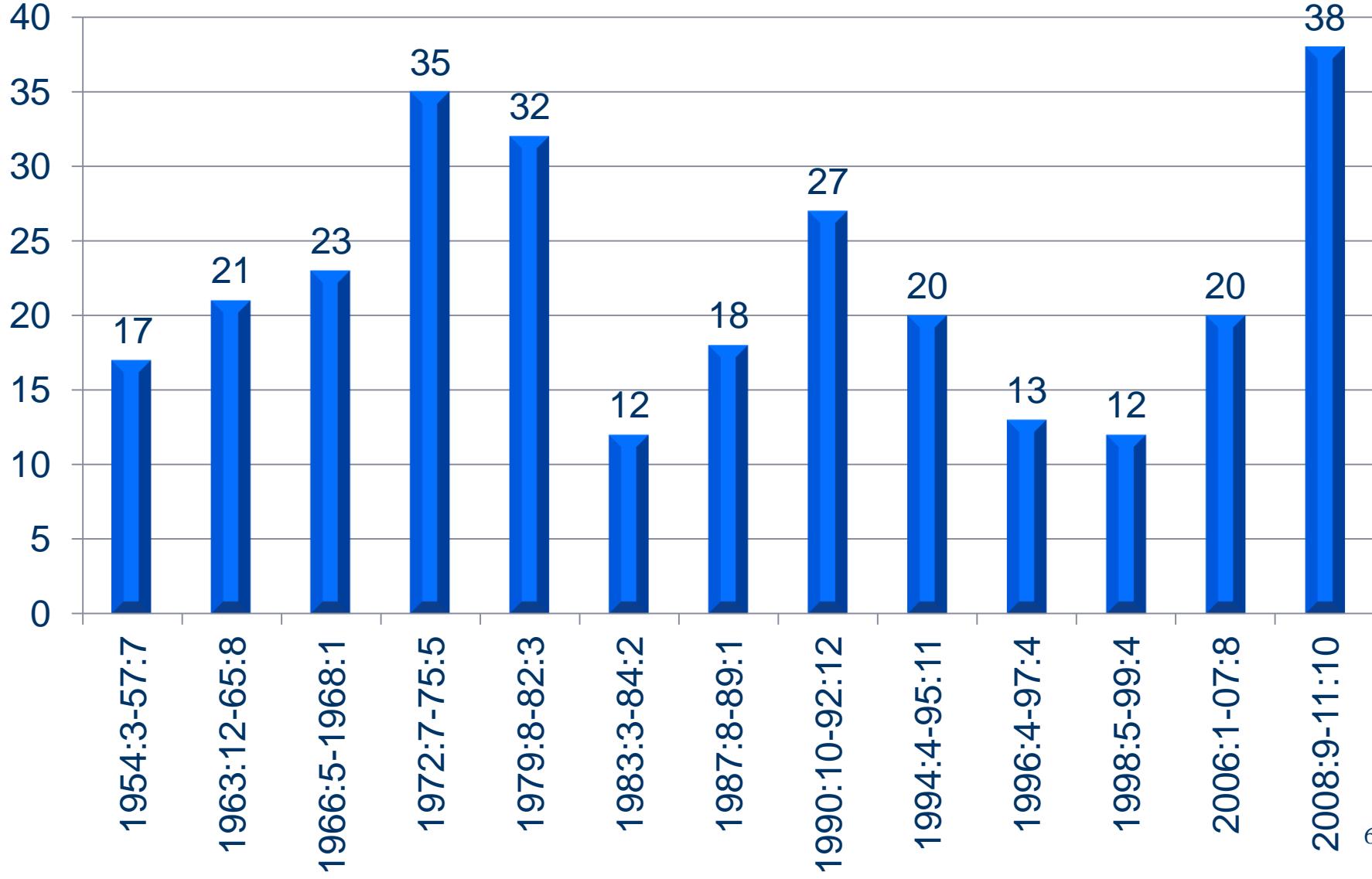
Contribution of Food Inflation

Weighted contributtion of food(Prim+mfg) to Total WPI   WPI Inflation rate (RHS)
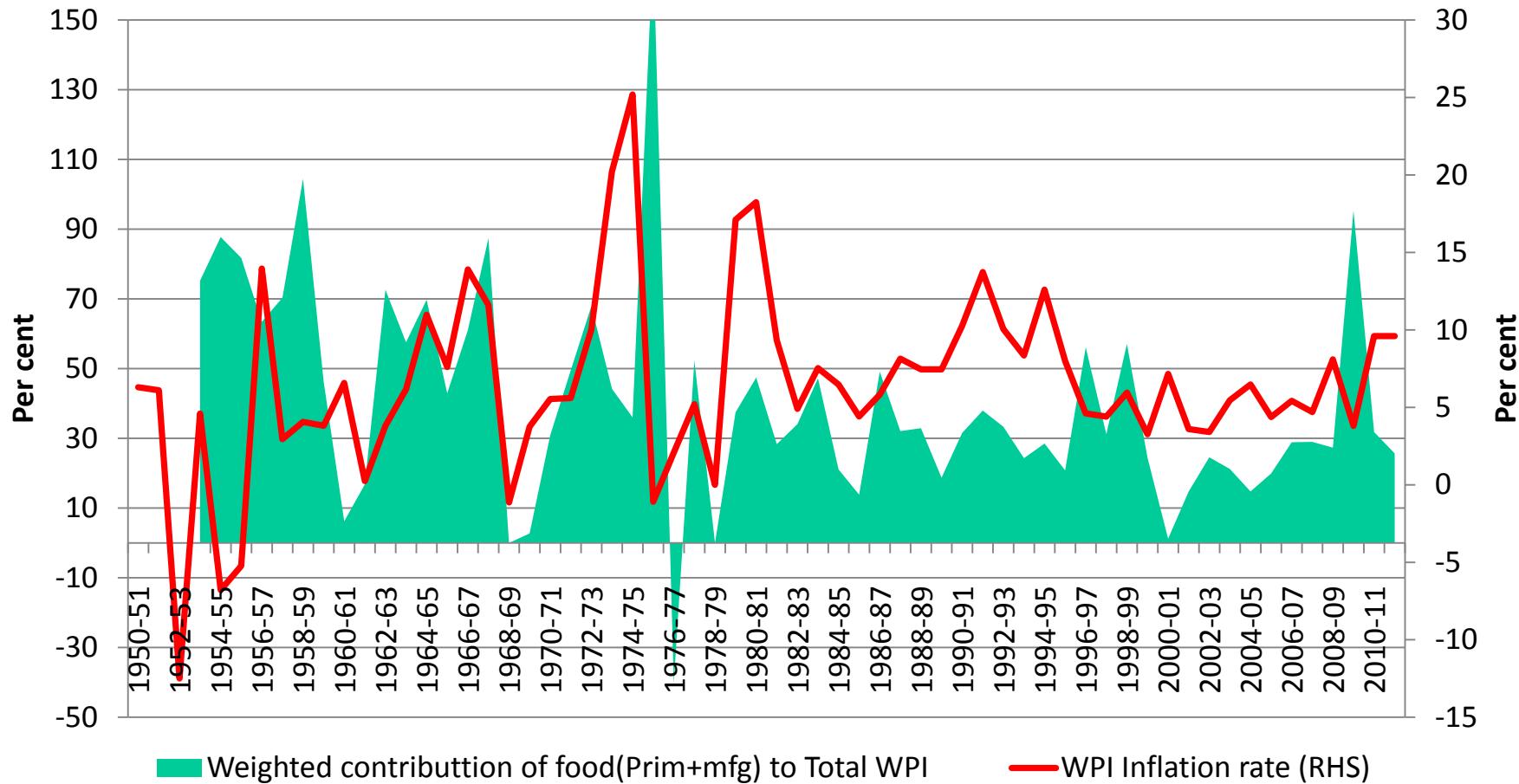
Drivers of Food Inflation
1960s &1970s

