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# **New Economic Study Finds Intel Extracted Monopoly Profits of \$60 Billion Since 1996**

**Also Finds Consumers and Computer Manufacturers Could Gain Over \$80 Billion from Full Competition in Microprocessor Market**

SUNNYVALE, Calif.--(BUSINESS WIRE)--

A new economic study issued today by Dr. Michael A. Williams, Director, ERS Group, found that Intel has extracted monopoly profits from microprocessor sales of more than \$60 billion in the period 1996-2006. Dr. Williams' analysis explains why pro-competitive justifications for Intel's monopoly profits are implausible.

Williams also found that consumers and computer manufacturers could gain over \$80 billion over the next decade if the microprocessor market were open to competition. The analysis noted that consumers would save at least \$61 billion over the period, with computer manufacturers projected to save another \$20 billion, enabling them to increase their investment in R&D create improved products and greater product variety; and provide additional innovation benefits to computer buyers around the world.

The ERS Group is an economic and financial consulting firm retained by AMD's outside counsel, O'Melveny & Myers LLP.

Dr. Williams said, "Intel has extracted \$60 billion in monopoly profits over the past decade; over the next decade consumers and computer manufacturers would save over \$80 billion from a fully competitive market."

Williams continued, "In light of the recent European Commission decision and prior Japan Fair Trade Commission actions, this analysis asks not whether Intel has engaged in anticompetitive conduct, but how much Intel has gained from the alleged conduct."

Thomas M. McCoy, AMD executive vice president, legal affairs and chief administrative officer stated, "Intel's monopoly profits of \$60 billion directly contradict Intel's claim that its business practices have resulted in lower prices - in fact this study shows that billions of dollars have moved straight from consumers' pockets to Intel's monopoly coffers."

McCoy continued, "That \$80 billion translates into an Intel monopoly tax on every consumer who purchases a computer. That's a jaw-dropping figure that helps explain why the European Commission brought antitrust charges against Intel - the real harm that its abuse of monopoly power causes competition and consumers."

A summary of the study is attached.

About Dr. Michael Williams and ERS Group

ERS Group is an economic and financial consulting firm that specializes in analyses for complex business litigation. Over 3,000 clients, including Fortune 500 companies, law firms, universities, industry trade associations and government agencies, have retained ERS Group professionals in a wide variety of cases involving numerous industries.

Michael Williams, Ph.D. is a Director of ERS Group. He specializes in antitrust, industrial organization, and regulation. As an economist in the Antitrust Division of the U.S. Department of Justice and as a consultant, he has examined and provided expert testimony on a variety of antitrust and regulatory issues, including monopolization, price fixing and tying arrangements. He has served as a consultant to the U.S. Department of Justice and the Federal Trade Commission in such matters as the proposed mergers of Exxon and Mobil, BP Amoco and ARCO, and in litigated matters such as FTC v. Rambus and U.S. et al. v. Oracle. His Ph.D. in economics is from the University of Chicago. He presented testimony this year as part of the joint DOJ-FTC examination on the future of the antitrust rules governing single-firm conduct.

## About AMD

Advanced Micro Devices (NYSE: AMD) is a leading global provider of innovative processing solutions in the computing, graphics and consumer electronics markets. AMD is dedicated to driving open innovation, choice and industry growth by delivering superior customer-centric solutions that empower consumers and businesses worldwide. For more information, visit [www.amd.com](http://www.amd.com).

## A Quantification of Intel's Historical Monopoly Profits from the Sale of Microprocessors and a Projection of Future Consumer and Computer Manufacturing Gains in a Fully Competitive Marketplace

