

# **AS Micro: Price Volatility in Markets and Buffer Stock Schemes**

# Why are prices volatile in markets for many commodities?



Low Ped ( $<1$ )



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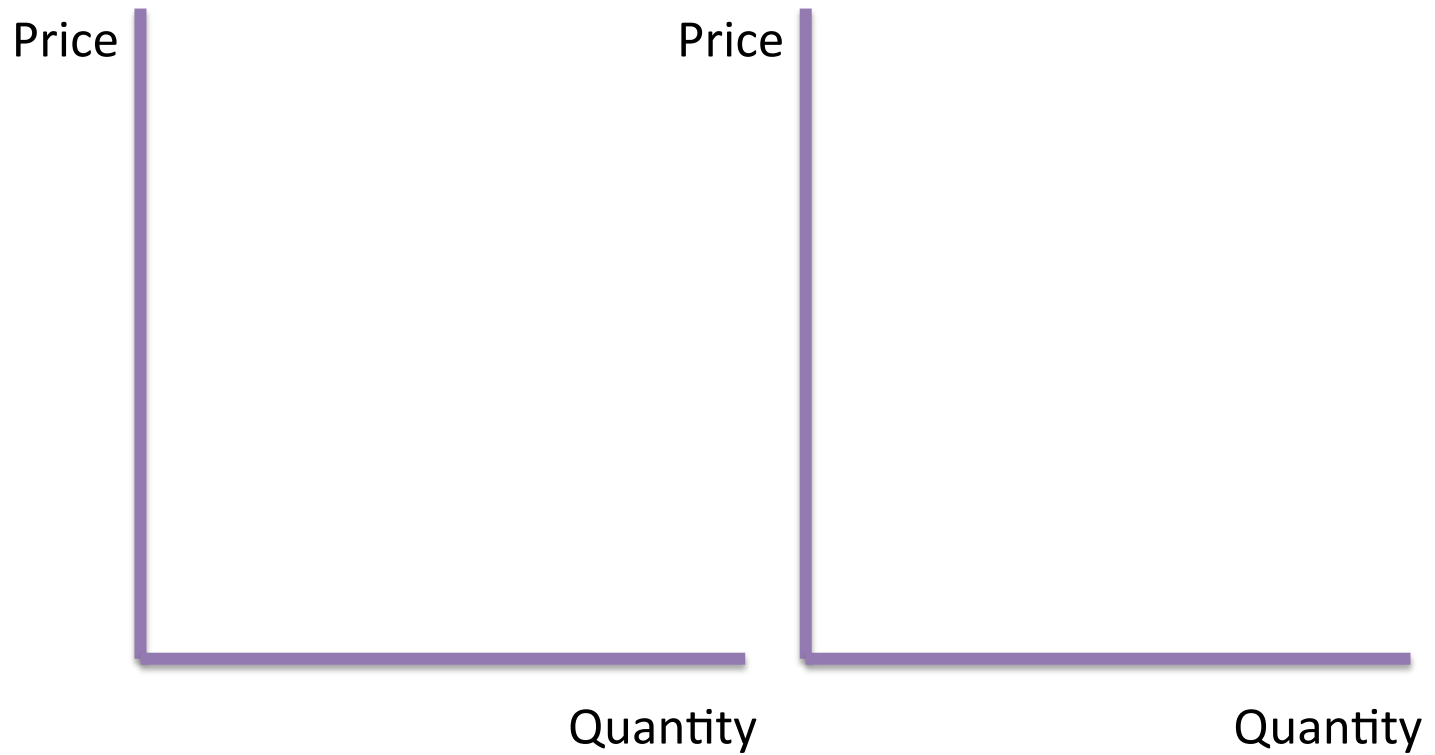
Volatile  
Supply  
“Supply  
Shocks”



