

Sentiment Signals from Options Markets



Paul Staneski, Ph.D.

Credit Suisse

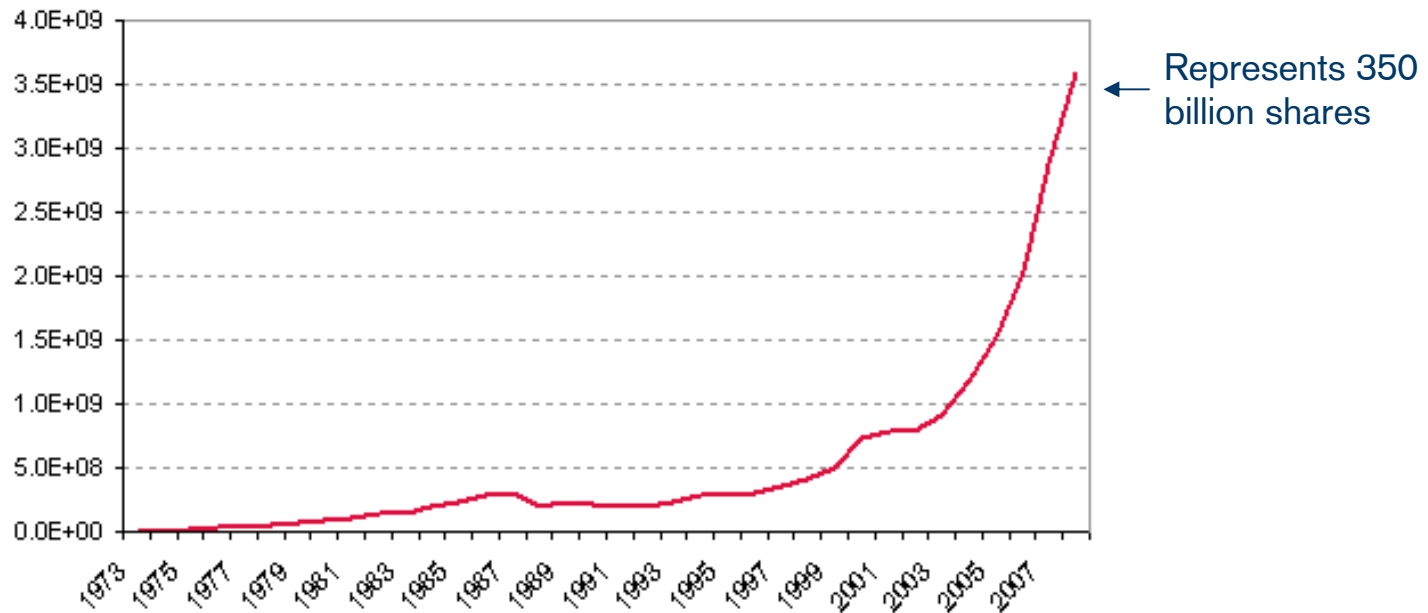
Global Head of Derivatives Solutions & Training

Dark Matter: There's more out there than meets the eye!



A **BIG** Business: Option Market Growth

- Open interest of exchange-traded option contracts in the U.S.



