

# Responses to Price Signals

**Malcolm Fergusson**  
**Senior Fellow**

**[www.ieep.eu](http://www.ieep.eu)**

**King Review Seminars**  
***Market Responses to Price Signals***  
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**Institute for  
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# Coverage

- **Mainly individuals**
  - But corporate behaviour also important for car purchase
- **Price signals currently available:**
  - Fuel price/duty
  - VED
  - Company car tax
- **Other options**
  - Purchase tax or feebate system
  - Road pricing



# The Evidence Base

- **Fuel Price Elasticities**
  - Well understood at aggregate level
  - Specific behavioural responses less so
- **Company Car Taxation**
  - Responses to change in taxation analysed
- **Others (eg VED, road pricing)**
  - Consumer responses complex
  - No strong evidence base on real responses



# Fuel Price Elasticities

- **Good studies and meta-analysis available for UK**
- **Graham and Glaister (2002) concluded:**
  - Short term = -0.3
  - Long term ~ -0.7
- **Nature of responses:**
  - Half through reduced driving
  - Half through 'other responses'



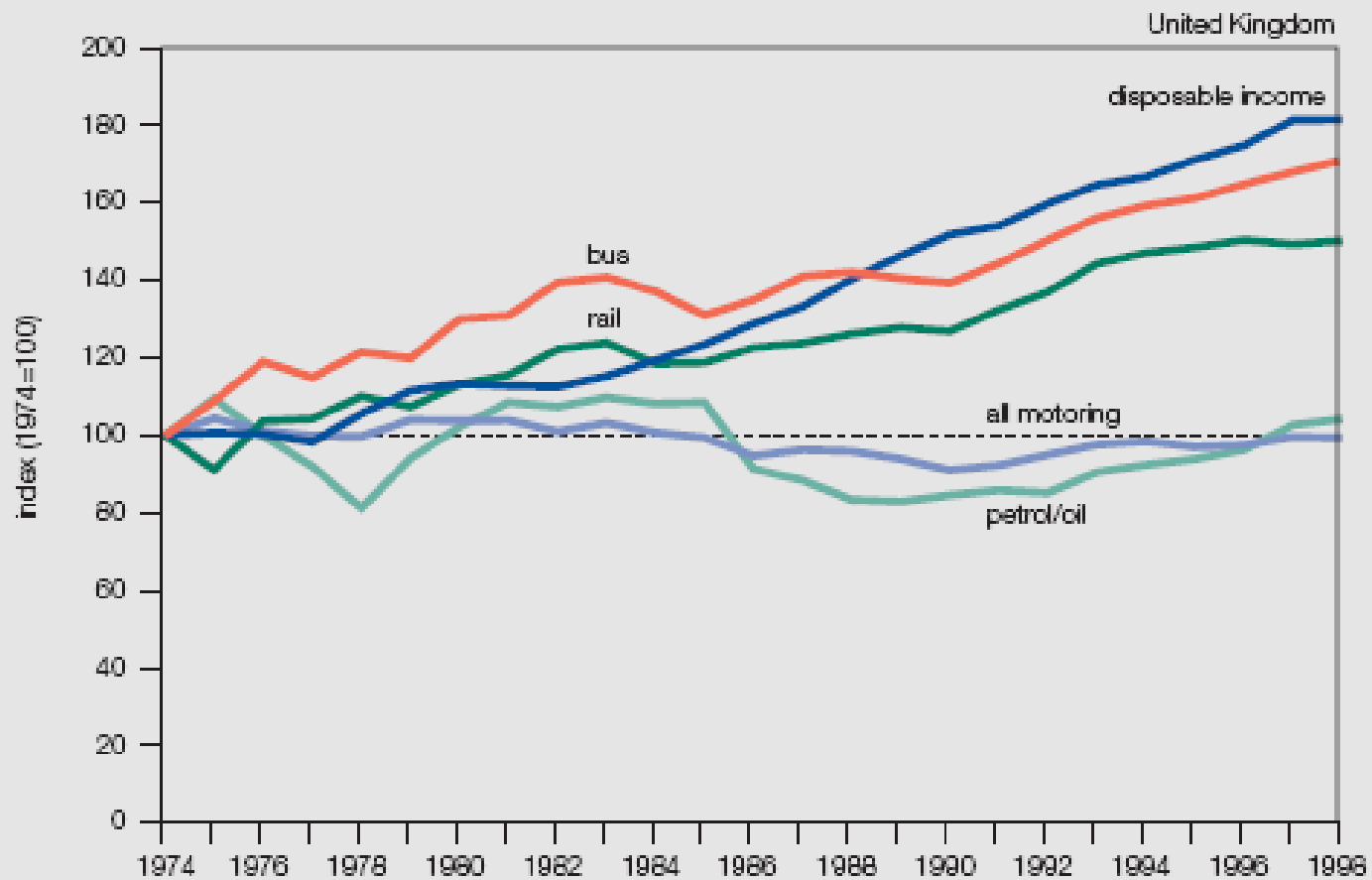
# Responses to Fuel Price Rises

- **Short term responses**
  - Drive less far
    - Fewer or more efficient trips
    - Closer destinations
    - Modal shift
  - Drive more efficiently
    - Definitely possible – but only in short term?
- **Longer term responses**
  - Change trip destinations
  - Move house
  - Buy a more efficient car