8
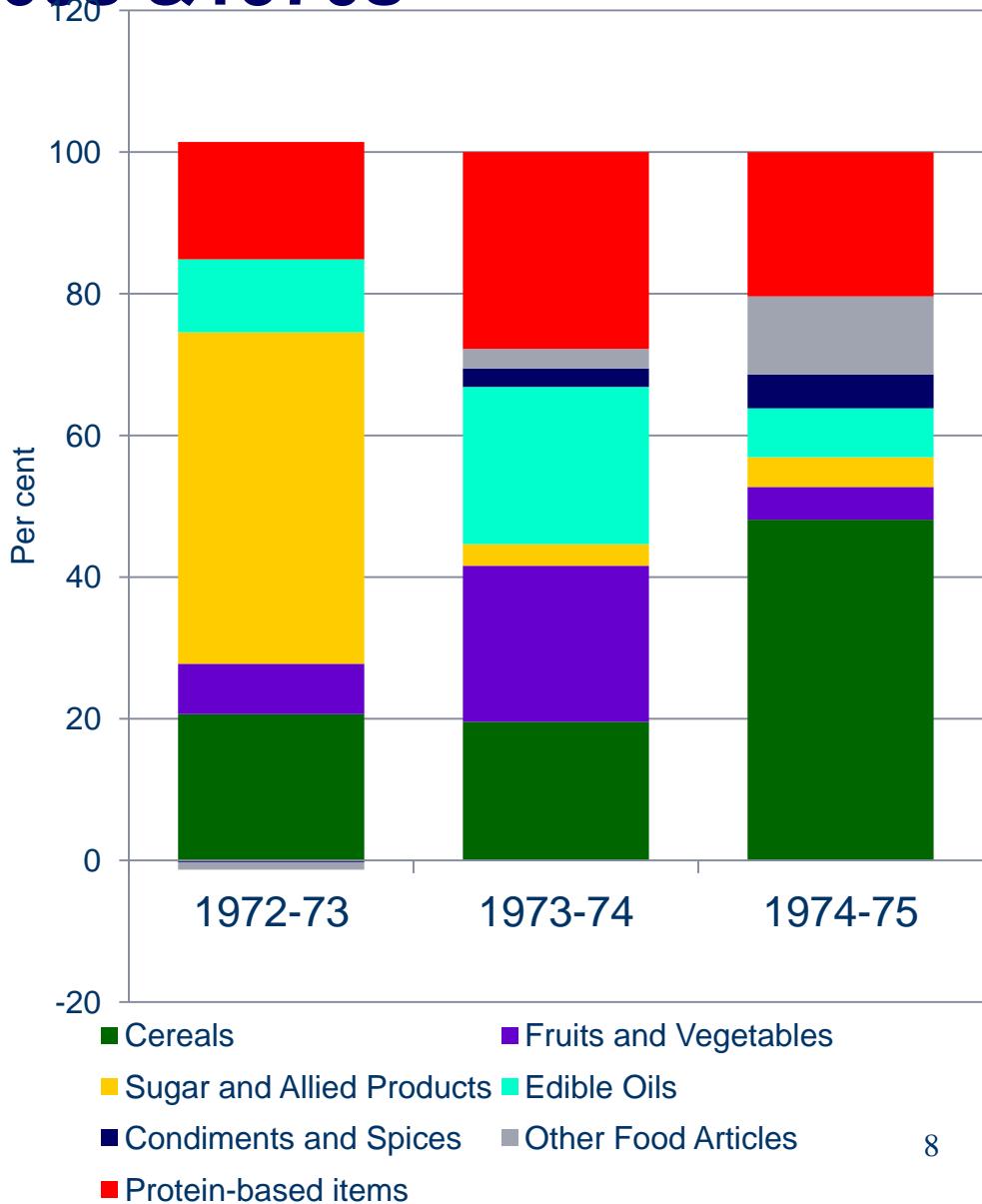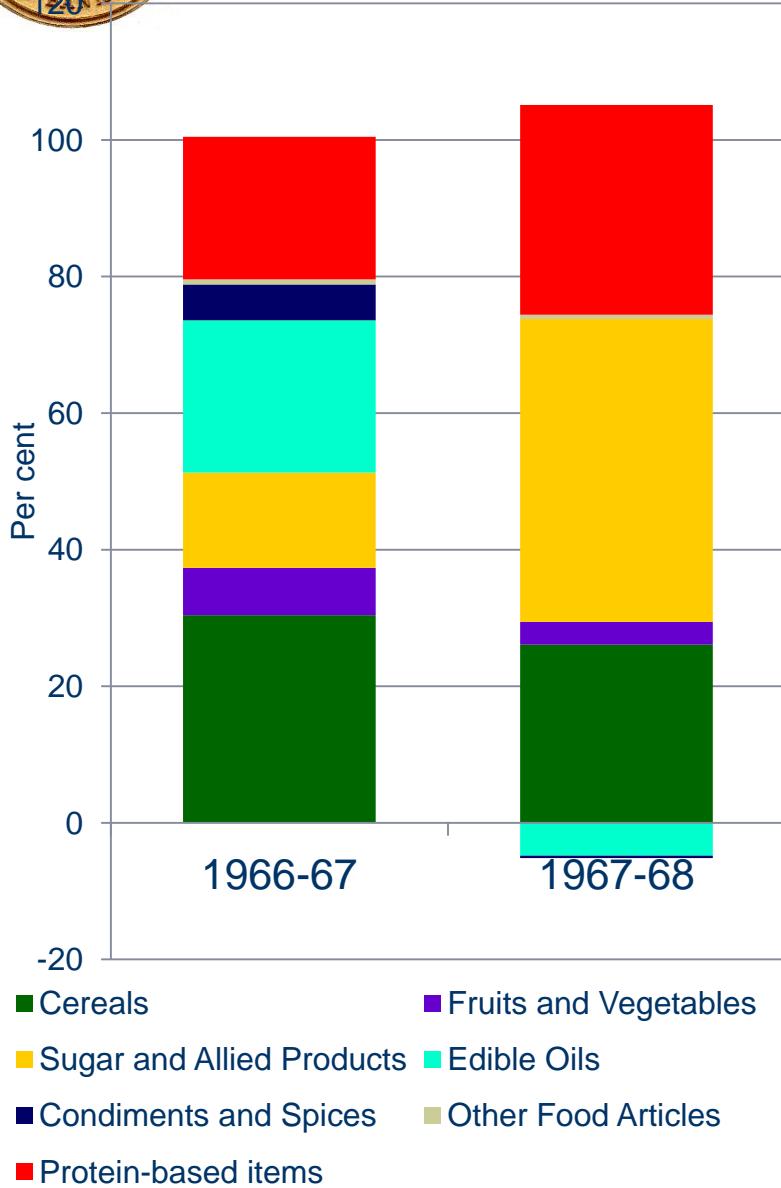
Drivers of Food Inflation
1980s &1990s
