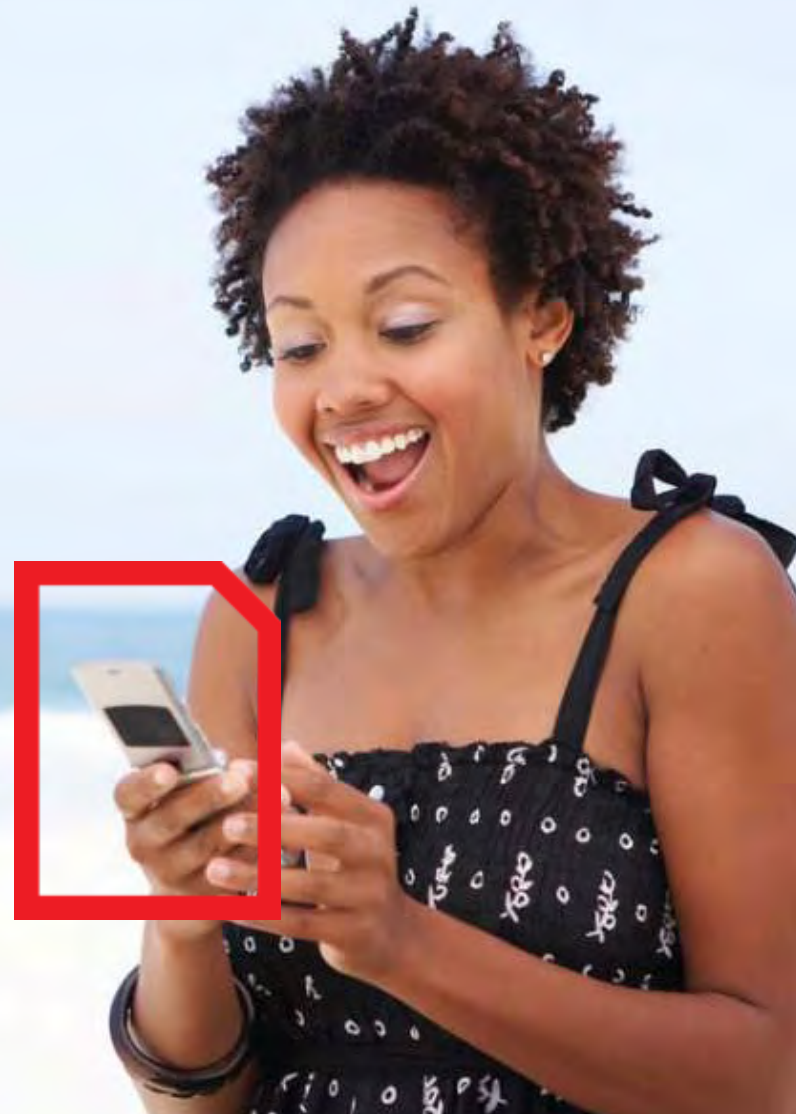


Flash Storage: on the road to recovery

Eli Harari,
Chairman and
CEO, SanDisk



Forward-Looking Statement

During our meeting today we will be making forward-looking statements.

Any statement that refers to expectations, projections or other characterizations of future events or circumstances is a forward-looking statement, including those relating to revenue, pricing, market share, market growth, product sales, industry trends, expenses, gross margin, production capacity and technology transitions and future products.

Actual results may differ materially from those expressed in these forward-looking statements including due to the factors detailed under the caption “Risk Factors” and elsewhere in the documents we file from time-to-time with the SEC, including our most recent annual and quarterly reports.

We undertake no obligation to update these forward-looking statements, which speak only as of the date hereof.

Agenda

- ▶ The Flash Opportunity
- ▶ Past and future NAND trends
- ▶ Modeling industry analysts forecasts
- ▶ Conclusions

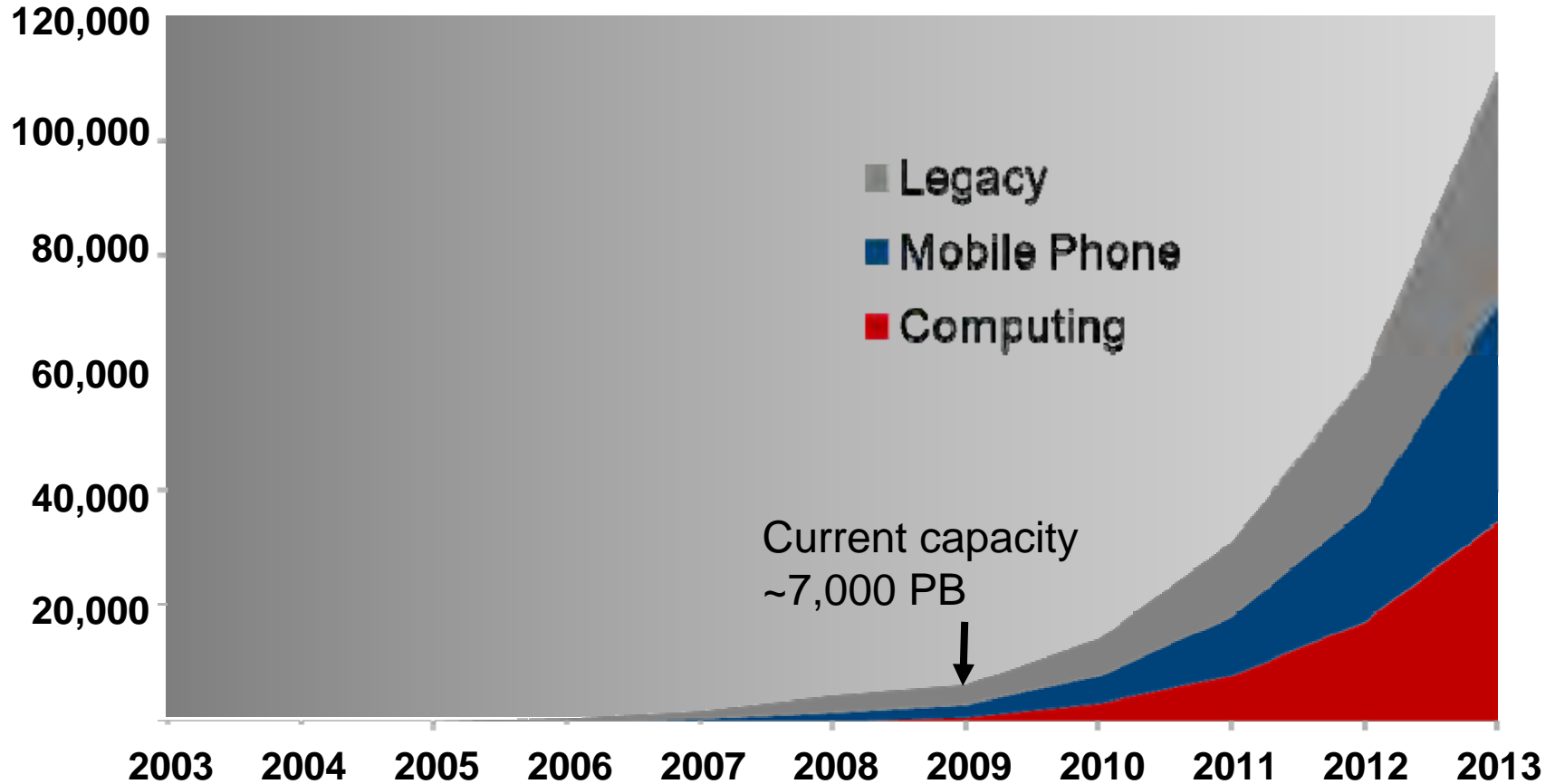
A large, white, rectangular sign with the SanDisk logo in red, 3D-style lettering. The sign is positioned on the right side of the image, partially obscured by a flower bed in the foreground. In the background, a SanDisk building is visible under a cloudy sky.

