Market Structure and Innovation: A Dynamic Analysis of the Global Automotive Industry

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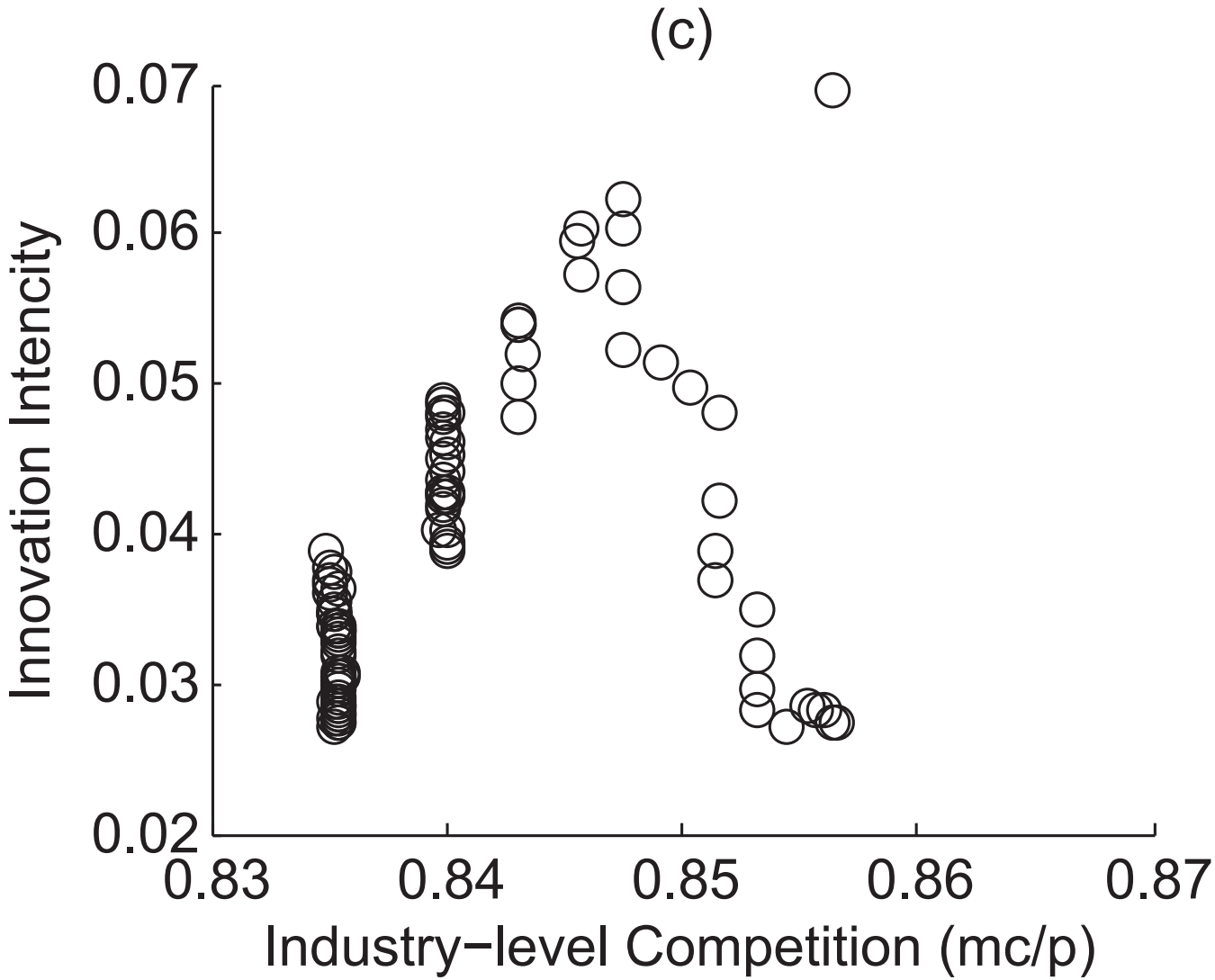
Summary

- Question: How does change in market structure effect innovative activity in the global automotive market?
- Unlike previous analysis, explicitly take into account
  $\longrightarrow$ dynamic nature of innovation
  $\longrightarrow$ evolving market structure
- Main result: inverted U shape relationship between market structure and innovative activity.