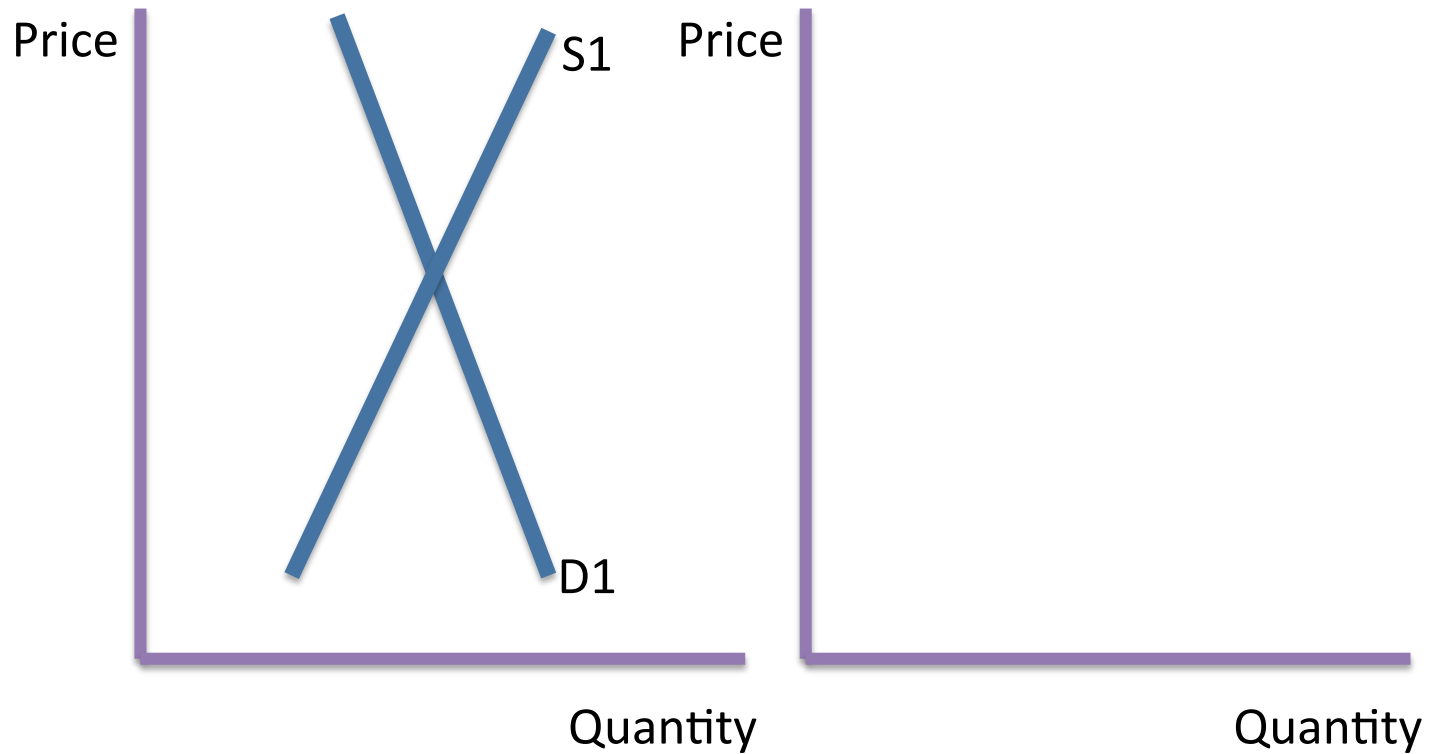
Market  
Speculators



# Using analysis diagrams

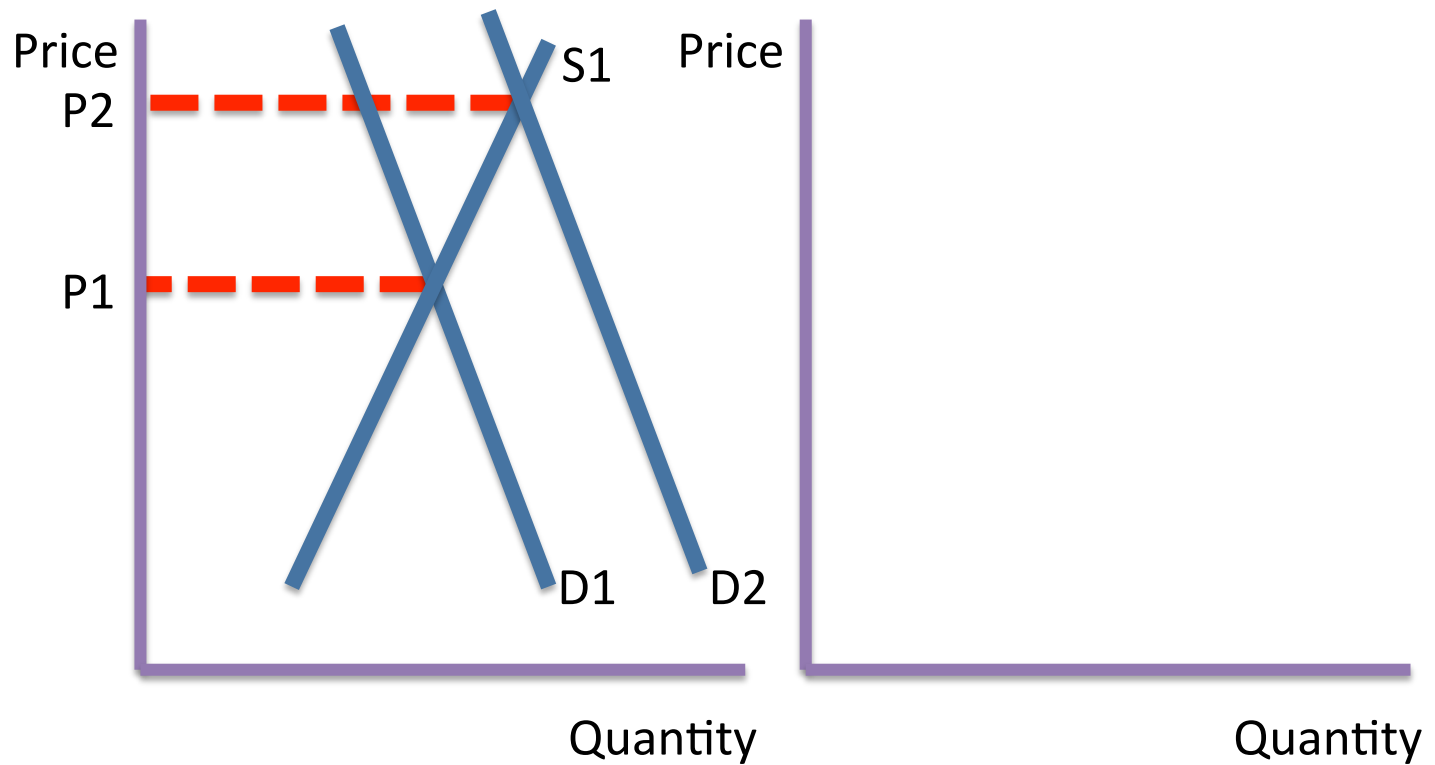


# Using analysis diagrams



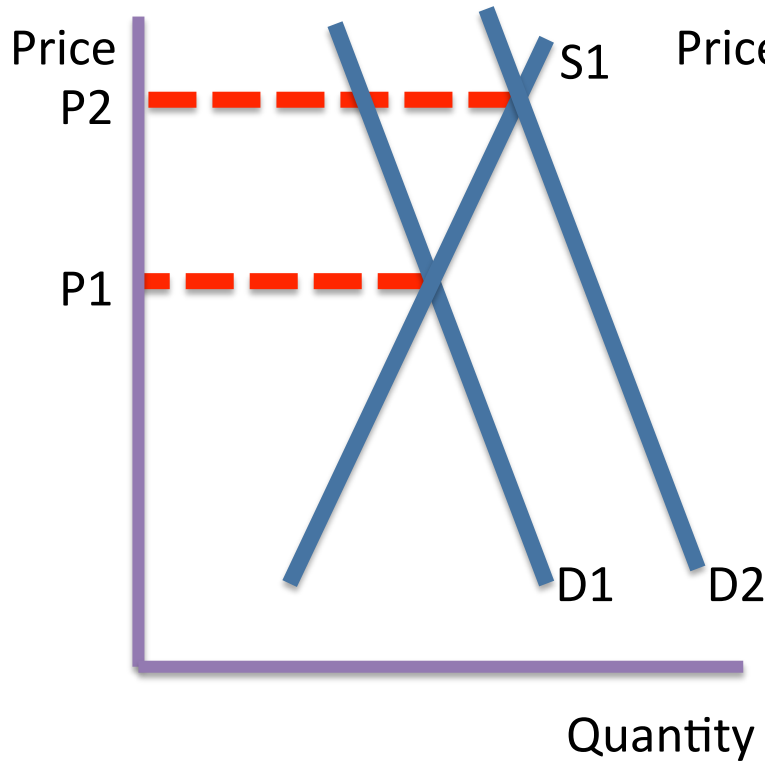
**RISE IN MARKET DEMAND**

# Using analysis diagrams

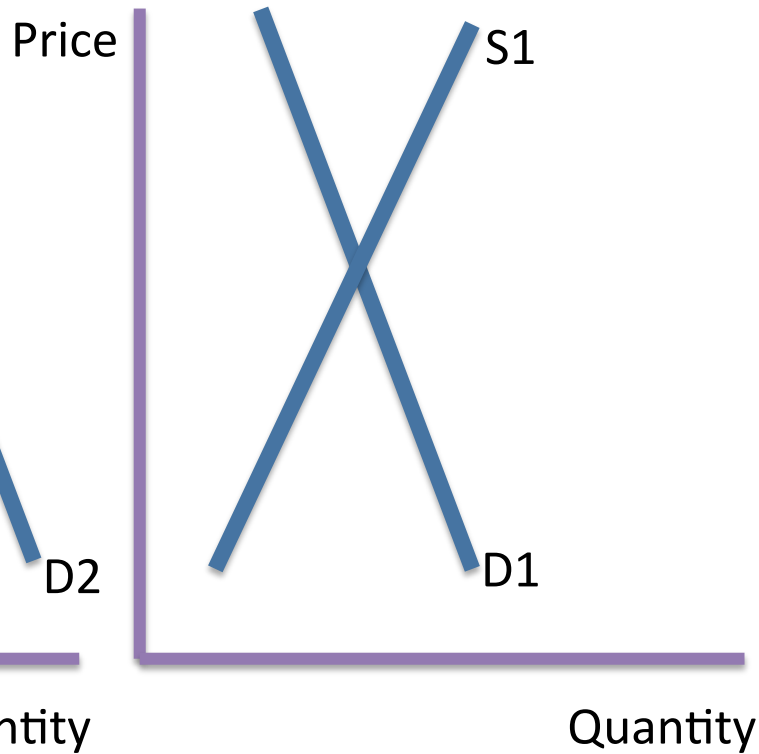


**RISE IN MARKET DEMAND**

# Using analysis diagrams

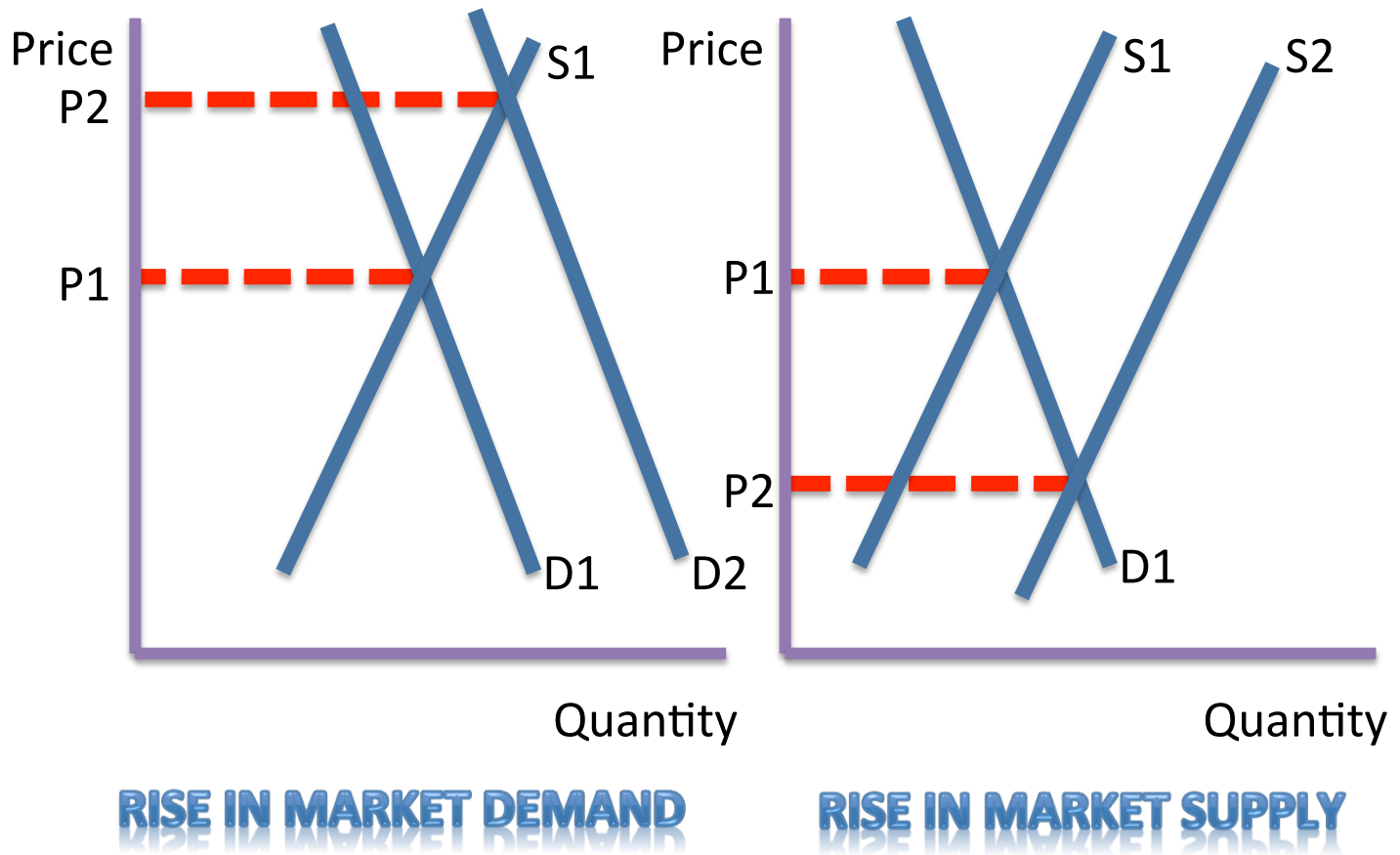


**RISE IN MARKET DEMAND**



**RISE IN MARKET SUPPLY**

# Using analysis diagrams



# Key problems arising from price volatility



# Key problems arising from price volatility



## **Risk and Uncertainty**

- **Uncertain incomes and profits for growers**
- **May limit capital investment by poorer farmers which then harms productivity and real wages in the long run**

# Key problems arising from price volatility



## Risk and Uncertainty

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## Risk of extreme poverty and unemployment

- Millions of smaller farmers suffer - least resilient
- Many do not gain when world prices eventually rise

# Key problems arising from price volatility



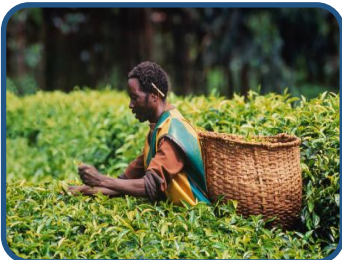
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## Macroeconomic effects

- Volatile export revenues affects nation's trade balance
- Especially the case where primary product dependence is high
- Higher prices can cause inflation and extreme food poverty

• Previous Year

