

Will Flash Stall?

Jim Handy

OBJECTIVE
ANALYSIS



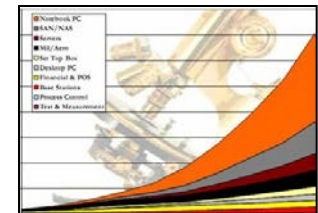
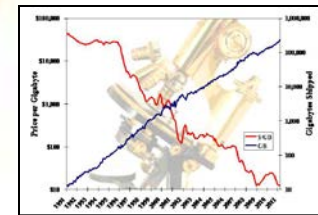
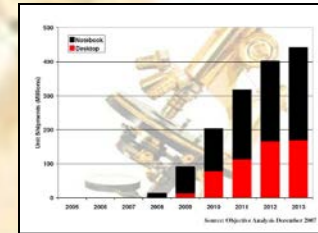
OBJECTIVE ANALYSIS



**Profound
Analysts**

**Reports &
Services**

**Custom
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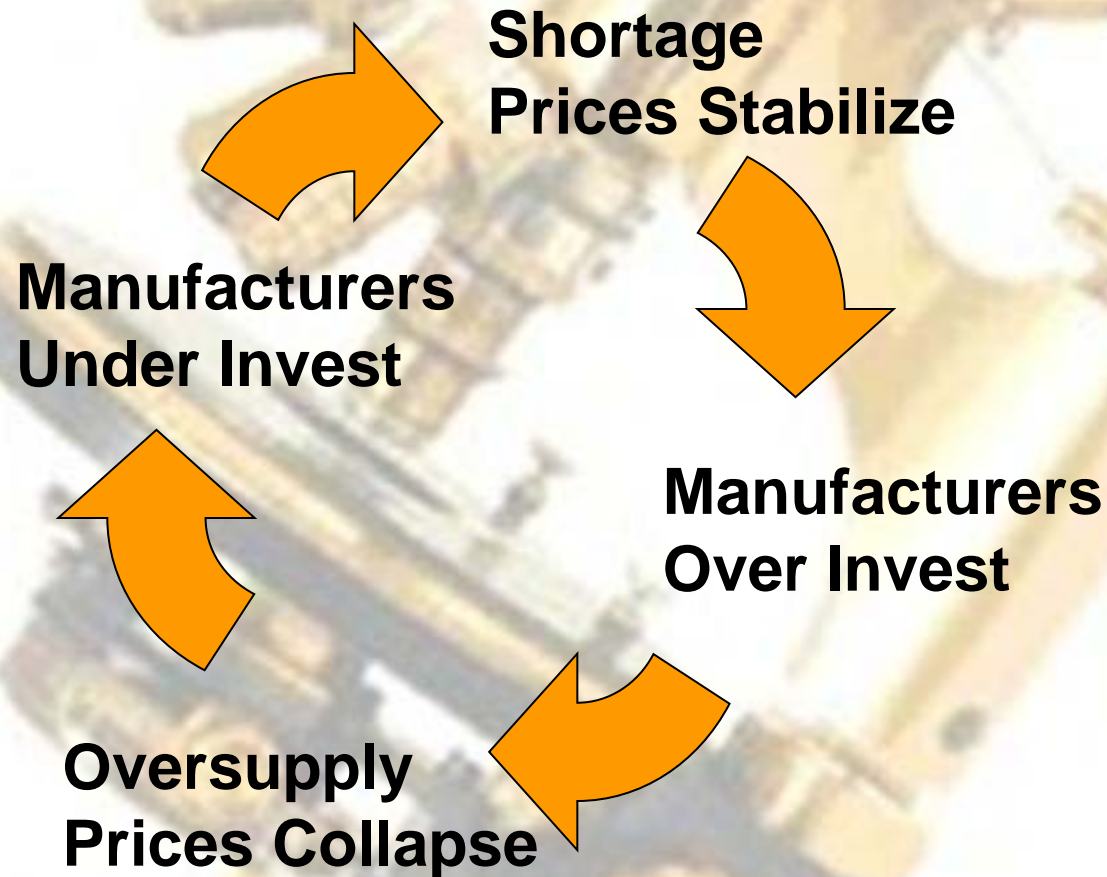