Source: Credit Suisse Quantitative Trading & Derivatives Strategies

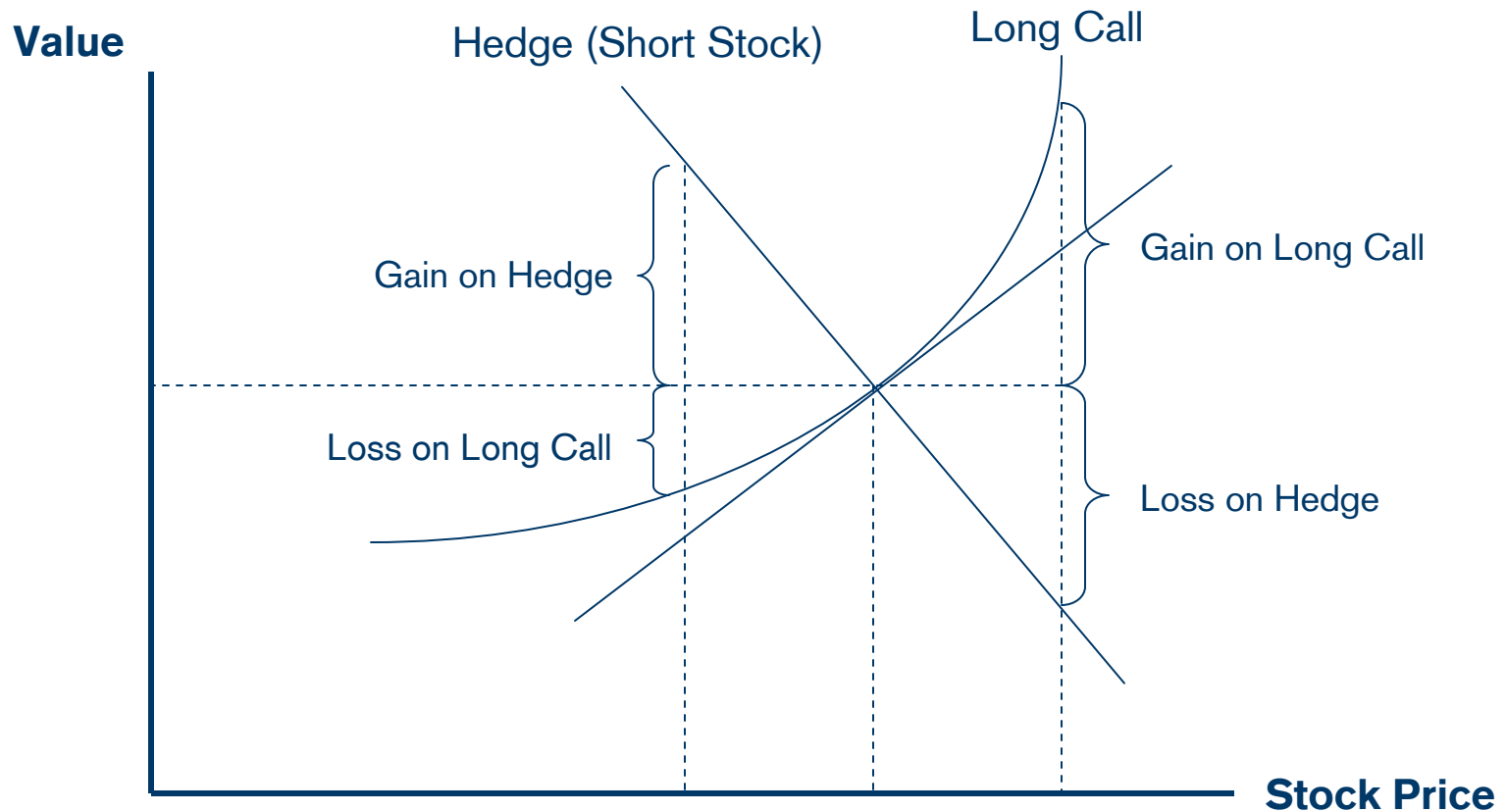
Hedging Order Flow

- From a daily Credit Suisse US Options Recap:
 - **“There was a buyer of 50k XYZ Jul 25 puts (creating 1.5m shares for sale)”**.
 - Note: these puts were 30Δ ($= 1.5/5$)
- Banks and broker/dealers must hedge their options order flow.
 - Buying calls
 - Selling puts } Creates shares to sell
 - Selling calls
 - Buying puts } Creates shares to buy

Re-hedging: It's all about Gamma

- Suppose I (as a broker/dealer) buy a 40-delta call and hedge it (by selling 40 shares of stock).
- The stock goes up a dollar ... what do I do to re-hedge?
- What do I do if the stock goes down?
- Let's see ...