SanDisk®

Headquarters
601 McCarthy Blvd
Building 6

Forecasted NAND Industry Demand: Who Will Fund Hockey-stick Capacity?

PetaBytes (PB)



Source: Gartner May 2009, Semiconductor forecast database (SEQS-WW-DB)

Where Will Projected NAND Demand Come From?

▶ Legacy/Consumer:

- Imaging, MP3, USB, gaming, GPS, etc
- Reduced price elasticity, good growth in BRIC
- Physical media content distribution (embryonic)

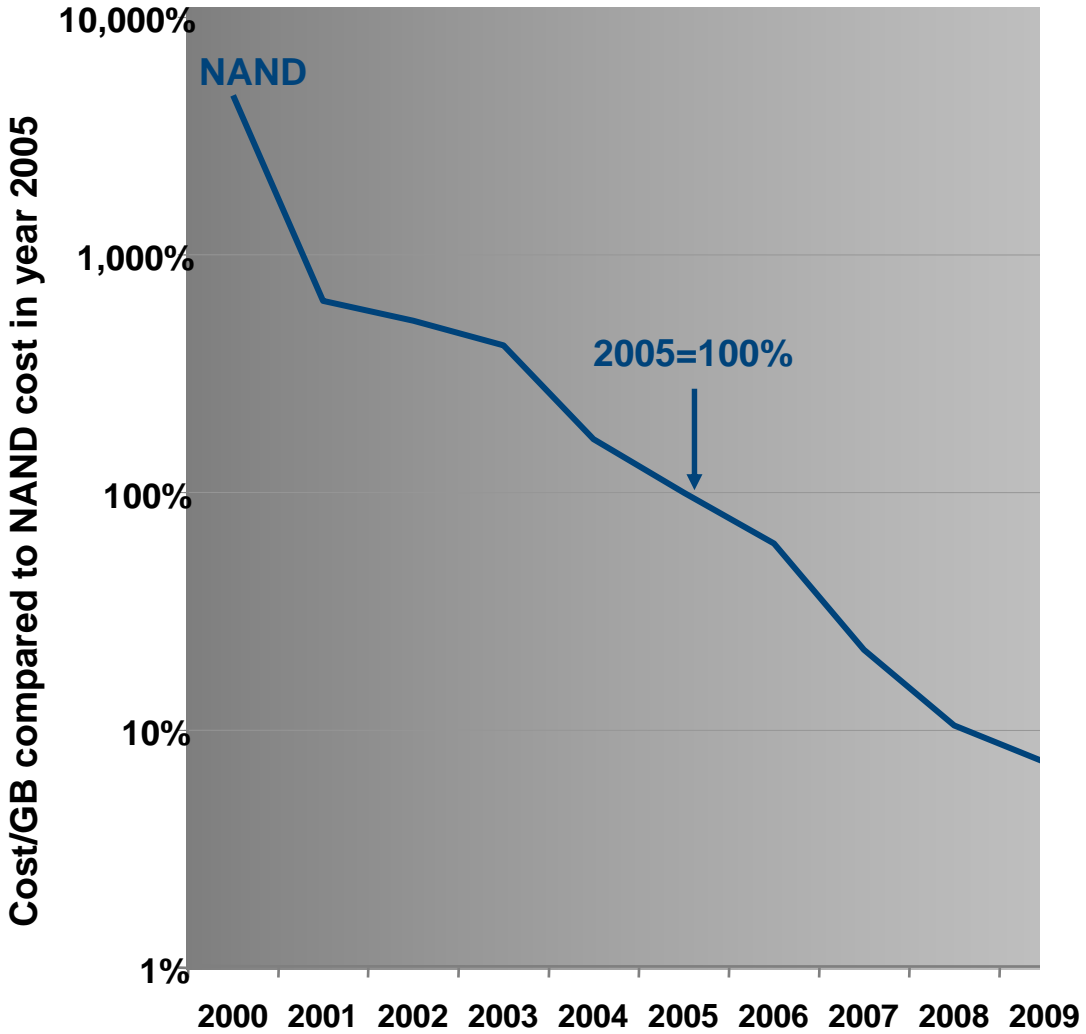
▶ Mobile Phone:

- Apps store, multimedia, gaming, convergence
- Young markets, low penetration
- #1 engine for growth in next several years: embedded, removable
- HDD not an option, wireless bandwidth limitations → Flash caching

▶ Computing:

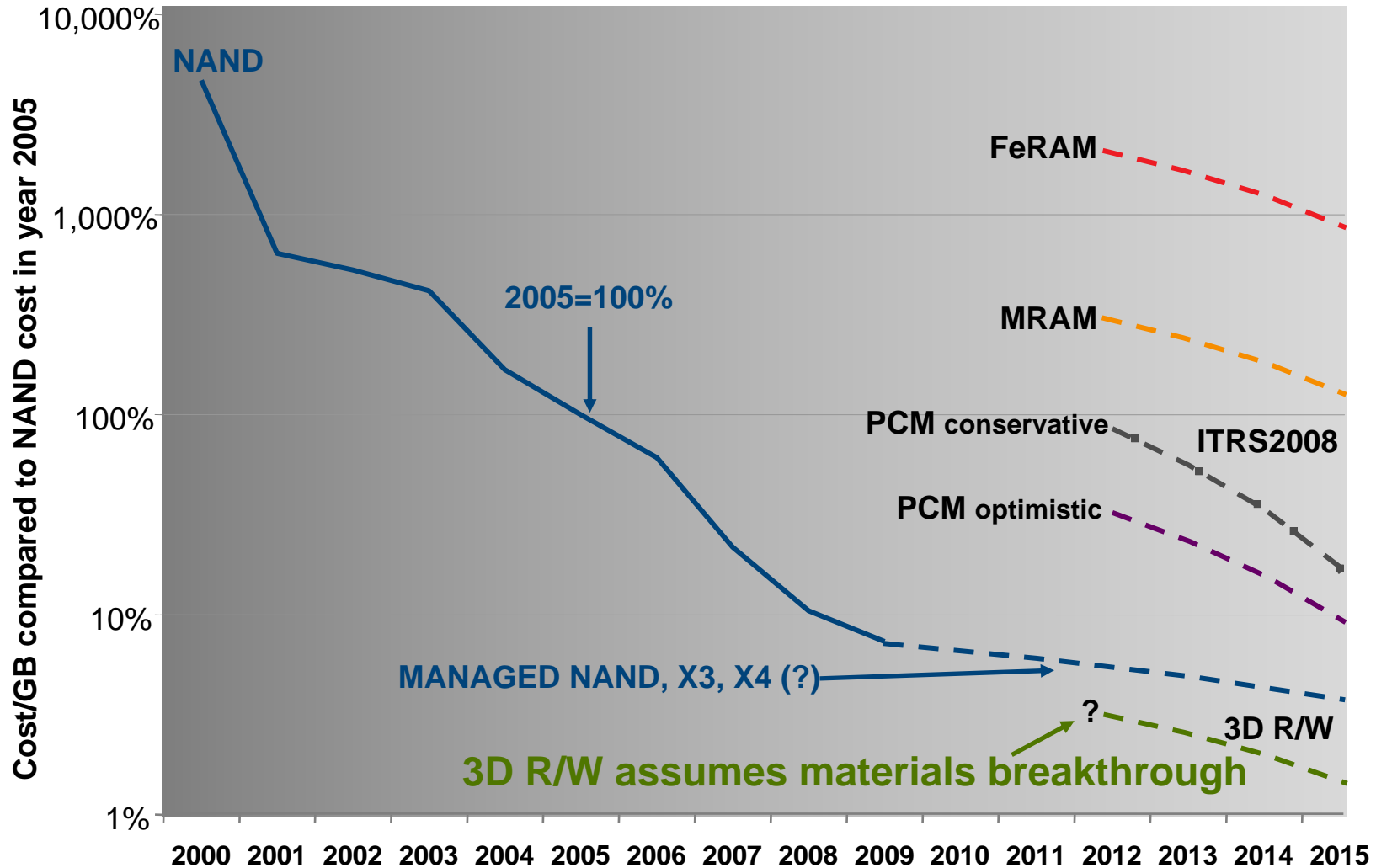
- Netbooks, notebooks, desktop, enterprise
- Huge potential, but still a few years from tipping point
- Compelling value: performance, crash-resistant, power, form factor
- Highly price elastic (other than enterprise): profitability will be key challenge, given projected NAND technology roadmap

NV Memory Technologies Cost Curves



Sources: ITRS, iSuppli, SanDisk

NV Memory Technologies Cost Curves



Sources: ITRS, iSuppli, SanDisk

NAND Cost/Price Reduction Trends

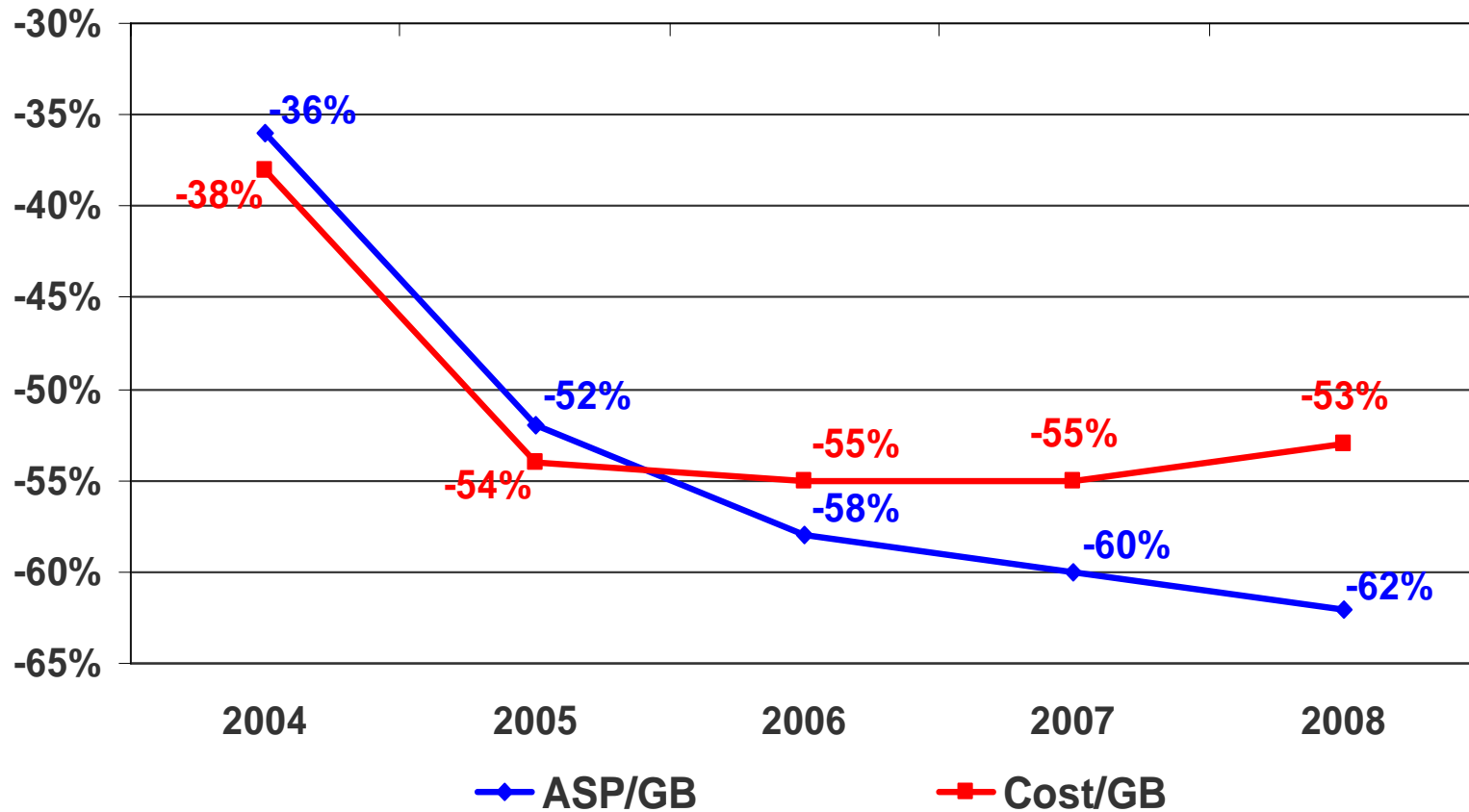
▶ 2005-2009: 45%-55% annual cost reductions;