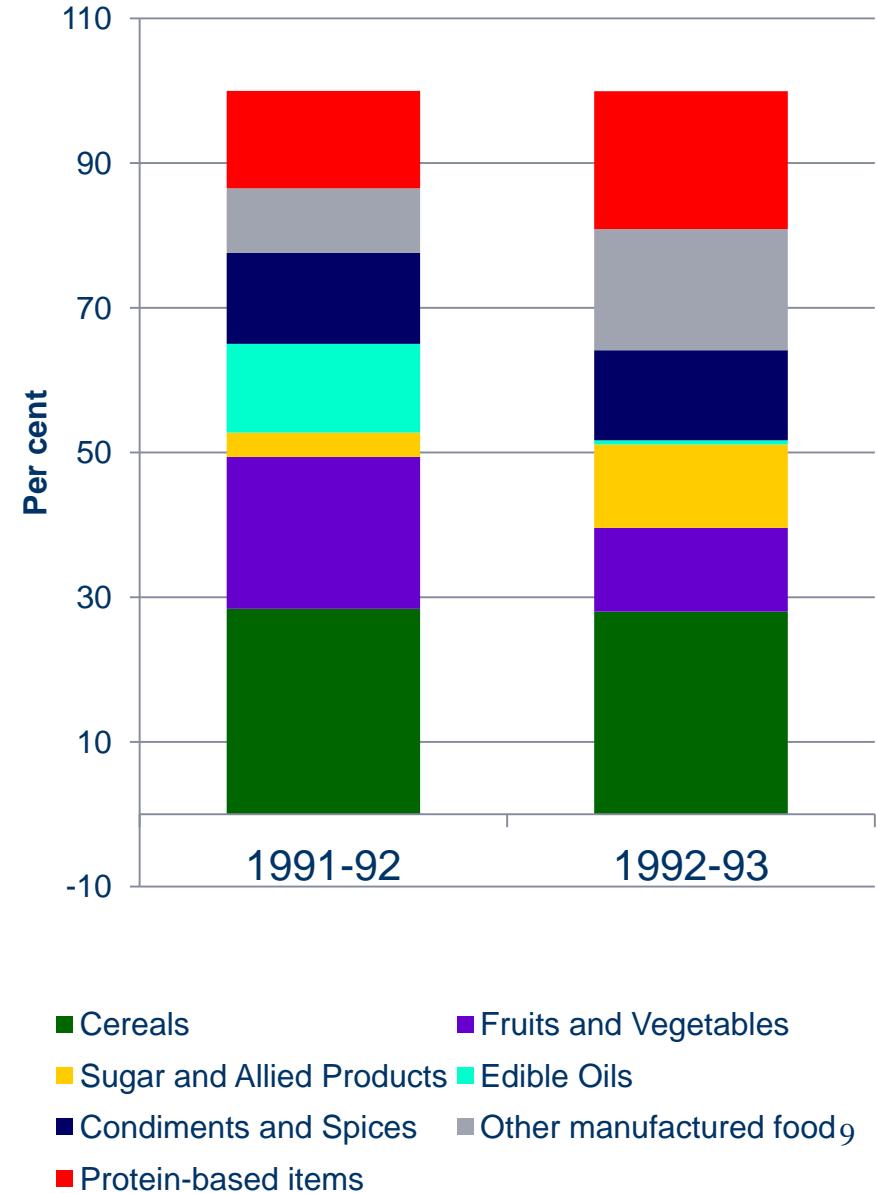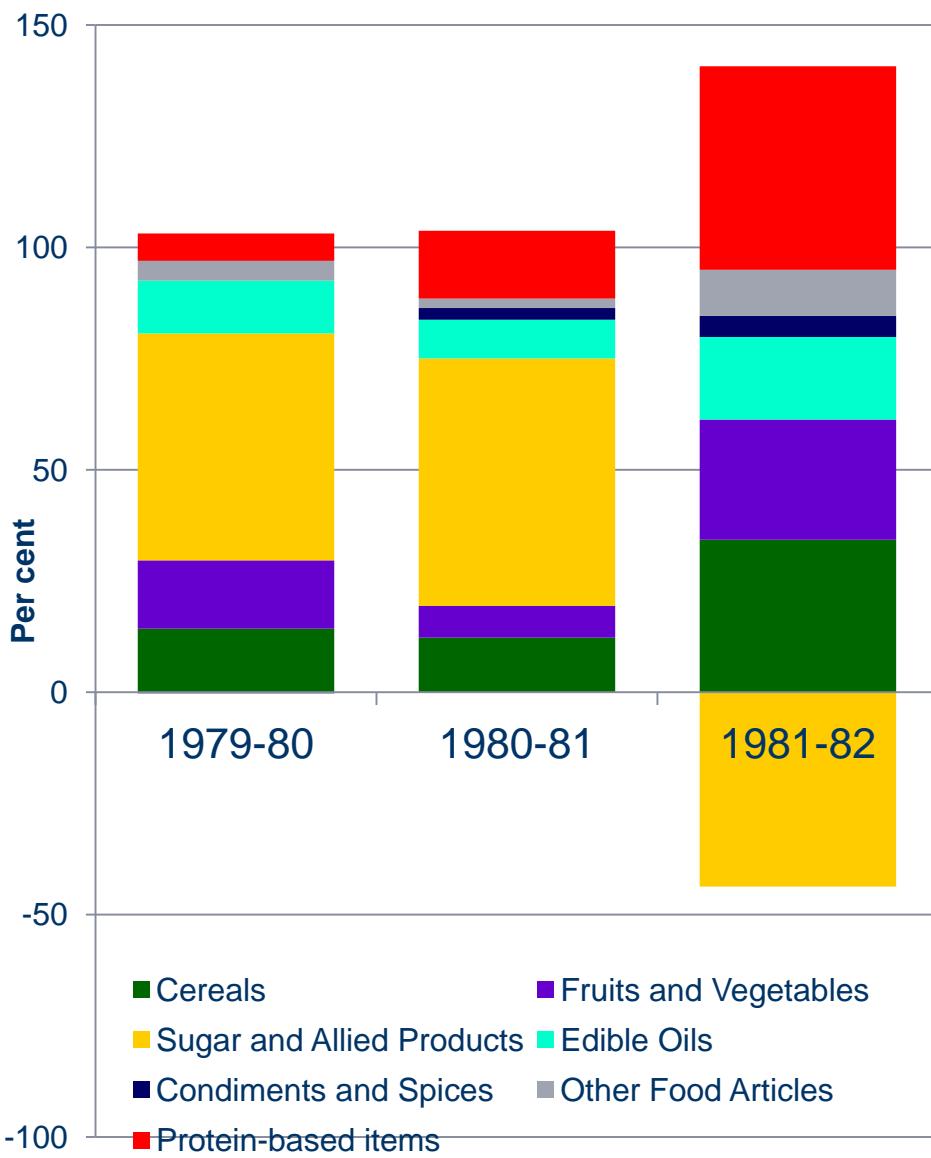
Drivers of Food Inflation 2000s