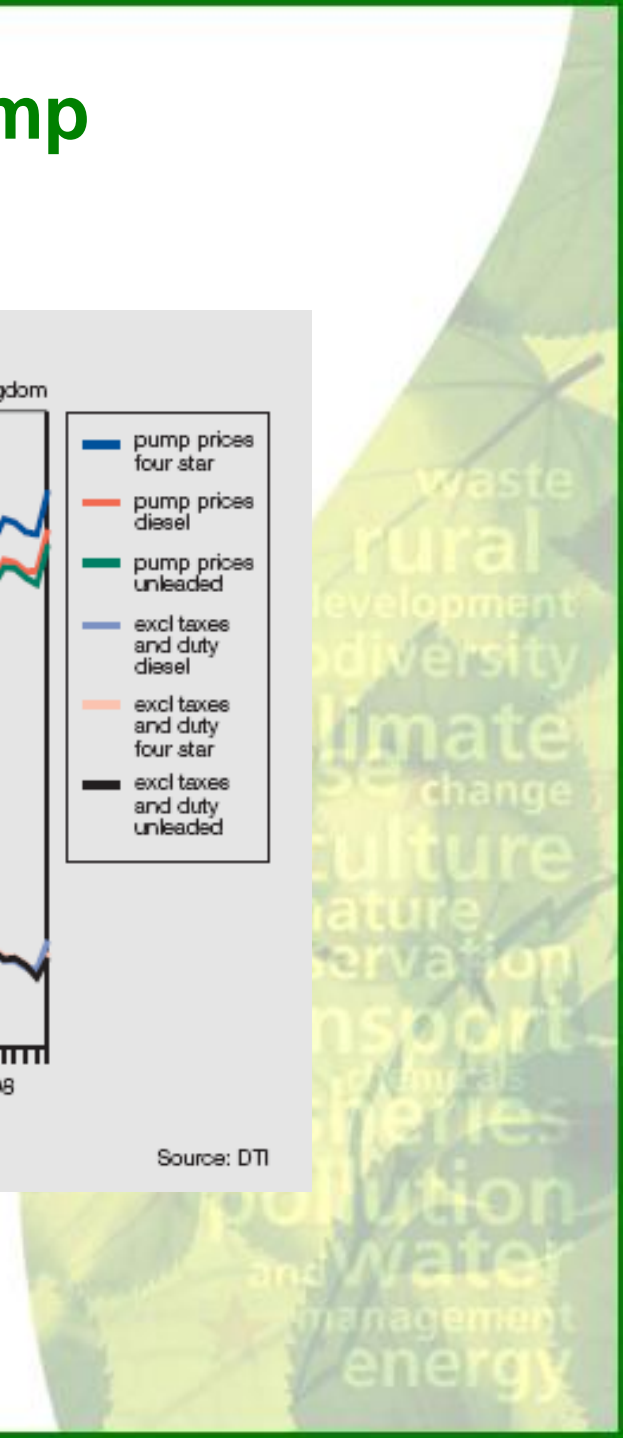