## Products exported by Ghana (2012)

Total Country Trade: \$16.5B

» [View as Text](#) [Fullscreen](#)

**Tree Map**

**COUNTRY**

- Exports >
- Imports
- Export Destinations
- Import Origins

**PRODUCTS**

- Exporters
- Importers

**BILATERAL**

- Exports To Destination
- Imports From Origin
- Exports By Product
- Imports By Product

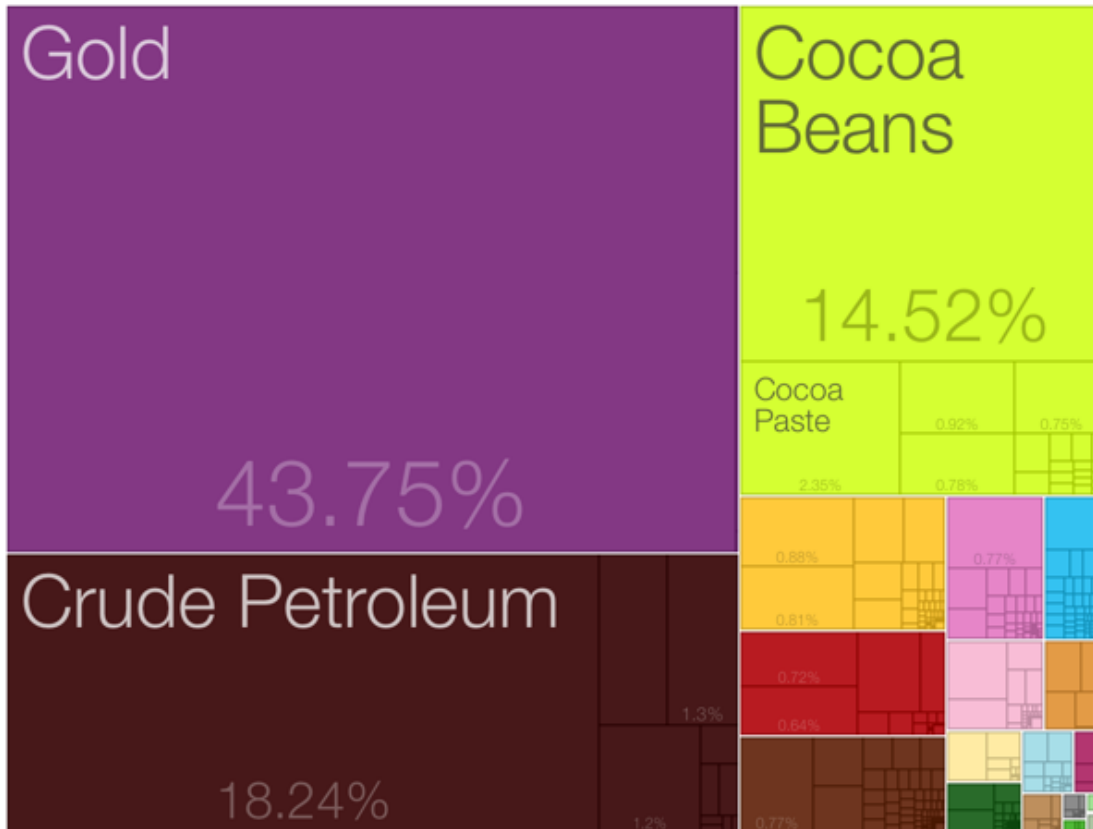
Stacked

Network

Rings

Compare

Geo Map



**ORIGIN**

Ghana

**TRADE FLOW**

Export Import

**YEAR**

2012

**CLASSIFICATION**

Hs Sitc

< Build Visualization

**DOWNLOAD**

PDF SVG PNG CSV

**EMBED**

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Category Full Gross Net Category + All Years

## NATIONAL FOOD BUFFER STOCK COMPANY (NAFCO)

- National Food Buffer Stock Company (NAFCO)

- > [Licensed Buying Companies](#)
- > [Price Determination](#)



28°C

## National Food Buffer Stock Company (NAFCO)



### Background of National Food Buffer Stock Company (NAFCO)

Government, in line with its mandate to accelerate the modernisation of Agriculture and to increase the productivity of the Ghanaian farmer, has introduced a number of interventions to achieve this mandate.

These interventions include:

The introduction of block farms program which has made it possible for mechanisation and extension services to be spread out to cover a large acreage and a large number of farmers.

Increased subsidization of fertilizers and improved seeds.