Delta Hedging & Gamma



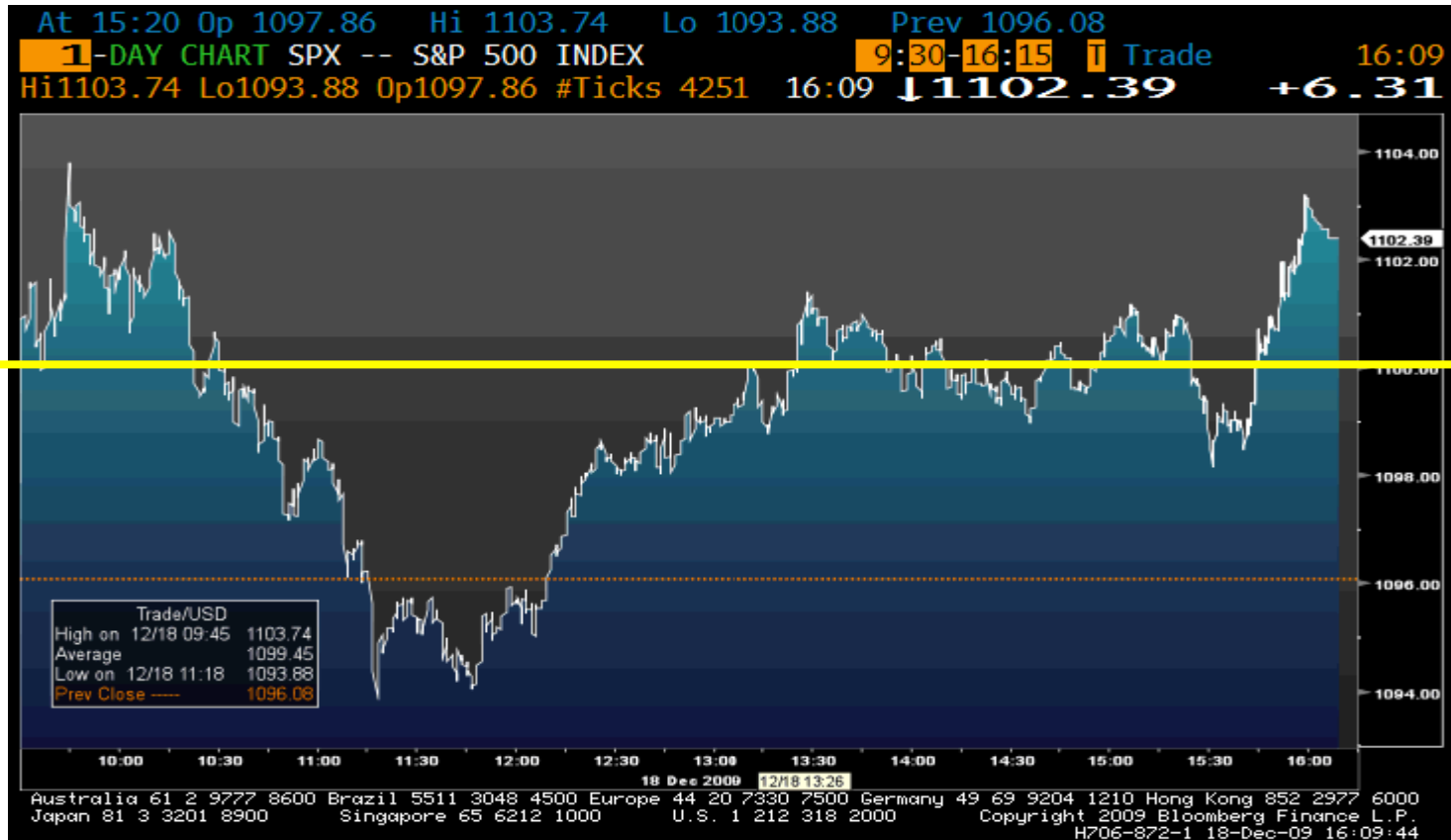
Because of gamma, the hedged position has a net gain regardless of the move in spot.

Pin Risk

- If the street is **long gamma** at a given strike price and the stock is trading around that strike near expiration, re-hedging activity (buy low/sell high) will tend to drive the stock price to the strike, “pinning” it there at expiration.
- **Short gamma** will cause the strike and stock price to act like the positive (or negative) poles of two magnets, repelling each other as hedgers “buy high” and “sell low”.

Dec Expiration (12/18/09)

- The Street was significantly long gamma at the 1100 Dec expiration ...



It's not just hedgers ...

- “A lot of accounts are long C July 3 puts (over 200m shares open interest) and may need stock to exercise their puts.” *Credit Suisse Daily Option Recap on July 9, 2009*



Canaries in Coal Mines!

- From the Wall Street Journal on Sept 22, 2009 ...

OPTIONS | SEPTEMBER 22, 2009

Bullish Moves in Perot Days Before Deal

Article

Comments

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BY TENNILLE TRACY

Days before Dell announced plans to buy Perot Systems, the options market played host to robust trading in Perot, suggesting some traders might have anticipated the news.

Starting Sept. 9 and continuing through Monday, traders bought and sold far more options in Perot Systems than they normally do.

