

i N C U B i C

Entrepreneurship Then & Now

Colorado Photonics Industry Association
POSSE
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Context

Built Ruby laser in 1964

Laser components and tools: Newport; Uniphase; Lightwave; New Focus...

Laser applications: Iridex...

Laser serving new fields: Arcturus

Make available entrepreneurial experience as resource for first-time entrepreneurs: Incubic

Photonics : Precision Photonics...

COMPANY

AviaraDx

Grandis

Greystripe

Knowlent

LIGHTCONNECT

Mistletoe Technologies

Nellix

OpVista

Ponté Solutions

Precision Photonics

SpectraGenics

Symphoniq

PREVIOUS INVESTMENTS

Agility

Iridex

JDS Uniphase

Lightwave Electronics

New Focus

PORTFOLIO COMPANIES:

You can judge us by the company we keep.

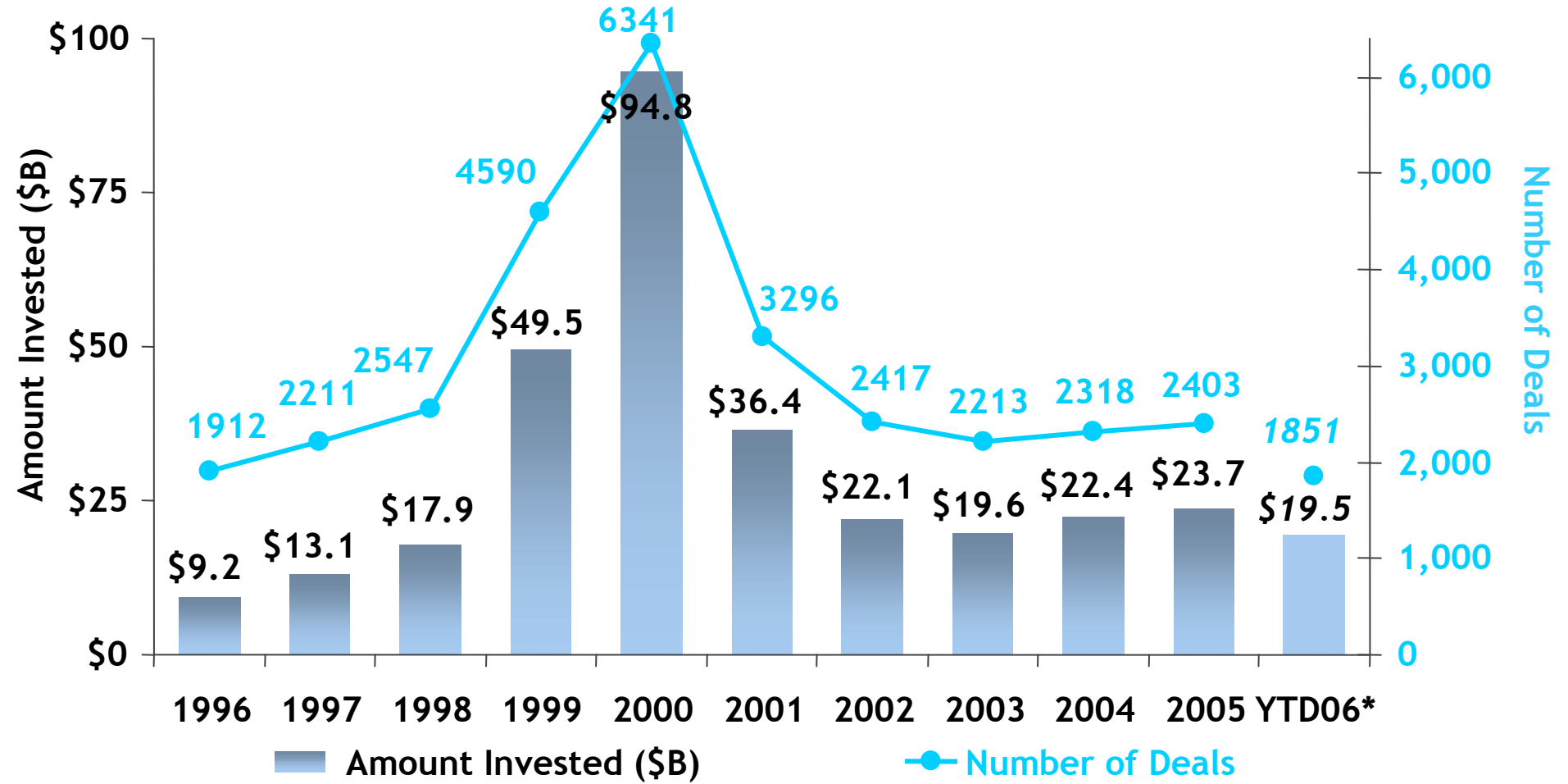


Lessons Learned on starting businesses

It takes more than a good product idea to build a successful business: market; team capability, business model, financing strategy, ...everything has to be aligned; plus being an industry- insider in the “power-structure”.....

Most failures are due to overly ambitious goals. The business model should focus on creating value efficiently capitalizing on your strengths

