Revision: The Surge in Commodity Prices – Cause and Consequence

In recent years we have seen a sharp rise in the prices of many internationally traded commodities such as oil, gas, iron ore, palm oil, rubber, copper and many foodstuffs. This revision note looks at some of the demand and supply-side explanations for this and also covers some macroeconomic consequences for various countries. The revision note will also highlight some micro and macro concepts from the AS and A2 specification.

Some of the evidence

Explaining the rise in commodity prices

There are many factors at work here

1. **Strong GDP growth in emerging market countries** including China, India, Brazil, Russia, Indonesia, Vietnam et al (see the Goldman Sachs analysis on the BRICS and N-11)
   a. The China effect:
      i. Huge rise in manufacturing output (the workshop of the world)
      ii. Massive infrastructural spending including preparations for the Olympics
      iii. Rising per capita incomes – driving demand higher for food especially meat – which then increases the demand for grain (income elasticity of demand relevant here!)
b. Many other emerging market countries are booming
   i. Strong derived demand for fuels e.g. oil and gas
   ii. High derived demand for materials and components e.g. cement, copper wiring, steel and energy
   iii. Many have accumulated high trade surpluses and can therefore afford to pay high prices for the imports they need

2. Impact of some extreme weather events cutting supply for a range of commodities
   a. Australian drought
   b. Drought in China
   c. Floods in the UK
   d. Hurricane Katrina in the USA

3. Supply constraints from war and geo-political tensions and the effects of cartel behaviour by energy producers including OPEC

4. Previous lack of investment in supply capacity e.g. affecting the oil and gas industry

5. Big shifts of scarce resources towards bio-fuels e.g. 1/3rd of US wheat production now goes into meeting demand for bio-fuels – taking supply out of the food chain and causing agflation.

6. The fall in the external value of the US dollar – most commodities are priced in dollars, so a weaker dollar makes them cheaper for consumption.
   a. The Credit Crunch has amplified this effect with the Fed Reserve slashing interest rates – creating expectations that the dollar will fall further

7. Speculative demand for commodities
   a. Many soft and hard commodities now seen as an asset class in their own right
   b. Weak stock markets and recession in property is causing hedge funds and other investors to go long on commodities
   c. IMF believes that speculation plays a big part in the explanation for the commodity price boom

When explaining the price changes – one useful distinction to make is between

- **Fundamental factors** e.g. globalisation, urbanisation, industrialisation of emerging economies – fuelling increased demand
- **Cyclical factors** e.g. strong demand from countries in the boom phase of their economic cycle
- **Short term factors** e.g. speculative activity, short term volatility of exchange rates and interest rates

**Remember the importance of elasticity!**

The prices of commodities are inherently volatile. At AS level you would be expected to explain this in terms of the low price elasticity of demand and low price elasticity of supply of many commodities. When elasticity is low, shifts in demand and/or supply feed through straight away into big changes in equilibrium price.
The effect of speculative demand in the market for wheat

Drought and other supply-side problems cause an inward shift of market supply and a rise in price

SRAS1 – SRAS2 is an inward shift of AS causing a contraction of AD, a fall in real national output and an increase in the general price level
Some of the Economic Consequences

This gives you a great chance to develop your evaluation skills – using where possible either the evidence you are given in a stimulus question or your own knowledge based on wider reading and supplementary notes. Changes in commodity prices are often called “external economic shocks”.

1. How large is the change in the price of one or more commodities? Are we measuring prices in nominal or real terms?
2. Does the evidence suggest a trend change in price? Or perhaps something that is more temporary and might be reversed in a short period of time?
3. Which industries are affected by the price change? And how important are those industries to a particular economy?
5. How might a change in commodity prices affect macroeconomic variables such as:
   a. Real GDP growth
   b. The components of AD (C+I+G+X-M)
   c. Trade in goods and services
   d. The exchange rate (especially for countries that export / import a significant volume of commodities)
   e. Input price and consumer price inflation and expectations of inflation
   f. Policy decisions on interest rates
   g. Real incomes, business and consumer confidence
   h. The economic cycles of other countries / wider consequences for the global economy
6. Consider second round effects
   a. Multiplier effects e.g. rise in unemployment causes fall in propensity to spend
   b. Accelerator effects e.g. rise in demand for oil causes increase in investment in exploration and extraction
   c. The inter-related nature of markets – for example:
      i. A rise in oil prices might lead to an increase in demand for and profitability of renewable energies
      ii. A rise in copper and steel prices will lead to an improvement in the profitability of recycling – good for the environment?
      iii. One country’s trade deficit is (in part) another country’s trade surplus e.g. how might the petro-dollars flowing into the economies of oil and gas exporters be used?
7. Identify both demand and supply-side effects – which appear to be stronger?
8. Ask yourself the question – what has actually happened? Am I basing my answer on supposition and theory? Or can I use some of my wider knowledge to score really high marks for evaluation?
9. At AS and A2 level, you must make use of AD-AS (macro) analysis to explain some of the consequences. There might be other opportunities to other diagrams too e.g. PPF, supply and demand.

So – for the UK….the recent increase in global commodity prices has had costs and benefits…..
Costs

Rise in input costs (variable costs) – leading to surge in producer price inflation – now showing through in a rise in consumer price inflation …. Which has follow through economic effects

Higher food price inflation (agflation)
   Seemingly – an end to the era of cheap food
   Damaging to lower income groups? Especially those with little/no wage bargaining power
   People’s experiences of inflation don’t seem to tally with the official data on CPI
   Fall in real incomes and less income available to spend after ‘essentials’ such as food and utilities
   Rising cost of living now hitting consumer confidence – risks causing a slowdown

CPI inflation has been rising – BoE expects it to head higher in 2008
   Gives the BoE less room to cut interest rates in response to the credit crunch
   BoE concerned that inflationary expectations are rising – a danger in the medium term

Higher input costs for businesses
   Hits profits especially if manufacturers cannot pass on to final consumers
   May accelerate trend towards out-sourcing production to lower cost countries
   Possible damage to export businesses if rising costs worsen competitiveness
   Risk of stagflation

Worsening trade deficit
   UK is a net importer of foodstuffs and also now a net importer of oil!
   Increased bill for raw materials and components – affecting producers throughout the supply chain
   Trade deficit is a leakage from the circular flow – causing a slowdown in AD

But … not all bad news!

Higher food prices good for our farming sector which has suffered from years of declining real prices and real incomes. (That said, farming contributes less than 1 per cent of UK GDP!)

Boost too for sectors such as renewable energy and if fuel prices remain high this may have important environmental benefits – e.g. encourage car manufacturers to invest more in improving fuel efficiency / change the pattern of demand towards smaller cars. Will rising food prices contribute to less obesity? Or have the reverse impact?

A stimulus to the North Sea oil and gas industry and related sectors

Inflation has risen but it is not out of control – the Bank of England can manage it – few signs of a damaging wage-price spiral talking hold

The pound has been strong against the US dollar which helps to limit the impact of rising commodity prices which are priced in dollars.

Business profits have been strong (helped by 16 years of economic growth) – most businesses have been able to cushion the impact of rising input costs.

There are signs that commodity prices will start heading lower in 2008 especially if the US economy goes into recession and China’s economic growth slows down.

UK economy is still growing and unemployment remains low. A slowdown – yes / A recession - probably not. Some evidence on the macroeconomic effects for the UK