

The Outlook for Contract Services: Is That Light at the End of the Tunnel?

PharmSource-*Pharmaceutical Technology*

Breakfast at AAPS

November 9, 2009

PharmSource Statement of Intent

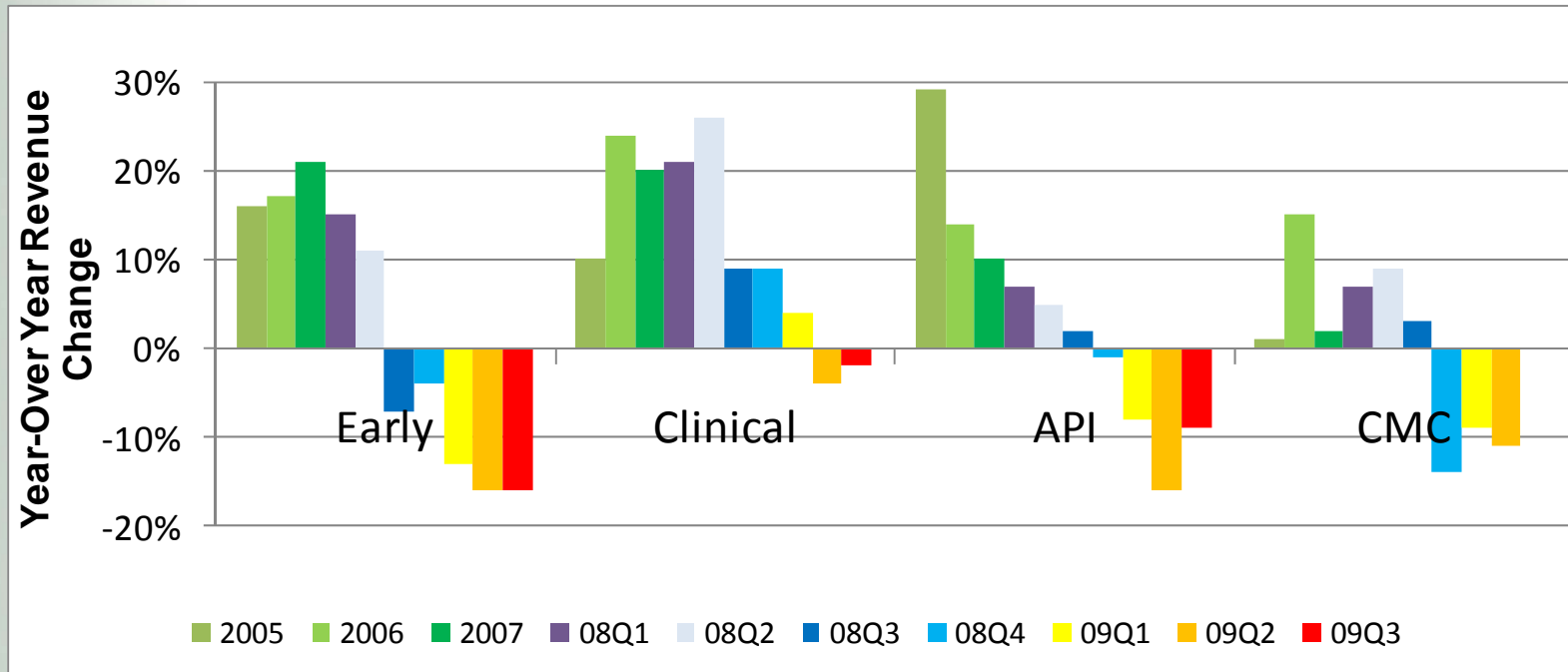
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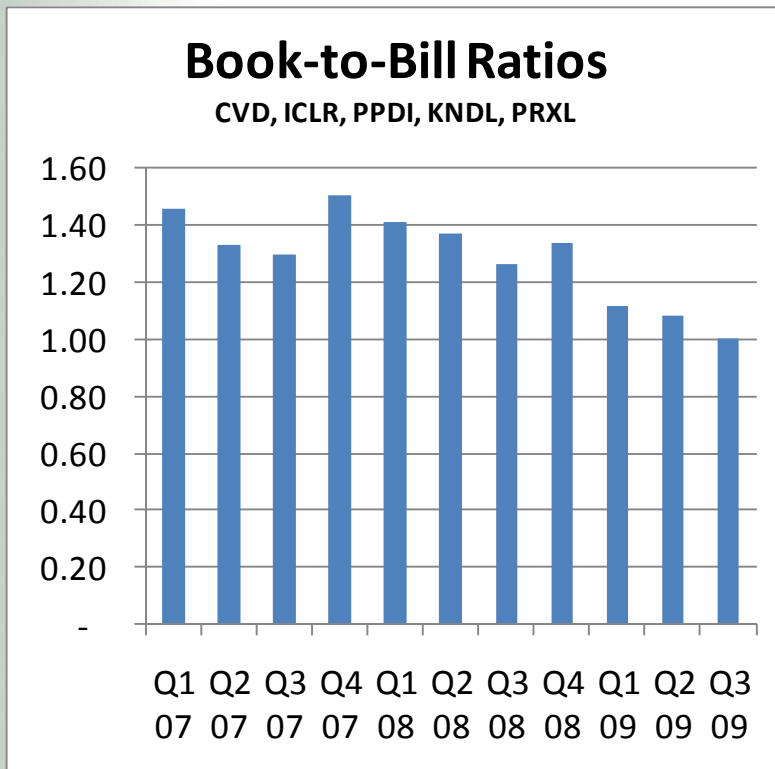
Market conditions

