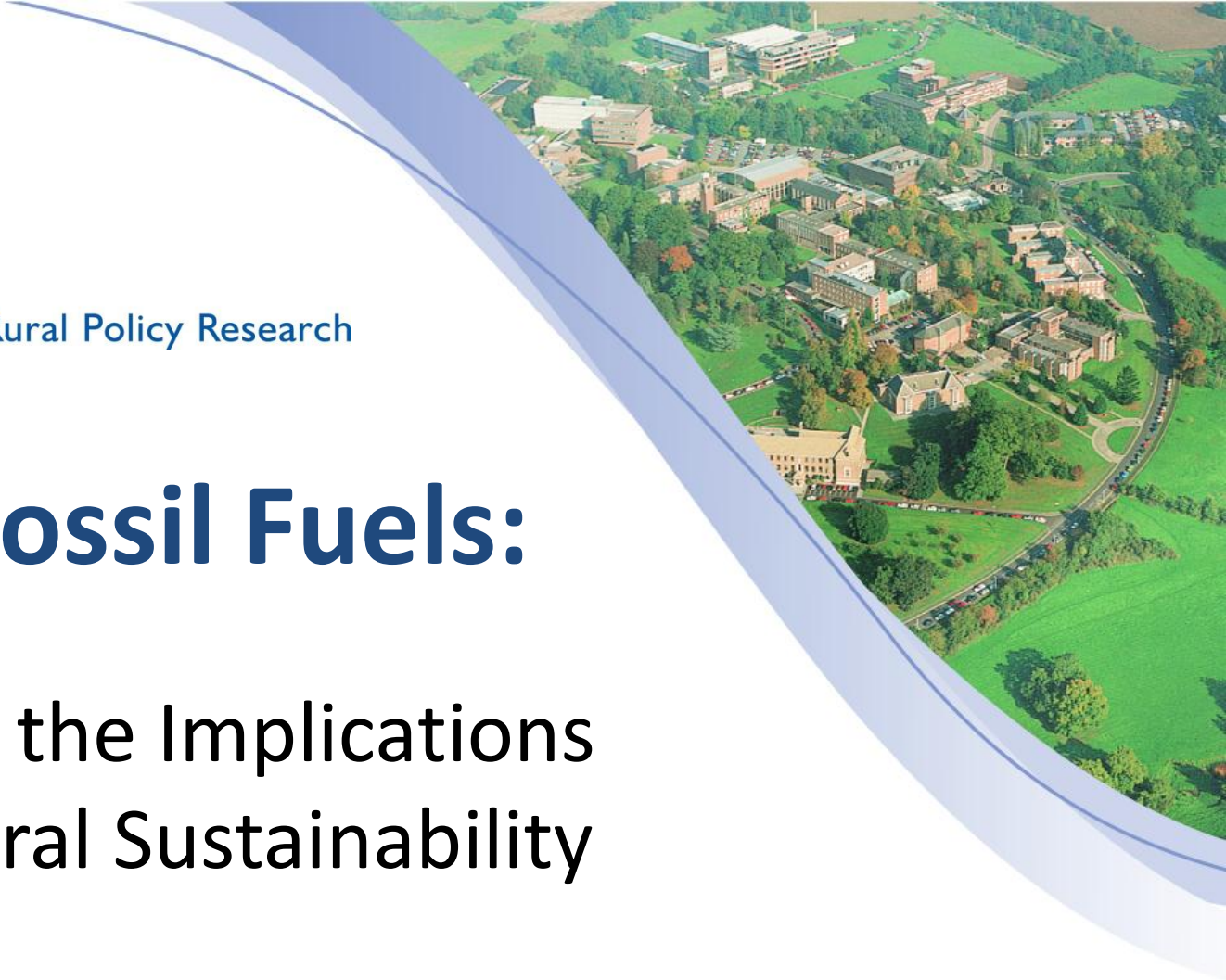


Eating Fossil Fuels:

Peak Oil and the Implications for Agricultural Sustainability

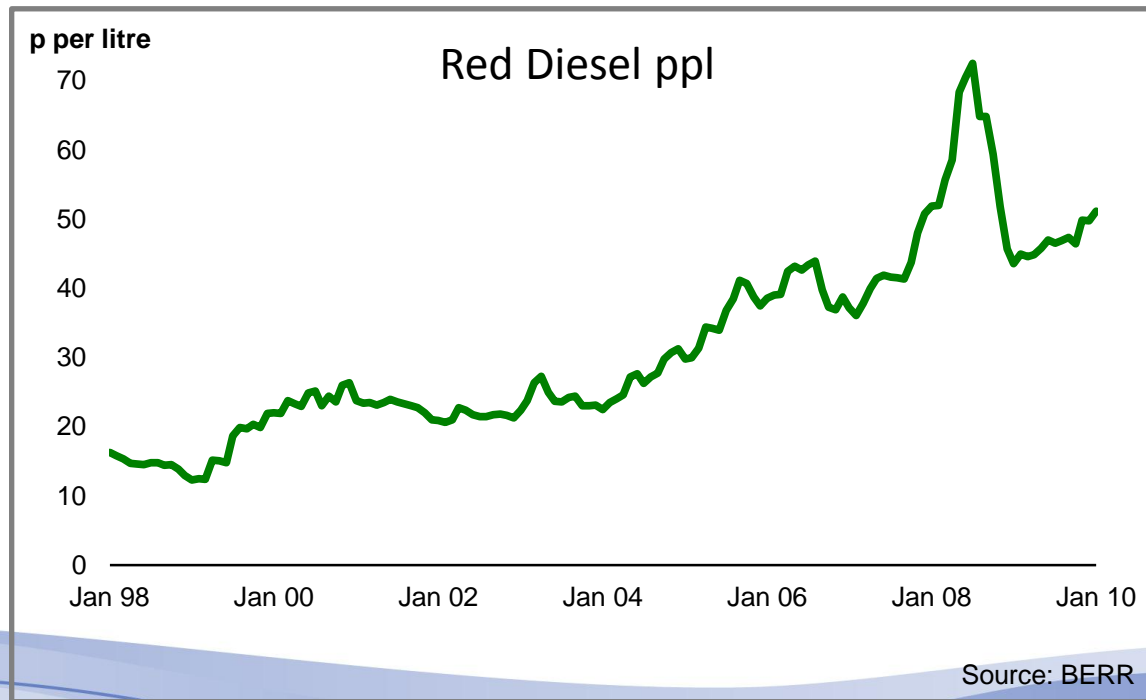
Katie Garvey

19/11/12



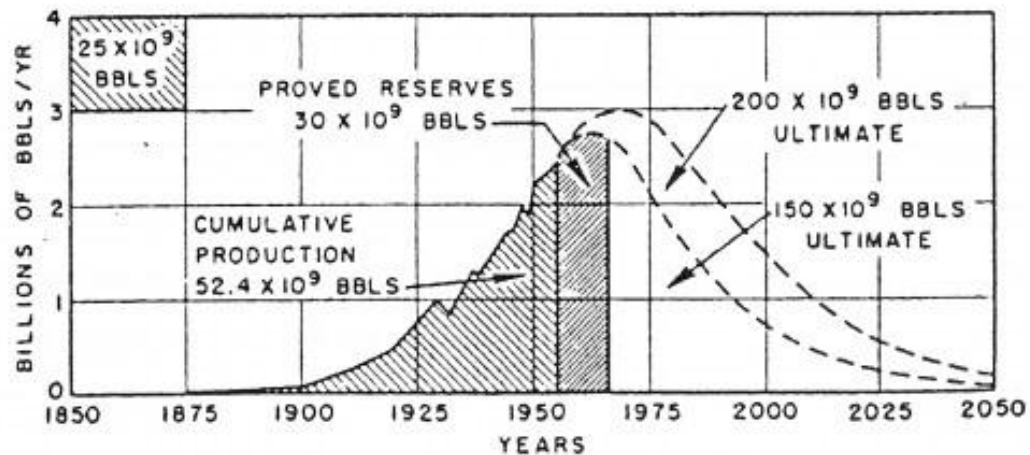
Recent Oil Price Trends

- July 2008 record high \$147 per barrel
- 10th March 2011 - Brent Crude \$116.50