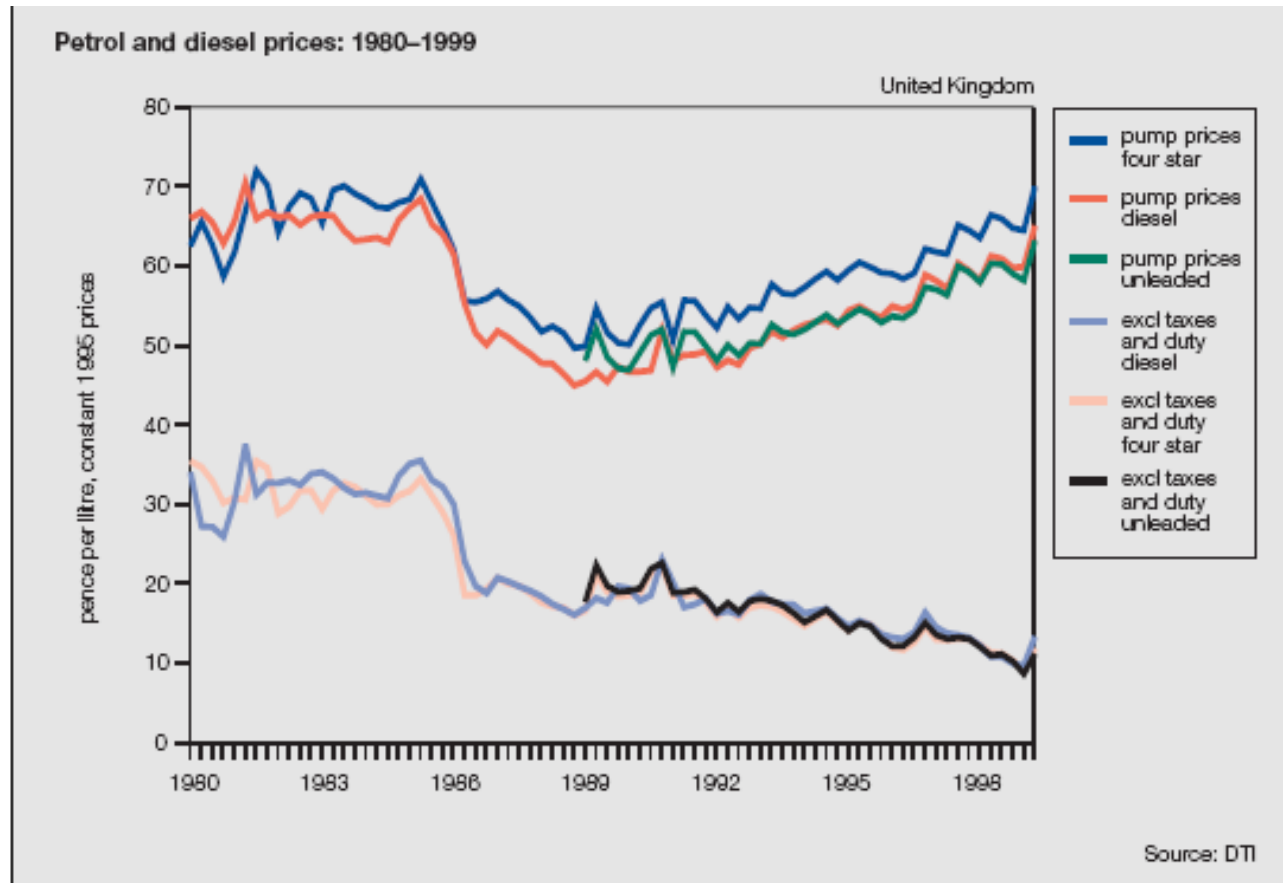
# Costs of Transport modes

