

SOKUDO Lithography Breakfast Forum 2006, San Francisco, CA

## Semiconductor Manufacturing Update:

# A Good 2006 As The Recovery Rolls On



Presenter:

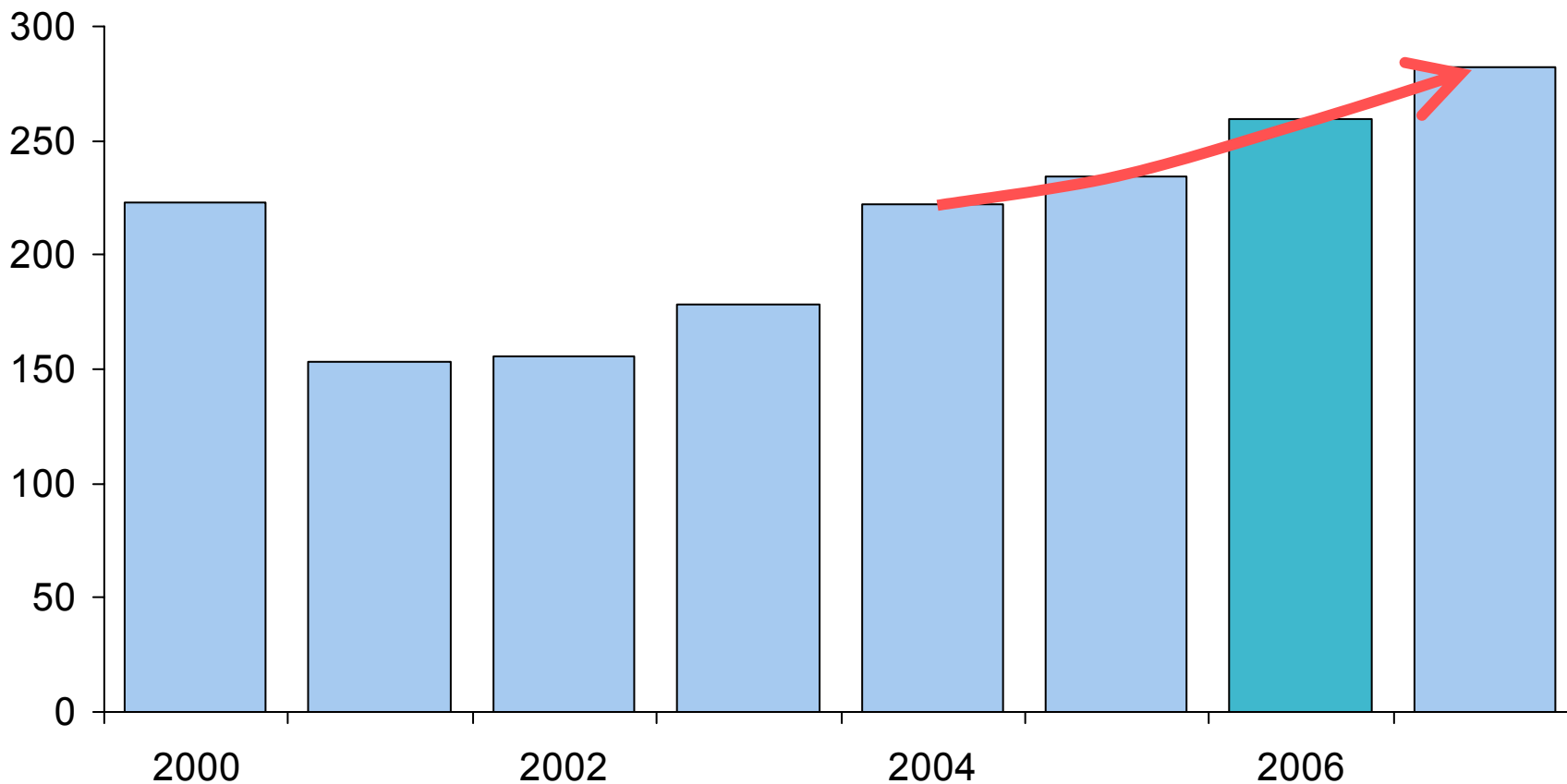
Klaus Rinnen

**Semiconductor Manufacturing**  
Gartner Dataquest