- 200MM→300MM
- SLC→MLC
- Rapid technology migrations (S curve sweet-spot)
- Productivity: Mega-fabs, automation, yields
- Productivity → excess supply → actual annual price reductions ~ 60%

▶ 2010-2013: 25%-35% annual cost reductions;

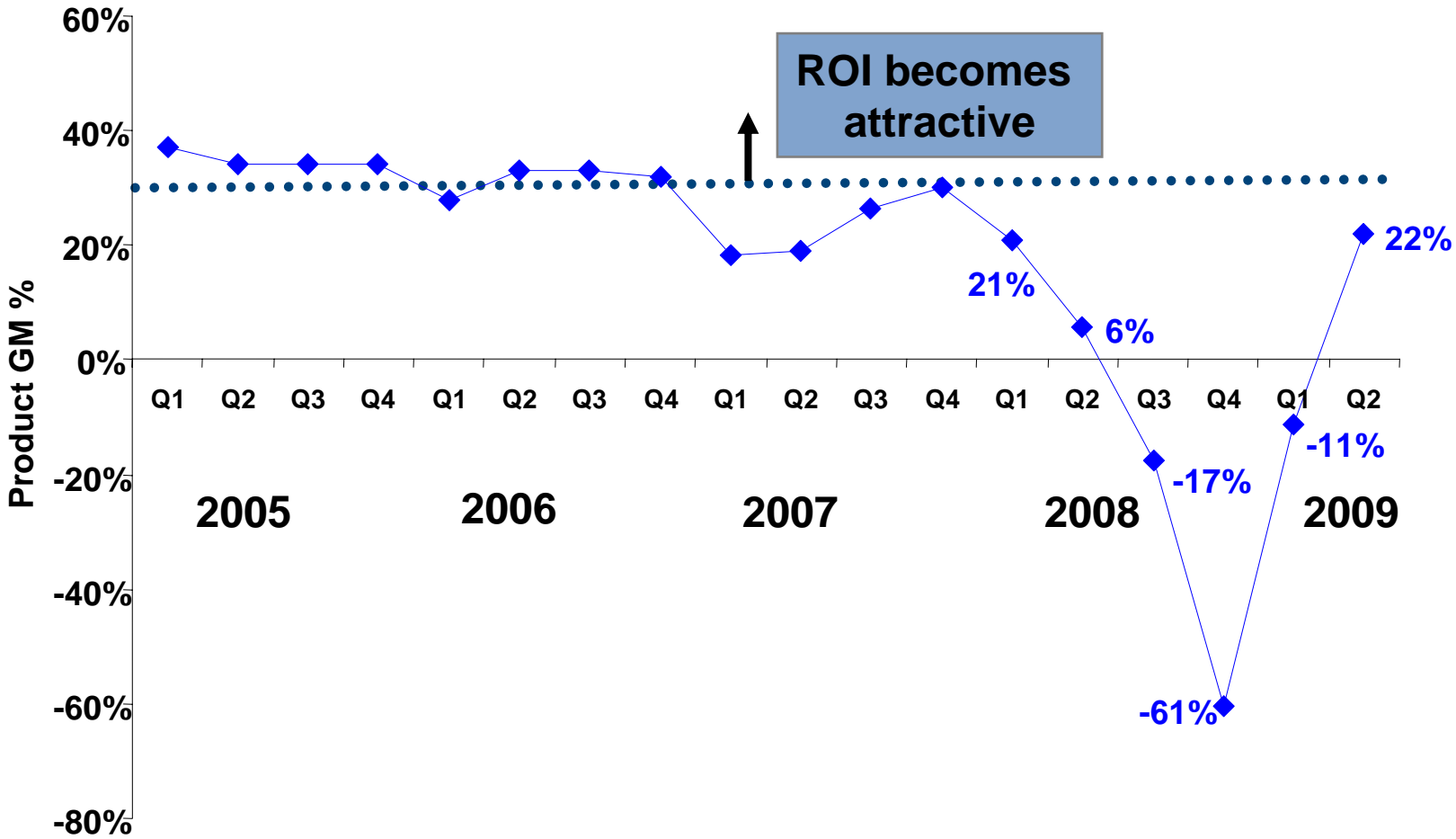
- No 300MM → 450MM
- MLC→X3 lesser impact than SLC→MLC , X4 scaling challenges
- Slowing technology migrations (less electrons)
- Costly immersion→EUV
- No alternative technology (other than potentially 3D R/W) cost competitive with NAND in next 5 years
- Analysts project annual NAND price reductions ~ 40%

