Overview
- Providing context for the day:
  - Global demand: stagnation and growth
  - International trade versus FDI
  - The leading vehicle manufacturers: structure and strategy
  - The supply chain: creating competence portfolios

Global demand
- If China economy grows at 8% p.a. then by 2031 per capita income = US in 2006
- But emerging markets face many problems:
  - Infrastructure
  - Urban forms
  - Road networks and social infrastructure
  - Economic fragility
    - See reaction to credit crisis in the US
    - Trade tensions China: US
  - Safety

Global demand
- What is the ultimate level of demand?
  - How many vehicles can the planet sustain?
  - Population growth and economic growth versus resource constraints:
    - Current car only fleet = 700 million; 70 million per annum
    - Population = 6 billion
    - Max potential = 0.75 cars / person
    - 2080 population of 10 billion = 7.50 billion cars or ten times current level
    - Likely 2060 figure of 2.5 to 3.5 billion cars; 300 million per annum?

Global demand
- Market stagnation has not yet really happened except in Japan:
  - Volume and unit value growth
  - Some convergence between major regional markets (NA; EU; Japan) in terms of segments, etc.
  - Growth in ‘niche’ segments
  - Market bifurcation
    - The value market; the prestige market
Global demand

- Market fragmentation a likely future:

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Trade or FDI?

- Long-term changes driven by manufacturing costs:
  - The drift Eastwards in Europe
  - The emergence of China, India etc as export locations
  - The erosion of Detroit as a manufacturing location
  - Likely pressure on Japan in the future

Global demand

- Fragmentation likely to increase in the future driven by:
  - Customer choice
  - Government regulation
  - Technical possibilities
  - Manufacturing competence
- Resulting in more complex and volatile markets

Trade or FDI?

- BUT:
  - Still value in localised production even for high volume assembly
  - Still major investments in established locations
  - Still a lot of high unit value plants in established locations
  - And the “world car” remains elusive...

Trade or FDI?

- Market convergence increases scope for trade:
  - Thailand: pick up trucks
  - US: SUVs (BMW; Mercedes)
  - Japan: Kei cars
  - WTO regime also removes small scale assembly operations

Trade or FDI?

- The Renault Logan example…
  - By 2009 Renault plans an extra 800,000 units sold compared with 2005, Logan is vital
  - Supposed to be €5,000 car
  - H1 production in 2007 just 183,000 from 1 mother plant and 9 daughter plants
  - New plants coming on stream in Russia and India
  - Have to double output at least by 2009
Vehicle manufacturers

- Three consistently successful business models in evidence:
  - The high volume, global coverage, high consistency, quality execution approach of Toyota
  - The specialist, prestige medium volume approach of BMW
  - The ultra-specialist e.g. Morgan

Vehicle manufacturers

- Less consistently successful strategies include:
  - Multi-brand constellations (Ford; VW Group; GM versus Renault-Nissan)
  - Medium size ‘volume’ manufacturing (PSA; Fiat versus Honda)
  - Platforms (VW again)
  - New brand launches and brand extensions (Smart, Skoda, versus Lexus, Porsche)

Vehicle manufacturers

- Is the mainstream business model exhausted?
  - Can enhanced efficiency save the day?
  - What are the alternatives?
  - Can new entrants emerge?
  - Can the industry control the economic and environmental debates?

The supply chain

- High levels of turbulence that are likely to get worse rather than better:
  - Business failures especially in the US
  - The end of the Keiretsu
  - The end of the German Mittelstand?
  - Volatile sourcing strategies from the vehicle manufacturers
  - Business problems passed down the chain

The supply chain

- The search for a portfolio of competences and locations:
  - New technologies (and new entrants)
  - Cost pressures
  - New vehicle assembly locations
  - Demands for greater system integration capability, world-wide supply, etc.

The supply chain

- Issues of vertical versus horizontal integration e.g. aluminium sector
- Partnerships, alliances and flexible organisations the likely way forward
- Extends all the way to the contract R&D sector…
Conclusions

- Economic forces plus technical changes will create a new global automotive industry
- This future will be uncertain and volatile
- There will be a premium on flexibility and responsiveness
- It will not just be about least cost
- The UK industry can prosper in these conditions