The injection of more tractors and other farm machinery and equipment at subsidized prices for increased mechanisation

These interventions coupled with investment in irrigation over the last cropping season has led to a larger than anticipated increase in the production of cereals. To ensure the security of farmers and insulate them against losses resulting from the anticipated increases in production, the Ministry of Food and Agriculture has set up the National Food Buffer Stock Company (NAFCO)

### Mandate of NAFCO

- To guarantee an assured income to farmers by providing a minimum guaranteed price and ready market.
- To mop up excess produce from all farmers in order to reduce post harvest losses resulting from spoilage due to poor storage, thereby protecting farm incomes.

# Ghana to establish Buffer Stock

The government in **Ghana** is to establish a **Buffer Stock Management Agency** as a long term measure to ensure food security. Such an Agency would have the dual responsibility of holding food security buffer stocks and intervening in markets to ensure **competitive prices to farmers** in times of glut

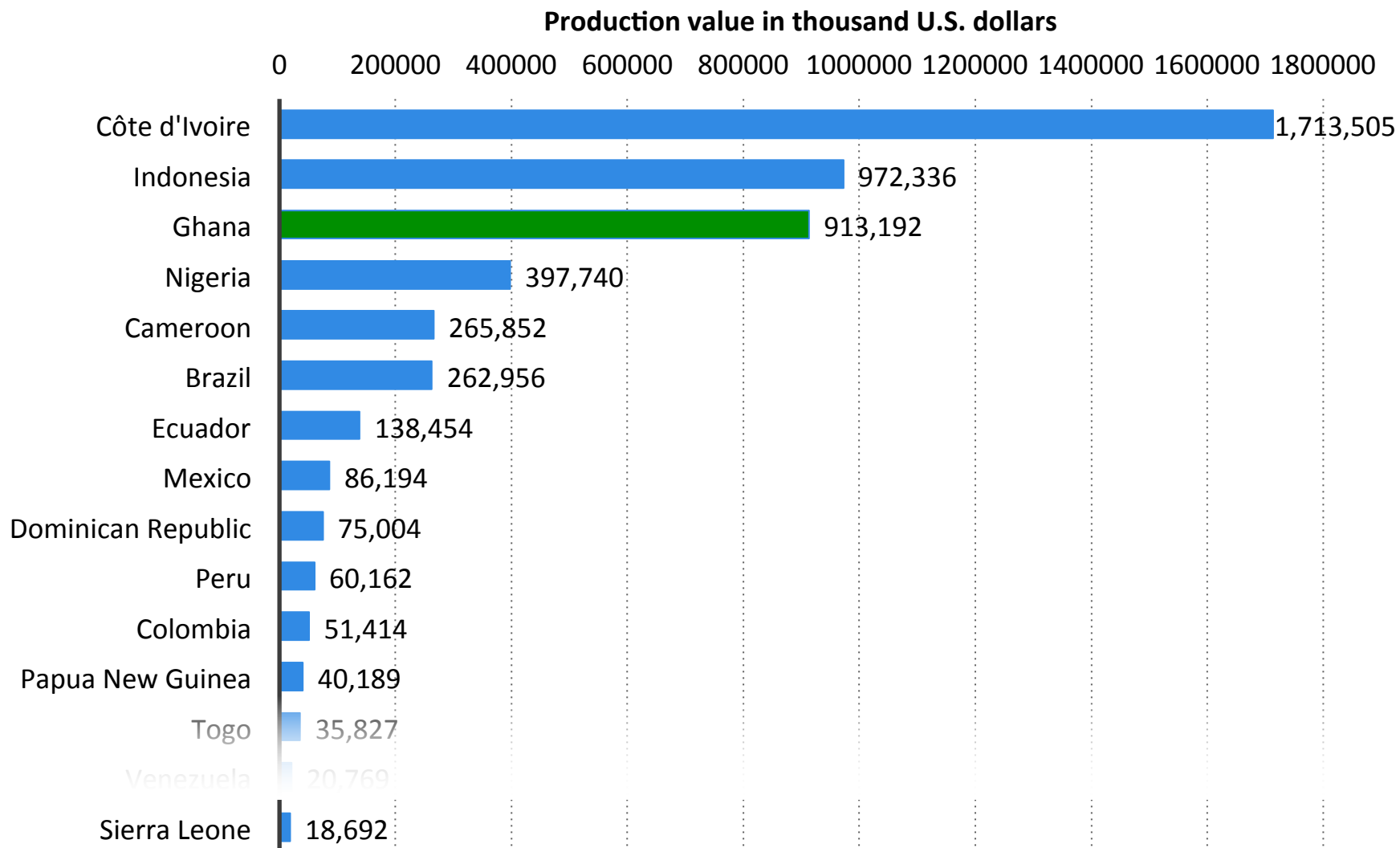
News reports: 18<sup>th</sup> October 2013



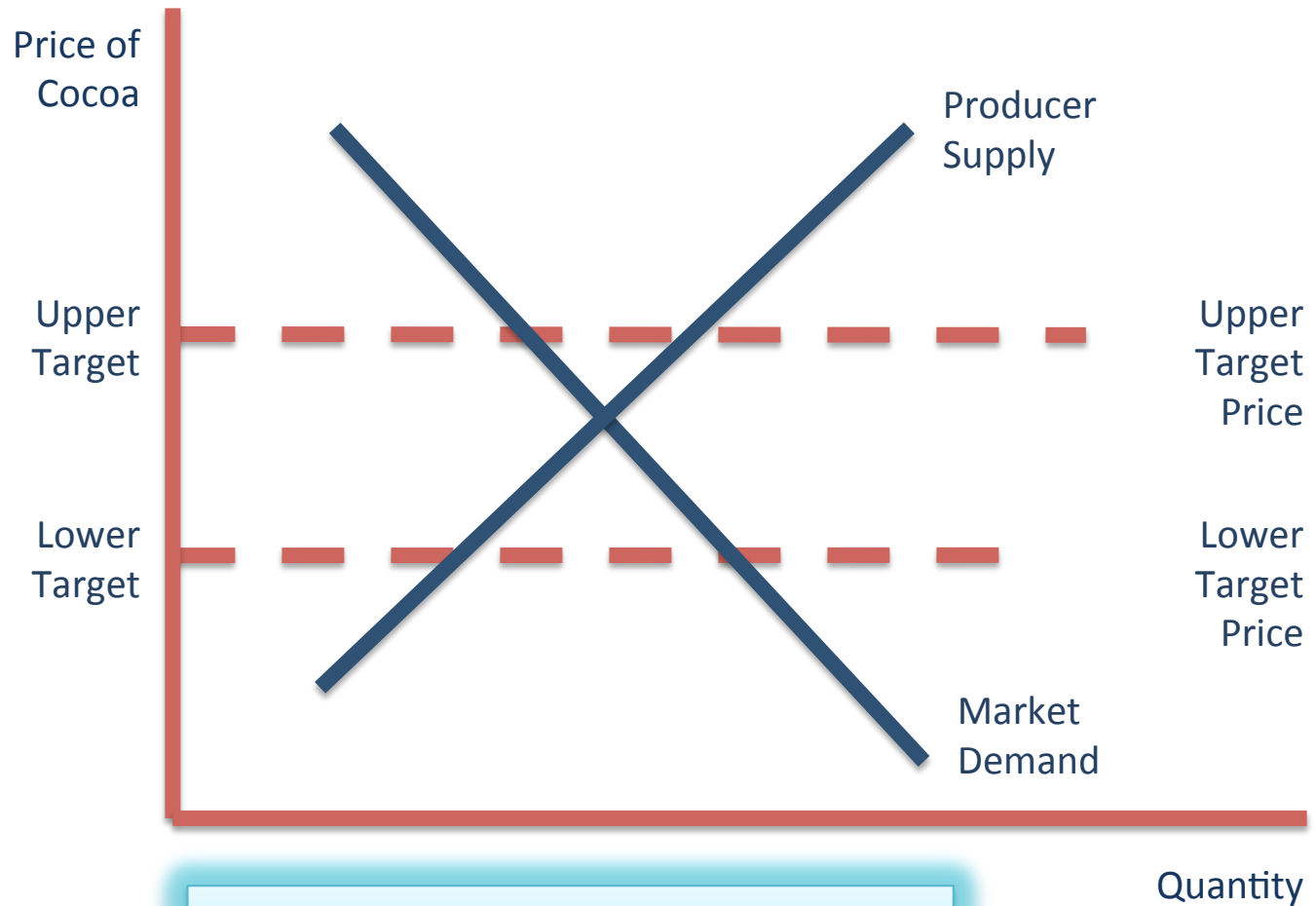
## Key aims of buffer stock:

1. Stabilise food prices
2. Ensure food supplies
3. Prevent farmers / producers going out of business because of drop in world prices

## Leading producers of cocoa beans in 2012, by production value (\$bn)



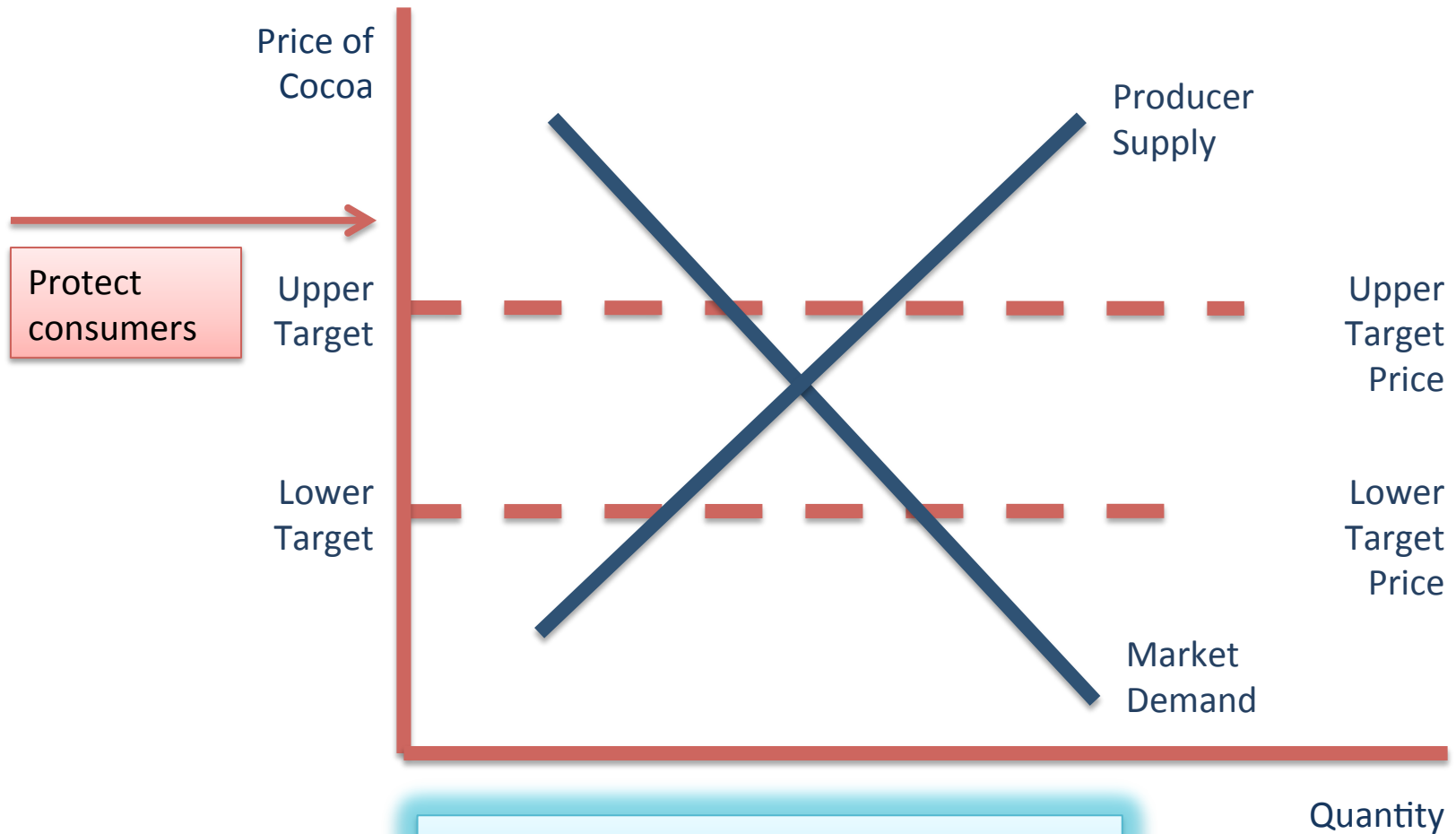
# How might a buffer stock help to stabilise prices?



A buffer stock scheme is a government plan to stabilise prices in volatile markets