Market Structure and Innovation



Comments

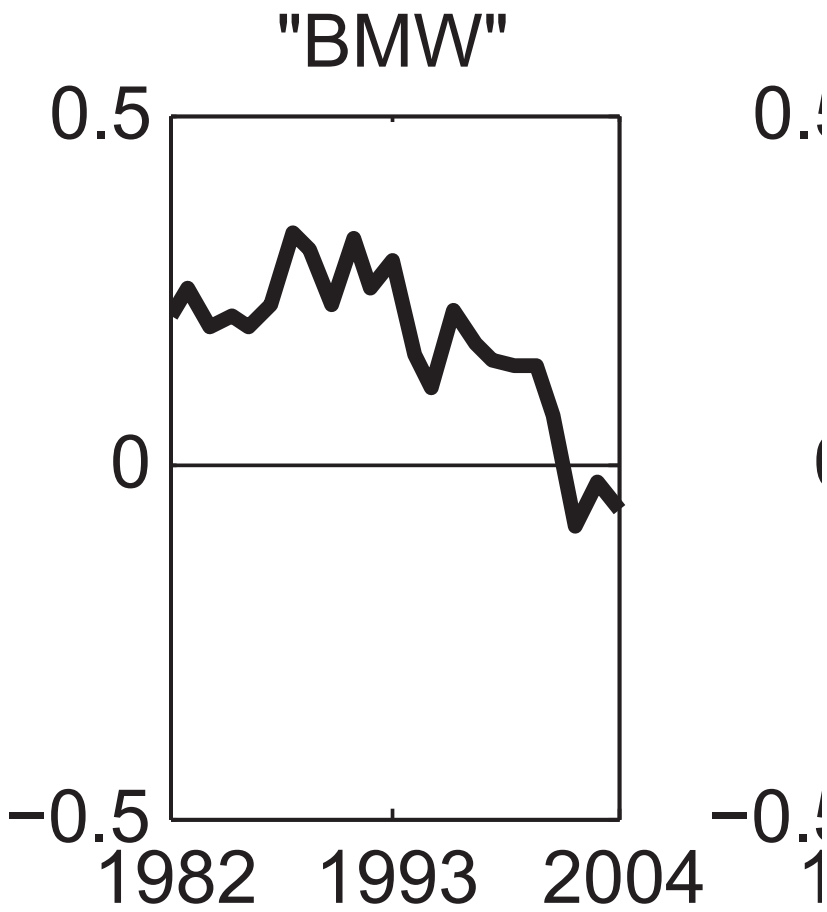
Relative prices do not look right

1. Global BMW price falls relative to GM after 1994?
2. Chrysler-Daimler merger results in dramatic fall in price.

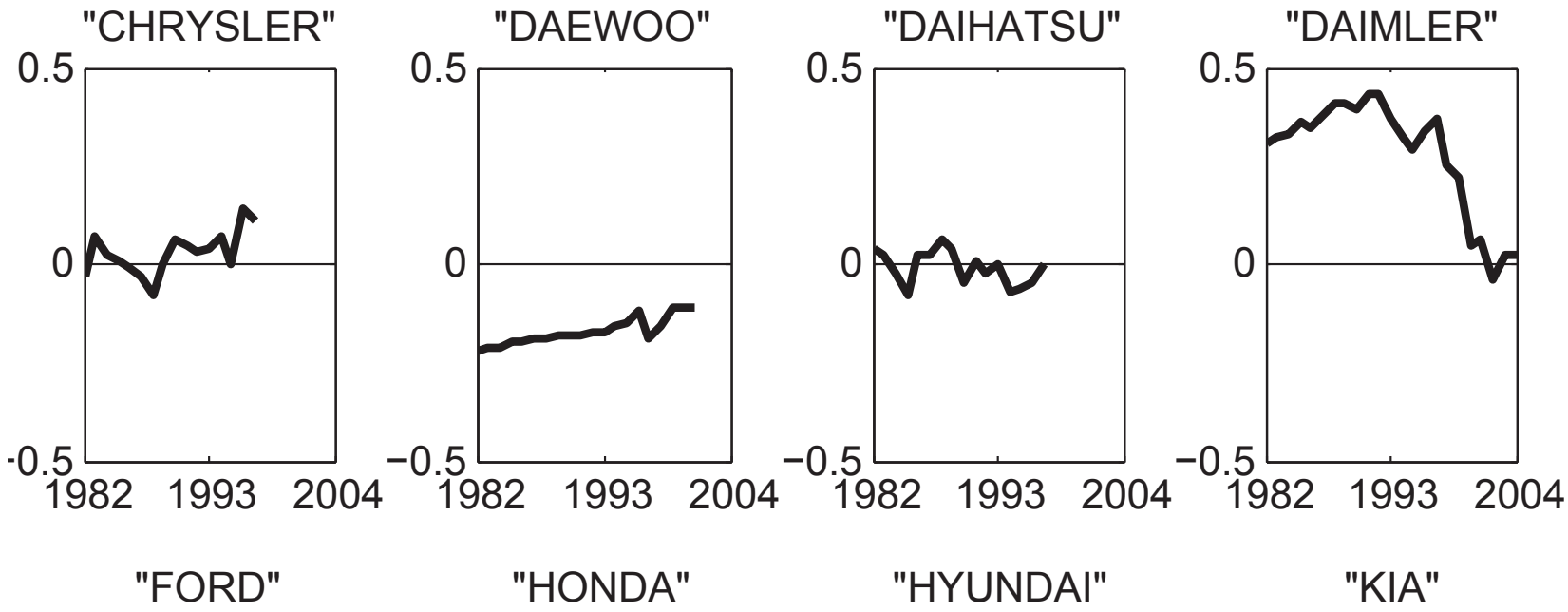
Modeling of merger as exogenous and random

1. With merger of 2 firms, number of products falls.
2. Why not keep number of products the same?
   $\longrightarrow$ perhaps motivation for merger is to expand product line.
3. If this change makes mergers profitable, then can rate potential mergers.

Global BMW prices relative to GM



Global Chrysler/Mercedes prices relative to GM



Comments

- What is the big picture for this evolving industry?
- Maybe use Sutton's framework of endogenous fixed costs.
  - start: fragmented markets (e.g. trade barriers, income).
  - forces behind fragmentation disappear.
  - firms limit competition by increasing R&D, pushing up fixed costs of entry.
- Simple, dynamic story behind industry consolidation.
- Consistent with evolution of other markets.