A report by Dr. Michael A. Williams, Director, ERS Group

### KEY STUDY FINDINGS:

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- Intel extracted monopoly profits from the sale of microprocessors of approximately \$60 billion in the period 1996 - 2006.
- Pro-competitive explanations for Intel's \$60 billion in monopoly profits are implausible for the following reasons:
  - Recent European Commission charges and prior findings from the Japan Fair Trade Commission;
  - The rarity of firms that achieved a 16-percent or more economic return;
  - An examination of strong companies that have much lower economic returns, including Pfizer, Wyeth, ExxonMobil Corp., and Target;
  - Intel's reported losses on its non-microprocessor businesses, showing that Intel lacks sustained, competitive advantages from brand-name loyalty and other factors;
  - Negative average economic returns earned by other semiconductor companies.
- Consumers and computer manufacturers would conservatively gain approximately \$81 billion in the next decade from full competition in the microprocessor market.
  - Consumers, including both home and business users, would save at least \$61 billion.
  - Computer manufacturers are projected to save at least another \$20 billion over the next 10 years.

- That represents a consumer savings of approximately 1.5% off the retail price of a \$1,000 high-performance desktop computer in a fully competitive market.
- Computer manufacturer savings would result in: (1) increased research and development, (2) greater product variability, and (3) further innovation, providing additional benefits to computer buyers.

#### Monopoly Profits

- Intel's economic return on its microprocessor business was calculated using publicly available information and standard economic methodology. The method begins with standard financial statements and derives from them the information necessary to calculate a firm's economic profits. It is based on Nobel Prize-winning research conducted by Merton Miller and Franco Modigliani and used by more than half the Fortune 1,000 firms to analyze their economic performance; Wall Street investment banks to assess potential investments; and leading management consulting firms, such as McKinsey & Co. and Stern Stewart & Co.

Intel's Total Profits (total return 25.95%)	\$141.8 billion
Competitive Profits (cost of capital 9.94%)	- 54.2 billion
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Result: Economic Profits (economic return 16.01%)	\$87.7 billion
Portion of Economic Profits Attributed to Assumed Advantages (5.0%)	- \$27.3 billion
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Result: Monopoly Profits (11.01%)	= \$60.4 billion

- Intel's economic profit (\$88 billion) was calculated by first determining total profits (\$142 billion) and subtracting from that value its cost of capital (\$54 billion--which includes a normal profit), resulting in economic profits of \$88 billion.
- Intel's economic profit margin of 16-percent (the \$88 billion) stands in stark contrast to the economic returns of 498 other public companies examined. Like Intel, they had capital of \$1 billion or more in 1996. Of these companies, the average economic return was less than one percent. Intel earned an economic return higher than 99-percent of these large companies, including companies with strong brands, research and development, or intellectual property rights, such as Pfizer, Wyeth, ExxonMobil Corp., and Target.
- Only four companies earned economic returns of 16 percent or more - Microsoft (38.25%), UST Inc. (28.54%), Coca-Cola Co. (16.58%), and Intel (16.01%) - and each of these companies has been associated with antitrust determinations. Of course, high economic returns by themselves do not demonstrate anticompetitive conduct.
- To be conservative, the study next provided Intel with a generous assumption that 5 percentage points (\$28 billion) of its economic return were attributable to legitimate advantages. That left the \$60 billion monopoly profit figure.

#### Consumer and Computer Manufacturer Savings

- The calculation of future consumer and computer manufacturer gains employed four conservative assumptions:
  - Intel's price premiums would fall by 50% over five years; price premiums were calculated by comparing Intel products with their AMD counterparts.

- AMD's market share of units sold would rise from 27% to 35% over five years.
- Total industry sales would grow at only half the historical growth rates.
- OEMs would pass-through 75% of cost savings to computer buyers.
- Data from 2Q2006 through 1Q2007 were used as the basis for projecting consumer benefits from increased competition over 10 years.
- Consumer benefits for 2012-2016 set equal to benefits in 2011.
- As an example of consumer savings on a specific computer purchase, the study notes that consumers would save more than 1.5 percent off the cost of a \$1,000 performance desktop computer.

Intel microprocessor ASP - 2006	\$121.12
Intel microprocessor ASP - 2011(projected) -	\$101.30
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Total price reduction for computer manufacturer:	\$19.82(16 percent less)
Savings passed on to consumer:	75%
Total consumer savings per computer:	\$14.87, or 1.5% of a \$1000 performance desktop computer

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Source: Advanced Micro Devices