Few Things Are Easy to Forecast

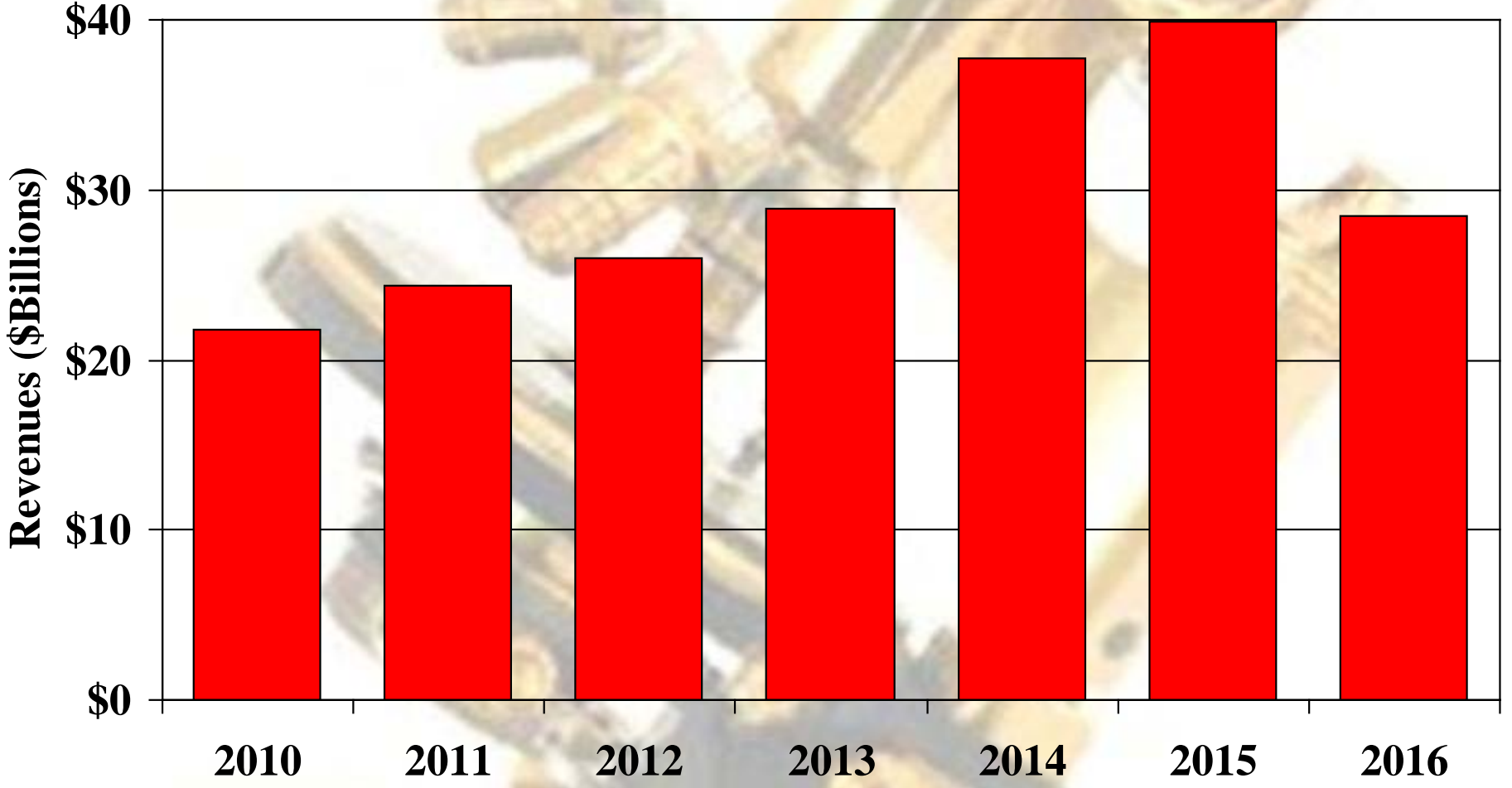
(But Some Aren't All That Hard)

- Memory Boom/Bust is investment driven
 - Overcapacity/Undercapacity is cyclical
 - Pricing follows predictable patterns
 - Current bust is well underway
- Technology problems change that
 - Price flattening extends
 - Profitability extends
 - Cycle extends