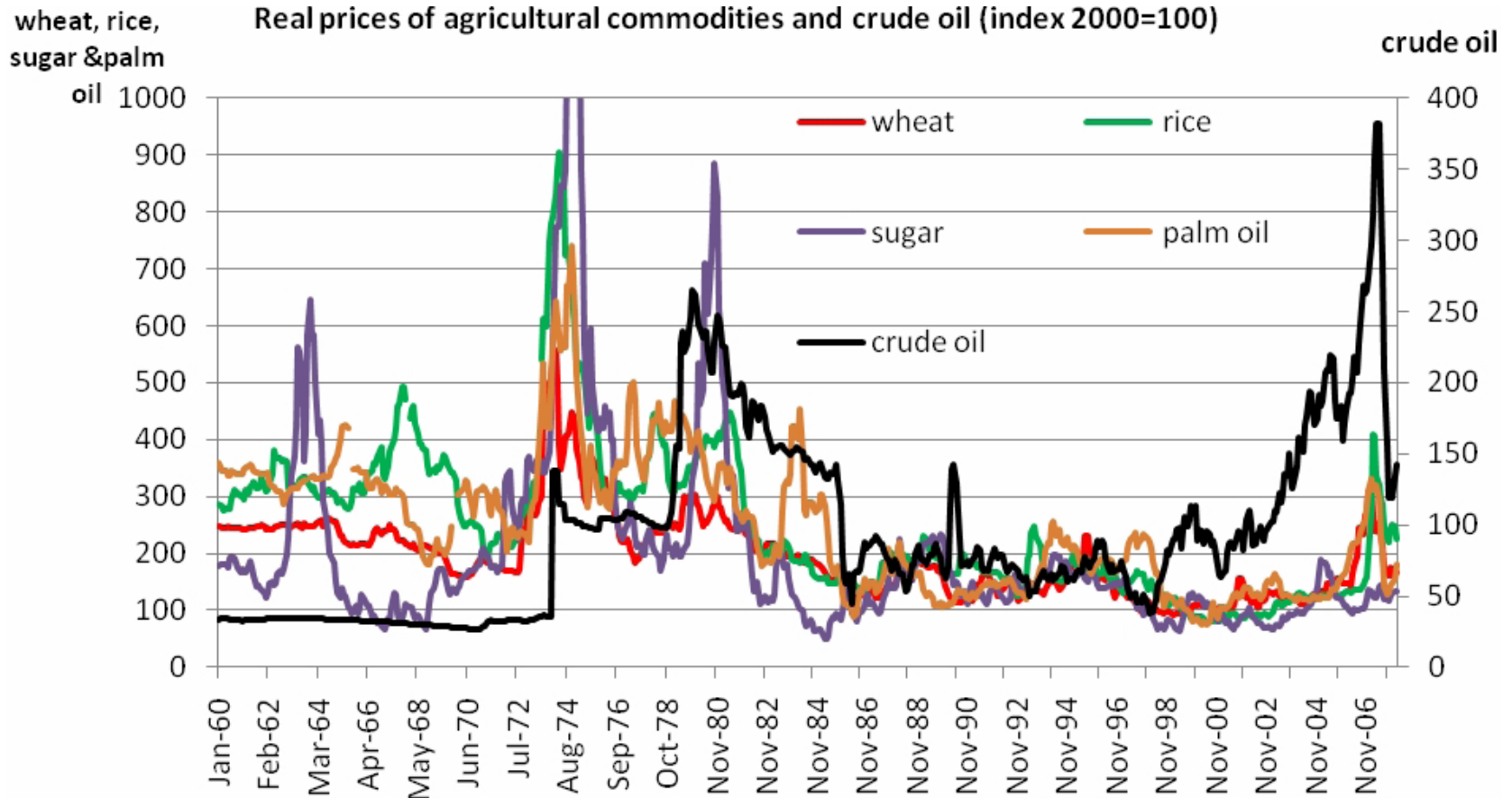
Peak Oil

- Dr. Marion King Hubbert (1956)
- Oil production will begin to fall when approximately half the oil reserves have been produced



Hubbert (1956)

