Goldman Sachs and the Big Short

TIME TO GO LONG?

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2. Goldman Sachs positioning
3. Risk Management during 2006-2007 period
4. Was there a conflict of interests on the side of Goldman Sachs? Was there an ethical dillema?
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1 | The US economy framework before 2008

The US economy, prior to the 2008 crisis, was facing one of its best moments ever, with both equities and real estate pricing crossing all time highs.

The American dream was trending	• Everyone wanted to be an home owner: resorting **to credit to be able to purchase a house** was getting very popular amongst the Americans
House prices were at all time highs, rising every year	• Both Real Estate and equities were **steadily increasing its prices and crossing all time highs**: it looked like a typical economic expansion dictated by the credit cycle.

Leveraging on weak foundations

Lending increased

Banks started lending a lot of money to the "American Dreamers", even to those who couldnt pay back the loan. Worst case scenario, banks would Get the property as collateral.

Financial products created

Investment banks created baskets of mortgages and sold them as a financial product- these were commonly known as **CDO**'s

Investment Ratings

Rating agencies, such as Moody´s and the S&P categorized the CDO's as safe investments("no one defaults on their home"). As they were considered diversified, most CDO's got AAA rating

Institutions

Most financial firms had a lot of CDO's in their balance sheets from 2006 to 2008. They were also part of the mass distribution of these assets to retail investors and other entities

The entire economy was leveraged on one fragile foundation: **the housing market is indestructible, and housing prices will keep rising steadily: independently of mortgage delinquency rates, mortgage portfolios(CDO's) will hold their value.**

Goldman Sachs’ History and Structure

When did Goldmans Sachs started? How is it structured?

Goldman Sachs was founded in 1869

- Caters exclusively to Institutional clients
- One of **the biggest Investment banks i**n the world
- 26000 employees and **$46 Billion in net revenue** by 2007
- Composed by **3 main divisions**:
- **Investment Banking** division, **Asset Management** division
- **The Fixed Income, Currencies, and Commodities (FICC)** division

Mortgage department:

- Structured Product Syndicate and Asset-Backed Securities (ABS) Finance Desk
- Collateralized Debt Obligation (CDOs) and Derivatives Desk
- The Advisory Group Desk
- Commercial Real Estate Loan Trading Desk

The Mortgage Market and Goldman Sachs' role

Market condition	New Financial Instruments	Market Maker
• Market value of **$1.2 trillion** dollars by 2007 • **A 600% increase since 2001** with **82% of the debt rated AAA** by credit rating agencies	• Introduction of **Collateralized debt Obligations (CDOs)** • Introduction of the **ABX Index**	• Underwrote **93 residential mortgage-backed securities** worth **$72 Billion** • **Facilitated $28 billion** worth of CDOs