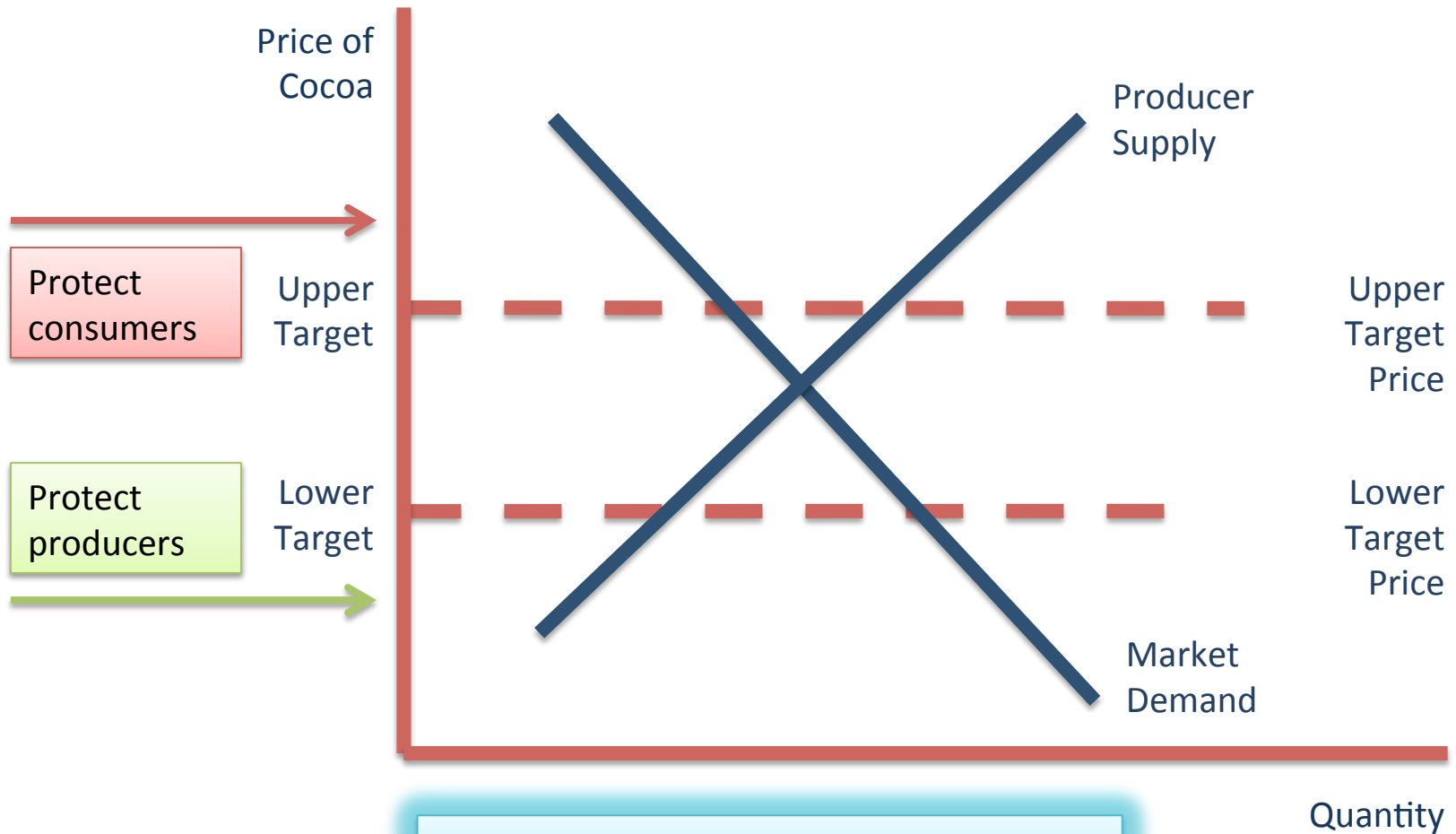


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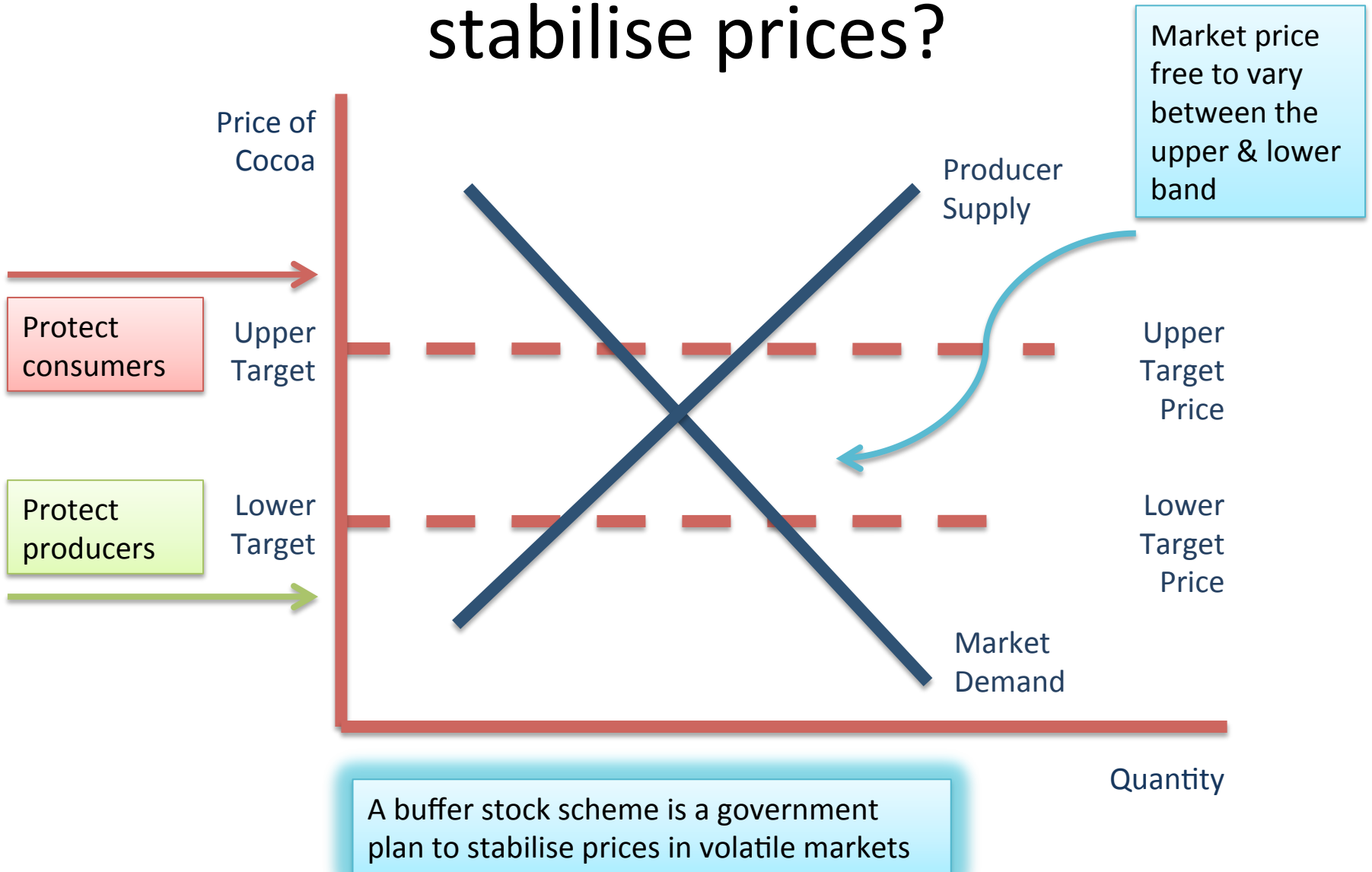
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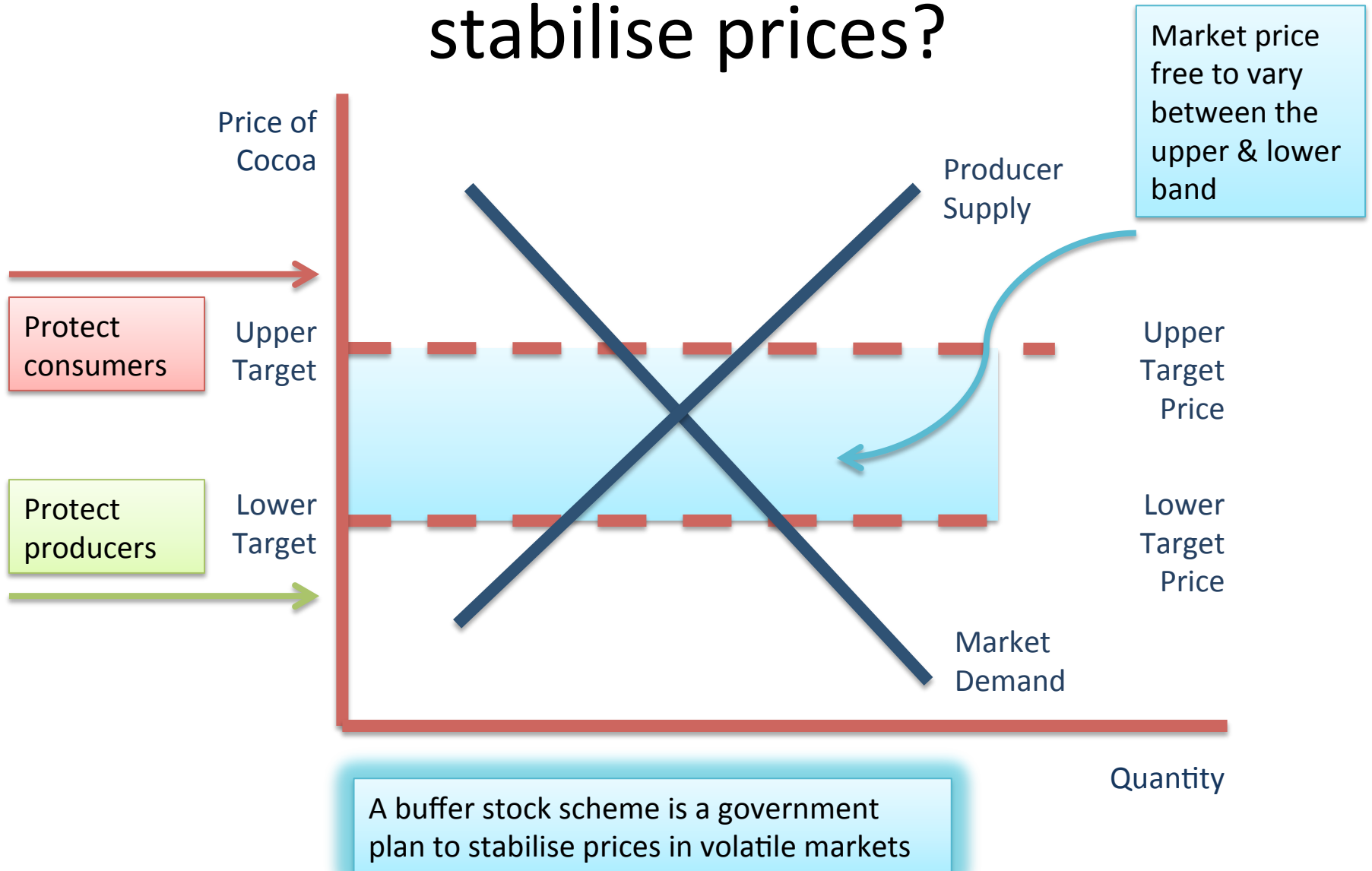