**Gartner**<sup>®</sup>

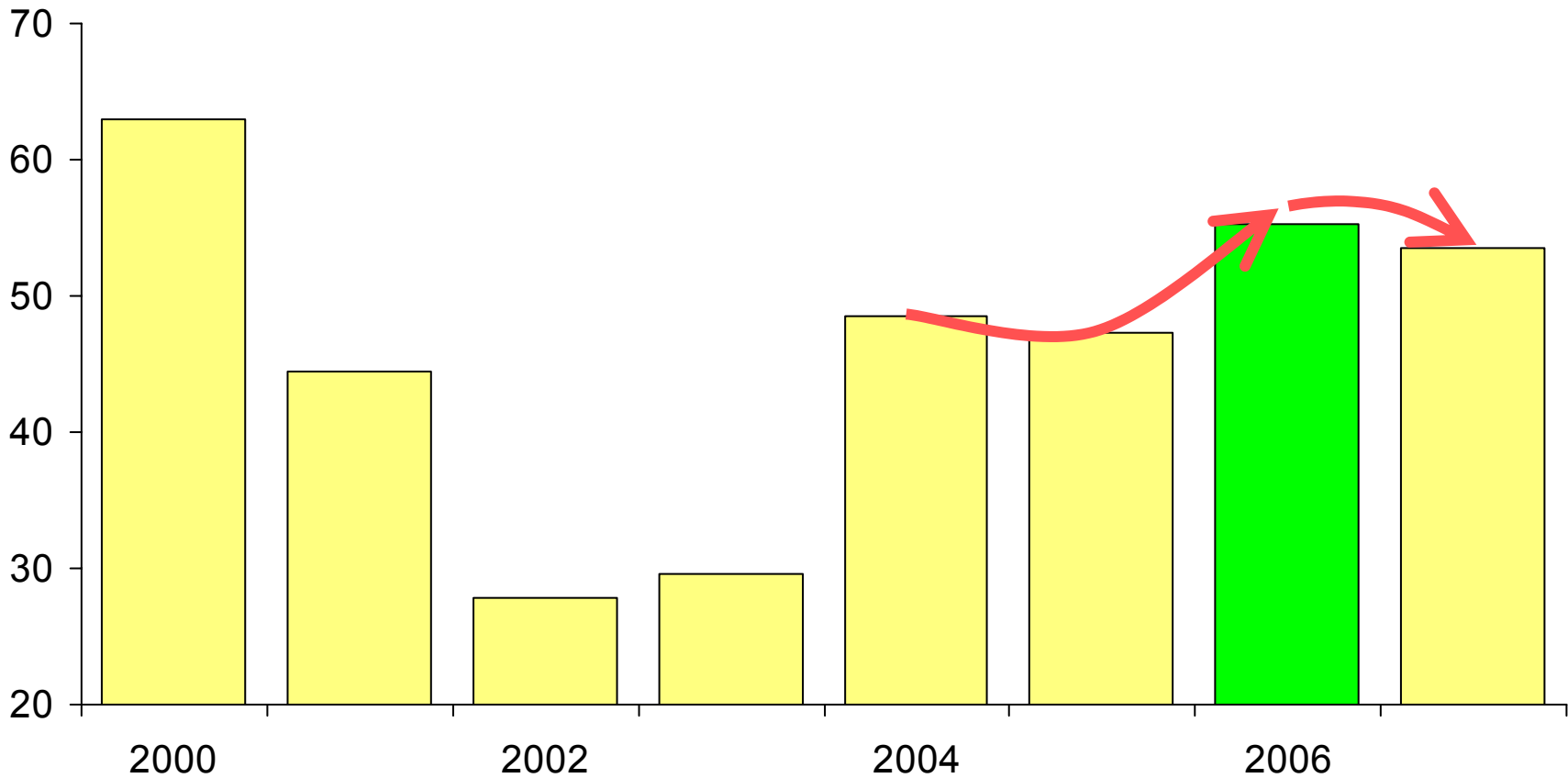
# A Good Year for Semiconductor Industry ...

Semiconductor Revenue (Billions of Dollars)



# ... and Capital Spending

Capital Spending (Billions of Dollars)