Proteins and Fruits & Vegs

Proteins and Fruits & Vegs…2

Percentage contribution to food inflation
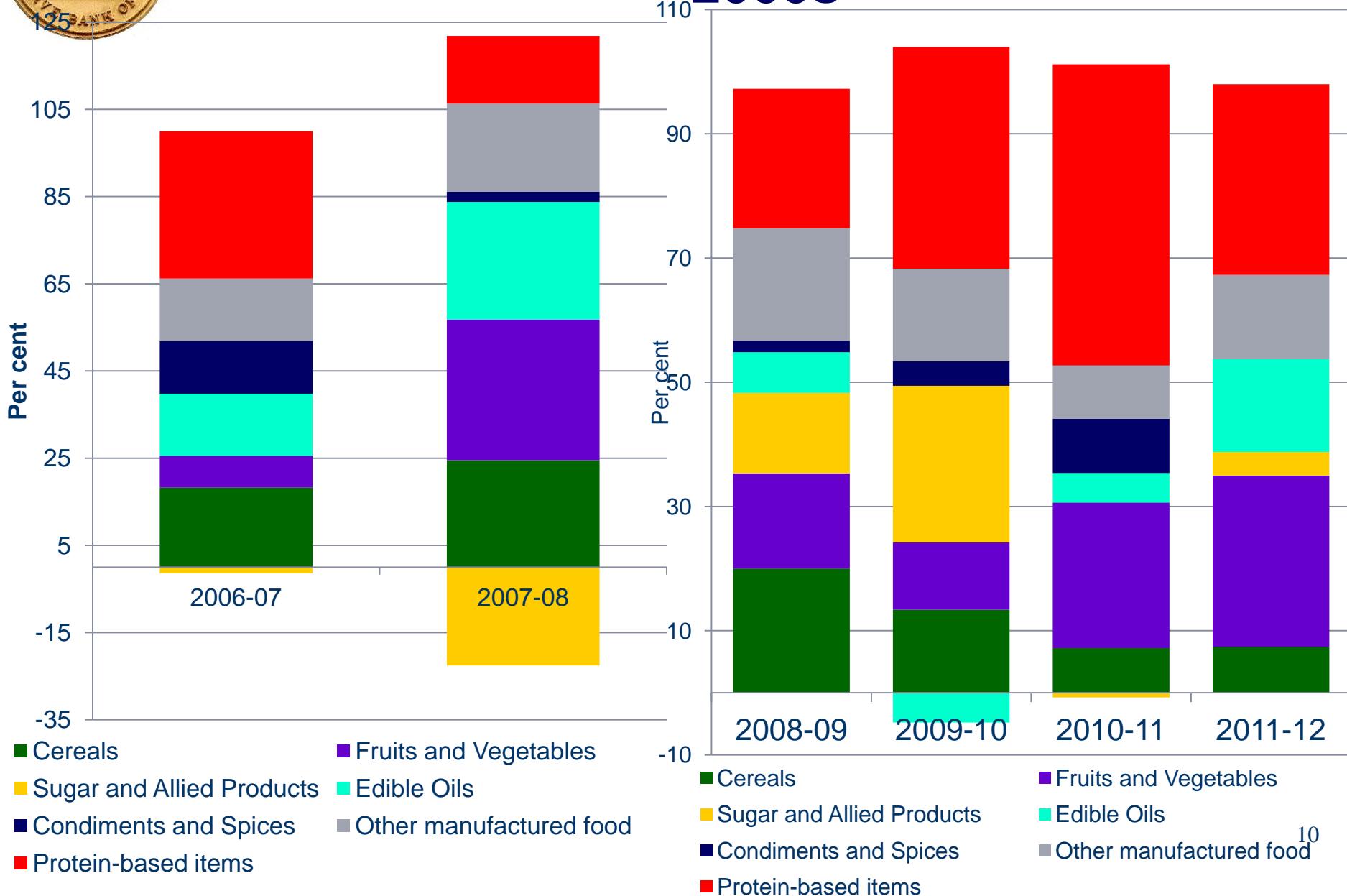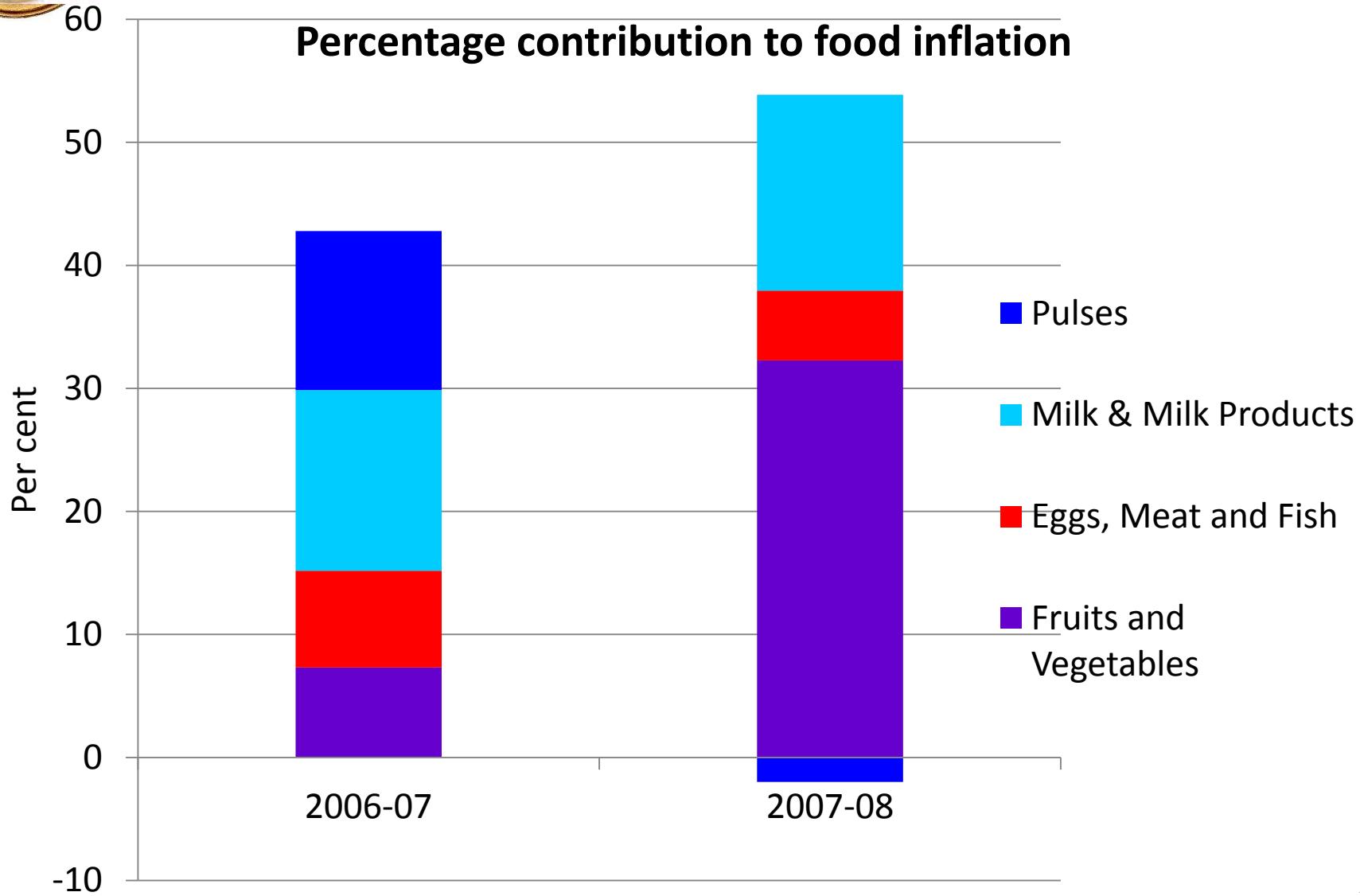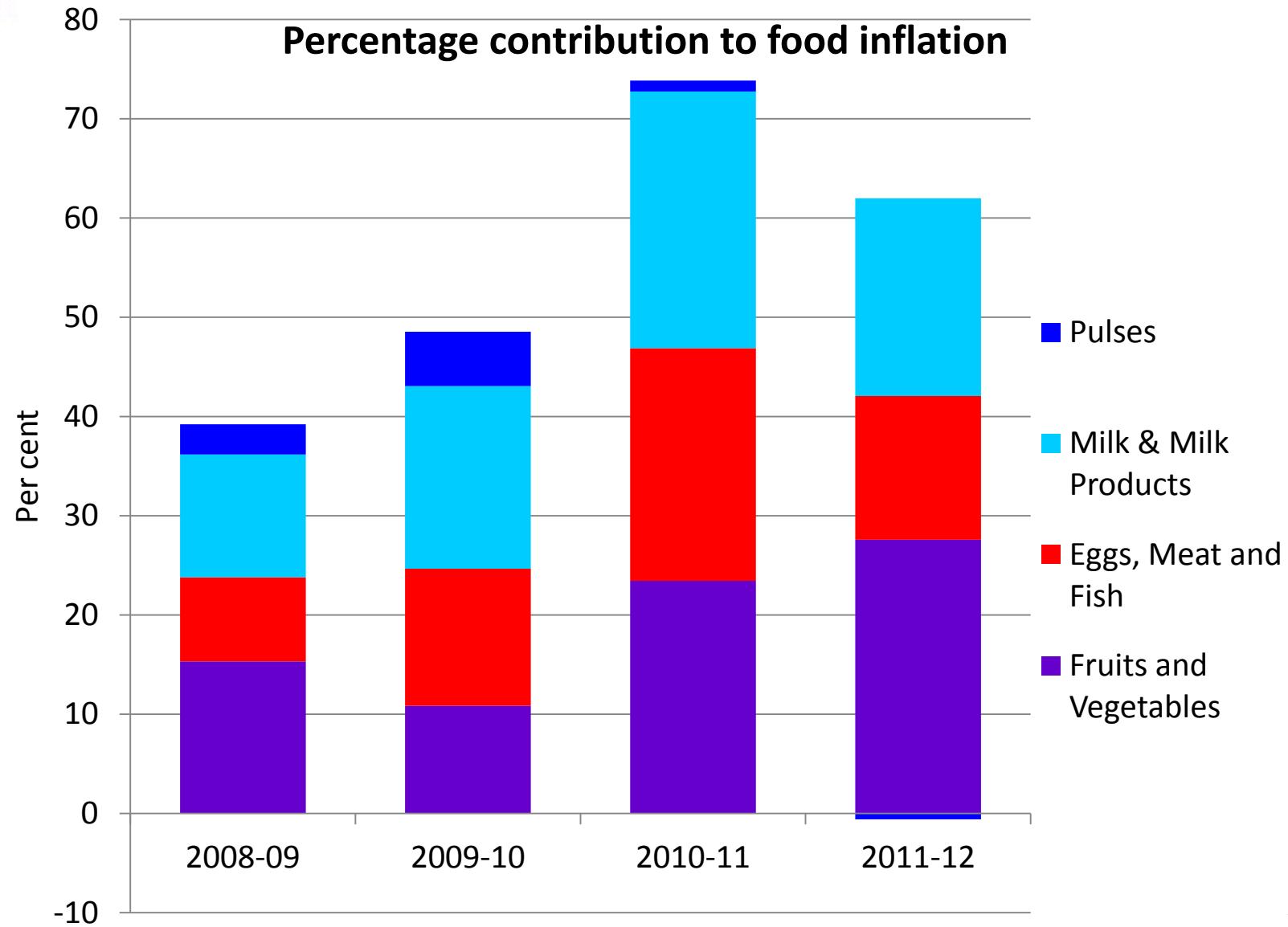
DEMAND FACTORS