And the bulk of the activity appeared to be bullish, with traders preparing for Perot's stock to move higher. "The increased options activity ...

Perot Systems

- The DELL bid (\$30/share) was announced on Monday, Sept 21, 2009 with PER trading at \$17.91.



- The week before, volume surged in PER calls, with the Oct 20-strike call trading over 30x normal volume on Sept 18 (closing that day at \$0.55).

Accenture (ACN) News (9/24/09)

Bullish Move in Accenture: Options

By Jud Pyle CFA   09/24/09 - 03:50 PM EDT

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Stock quotes in this article: [ACN](#) [HURN](#)

NEW YORK (TheStreet) -- Shares of **Accenture** ([ACN Quote](#)) are 30% higher than its April lows of \$26.67, and at least one investor is calling for even more upside in the management services company throughout the next few weeks.

OPTIONS GUIDE

-  **Bulls Target Comcast, Nike: Options Recap**
-  **Big Investor Bets Comcast Will Rise**
-  **Heavy Activity in Safeway: Options**



Looking at the out-of-the-money Oct. 40 calls, more than 12,700 of these options traded so far today versus open interest of 3,000 contracts, indicating that the [investor](#) traded these calls to open.

During the first hour of [trading](#), an investor bought 8,000 of these options for about 20 cents. That means if the investor decides to hold these options until expiration, the call purchase would make money if ACN shares expire higher than \$40.20.

The Oct. 40 calls are currently trading up 12 cents, and have a delta of 15. That means for every dollar move in the underlying stock, the calls should move by 15 cents. ACN shares are now trading down 41 cents, and the calls should have dropped roughly six cents. When calls are up and [stocks](#) down, it suggests the presence of call buyers, as implied volatility has climbed to 42.1.

ACN did not announce significant news today, but rumors continue to circulate around ACN's potential interest in acquiring **Huron Consulting** ([HURN Quote](#)).

It's interesting that we're seeing heavy-call buying activity without a major catalyst. This could also be a stock-replacement strategy, where the investor is selling shares but buying the calls in case there is further upside. The call purchase could have less downside than owning the stock outright. (The maximum loss for a long call is the premium paid, plus commissions.)

More on ACN

[Next Tech Merger](#) 

[Five Dumbest Things on Wall Street: Aug 7](#)

[Options Traders Turn Bullish on Hurn](#)

[Mad About Options: IBM Flashback](#) 

[Mad About Options: That'll Do Hewlett](#) 