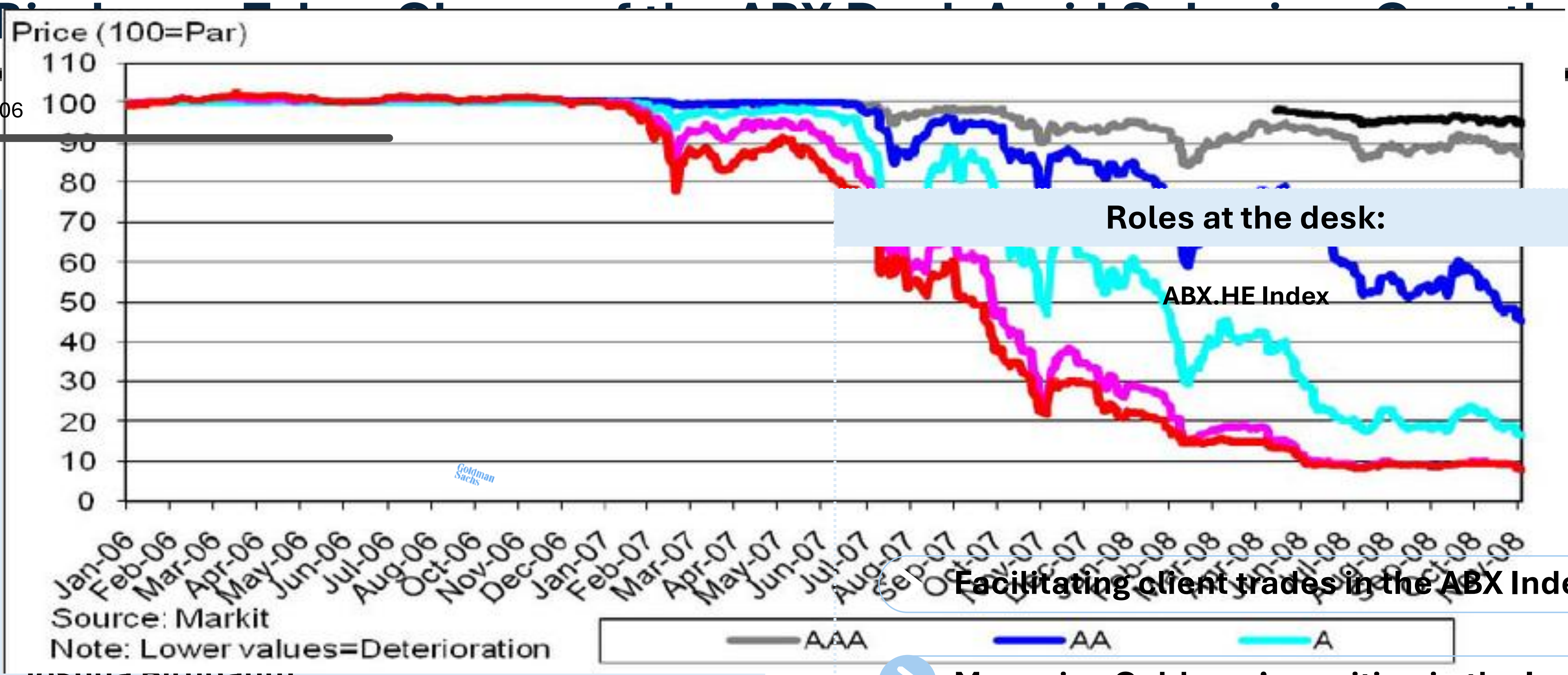
Goldman Sachs' Risk Management Put to the Test: Regarded as Wall Street's Best

Best of Wall Street

- Firm-Wide Risk Committee
- Real-time P&L Monitoring
- Established Metrics: "VaR Police"
- Information Flow: No Silos
- Risk Management Unit

How did Goldman Sachs navigate 2006 early warning signs, adapt its strategy, and positioned itself for survival?