Equity into VC-backed companies \$25B annual



YTD06*: 1Q06 - 3Q06

Source: Dow Jones VentureOne/Ernst & Young

IPO Activity Has Increased Somewhat

~56 IPOs vs ~400 M&A transactions 2006

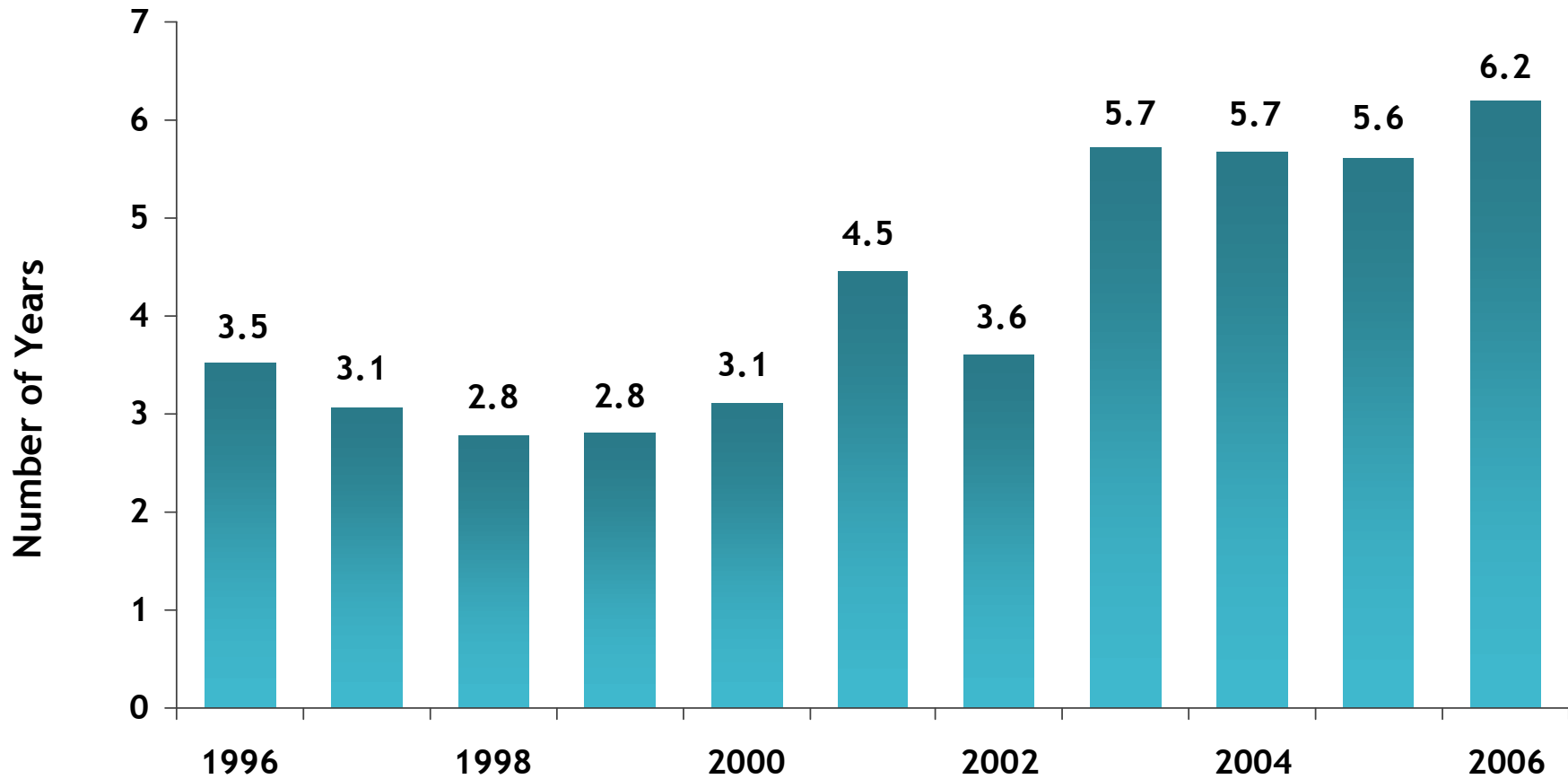