Changing Consumption Patterns

MPCE Rural
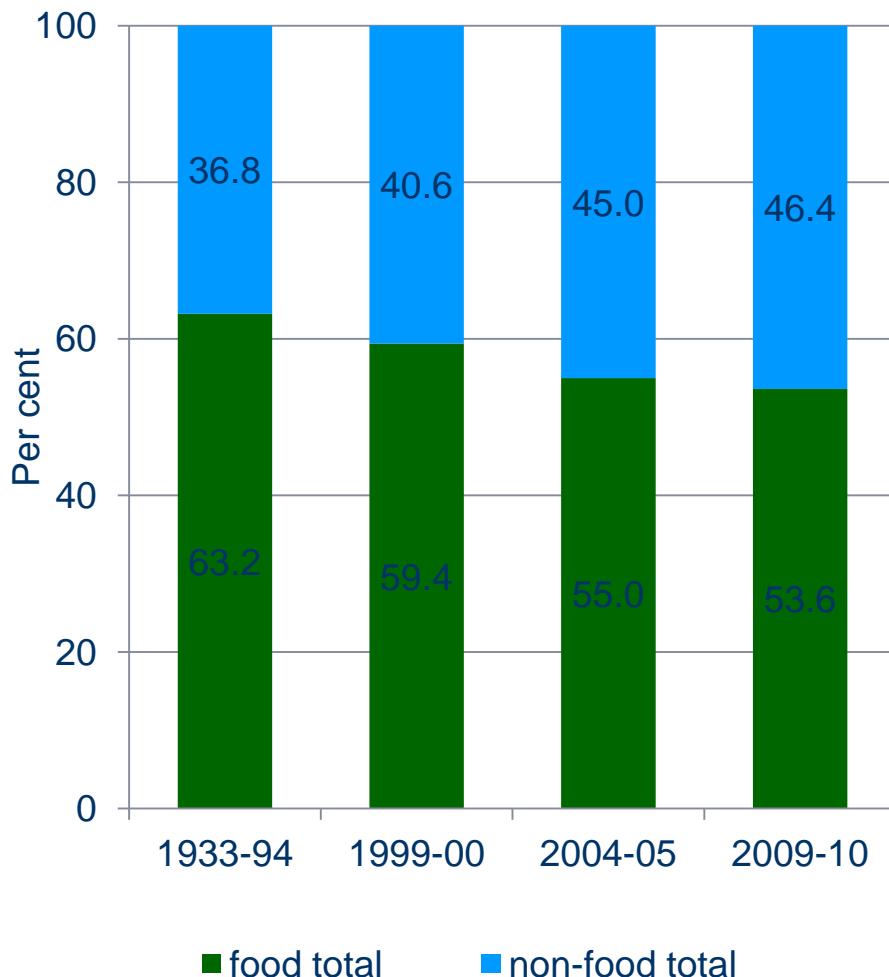
MPCE Urban
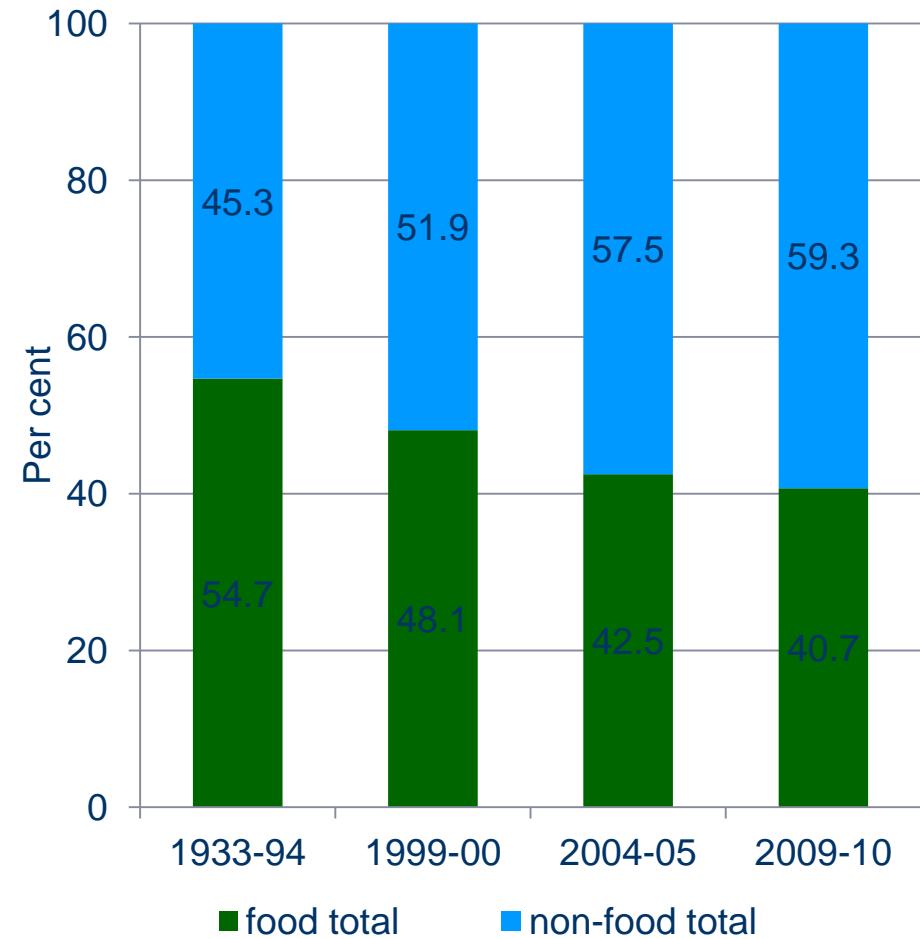
Source: NSSO surveys, Various rounds
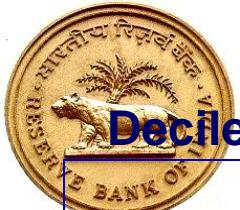
Urban Engel Curves
Decile-wise Monthly PCE on Select Food Items: All India (Urban)   (Rupees)

Source: Estimated from NSSO unit level data, 2009-10

Rural Engel Curves

Cereals and Substitutes
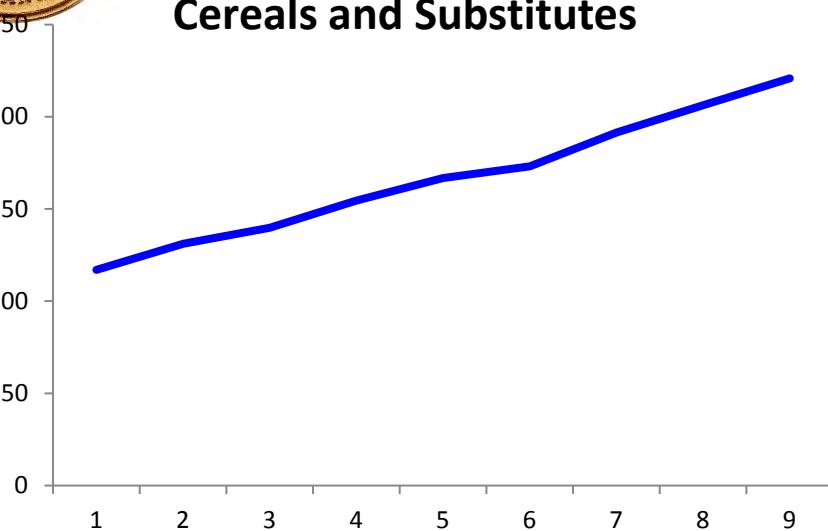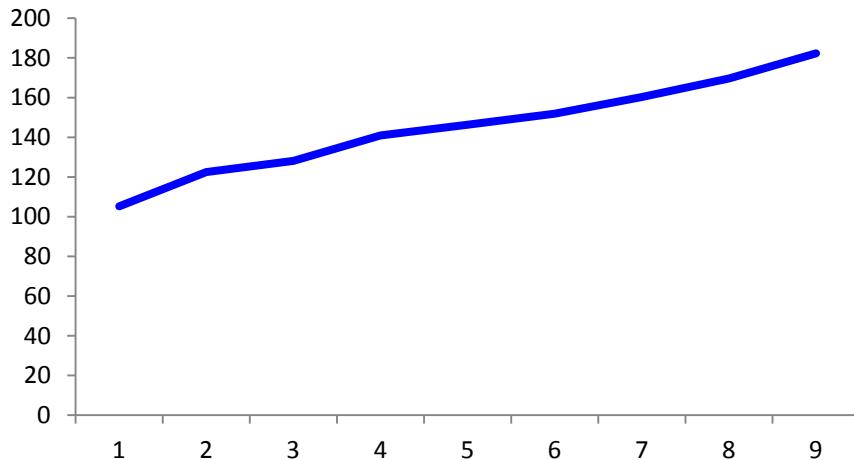
Fruits and Vegetables
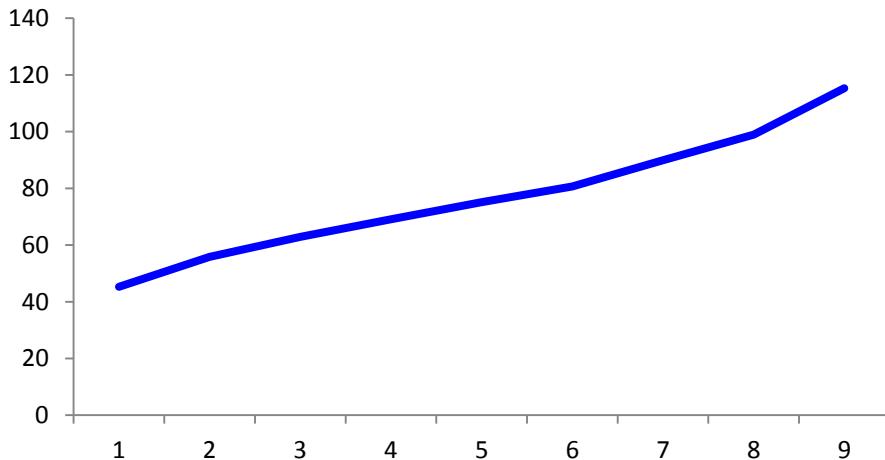
Protein Rich food
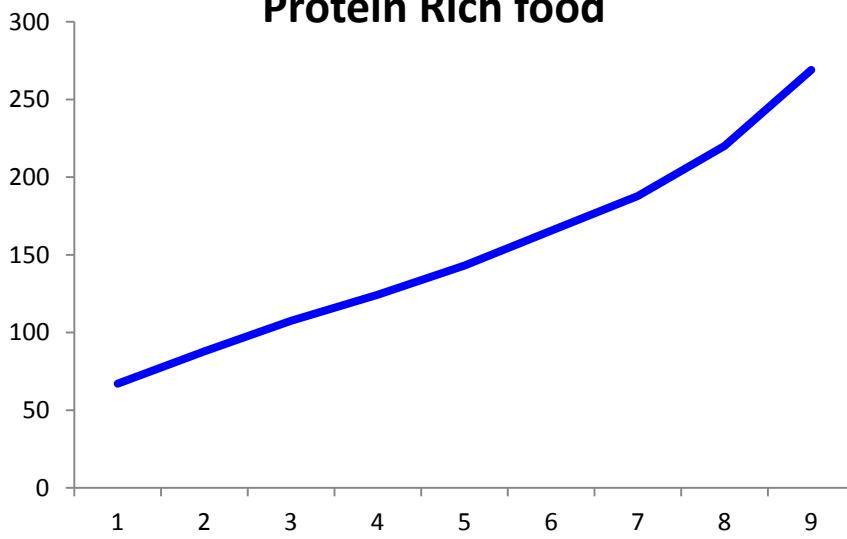
Processed food and Beverages
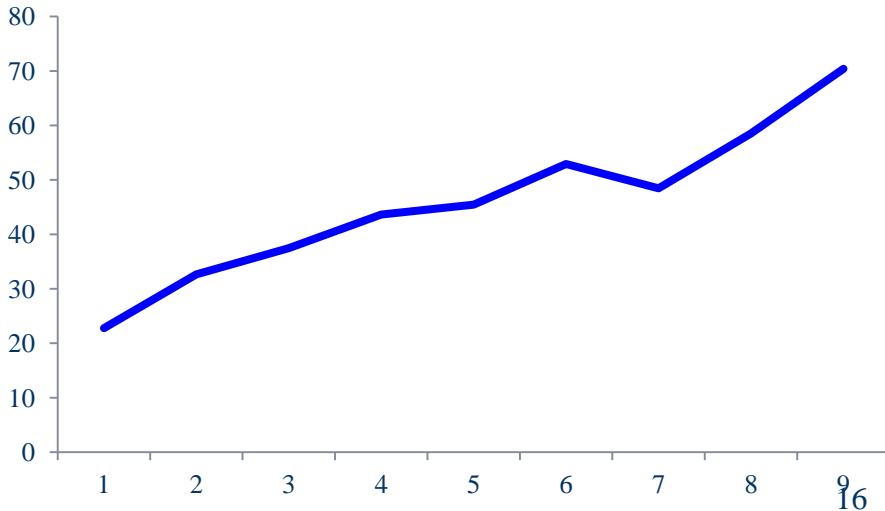
Source: Estimated from NSSO unit level data, 2009-10