# Forecasted Growth

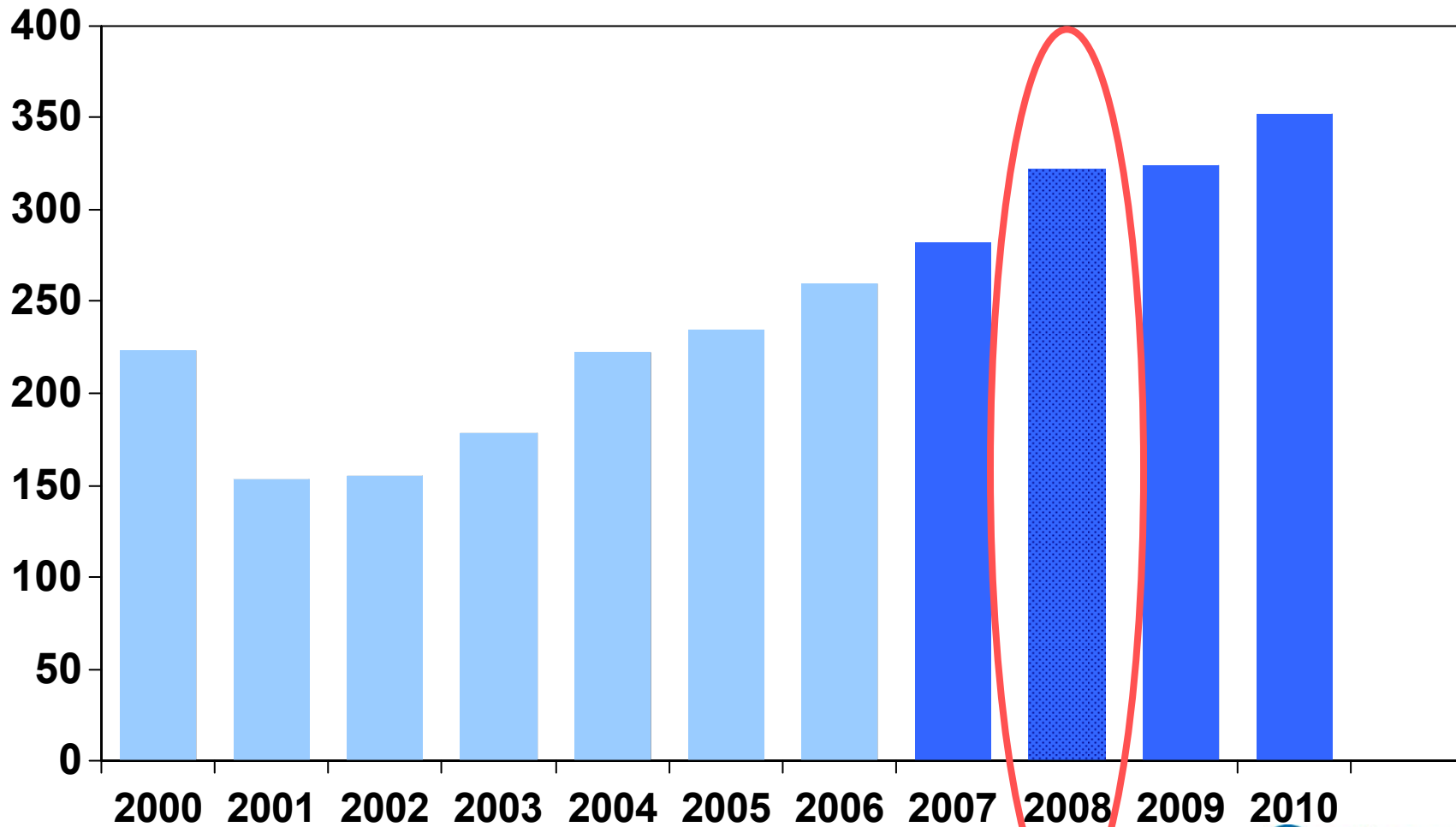
Revenue Growth (%)	2006	2007
World Real GDP	<u>+3.8</u> ↑	<u>+3.3</u> ↑
U.S. Real GDP	<u>+3.4</u> ↑	<u>+2.6</u> ↑
E Equipment*	<u>+4.8</u> ↑	<u>+5.0</u> ↑
Semiconductor	<u>+10.6</u> ↑	<u>+8.9</u> ↑
Capital Spending	<u>+16.6</u> ↑	<u>-3.3</u> ↓
Equip. Spending	<u>+24.8</u> ↑	<u>-4.5</u> ↓
WFE Equipment	<u>+25.4</u> ↑	<u>-4.4</u> ↓
Litho Equipment	<u>+27.1</u> ↑	<u>-0.3</u> ↓
Photomask	<u>+7.1</u> ↑	<u>+4.5</u> ↑
Photoresist	<u>+12.5</u> ↑	<u>+2.3</u> ↑