Historical Trends

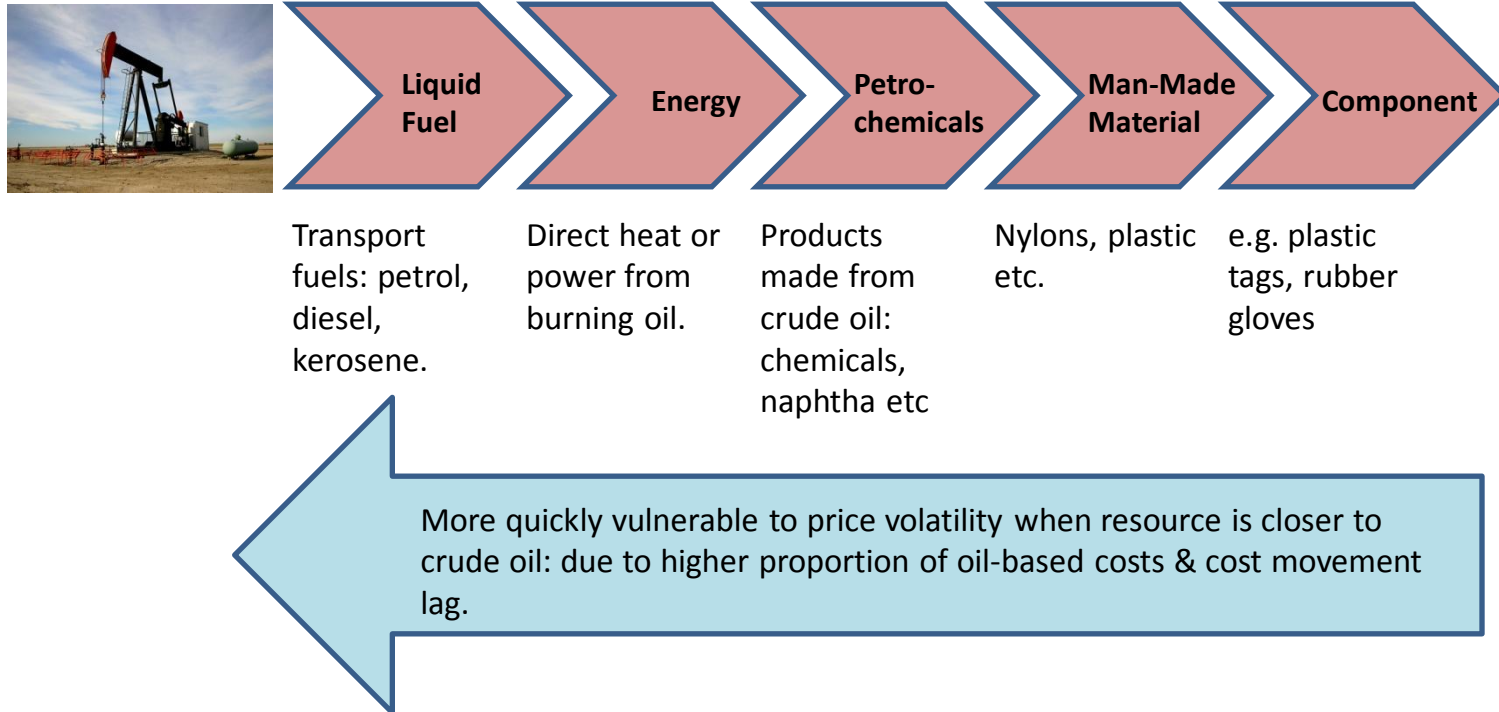


Source: UNCTAD, BEA

Energy-Based Inputs

- **Machinery Fuel and Oil** (petrol, diesel, paraffin, lubricating oils)
- **Contracting costs** (fuel component)
- **Fertilisers** (inorganic straights and compounds)
- **Crop Protection** (acaricides, defoliant, desiccants, fungicides, growth regulators, herbicides, insecticides, molluscicides, nematicides)
- Machinery, Purchased Feed, Medicine

Input Supply Chain



Can the FBS data tell us:

- How dependent is contemporary agriculture on oil?
- Which types of farming are less oil dependent than others?
- What are the implications for profitability of higher oil prices?
- What farm management steps can be taken to reduce oil price vulnerability?

Conclusions

- FBS data
- Financial Modelling
- Resource price calculations
- Reveal where further data is required from FBS
- Determine the oil vulnerability of UK agriculture
- Promoting efficiency and profitability