Income Elasticities

Multiples of MPCE: Top Decile/Bottom Decile

	Rural Areas	Urban Areas
Cereals and Substitutes	1.7	1.9
Fruits and Vegetables	2.5	3.3
Protein Rich food	4.0	4.4
Processed food & Beverages	3.1	9.0

Source: NSSO 2009-10, GOI.

SUPPLY FACTORS

Stagnant Productivity in Pulses

Yield of pulses (Kg per hectare)
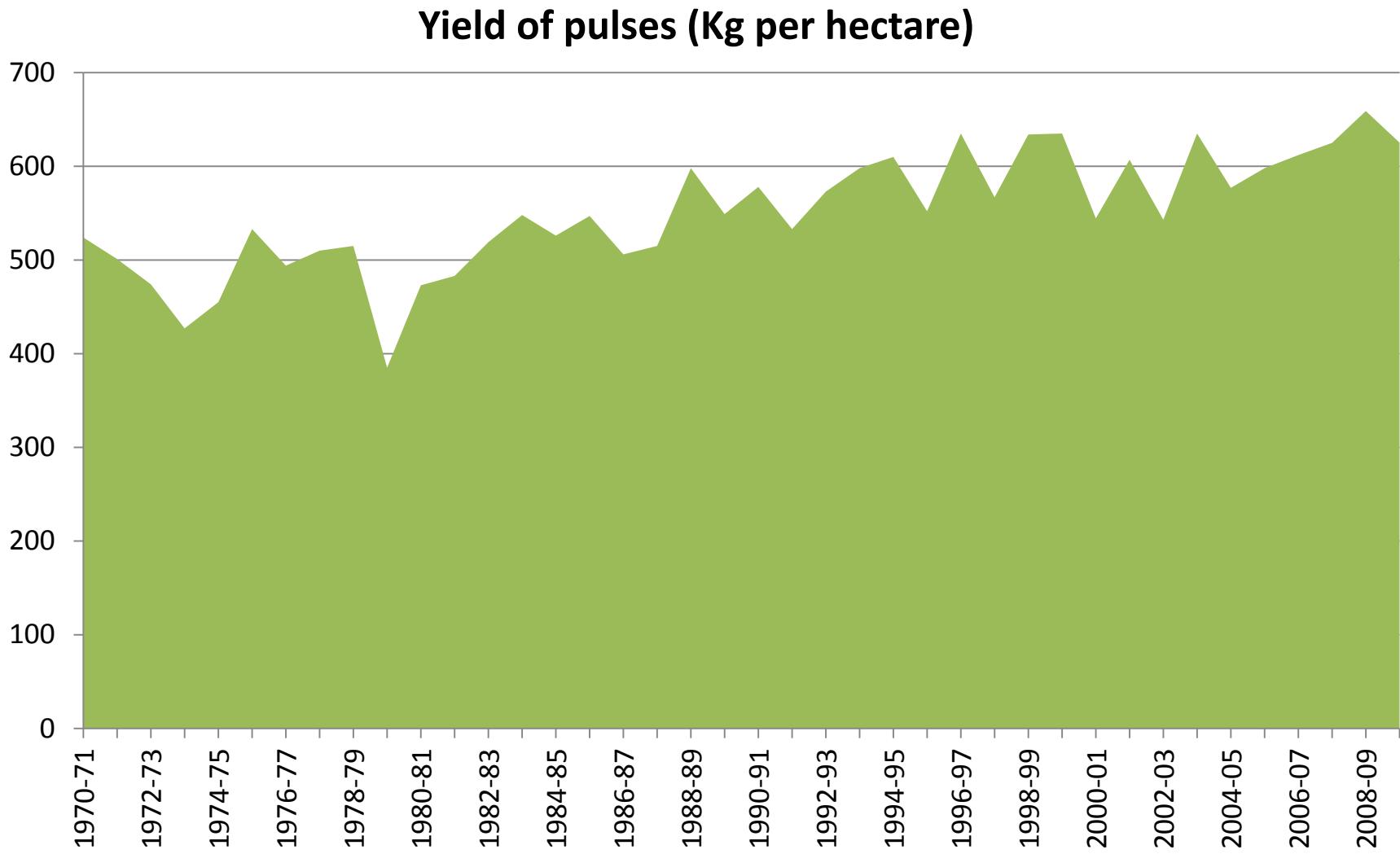
Productivity Differentials

State-wise yield of total pulses in 2009-10 (kg per hectare)