Contractor revenues continue sharp decline



Market conditions

CRO signings down, cancels up



■ Book-to-bill decline

- Higher cancels
- Delayed decisions
- Smaller projects
- Funding shortages

■ Previous periods have been worse

- 99-00: 0!
- Q2 02: .97
- Q2 04: .94

Market conditions

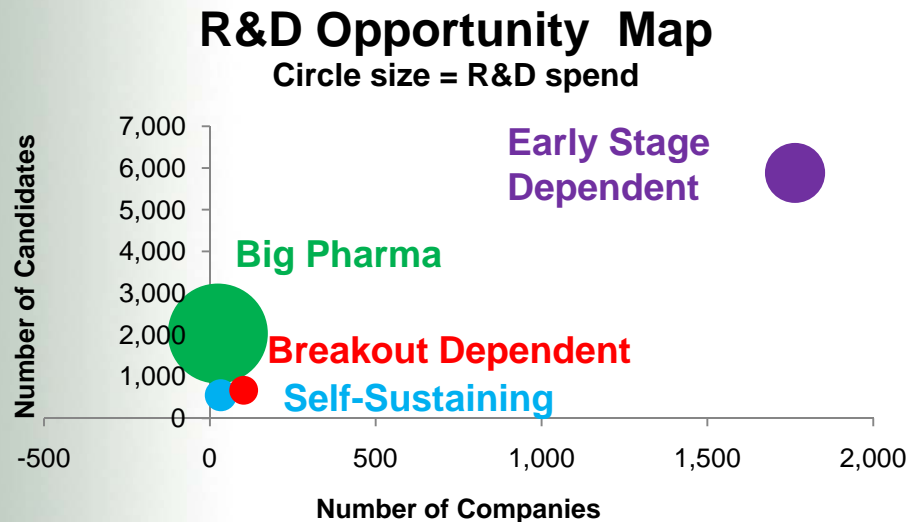
Outsourced CMC development a \$6 billion industry

Total USD millions	Organization Doing the Work			
	Bio/Pharma In-house	CDMO In-house	Contract Lab / CDMO Lab Only	Total
Process/form development	1,177	1,780	-	2,957
Analytical development	659	964	1,406	3,029
CTM manufacture	1,302	2,070	-	3,372
Total	\$ 3,138	\$ 4,814	\$ 1,406	\$ 9,358
Share of spend	34%	51%	15%	100%

Source: PharmSource, **The Market for Contract Analytical and Development Services**