Real changes in the cost of transport and in disposable income: 1974–1998



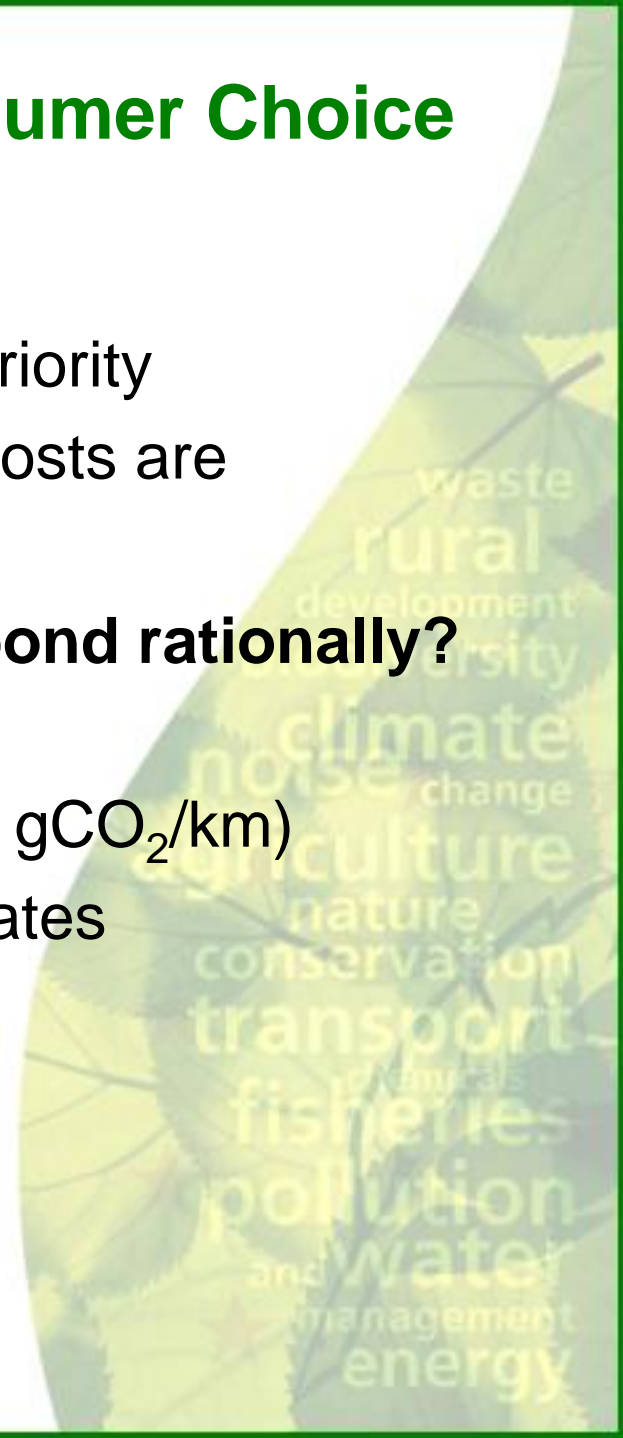
Source: ONS, DETR

# Fuel Prices at the Pump



# Car Purchase Decisions – Consumer Choice

- **Many factors taken into account**
  - Environment *per se* is not a high priority
  - ... but fuel economy and running costs are
- **Key question – do consumers respond rationally?**
  - Limited information
  - Difficult calculation (mpg, l/100km, gCO<sub>2</sub>/km)
  - Short-termism and high discount rates
  - Risk aversion





# Company Car Taxation

- **Now related to CO<sub>2</sub> bands**
- **Significant impact on car choices**
- **Average CO<sub>2</sub> from cocars now below that of private purchases**
- **... though some buyout issues for large cars**



# Other Taxes and Responses

- **Vehicle Excise Duty**
  - Positive relationship to labelling
  - ... but differentiation small
  - Little discernible impact on purchase choices
- **Alternative options?**
  - A feebate (fee and rebate) system?
  - Reduced VAT on efficient cars?
- **Road Pricing**
  - An alternative source of revenue
  - But will it *weaken* incentives to fuel efficiency?



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