Q2 2007, 22 IPOs

still far fewer than "old days"



Taking longer to reach IPO

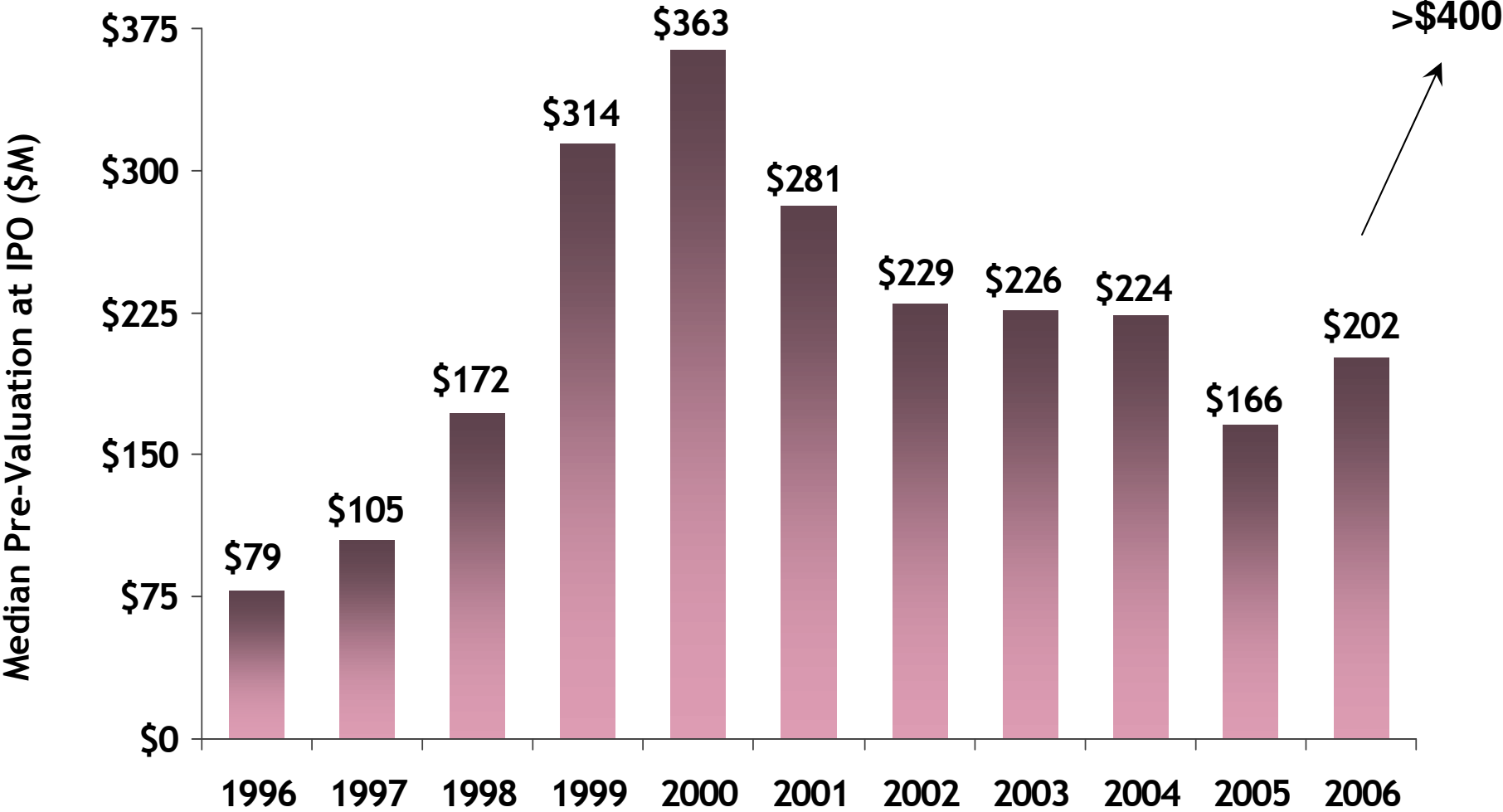
Median Time From Initial Funding to IPO - taking longer, mature companies