Jan. 2006



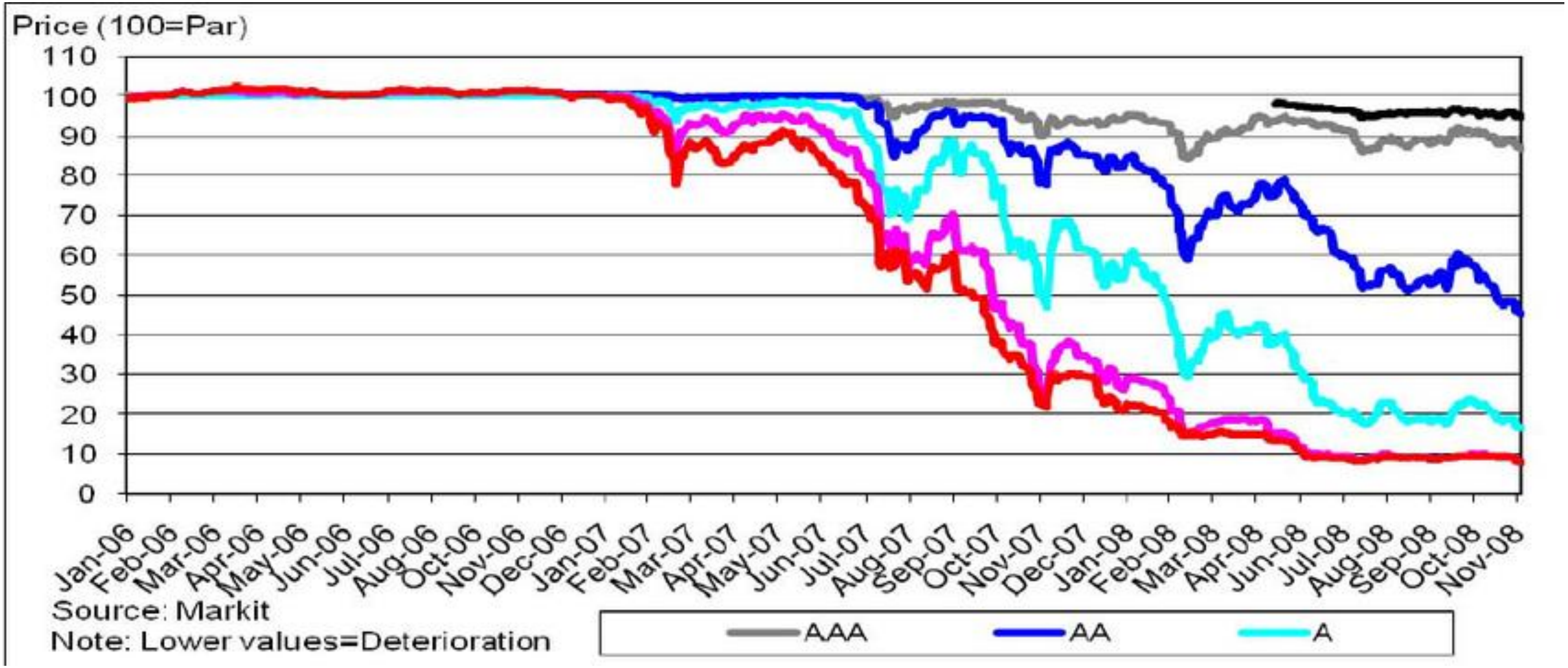
Joshua Birnbaum

1992

Roles at the desk:

ABX.HE Index

- **Facilitating client trades in the ABX Index**
- **Managing Goldman's position in the Index**


Price (100=Par)
110
100
90
80
70
60
50
40
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0
Jan-06 Feb-06 Mar-06 Apr-06 May-06 Jun-06 Jul-06 Aug-06 Oct-06 Nov-06 Dec-06 Jan-07 Feb-07 Mar-07 Apr-07 May-07 Jun-07 Jul-07 Aug-07 Sep-07 Oct-07 Nov-07 Dec-07 Jan-08 Feb-08 Mar-08 Apr-08 Jun-08 Jul-08 Aug-08 Sep-08 Oct-08 Nov-08
Source: Markit
Note: Lower values=Deterioration
AAA
AA
A

The ‘Lunatics’ Betting Against the Market: A Defining Moment

June 2006

PAULSON
& CO.
INC.

Paulson was aggressively shorting ABX since January, essentially betting against the U.S. Housing Market

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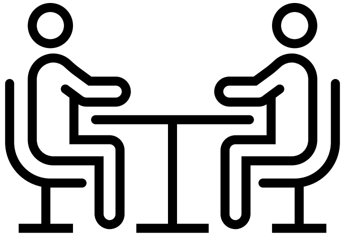
Paulson **Birnbaum**



Turning Point

"What if Paulson is right?“

"What if the U.S. housing market is about to collapse?"

Risk Management in Action: The “Structured Exit”

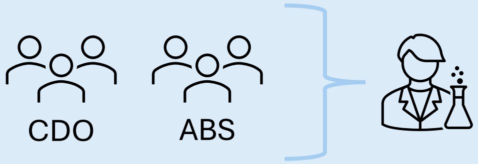
Sep. 2006

HUMILITY & CURIOSITY

1) **Flow of information and risk management embedded culture:** Birnbaum **shared** his concerns and findings with the rest of the departments
2) **Market analysis:** Goldman Sachs analyzed subprime market fundamentals; identified **increasing EPDs**; **unresponsible** mortgage originators
3) **Risk assessment:** Subprime market was going to collapse, and Goldman was **heavily long**, holding billions of dollars in subprime-mortgage related securities

“STRUCTURED EXIT”

