CAR CRASH:
THE U.S. AUTO INDUSTRY IN CRISIS

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OVERVIEW

• U.S. auto sector has both short-run and long-run problems
  – Short run problems have hastened and exposed long run problems

• Key questions to be addressed?
  – What are these problems?
  – What would have happened but for the short run problems?
  – Is there a principled reason for government intervention?
SHORT RUN PROBLEMS

• Collapse of total sales, especially in most profitable segments

• Causes of collapse:
  – “Over-selling” in past few years
  – Great recession
  – Credit crunch

• Result has been staggering losses
  – GM reported loss of $30 B in 2008, $10K per vehicle
AUTO SALES DECLINE

Sources: Bureau of Economic Analysis; MotorIntelligence.com
LONG RUN PROBLEMS

A. Product problems
   1. Quality differential
   2. Inferior designs
   3. Reputation effects
   4. “Hit” vehicle strategy

B. Production problems
   1. Operating costs
   2. Legacy costs
C. Corporate problems
   1. Management weaknesses
   2. Governance failures

D. Government policy
   1. Cheap gas/low fuel economy
   2. Alternative technology fiction
Long run result has been staggering destruction of value:

– Loss of shareholder value, perhaps $300 B in last decade

– Loss of hundreds of thousands of jobs, retirement protection for millions

– Squandering of customer goodwill and product acceptance
  • Long term decline in basic competitiveness of US
  • Share of passenger cars falling for 30 years
The “but for” scenario

• Consequence of these problems is that industry has been on “glide path to oblivion:”
  – Equilibrium consisting of much smaller US auto industry
  – Might not be worst outcome
  – But overwhelmed by events

• Question becomes whether these are problems that private bankruptcy can address
  – Or are there broader public issues not necessarily dealt with in bankruptcy?
(A) SUPPLIER EFFECTS

• Suppose there are two U.S. auto companies, $A_1$ and $A_2$, each buying a crucial part ("seats") from two suppliers subject to scale economies.

• One auto manufacturer, $A_1$, goes bankrupt, retail sales and demand for seats collapse.
Three cases follow:

1. Suppose $S_1$ and $S_2$ are in competition at contract renewal time so that competition between them is strong and price is at or near the competitive level. Suppose $A_1$ buys primarily from $S_1$ under contract. Collapse of $A_1$ may cause $S_1$ to collapse. This leaves $S_2$ as monopoly supplier to remaining auto company $A_2$, with correspondingly higher seat price.
   - Analogous to foreclosure story, but here triggered by collapse of firms at each stage
2. Even if auto companies engage in dual sourcing, the supplier more dependent on collapsed auto company suffers larger demand decline
   • With scale economies, might be financially jeopardized even if equally or more efficient

3. If auto companies buy equally from both seat manufacturers, unit costs of both suppliers increase as one manufacturer goes into bankruptcy
   • May jeopardize supplier viability and seat supply to other auto company
Scenarios depend on:

- Degree of product differentiation in seats
- Supply substitution
- Periodicity of contracting for seats
- Ability of A2 to shift business to S1
- Operation of A1 while in bankruptcy
- Speed of emergence from bankruptcy
(B) WARRANTIES

• Car buyers purchase not just vehicles but pay implicit price for warranty service, parts supply assurance, etc.
• This option may become worthless if company goes bankrupt
• Company may also go bankrupt if enough possible customers believe it. They stop buying this company’s cars for fear warranties valueless due to imminent bankruptcy
• Self-fulfilling prophesy similar to contagion effect
• Similar to other bundled products-services or complementary components of network
  – Support for software
  – Copiers and parts
  – Cameras and dedicated lenses
• Empirical question of how important this really is in customer decision-making
  – Whether they do look ahead ("life-cycle purchase decisions")
  – Whether in looking ahead, they make rational decisions (behavioral economics)
(C) STRANDED ASSETS

- Economic models and policies assume problems of very partial nature
  - Failing firm defense to merger designed to preserve assets that would otherwise disappear
  - Key is that assets can be shifted over to another producer in the short run, thus preserved
• What if entire sector is failing, so there is no alternative possible user?
  – And failing long enough to cause assets to be removed or destroyed, so they disappear
  – What if entire economy cannot use assets for foreseeable future?
• In auto industry concern is with physical assets
  – Also with human capital—skilled labor that does not make it to new equilibrium
• These may become permanent costs of sector-wide collapse
(D) SPILLOVER EFFECTS

• Collapse of auto industry has already had serious spillover effects on
  – Employment and unemployment insurance
  – State and local finance
  – Dealers everywhere

• Bankruptcy would have ripple effects on
  – Health insurance costs for current and past employees
  – Pension benefits guarantee
  – Banks and other creditors

• Difficult to quantify, but undoubtedly large and important for policy decisions being made
Observations about current policy

• Addresses each of above four issues
  – Supplier Support Program
  – Warrantee protection from U.S. government
  – Assistance to stranded assets through Director of Auto Recovery
  – Spillovers

• But still concerns:

  1. What is actual business plan?
     – Will the industry be transformed and successfully compete with Japanese auto companies?
     – Or is new plan that they simply reconstitute themselves into smaller, lower-cost competitors?
     – Does this essentially put them back onto the glide path to oblivion?
Observations about current policy

2. What is exit strategy?
   – Will government follow through on its 30 and 60 day deadlines, and then allow to happen what it threatened?
   – Even if they do, what happens when companies gear up to make products that market does not want?
     • Likely to be an issue if companies commit to fuel-efficient cars and gas remains at $2/gallon

3. What happens to Ford as its competitors are propped up?
   – Ford has not accepted bailout money and pursued own turnaround plan
   – Now faces stronger rivals that have government backing for concessions