\*Production revenue

Note: Arrows indicate change over 3m ago

# Semiconductor Revenue Forecast: Next Cyclical Peak is in 2008

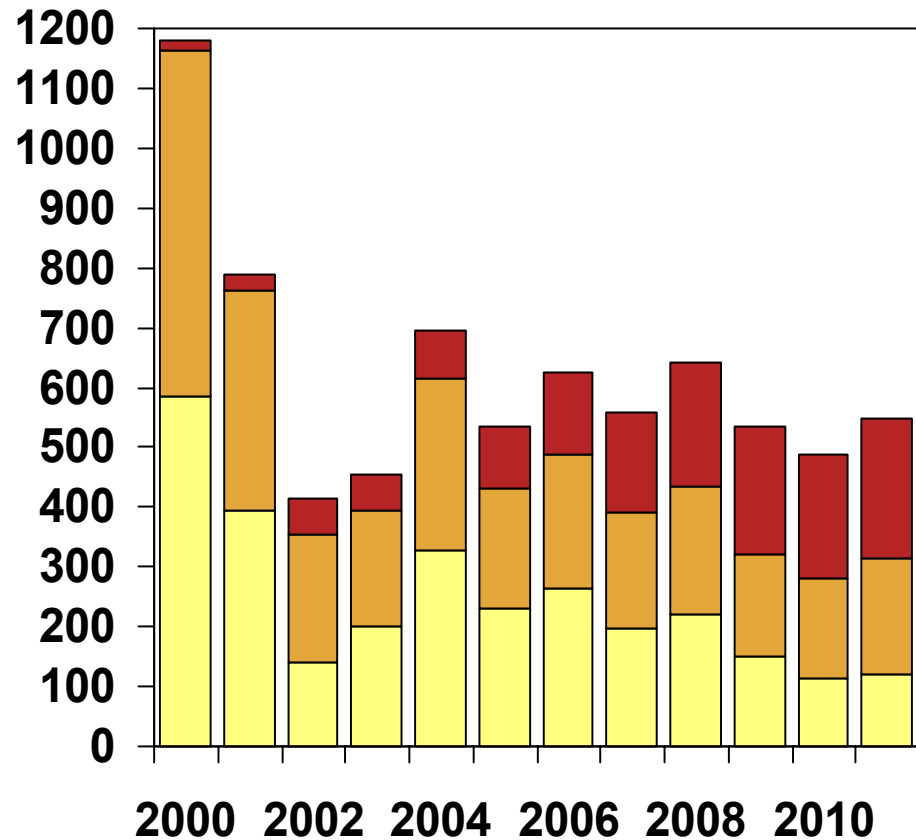
Billion USD



# Stepper Forecast: Making New Revenue Highs

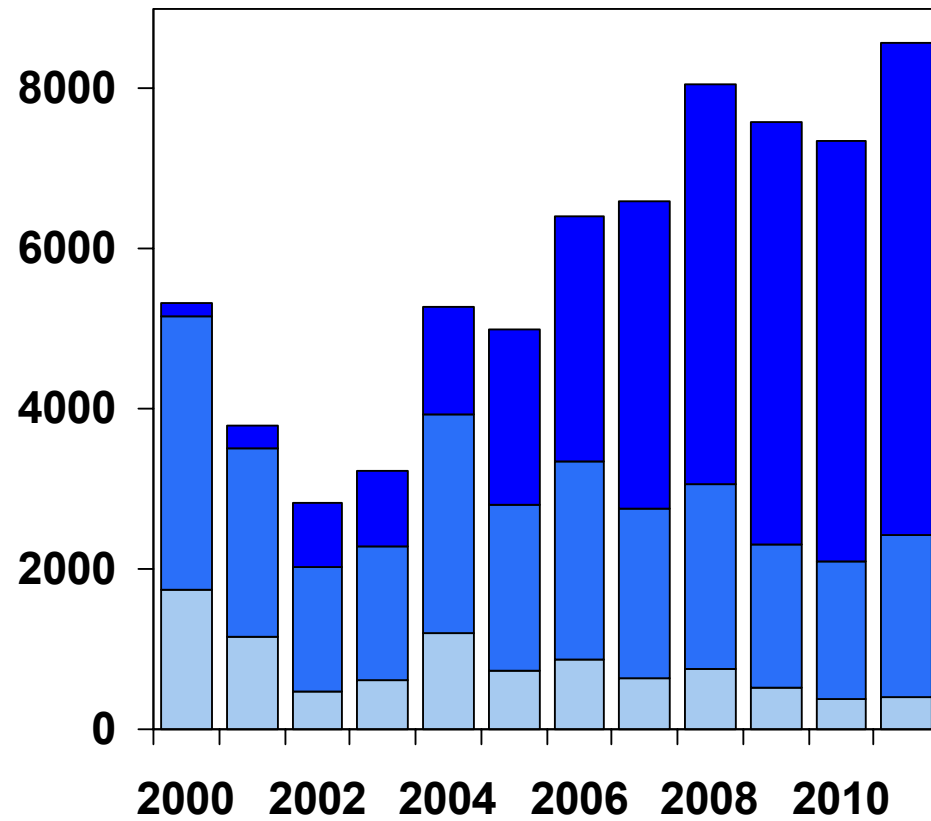
*Stepper Unit Forecast*

Units



*Stepper Revenue Forecast*

Millions of Dollars



# Challenges to Lithography Community

- Business Challenges
  - Consolidation in customer base
  - Rising R&D cost
  - Delivering and supporting a broadening product portfolio
- Technology Challenges
  - Extending optical lithography
    - Taking immersion to 22nm?
  - What comes after ArF?



# Thank You!