Goal: Reduce Exposure Without Sounding the Alarms



Hudson Mezzanine 2006-1
New Synthetic CDO

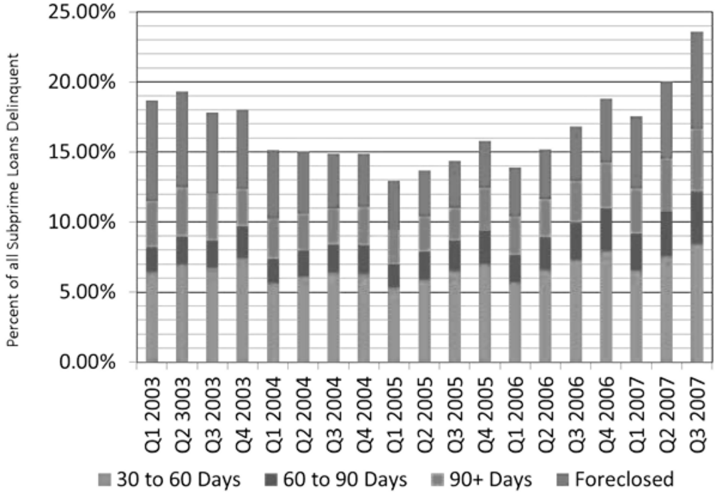
$3 billion short in one month

100% short on the CDO

December 2006: Getting Closer to Home

Dec. 2006

Mortgage delinquencies and foreclosures peak…



Source: Mortgage Bankers Association

Mortgage origination companies were struggling with early payment defaults, some were already in **financial distress**

… Now it's the time to act…

CFO sees on P&L that for 10 days the Mortgage Department **had been losing money**

Still $6 billion net long position in subprime mortgage securities

Firm-Wide Risk Committee and other general meetings

In five days, Goldman Sachs reached the conclusion that would end up saving the company: **"It's time to get closer to home"**

GS’s Actions revealed a conflict of interests

Goldman Sachs primary interest for the well-being of its clients was in conflict with their interest to dispatch their CDOs and enter a net short position on this market.

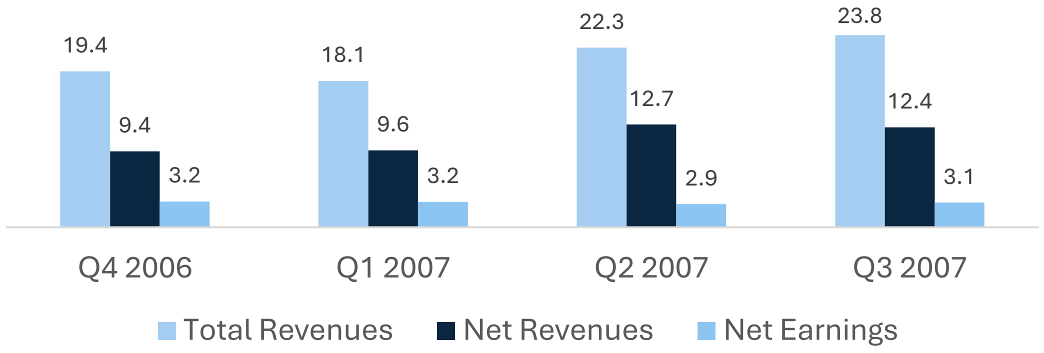
Dual Strategy	Risk Transfering	Marketing Strategies
• Goldman Sachs acted on **information asymmetry**: they knew the market was going to fail, yet they still **sold CDO's** • Overall, they were **selling subprime mortgages** securities while simultaneously **betting against them**	• Hudson Mezzanine 2006-1 CDO designed as **“structured exit”** • Goldman Prioritized its **own financial gain** over the interest of its clients	• Promotional booklets **outlining the features of the CDOs** • **Misleading claims**: “Sourced from the street” and “aligned incentives with the Hudson program”