Source: Ministry of Agriculture, GOI
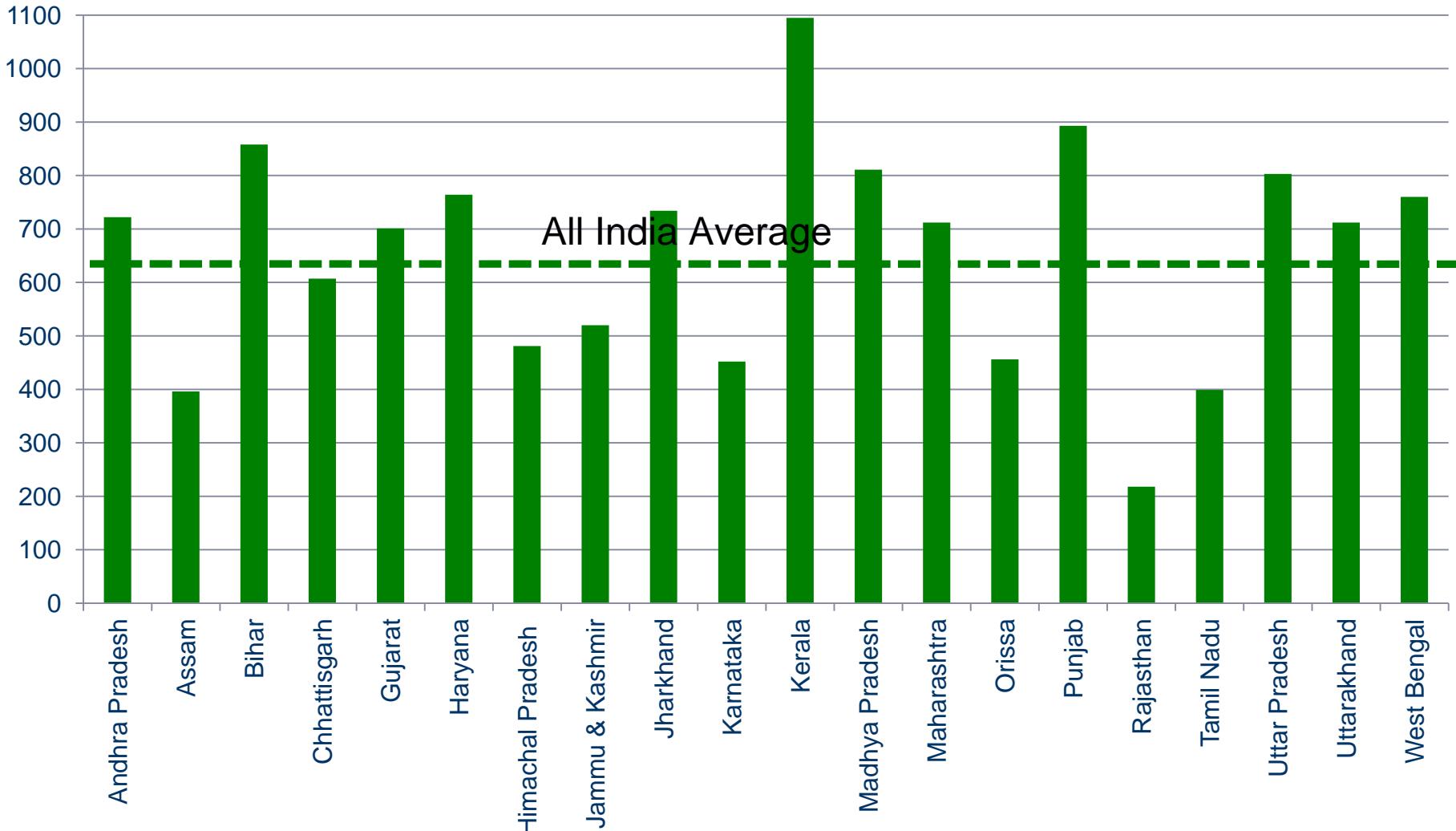
Slowing Growth in Milk Yields
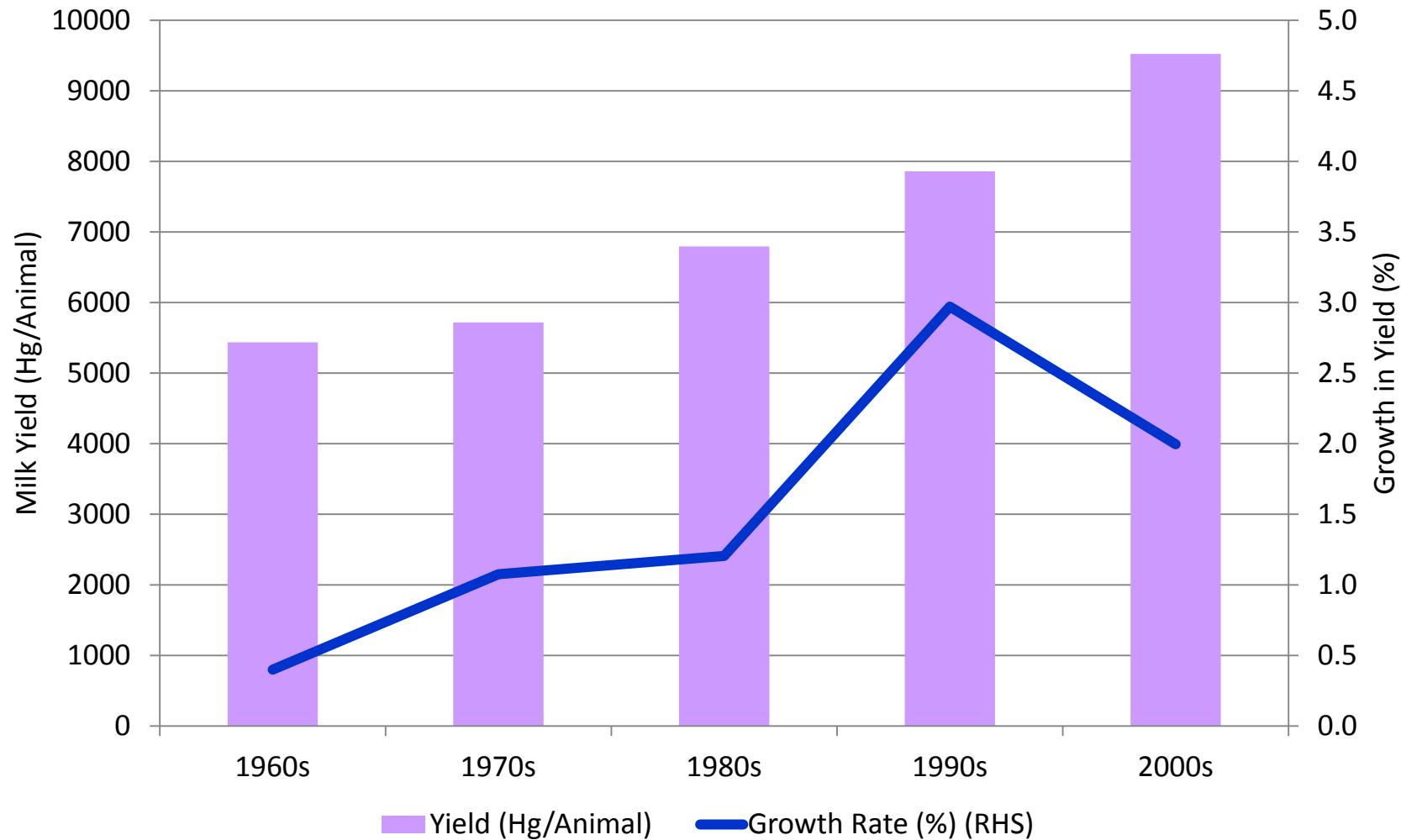
South-west Monsoon Rainfall
50 year moving average

South-west Monsoon rainfall in India (in mm)
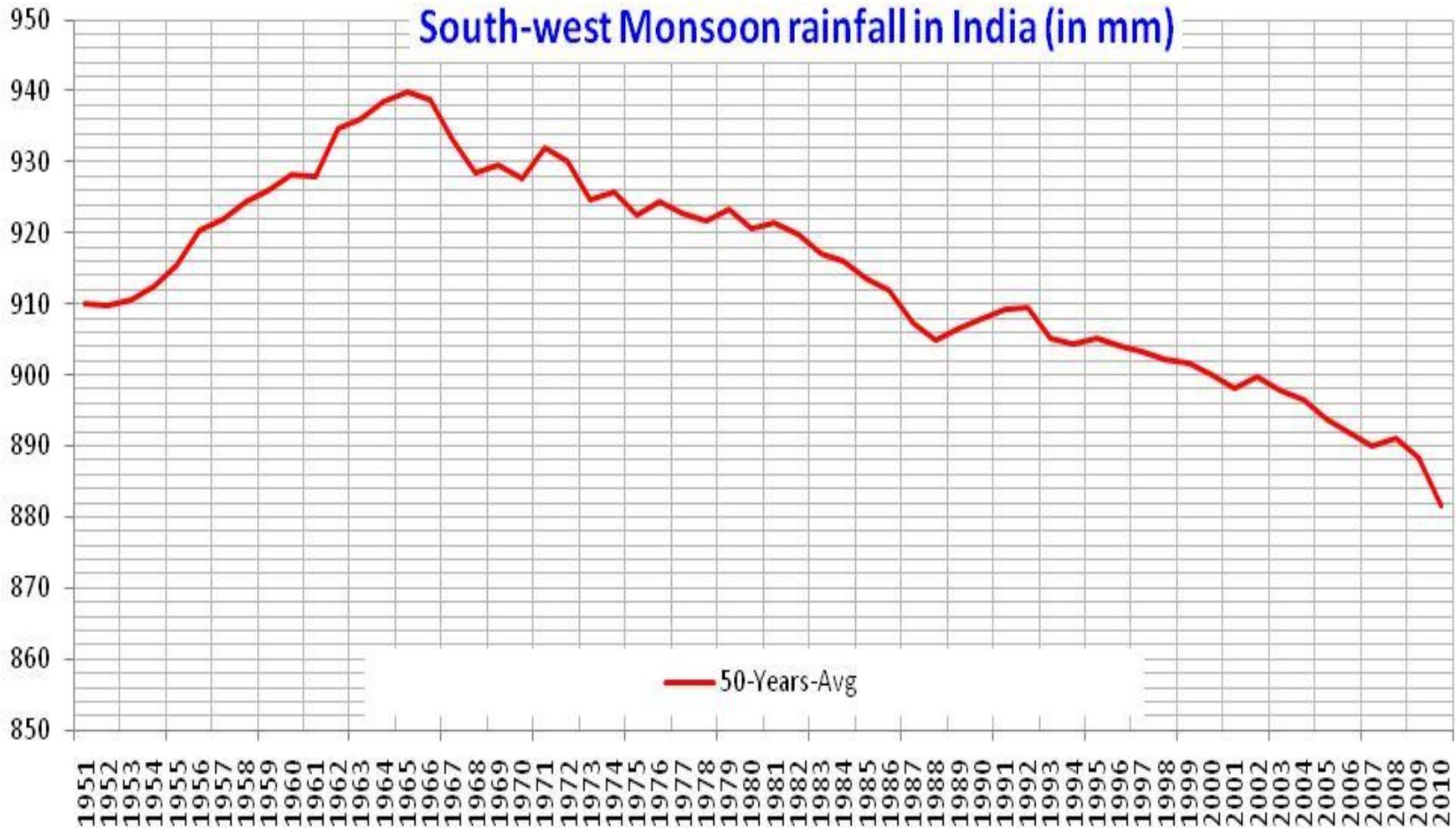
50-Years-Avg

•IMD-LPA is calculated every 10 years as the 50 years average i.e.
•IMD LPA for 2011-2019 is 89 cm and is the average rainfall over the country as a whole for the period 1951-2000.

