Discussion of Matt Grennan's: "Price Discrimination and Bargaining: Empirical Evidence from Medical Devices"

Robert Town
University of Pennsylvania and NBER

Introduction

- Very good and very polished paper – one of the better IO of health care papers in the last 5 years
- Why?
  - Important question
  - Great data
  - Appropriate methods
  - Interesting counterfactuals
  - Highlights importance of symmetry in merger/competitive analysis
- Most successful medical device in history
- IO of business-to-business markets are not well studied
  - Often subject of mergers
- More broadly, little work on medical devices and they are important and becoming more important (pharma in decline?)

Key Assumptions – Areas to make progress

- Nash Bargaining
  - Precludes exclusive deals
  - Prices are negotiated off of a list price menu with volume discounts (early stents sales were generally on list prices)

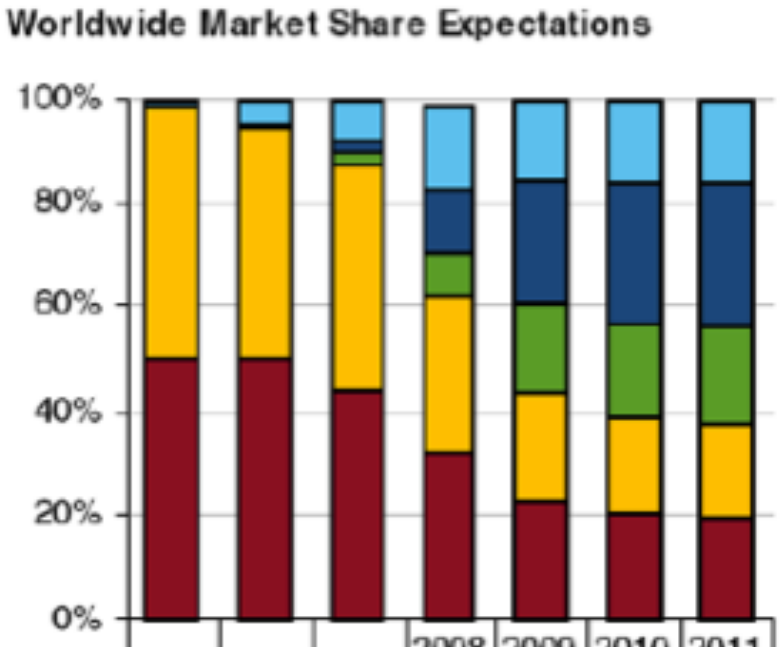
Key Assumptions – Areas to make progress

- Hospital Surplus:
  - Patient/physician utility: $u_{ijht} = \theta_{jh} - \theta^p p_{jht} + X_{jt}\theta^x + \xi_{jht}$
  - Hospital surplus: $W_{ht} = \sum_j \int_{A_{jht}} \frac{u_{ijht}}{\theta^p} d\epsilon$ but I would think it is something like: $\sum_j (r_{jt} - p_{jht} - cost_{jht}) q_{jht} + \gamma W_{ht}$
  - Current approach does not allow payments to affect utilization expect through observables
  - Is this important? Maybe –
  - Bundled products - Boston Sci (Taxus) and J&J (Cypher) sell a menu of products to hospitals
- Bargaining skill varies and is essentially a residual
  - Too much variation?
  - Difficult to perform counterfactuals without making ad hoc assumptions

What to do next? Some possibilities

- Framework for a static profit function which can be used to examine static / dynamic behavior
- Entry/Exit

Market Shares



	2005	2006	2007	2008 E	2009 E	2010 E	2011 E
ENDEAVOR	1%	5%	8%	17%	16%	17%	17%
XIENCE	0%	0%	3%	12%	24%	27%	28%
PROMUS	0%	0%	2%	8%	16%	18%	18%
TAXUS	49%	45%	43%	30%	21%	18%	18%
CYPHER	50%	50%	44%	32%	23%	20%	19%

The Big Exit

THE WALL STREET JOURNAL.
WSJ.com

HEALTH INDUSTRY | JUNE 16, 2011

Stent Pioneer J&J to Exit Business

BY JONATHAN D. ROCKOFF AND JON KAMP

Johnson & Johnson, the company that created a $5 billion global market for tiny metal devices called stents that prop open clogged heart arteries, is leaving the business, succumbing to years of slumping sales and market share that reflected an inability to keep pace with competitors.

The company said Wednesday it will halt sales of its pioneering Cypher drug-coated stent by year end, discontinue development of a next-generation device, close two plants and layoff as many as 1,000 employees at its Cordis unit as it shifts its focus to other medical technologies that promise higher growth.

It is a surprising ...

What to do next?

- Framework for a static profit function which can be used to examine static / dynamic behavior
- Static and Dynamic merger/divestiture effects
  - Boston Sci/Guidant/Abbott
  - J&J/Conor

The Big Merger and Divesture

WSJ BLOGS

Deal Journal

An up-to-the-minute take on deals and deal makers.

AUGUST 10, 2007, 12:30 PM ET

Is Boston Scientific-Guidant A Deal Fom Hell?

Article | Comments (8)

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By Dana Cimilluca

Boston Scientific's $25 billion purchase of Guidant last year is buffing its credentials for inclusion in an exclusive club: Deals From Hell.

We refer to a list of history's worst deals in a 2005 book by Robert Bruner, dean of the Darden School of Business at the University of Virginia, entitled "Deals From Hell: M&A Lessons That Rise Above the Ashes." As we discussed in this post, candidates can earn admission through a variety of ways, including destruction of market value; financial instability; impaired strategic position; organizational weakness and damaged reputation.

Yesterday's news that Boston Scientific is taking the highly unusual step of unwinding the purchase of Advanced Bionics that it made just three years ago serves as a reminder of how ill-conceived Boston Scientific's larger purchase of Guidant is beginning to look. Advanced Bionics complained that cash constraints resulting from the Guidant deal harmed its ability to develop new products.

What to do next?

- Dynamic impact of regulation on product introductions and welfare
  - Device regulatory structures differ across countries
  - EU < US < Japan
  - Value of more products versus risk of unsafe (or perhaps ineffective) products