SanDisk's ASP/GB Decline vs. Cost Decline *

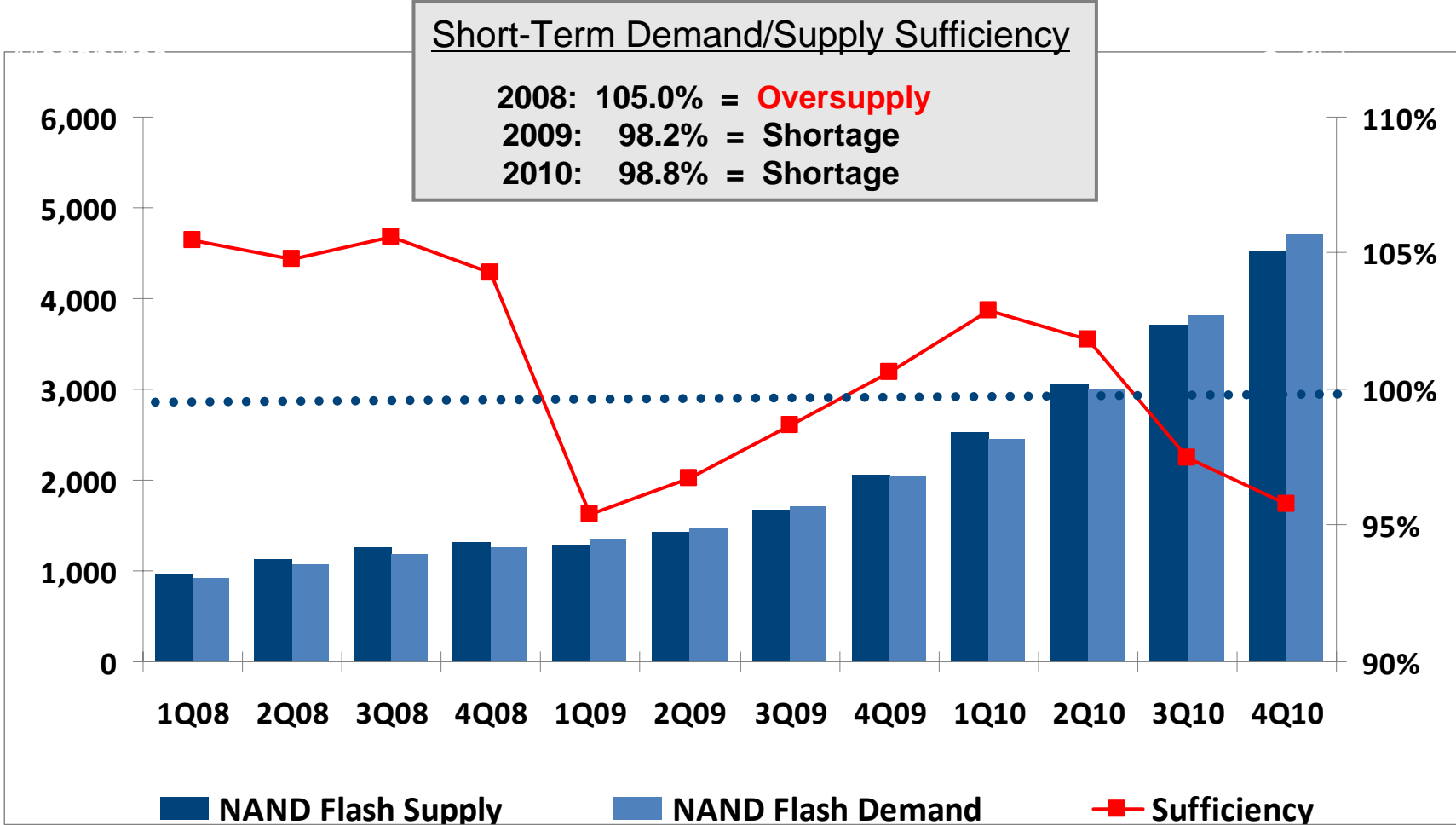


*(excl. inventory charges in 2008)

SanDisk's Product Gross Margin (Non GAAP)