POLICY IMPLICATIONS

Inflation and Inflation Expectations
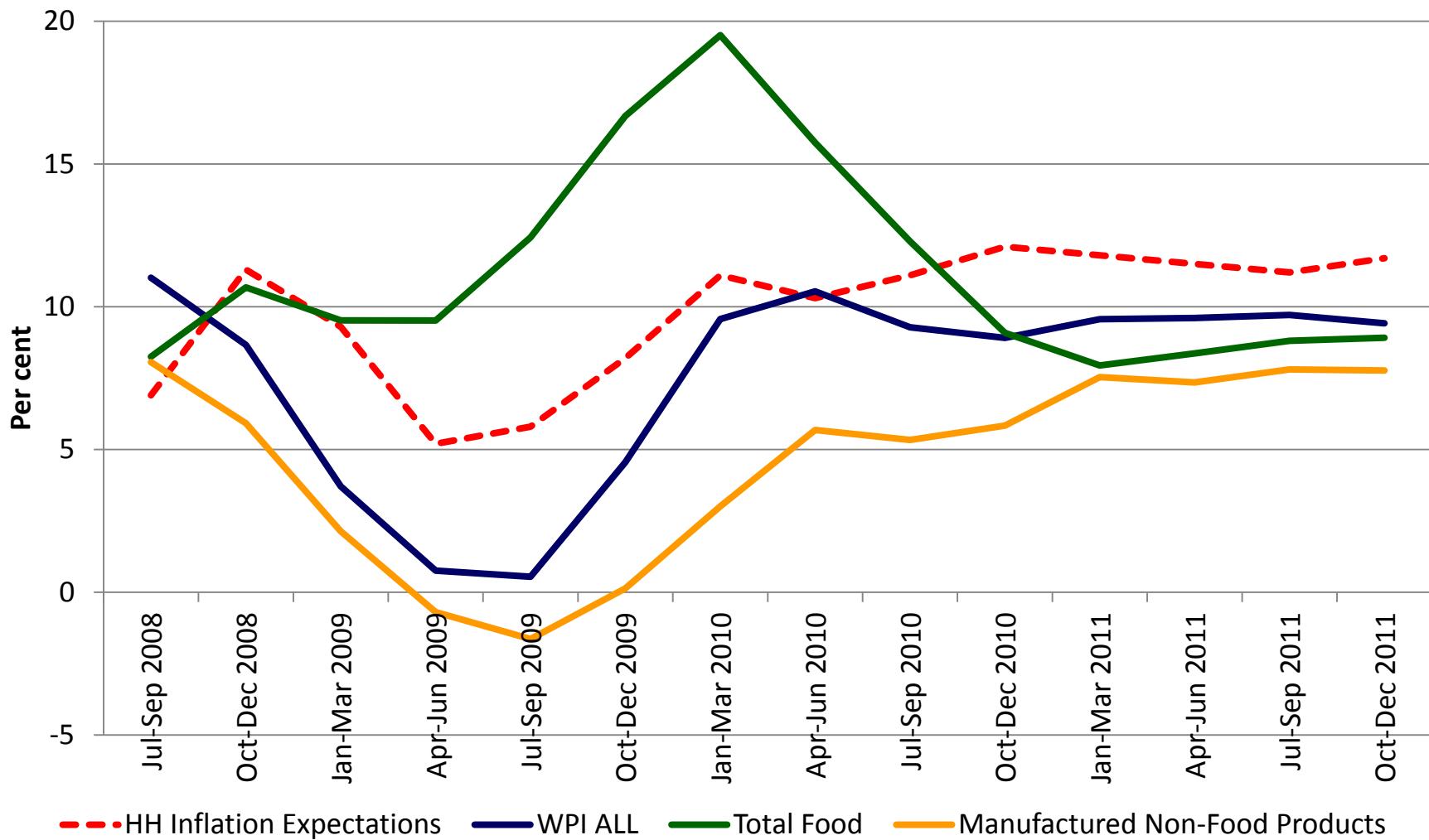
Rising Wages

CPI-Rural Labourers Inflation and Wage Growth*

Left chart legend:
- CPI-RL Inflation (2010-11)
- Wage Growth (2010-11)

States (left chart, top to bottom): Orrisa, Jammu &…, Andhra Pradesh, Maharashtra, Assam, Tamil Nadu, Punjab, West Bengal, Karnataka, Madhya Pradesh, All-India, Uttar Pradesh, Meghalaya, Rajasthan, Kerala, Himachal…, Gujarat, Manipur, Bihar, Haryana, Tripura

Right chart legend:
- CPI-RL Inflation (2009-10)
- Wage Growth (2009-10)

States (right chart, top to bottom): Haryana, Tamil Nadu, Bihar, Jammu & Kashmir, Karnataka, Kerala, Maharashtra, All-India, Madhya Pradesh, Uttar Pradesh, Orrisa, Punjab, West Bengal, Rajasthan, Assam, Himachal Pradesh, Andhra Pradesh, Gujarat, Meghalaya, Manipur, Tripura

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* Y-o-Y Growth in March; Rural Unskilled Labourer (Male) Wage. **Source:** Indian Labour Journal: Labour Bureau, Ministry of Labour.

Cereal Stocks and Prices

Legend: Cereal inflation — Food stocks (RHS)
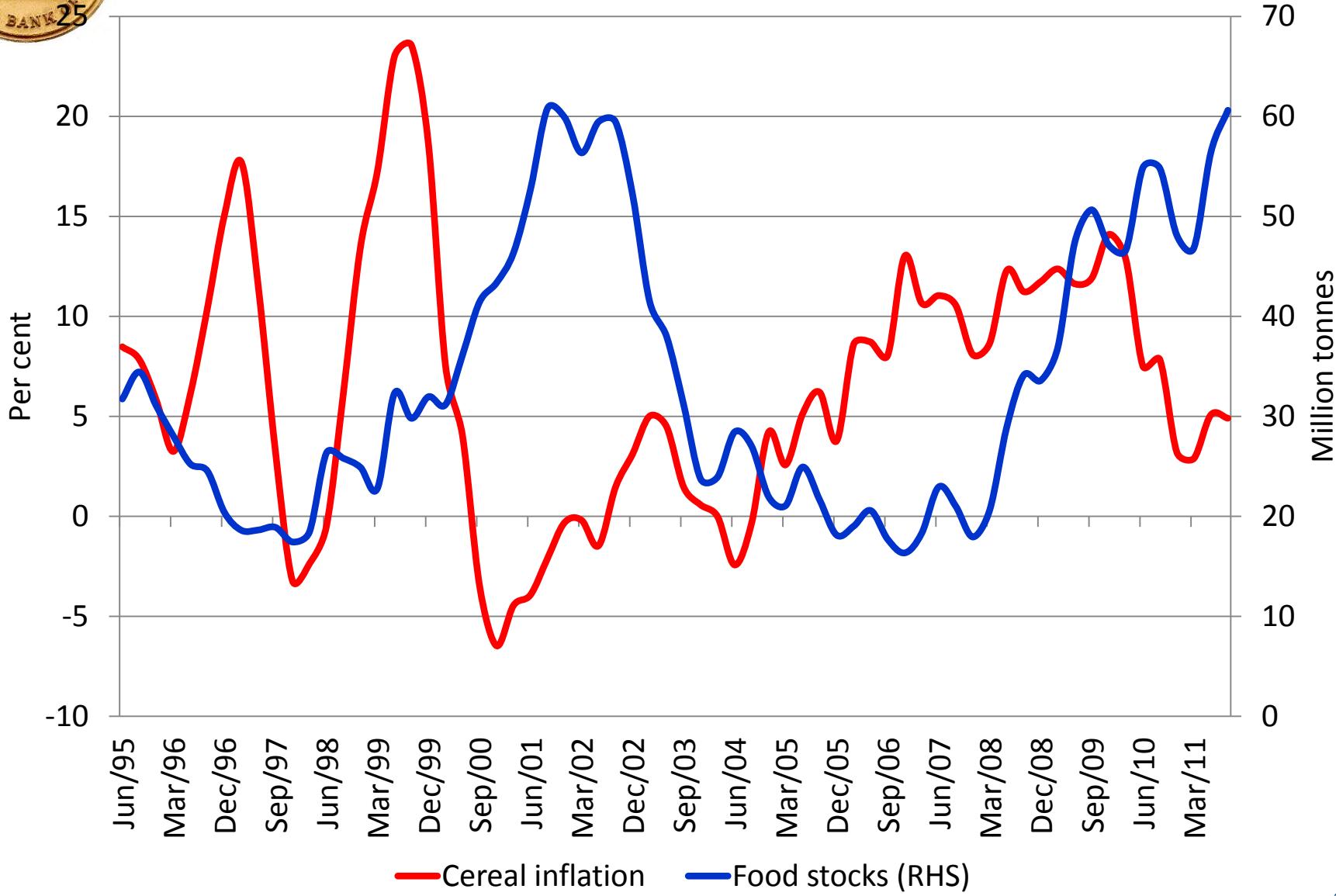
Policy Implications

- **Persistence and Expectations**
  - Food inflation part of core inflation
  - Wage-price feedback
  - Persistent supply shock implies slower growth for any given rate of inflation

- **Supply Responses**
  - Opportunities for productivity increases
  - Product and region-specific constraints
  - Threats from water scarcity
  - Role of stocks