Goldmans Financial Situation as of Q3 2007

Overview

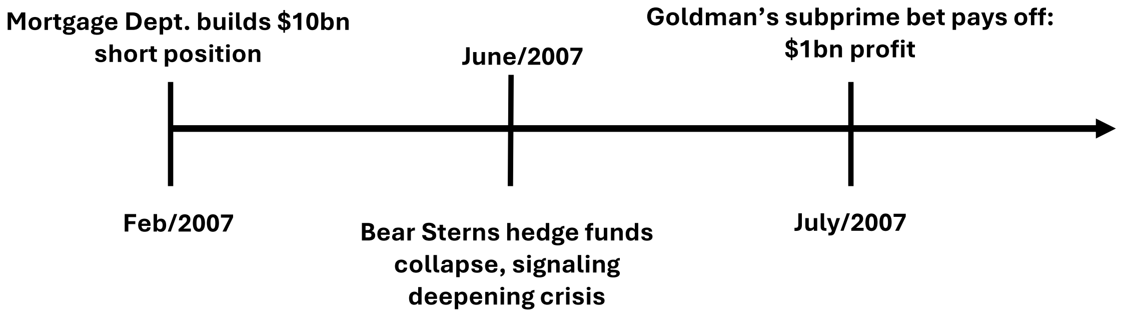
- Goldman Sachs **profited $1 billion** in July 2007 from subprime short positions, mitigating mortgage-related losses.
- **Trading & Principal Investments drove revenue**, particularly the Fixed Income, Currencies, and Commodities (FICC) division, including mortgage-related trading.
- **Strong Risk management** and dynamic exposure adjustments enabled Goldman to capitalize on the subprime downturn, outperforming competitors facing heavy losses.