Source: Dow Jones VentureOne/Ernst & Young

Increasing Valuations for IPOs

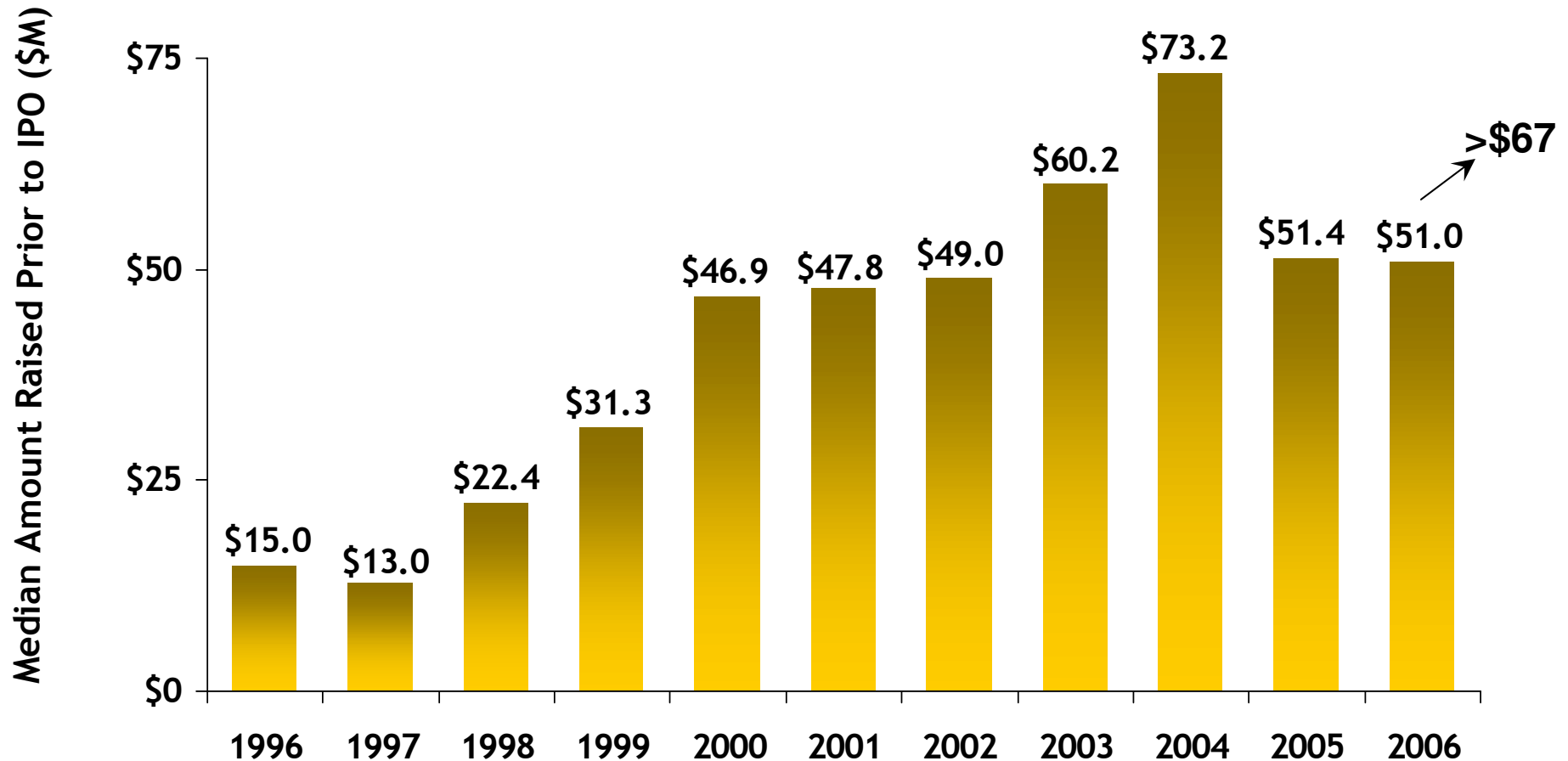
*Only larger value companies reach IPO - >> 1996
(Q2 2007 >\$450M)*