R&D outlook

R&D opportunity highly segmented

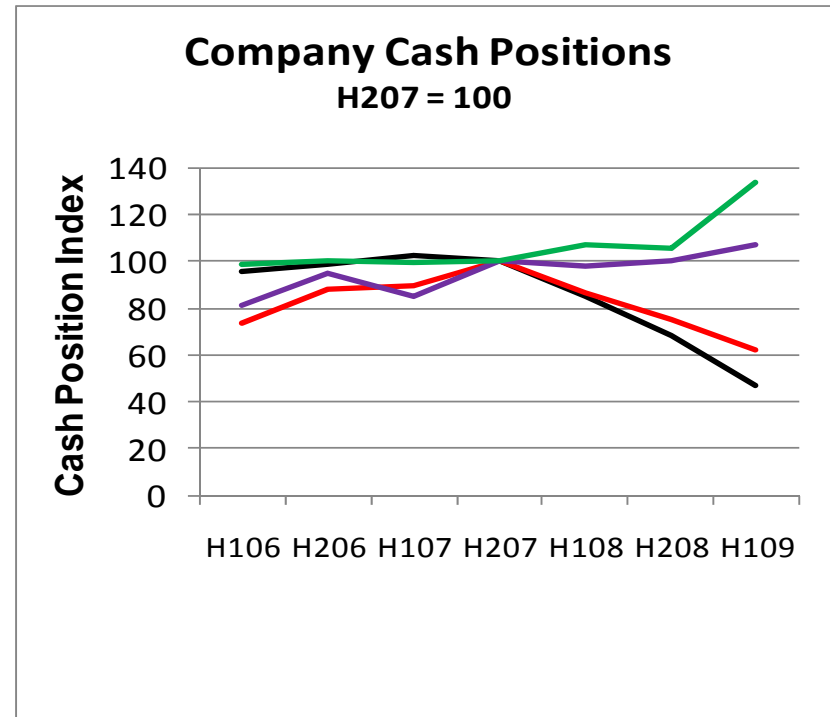
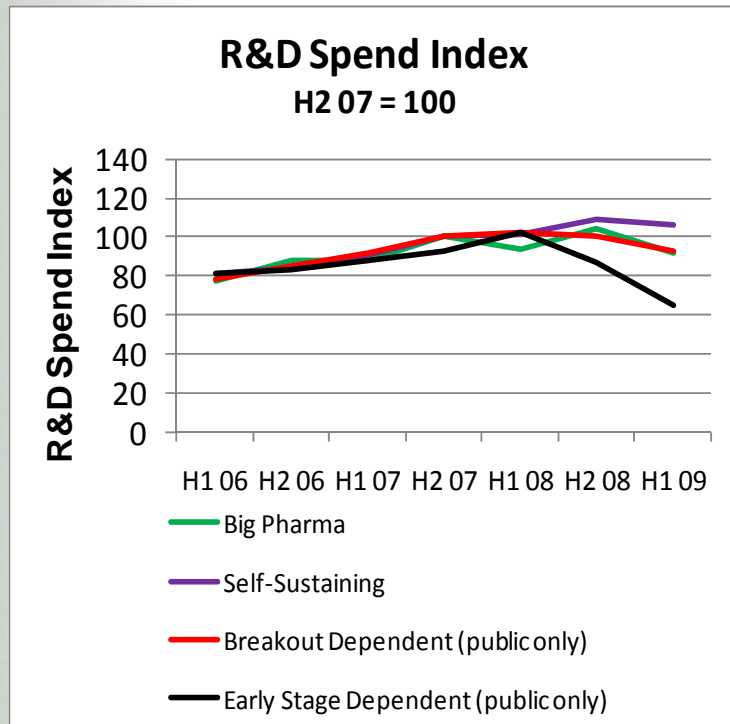


Big Pharma: 25 largest bio/pharma
Self-sustaining: revenue-generating, profitable
Breakout dependent: late stage pipeline, need outside financing
Early stage dependent: early pipeline, VC-backed

- 72% of pipeline dependent on outside financing
- <75 companies are self-sustaining
 - 72% of R&D spend
 - 28% of candidates