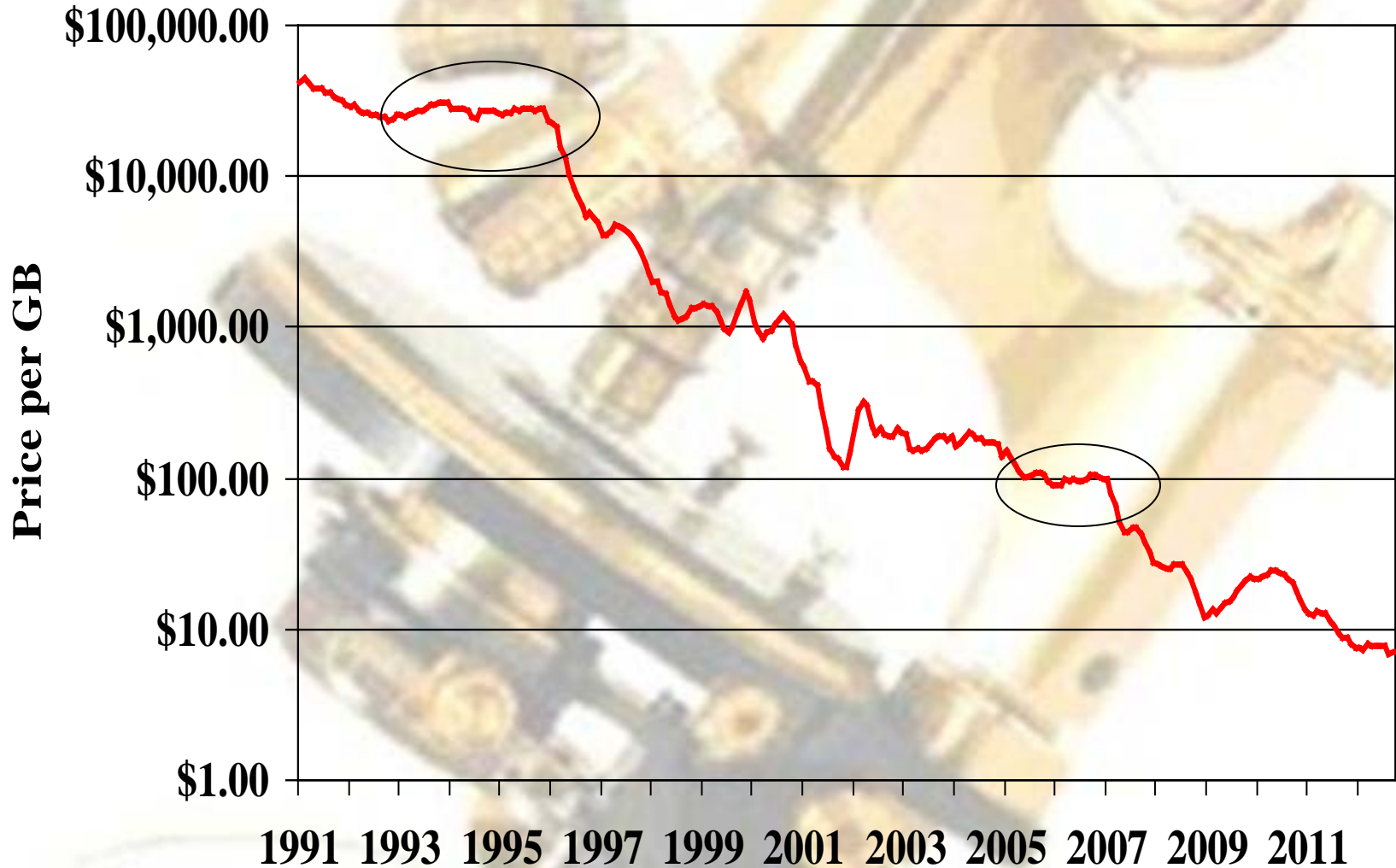
Vicious Cycle of a Price Collapse



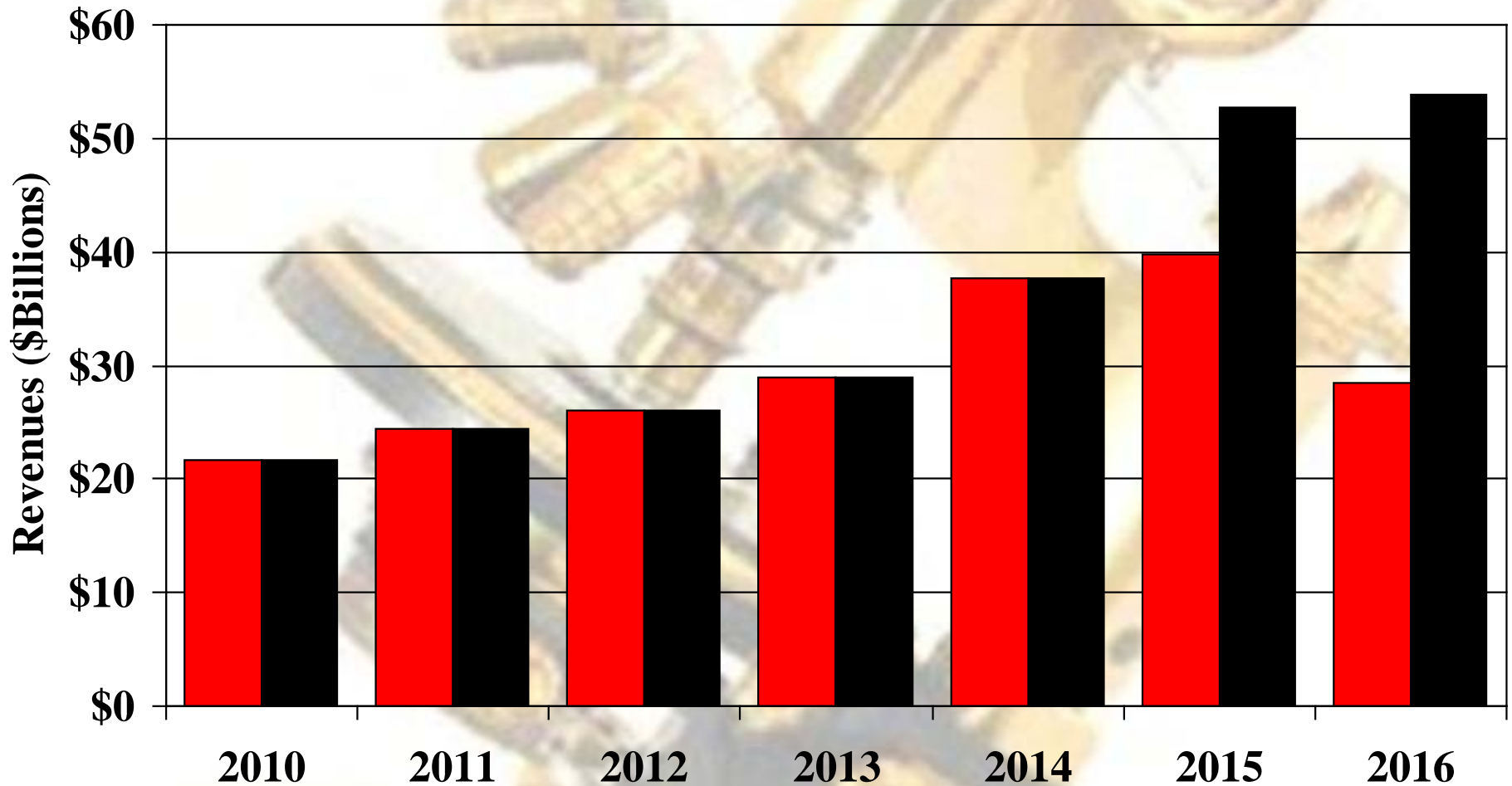
Typical NAND Flash Cycle Forecast



Learning from 20+ Years of DRAM



NAND Flash Forecast with Stall



Summary

- Flash oversupply ends mid 2013
 - We are there now
 - Expect stable prices for 2 years
- The “Big Question” – Will scaling stall?
 - Extends shortage
 - Improves profitability
 - Attracts outside investment
- There will be a crash at the end



Thank You!

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ANALYSIS**