Source: Dow Jones VentureOne/Ernst & Young

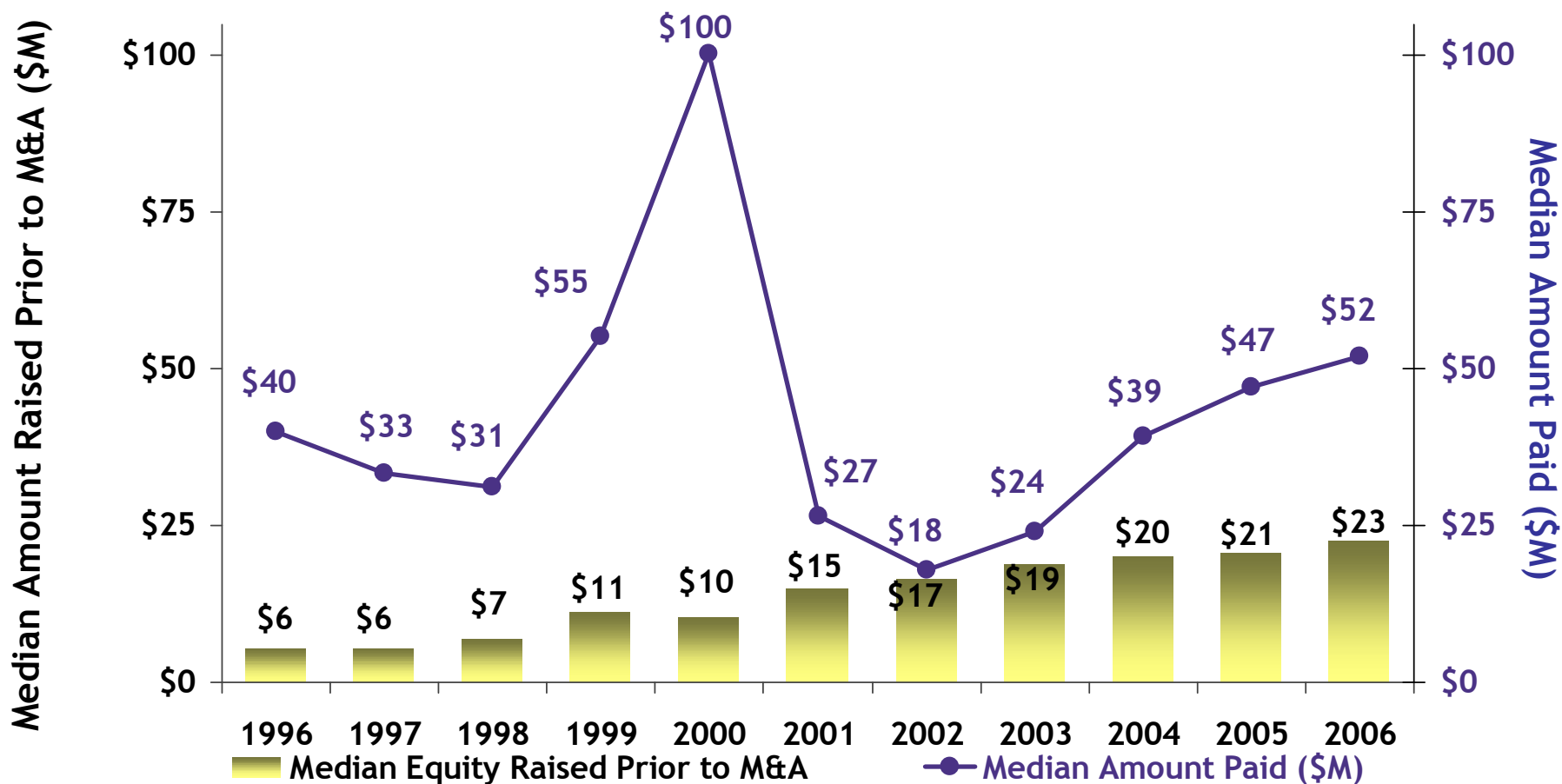
IPOs: Amount raised prior to going public