Key Financial Metrics in $bn



→ **Q3 2007 was Goldman's strongest quarter in recent history**

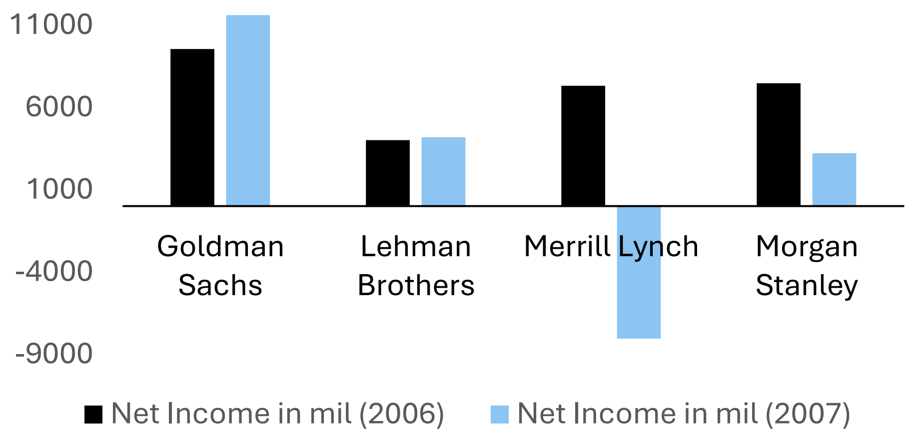
Timeline major events 2007

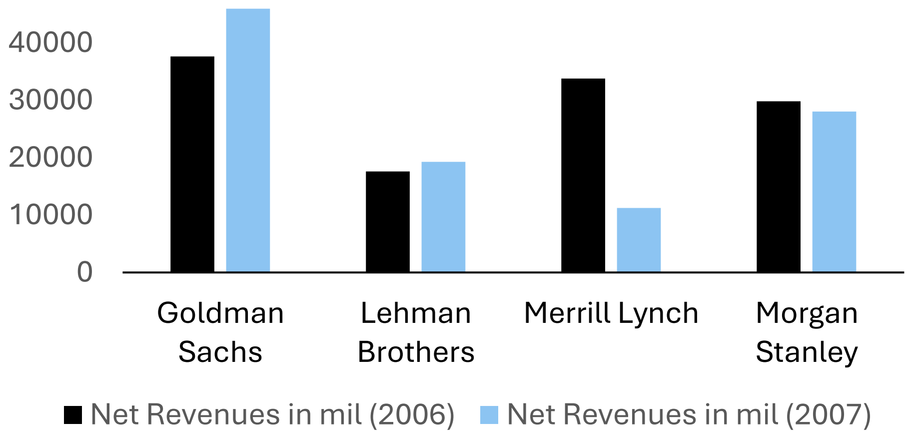


Goldmans Financial Situation as of Q3 2007

Comparison with competitors

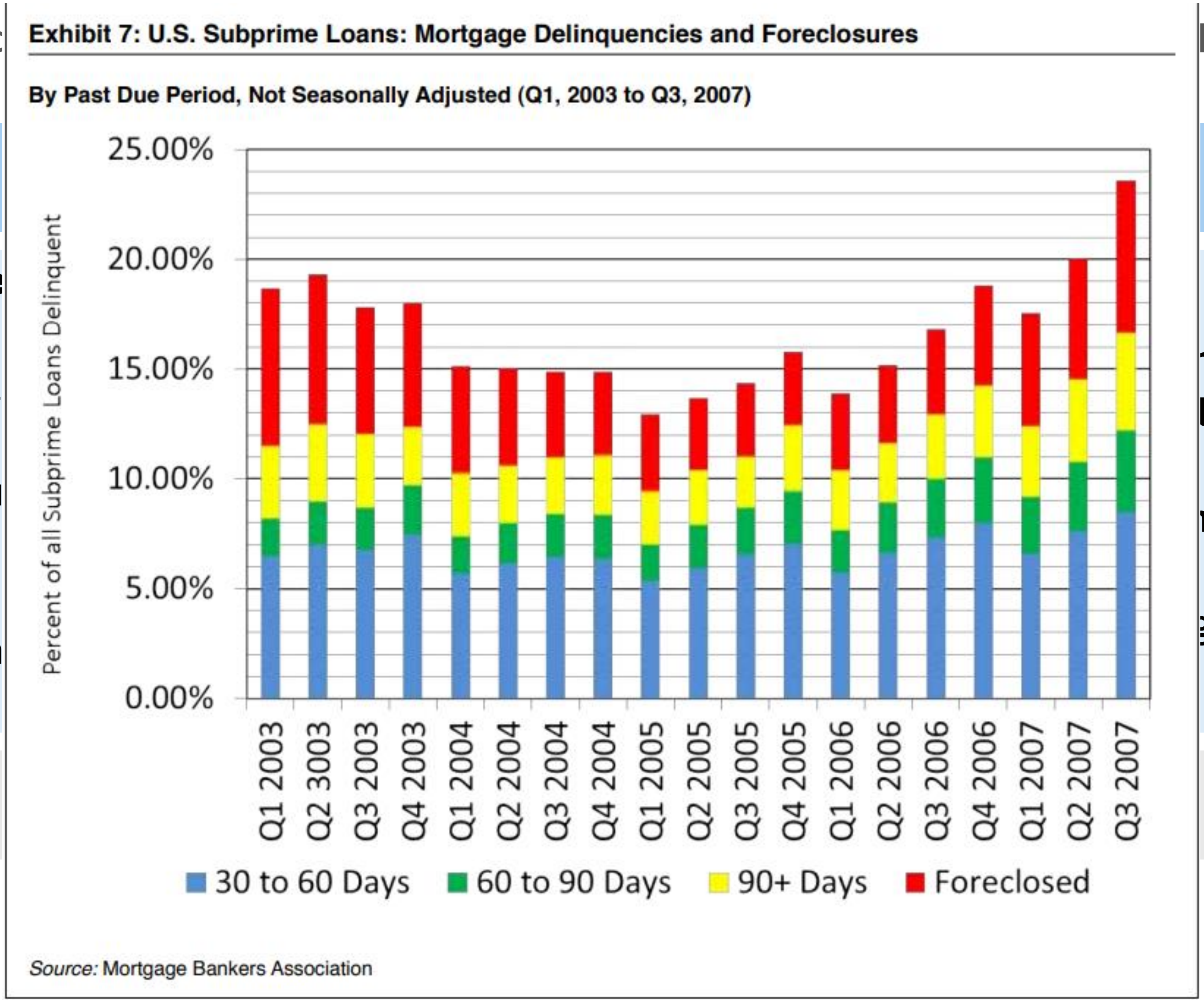
- **Sustained profitability** while competitors posted losses.
- Strategic **short positions** on subprime mortgage-backed securities shielded the firm from market downturns.
- **Goldman** dynamically adjusted exposure, **mitigating losses** and capitalizing on market volatility.
- While **competitors** like Lehman, Merrill Lynch, and Bear Stearns **faced heavy losses**, Goldman's limited exposure led to strong gains





5 |Time to go Long?

What should Viniar d lortgage department?



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- Potential for **u trenches**
- Potential for **h**

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the market

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Thank you !

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