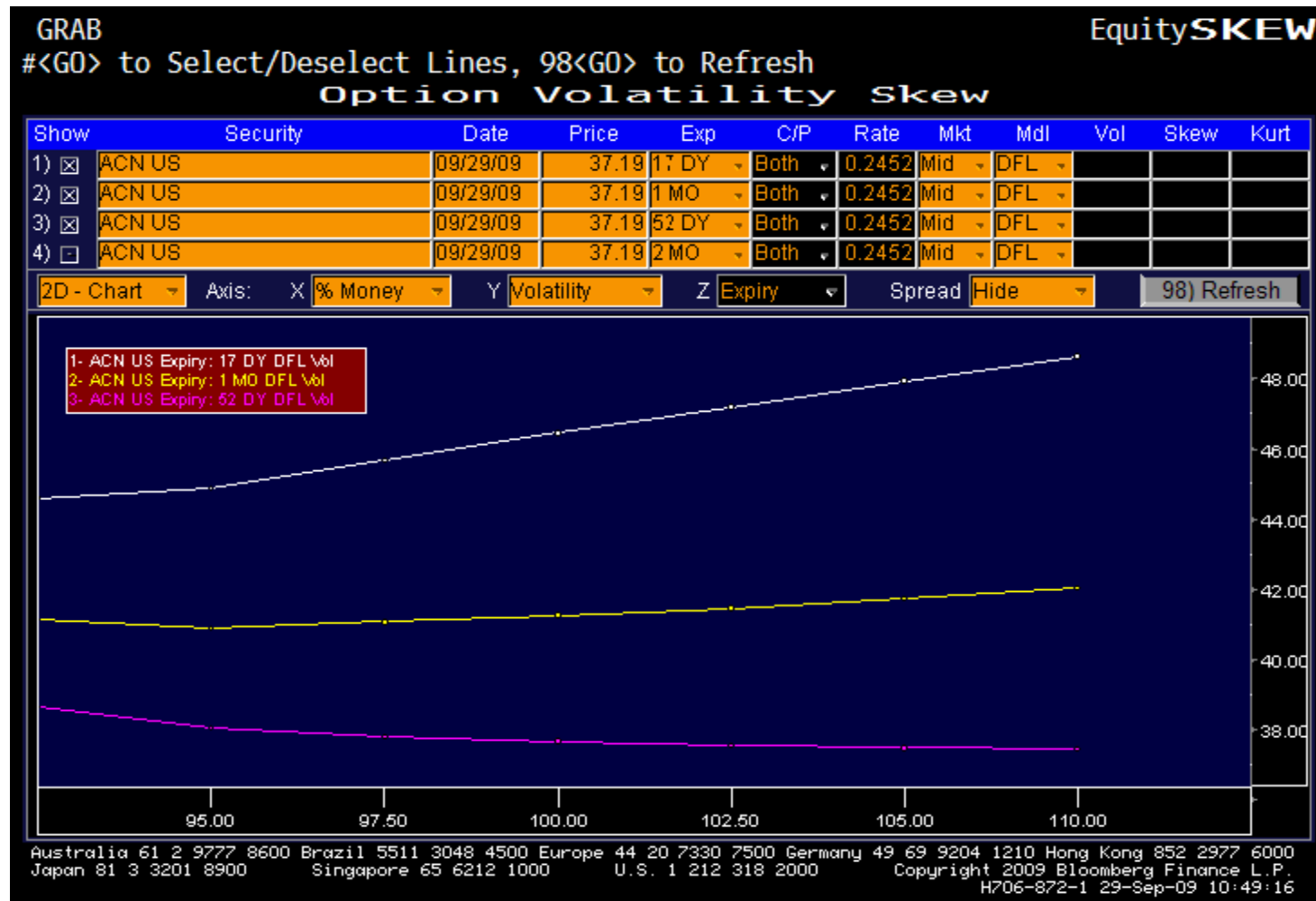
[Against the Grain: Buy Accenture!](#) 

[U.S. Stocks to Open Lower Ahead of Spending Data](#)

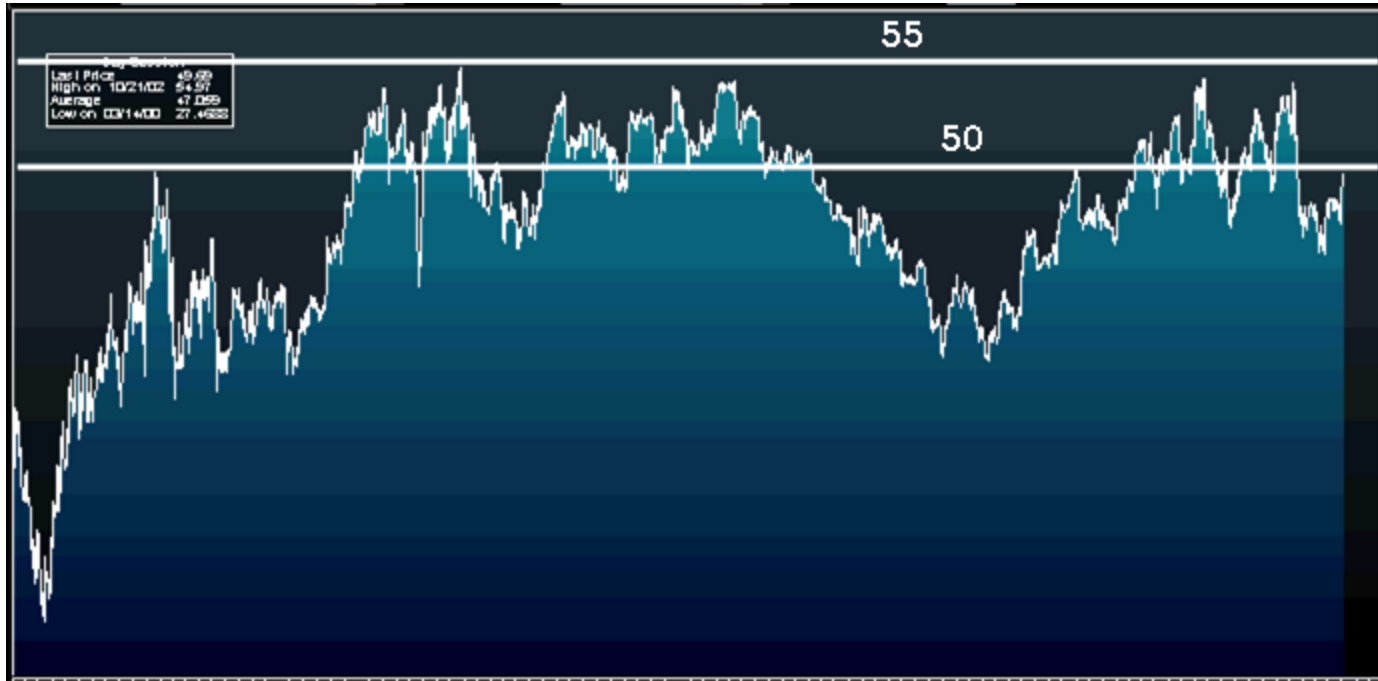
["Mad Money Lightning Round": Joy Global: Dirt Cheap](#)