4x more expensive than 1996, trend is upward



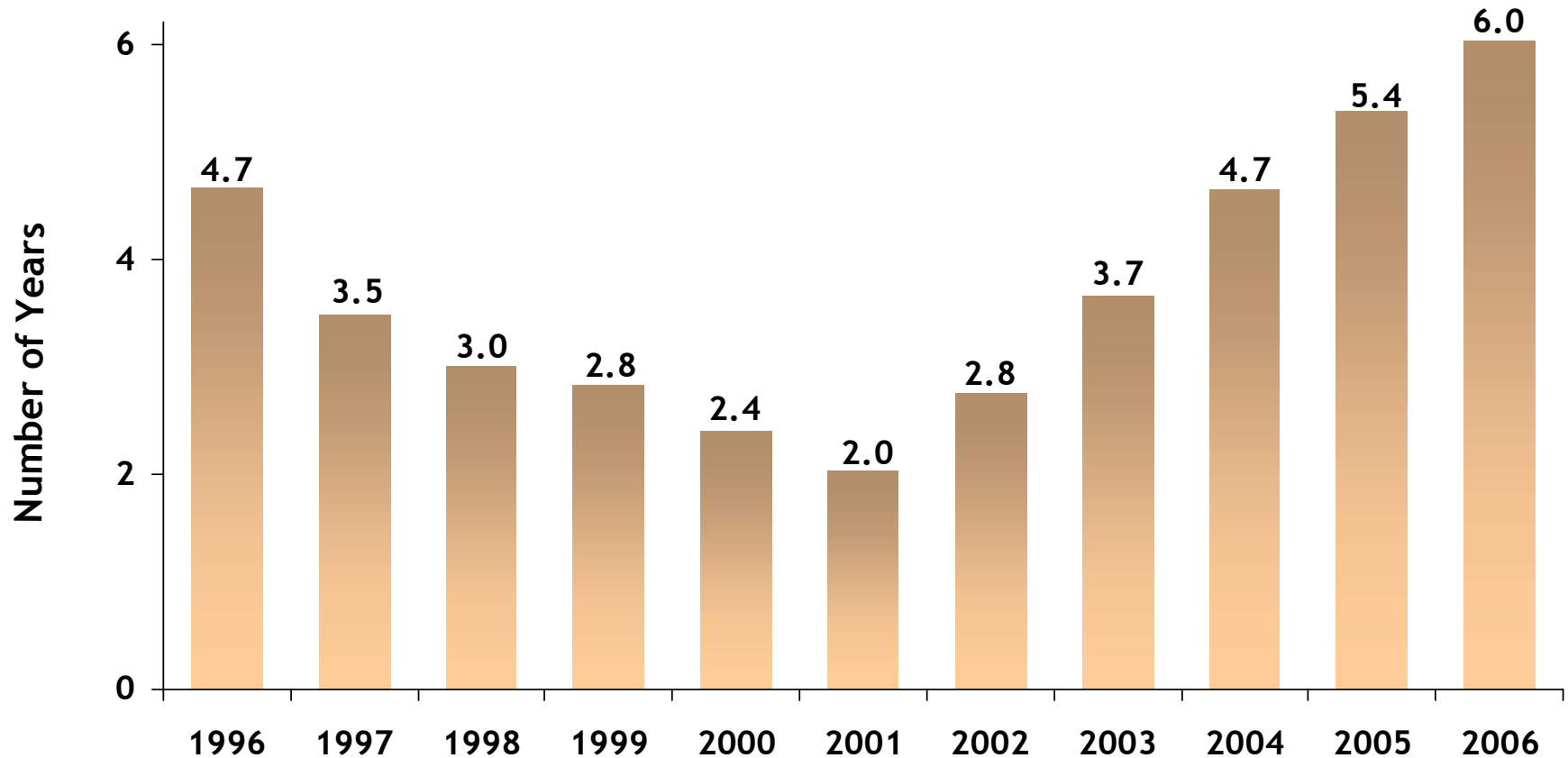
Gains from M&A Exits Increasing: \geq \$50M