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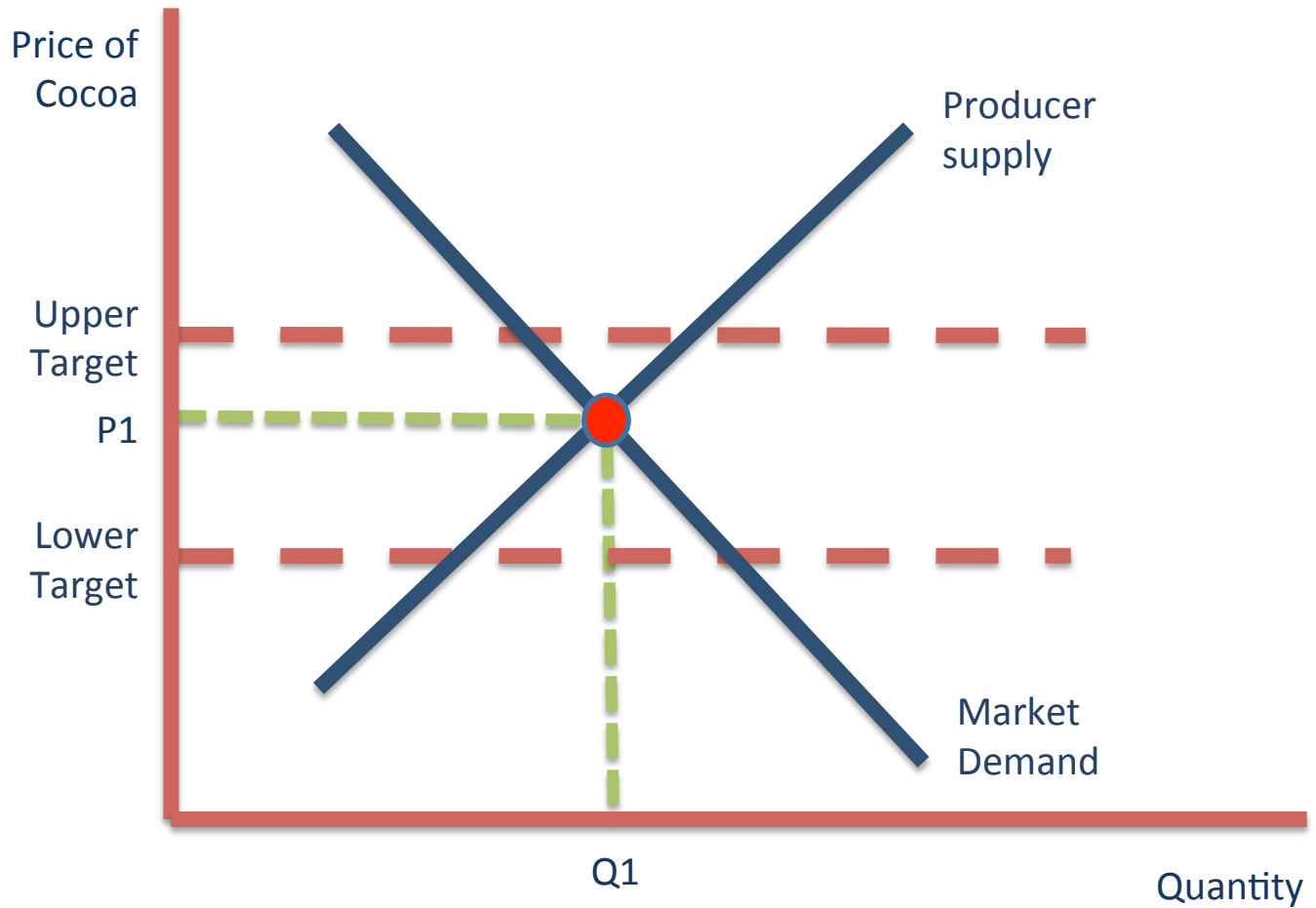
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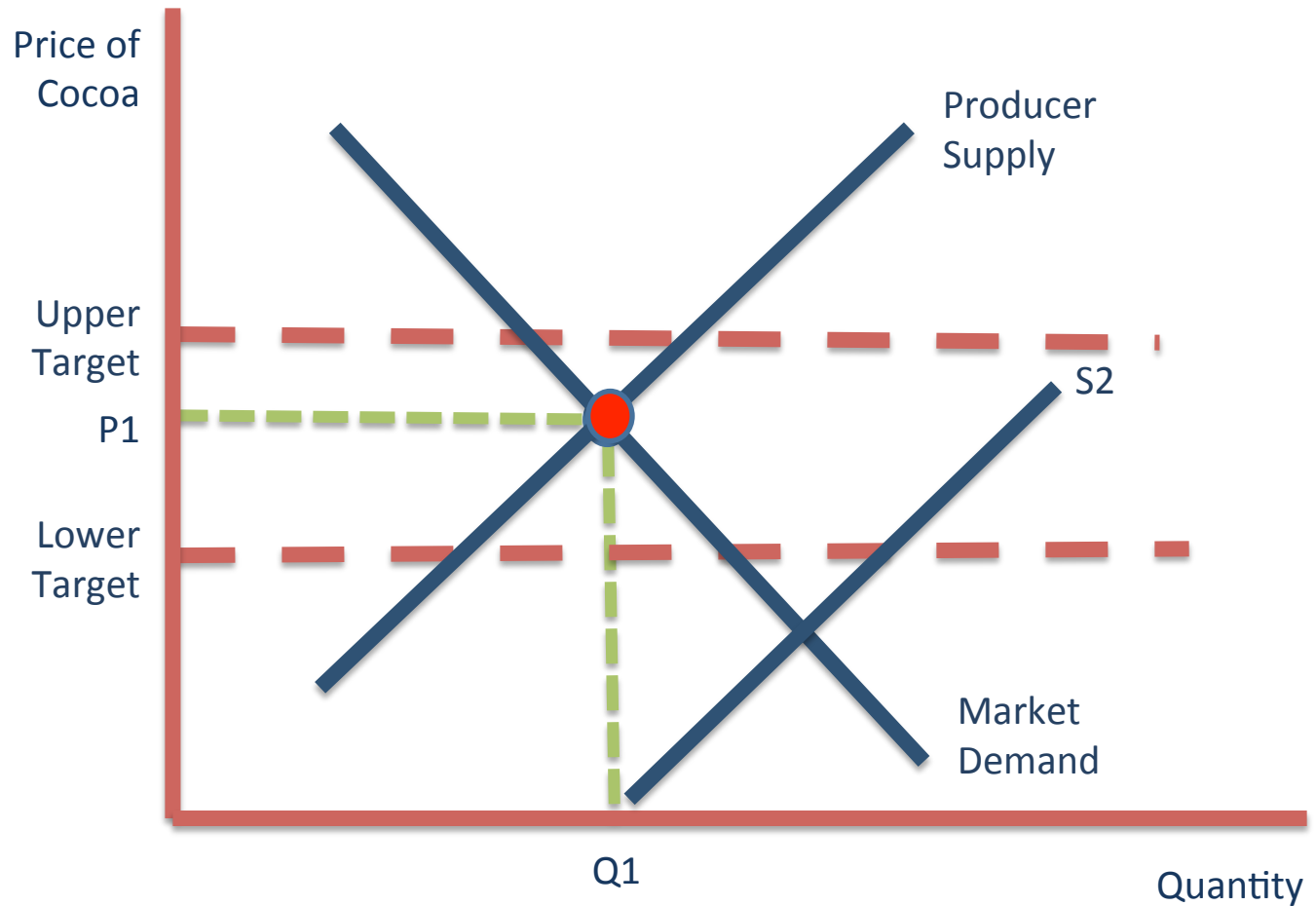
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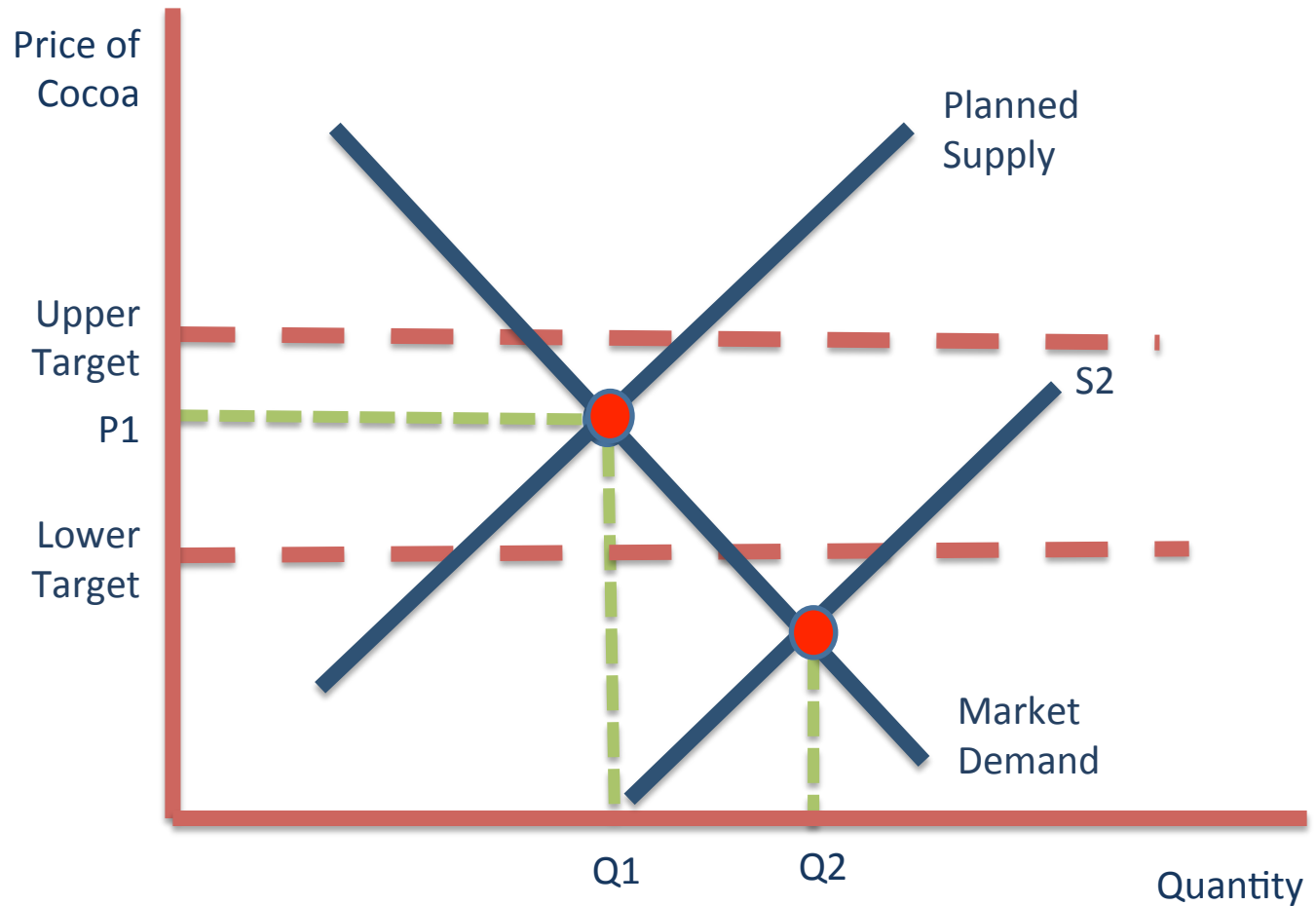
# Current market price is at P1