R&D outlook

R&D spending declining



R&D outlook

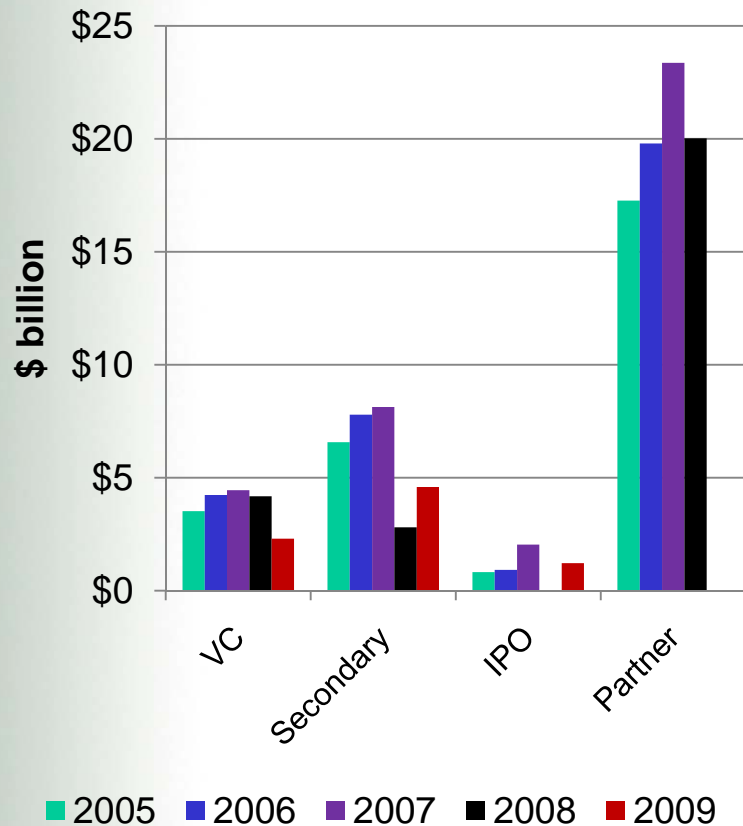
Follow the money

2009 YTD	Big Pharma	Self-Sustaining	Breakout Dependent	Early Stage Dependent	Total
VC	\$ 0	\$ 0	\$ 90	\$ 2,785	\$ 2,875
Follow-on	0	500	2,875	2,250	5,625
IPO	0	1,065	85	75	1,225
Debt	-	1,950	1,380	325	3,655
Partnering	32	387	863	1,431	2,713
Total	\$ 32	\$ 3,902	\$ 5,293	\$ 6,866	\$ 16,093

- Partnering includes known upfront and milestone payments
- IPOs include Talecris (1.065 billion, none to R&D); Omeros; Cumberland
- Excludes \$80.4 billion debt raised by Big Pharma

R&D outlook

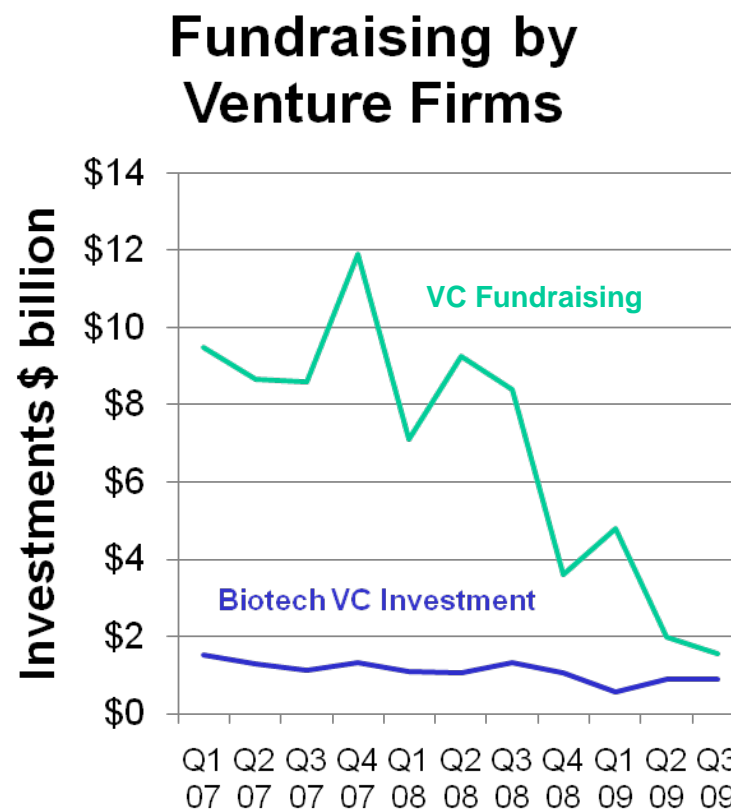
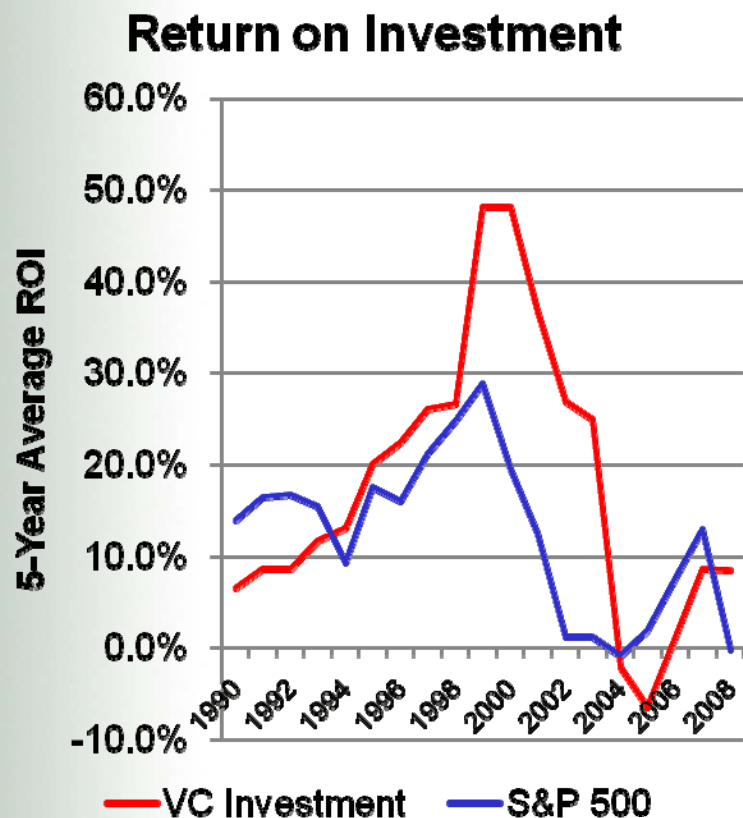
Follow the money (2)