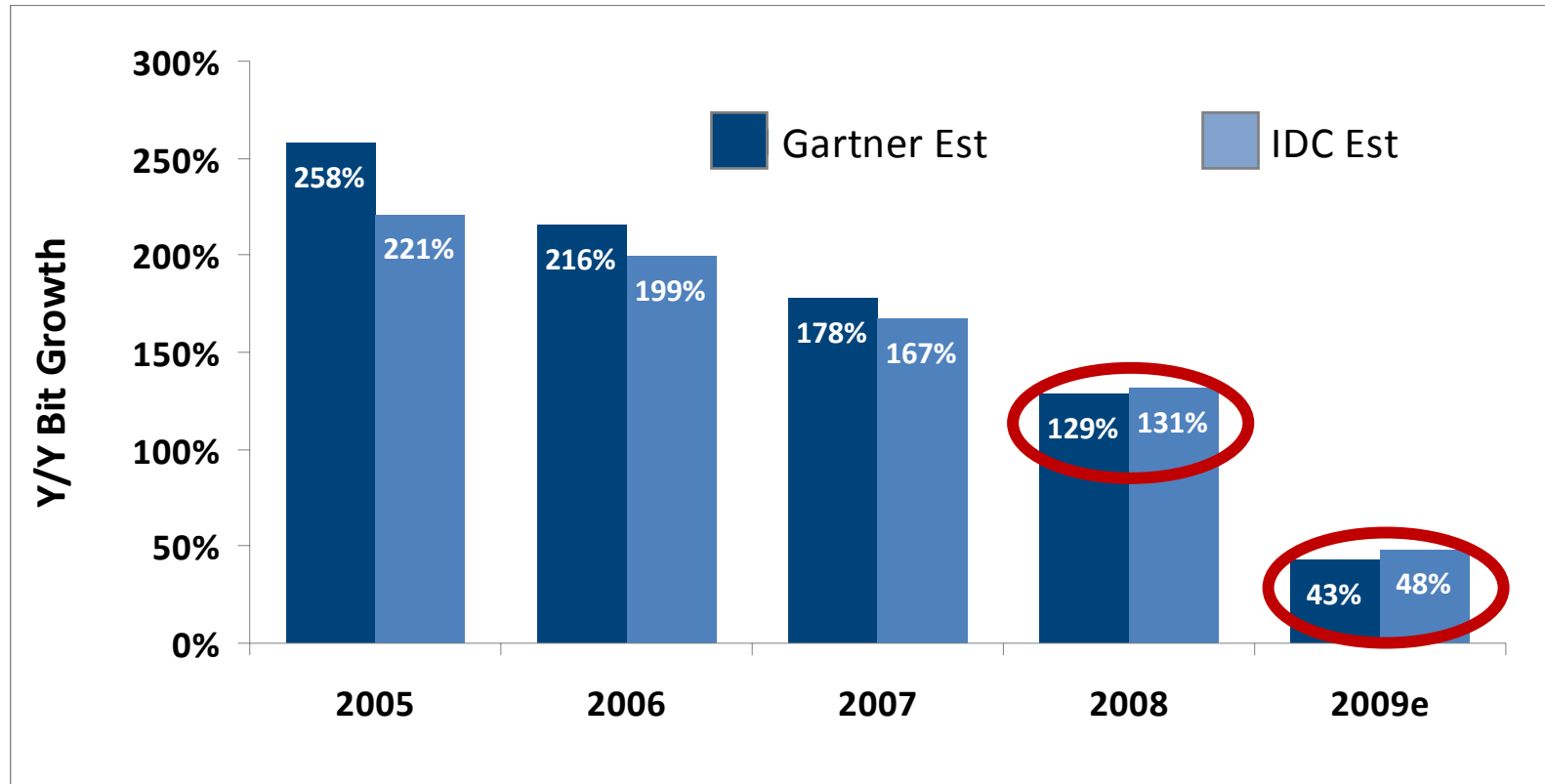


Demand/Supply Imbalance



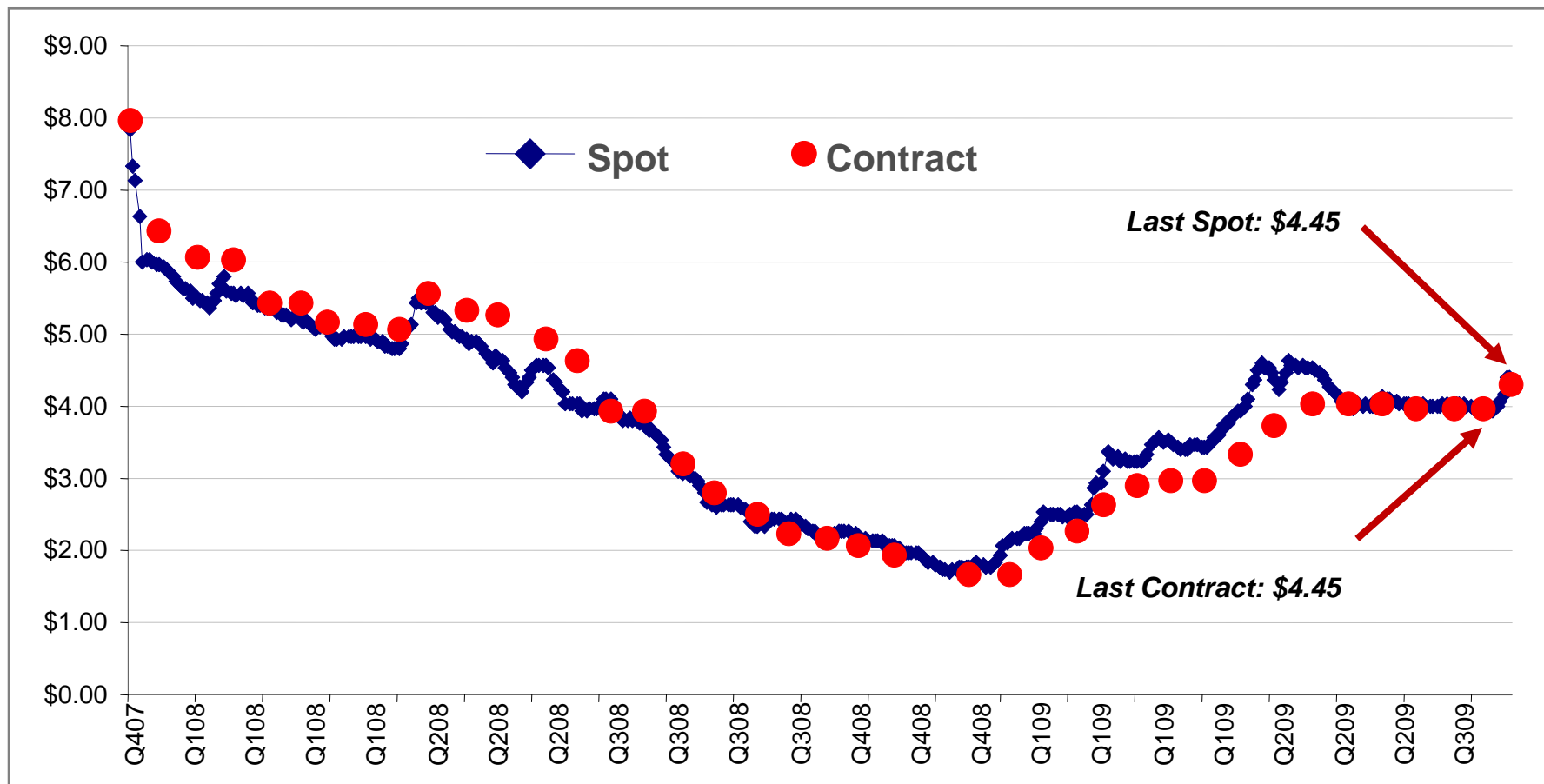
Source: Gartner May, 2009
 "Forecast: NAND Flash Supply and Demand, Worldwide, 1Q08-4Q10 (2Q09 Update)"

Industry Supply Bit Growth Decelerating



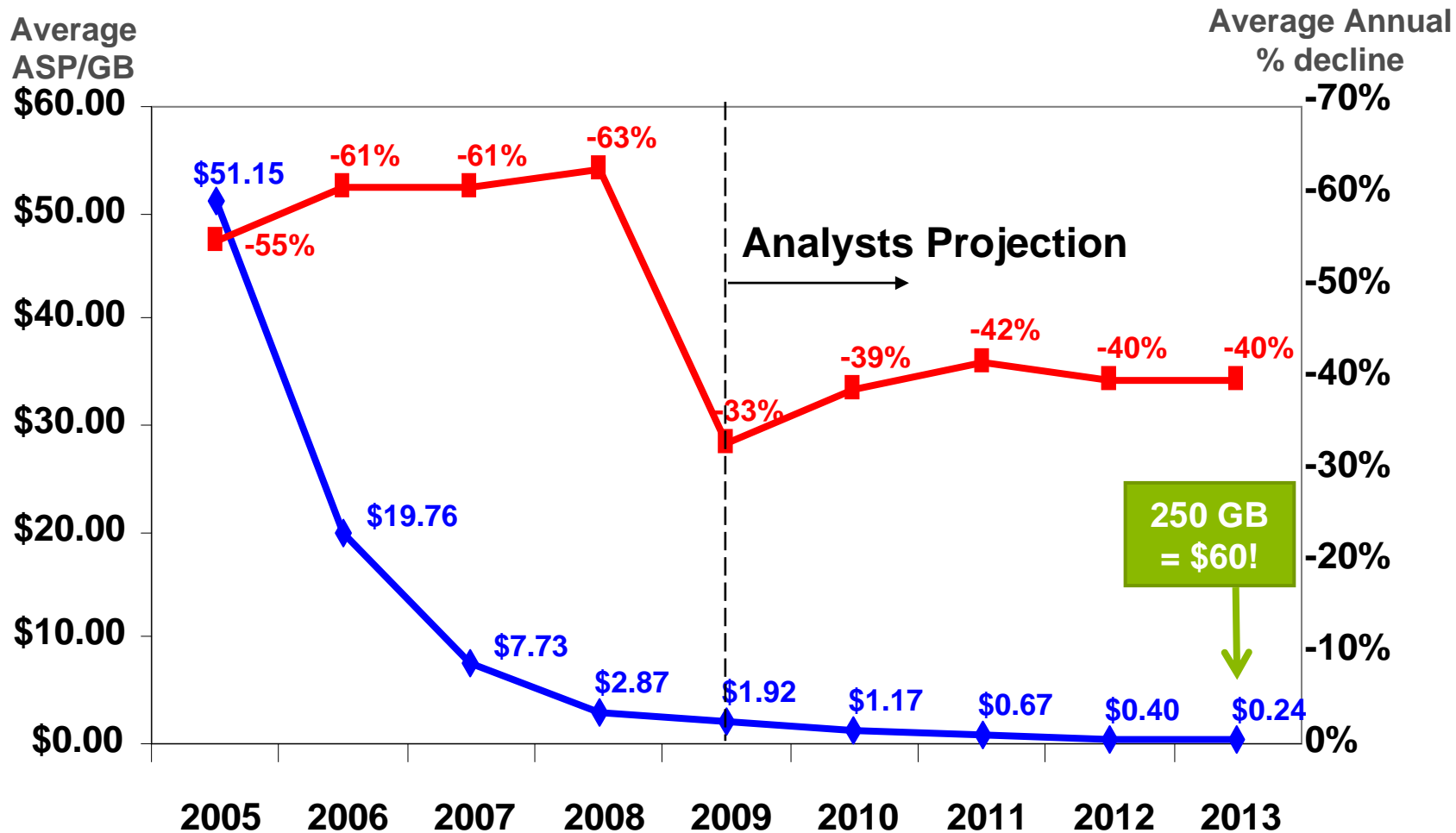
Source: Gartner, May 2009; IDC, June 2009