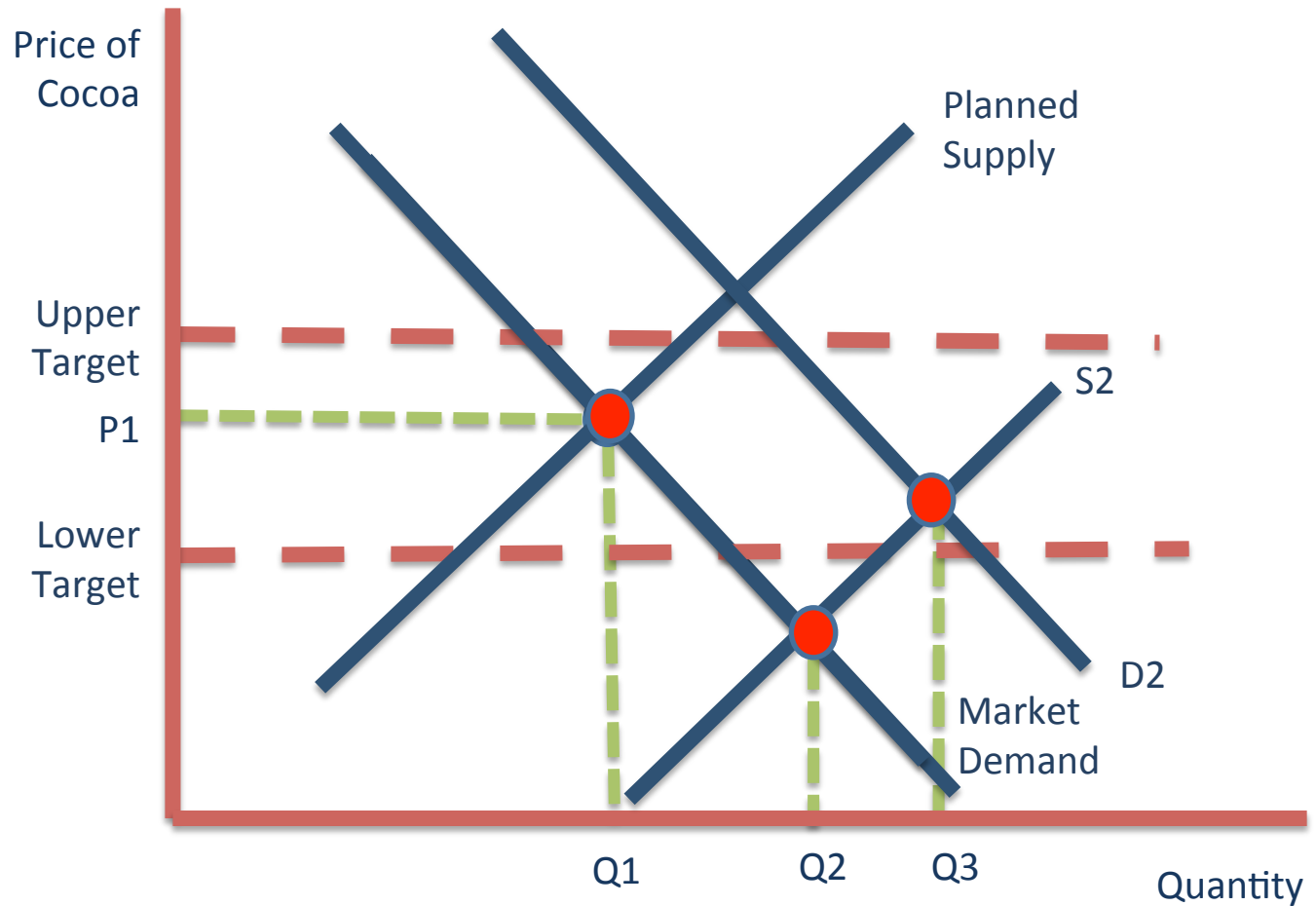
# Consider an **unexpected rise** in market supply



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# Do Buffer Stock Schemes Work?



# Problems in using buffer stocks for commodities *such as cocoa*



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**Might be better alternative long run policies for farmers**

# Alternatives to buffer stocks





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Mobile technology to  
help farmers



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Mobile technology to  
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Encourage processing /  
branding by farmers



# Alternatives to buffer stocks

Mobile technology to  
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Improved basic storage  
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Micro insurance policies  
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# Alternatives to buffer stocks

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Micro insurance policies for poorer farmers



Good evaluation always includes **suggesting alternatives** to the policy / strategy under discussion



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