- Sources for early stage dependents still down
 - VC off sharply, some recovery in Q2/3
 - IPOs still difficult
- Follow-on funding bouncing back
- Partnering terms tougher
 - Less cash up front
 - More of deal depends on milestones, options

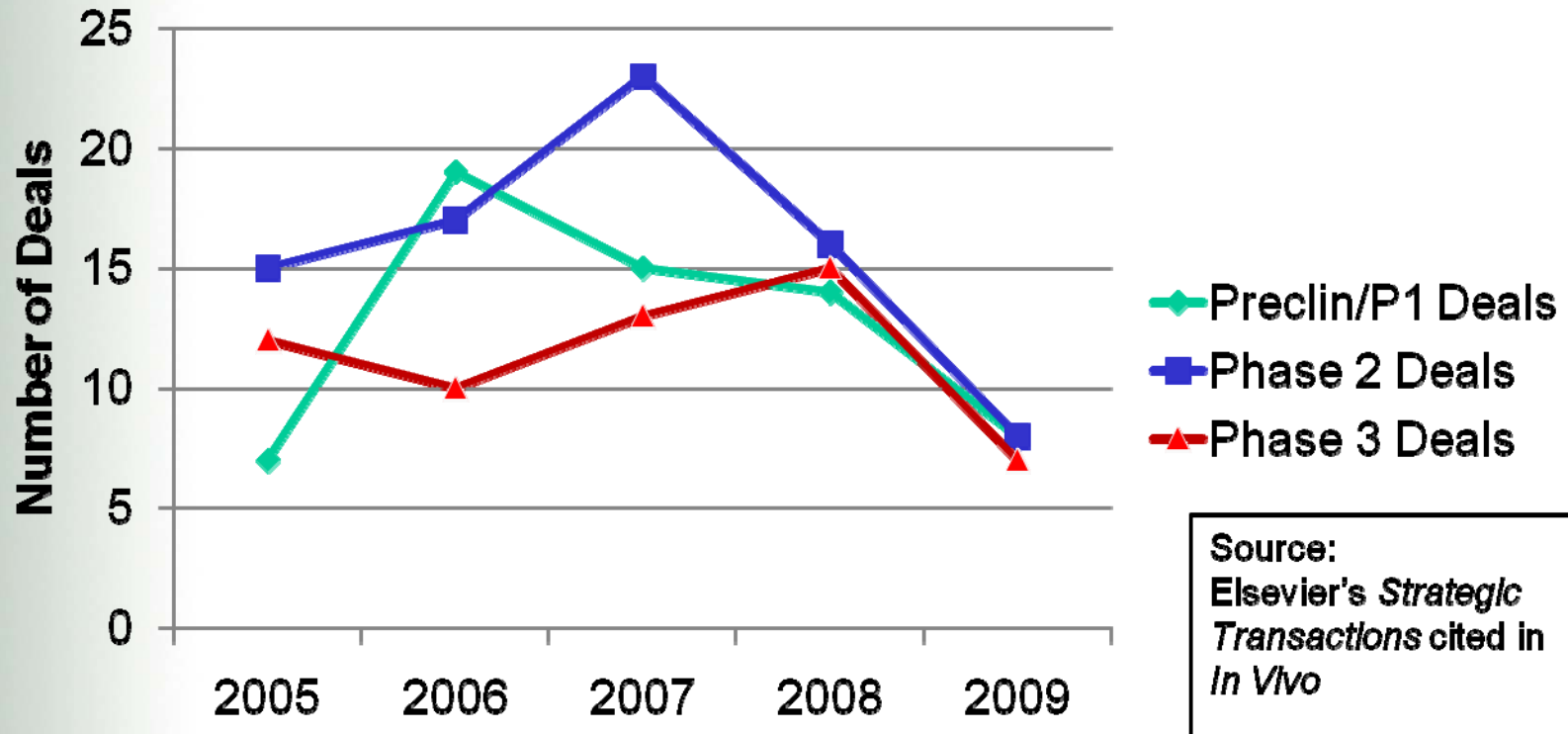
R&D outlook

Early stage dependents face funding shortage



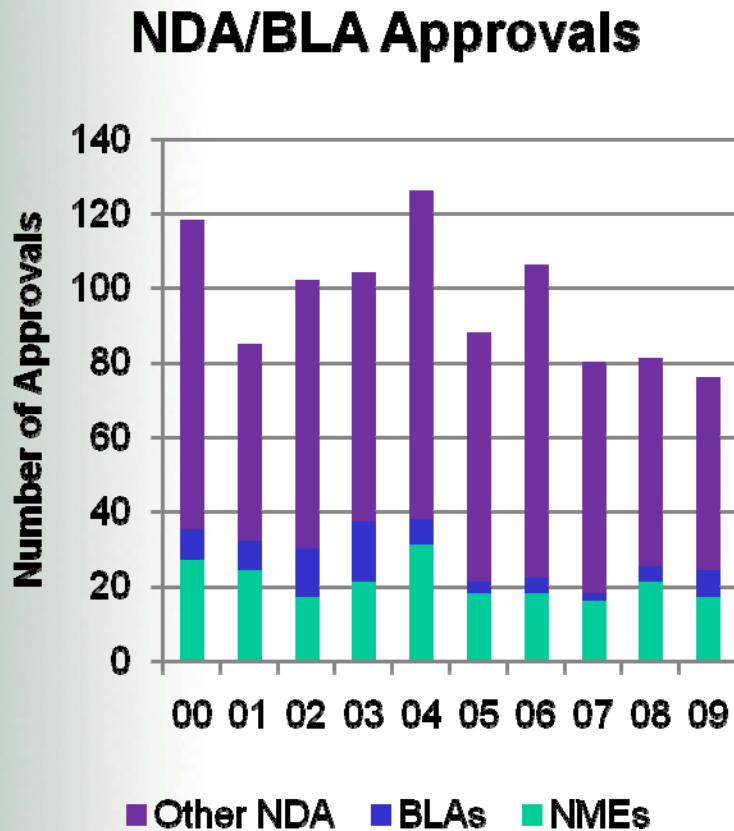
Partnering deals offer less up front

Partnering Deals with Upfront > \$15 million



Commercial outlook

Approvals slightly ahead of 2007/8

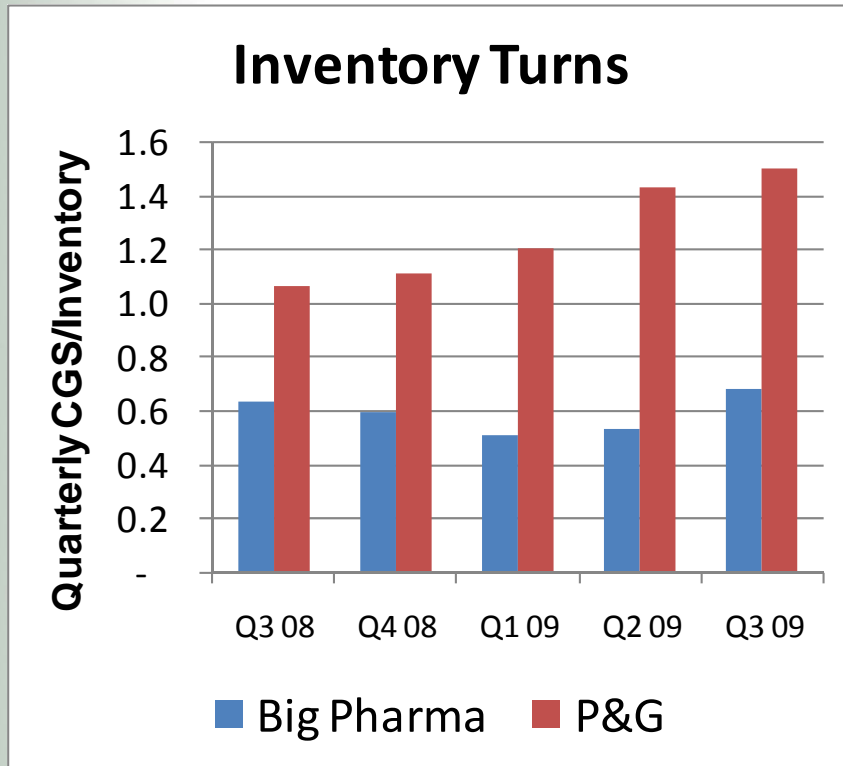


- Filed NDAs awaiting approval:
 - 107 identified
 - Including. 30 w/CRLs
 - 47 known dose CMOs
 - 39 known API CMOs

Source:
PharmSource Market Intelligence Service