NAND 16Gbit(2GB) MLC, Spot & Contract

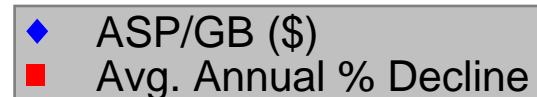


Source: inSpectrum. As of July 30, 2009

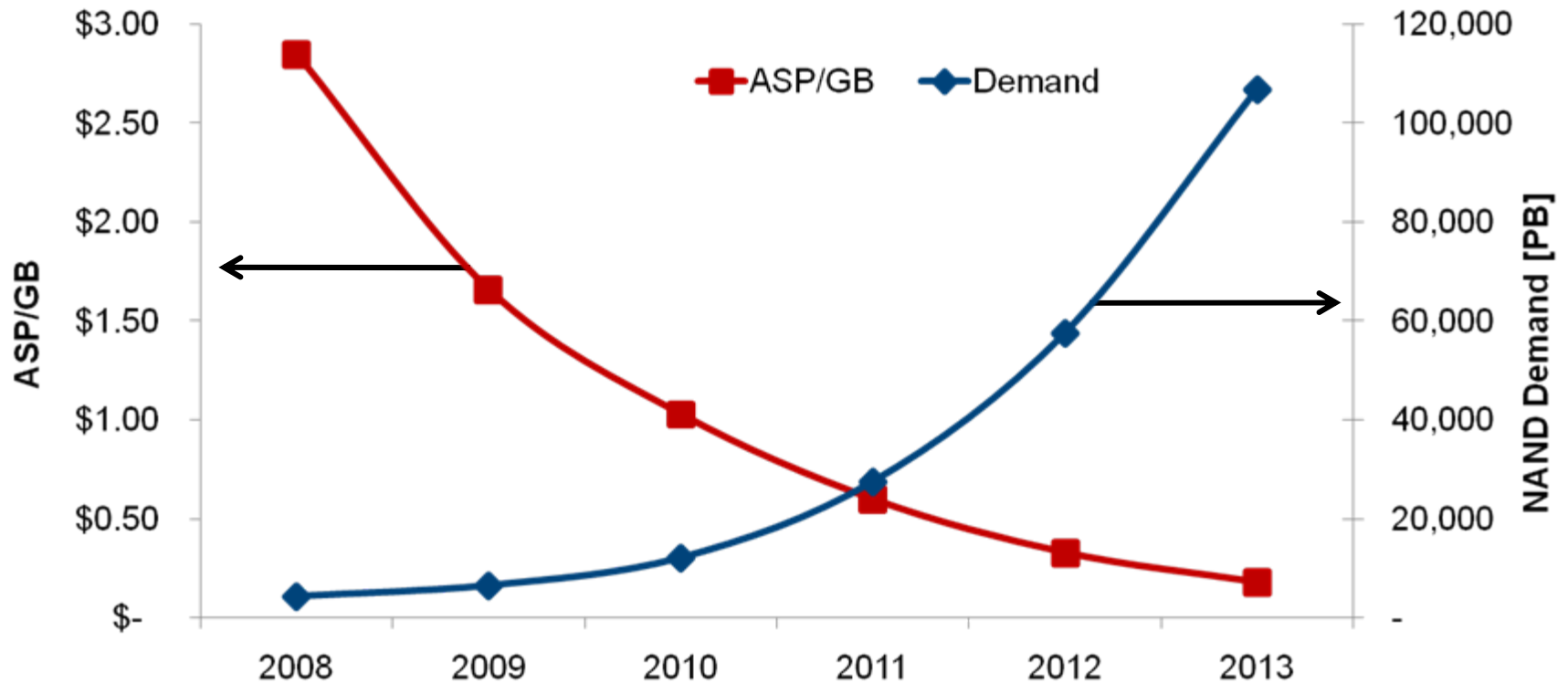
NAND Industry ASP/GByte



Source: Average of Gartner, IDC, iSuppli, Forward Insights



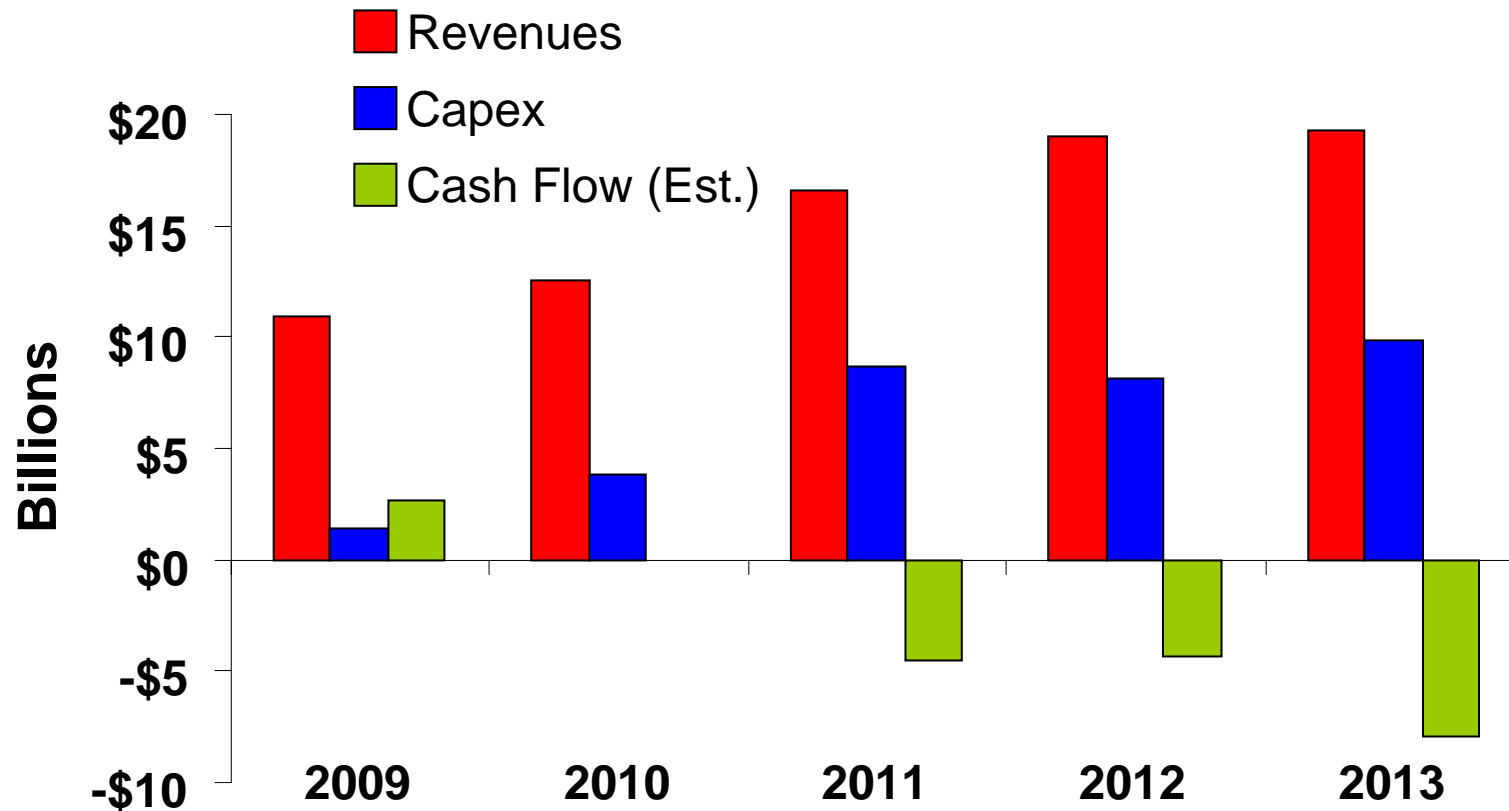
NAND Industry Projected Demand, ASP/GB



Source: Gartner June 2009

"Forecast: Memory, Worldwide, 2004-2013 (2Q09 Update)"

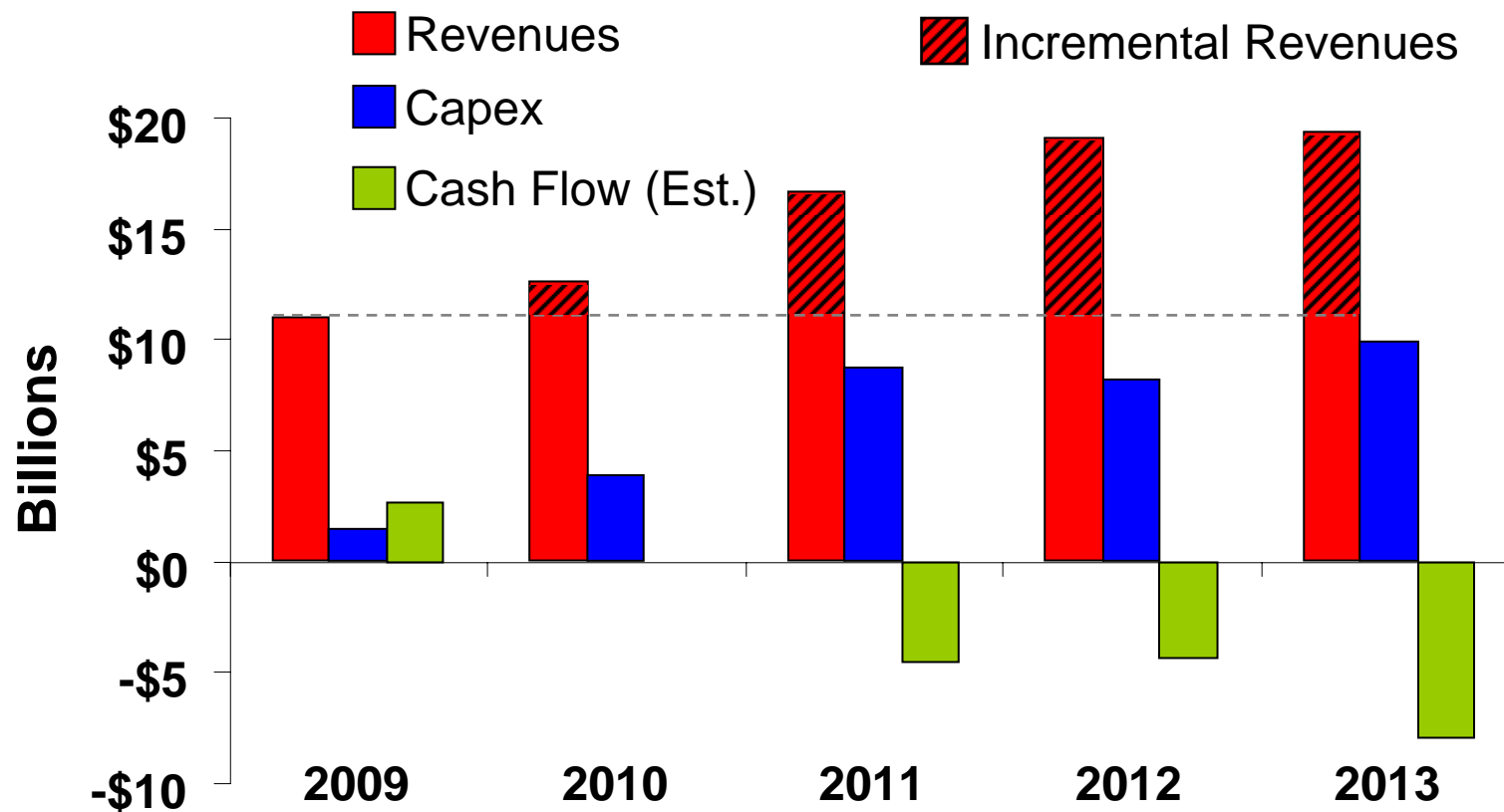
Analysts' 2010-13 Financial Model



Source: Average of Gartner, IDC, iSuppli, Forward Insights

Analysts' 2010-13 Financial Model

Disconnect: Incremental revenues *do not* support incremental Capex



Source: Average of Gartner, IDC, iSuppli, Forward Insights

NAND Analysts Scenario Disconnect: 2010-13

- ▶ Analysts project huge growth in NAND demand in 2010-13 which would require cumulative incremental Capex of ~ \$25B - \$30B in new NAND capacity
- ▶ Analysts project cumulative incremental NAND revenues of ~ \$20B in 2010-2013
- ▶ Analysts project NAND price reductions that are not consistent with slower cost reductions due to slowing NAND technology transitions beyond 2010
- ▶ This analysts' scenario makes investments in new NAND fabs economically unattractive

Conclusions

- ▶ NAND industry appears currently on the path to recovery from the worst downturn ever
- ▶ Current demand and supply in better balance than in past 4 years
- ▶ NAND is moving to Managed NAND and X3
- ▶ Projecting hockey-stick demand for Flash storage in mobile and computing markets in coming decade; however analysts' economic model puts in question ROI for needed future fabs
- ▶ Slowing down of NAND scaling may potentially slow down mass adoption in price sensitive applications such as SSD
- ▶ 3D R/W believed prime candidate to potentially deliver disruptive cost structure beyond NAND's scaling limits

Thank You!

Eli Harari,
Chairman and
CEO, SanDisk