Median Amount Paid in M&As vs. Median Amount Raised Prior to M&A
 \leq 100 companies per quarter



Older Companies Being Acquired

Median Time From Initial Equity Funding to M&A taking longer



Source: Dow Jones VentureOne/Ernst & Young

Venture industry trends 2006-Q2 2007

- **Equity into VC backed companies about 25B annually**
- **IPO activity increased, 22 in Q2 2007,**
- **Medium IPO Pre 452M Vs 202 last year**
- **Taking over 6 years to IPO**
- **Takes more \$ to get to IPO, \$67M median**

- **M&A around 100 exits per quarter, median 52M value**
- **Raise prior to M&A Medium \$23M**
- **They take 6 years also**

Interpretation, VC Trends > 2007

- **“Megafunds”**
 - **Geared for >\$500M IPOs**
 - **International offices, India, China, Israel**
 - **Aligned with the banking industry**
- **Smaller funds**
 - **Open for first-time entrepreneurs**
 - **Geared for >50M M&A, potentially larger**
 - **Looking for capital efficient investment**
(<\$20M all-in)

“Trend” areas of interest, 2007

Areas of current VC interest

- 1. Web 2.0**
 - the next “YouTube”, “you”, gaming, entertainment, advertising
- **2. Mobile phenomenon.**
 - Connected life – web, WAP, advertising
- **3. All the IT to support web and mobile**
 - 1B/year handsets drive “disposable Moore’s law”
 - Video traffic majority of all network bandwidth
 - Semiconductor, networking, security
- **4. Cleantech**
 - Alternative energy
 - Now >10% of venture investing, >\$2B per year
- **5. Healthcare**
 - >\$95B technology market – split:
 - aging/vascular/obesity/orthopedics
 - healthy/vanity/aesthetics

Photonics Today

- *Laser was invented 50 years ago*
- *“Bubble” long gone, not recurring any time soon*
- *Availability of cost effective optical components*
- *Plenty venture money but photonics is hard sell*
- *Starting business gets more expensive & favors incumbent*
- *Sarbanes-Oxley compliance makes it costly to IPO*
- *Less investment in research*
- *Less companies compete for acquisition, no urgency*
- *More financial acquisitions, less strategic technological acquisitions*

*Laser/photonics industry is evolving towards maturity.
Established companies can capitalize on infrastructure
and brand to pursue new business more efficiently than
startup companies*

Two paths to becoming an entrepreneur

- (1) In search of big new application of photonics*
- (2) Turn over a new rock: Serve a new field with
photonics expertise and to become a true industry
insider over time.*

Moving Forward As An Industry

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Companies need new technologies.

Individuals/entrepreneurs are creating technologies from R&D funding, but need “resources” to create commercial value

Wealth creation is not a zero-sum. Industry can benefit from efficient value creation as a group

Photonics industry needs leadership to promote cooperation to make technology commercialization more efficient

Summary

A successful startup requires a useful product idea, alignment of business strategy and “resources,” plus active participation of an industry insider

A startup company should first focus on building a “prototype” of the business to capitalize on its strengths and to make efficient use of resources to create value

A viable entrepreneurial strategy is to serve emerging fields with photonics expertise and to become an industry insider over time

Promote cooperation within industry, through professional societies and industry associations

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