Commercial outlook

CMO order volatility to continue

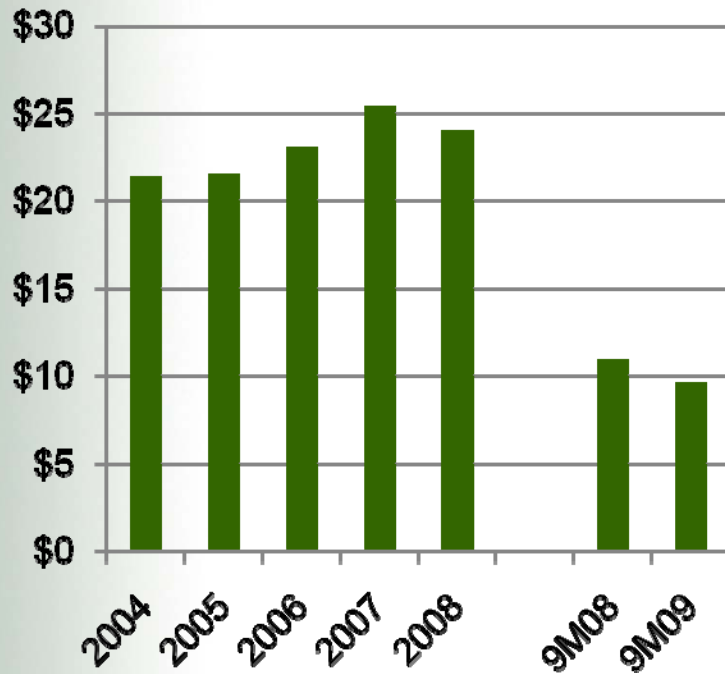


- Managing working capital to free cash
- Big Pharma still has a ways to go
 - 20-50% reduction in inventory still possible
 - Flat/declining sales worsen problem
- Lonza: “This environment of high volatility is expected to continue for the next few years.”

Commercial outlook

CapEx slowing down somewhat

Big Pharma CapEx



- Down 12% YTD
- Big Pharma continues to invest in strategic manufacturing
 - Vaccines
 - Biologics

Industry outlook

Industry transition dampens 2010 outlook

R&D

- Funding uncertainties continue to hurt early development
- Late development flat to slow growth
- Public CROs expect improvement by Q2 10
- More Big Pharma CMC outsourcing
 - Preferred provider opportunities

Commercial Manufacturing

- Continued volatility as clients adjust operating and financial management
- Positive bump from NDA approvals
- Some opportunity from post-merger restructuring
- More competition from Big Pharma excess capacity

Managing in uncertain environment

- Embrace uncertainty
 - Scenarios and contingency plans
 - Not static forecasts and budgets
- Fight for market share
 - Increase business development/sales
 - Position as Big Pharma preferred provider
 - Strengthen service offerings
 - Accept you may have to compete on price
- Figure out emerging market opportunity
 - China pharma market to grow 20% p.a. (IMS)