[Tiger Woods Return No Help for Golf Stocks](#)

ACN: Inverted Skew



Prices: Jan 3, 2000-May 1, 2008



- What would you pay for the 2-month 57.5-strike call on this stock?

Feb 15, 2007

LATEST NEWS [BAC] Fitch cuts Bank of America to 'A+' and upgrades Countrywide

InBev, Anheuser-Busch rise on merger talk

Deal would be strategically 'positive' for Budweiser owner, analyst says

By [William Spain](#) & [Steve Goldstein](#), MarketWatch

Last update: 2:39 p.m. EST Feb. 15, 2007 | [Comments: 1](#)

NEW YORK (MarketWatch) -- A merger of the world's largest beer makers, InBev and Anheuser-Busch, would be difficult because the combination would face antitrust hurdles and the entrenched management teams would compete for key roles in the merged business, industry analysts said Thursday.

<http://www.marketwatch.com/news/story/anheuser-busch-inbev-rally-report-merger/story.aspx?guid=%7B5C244FF2-6973-4CC2-BF15-61E8F9416B13%7D>

May 24, 2008

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InBev Said to Consider Bid for Anheuser-Busch

By **ANDREW ROSS SORKIN** and **MICHAEL J. de la MERCED**
Published: May 24, 2008

The Belgian beer giant InBev is in the early stages of preparing what could be a \$44.6 billion offer for [Anheuser-Busch](#), the American maker of Budweiser beer, people briefed on the matter said Friday.

[Enlarge This Image](#)



Geert Vanden Wijngaert/Associated Press
Carlos Brito, the chief executive of InBev, which might pursue the largest deal ever in the beverages industry.

InBev is the world's largest brewer by sales volume and the maker of Stella Artois. Anheuser-Busch, the longtime giant of American brewers, holds more than 50 percent of the domestic market. Such a union would be the largest deal ever in the beverages industry.

But any possible InBev bid, these people said, was still far off.

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June 11, 2008

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The New York Times
Wednesday, July 16, 2008

Business

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DealBook Edited by Andrew Ross Sorkin

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Anheuser-Busch Confirms \$46.4 Billion InBev Offer

June 11, 2008, 5:10 pm

Link to This TOPICS Mergers & Acquisitions, Battle for Budweiser
E-mail this INDUSTRIES Food & Beverage



Anheuser-Busch confirmed on Wednesday that it has received a \$46.4 billion takeover offer from Belgium's **InBev**, in what would be a union of two of the largest beer brewers in the world. (Read InBev's letter to Anheuser-Busch [here](#).)

The iconic American company, which produces Budweiser, confirmed that InBev has offered \$65 a share and said that it will review the proposal and will make a decision "in due course." August A. Busch IV, the company's chief executive and a scion of the controlling Busch family, has said that he and his management have prepared several takeover defenses.

A spokeswoman for Anheuser-Busch declined to comment beyond the statement.

BUD Prices

GRAB			EquityHP					
CLOSE/PRICE			Page 1 / 1					
ANHEUSER-BUSCH COS INC. (BUD US) (Not Quoted)			HI 62.26 ON 6/27/08					
Range 4/28/08 to 6/27/08			AVE 55.5866 VL 13886271					
USD			ON 4/28/08					
Period D Daily			Market I Trade					
DATE	PRICE	VOLUME	DATE	PRICE	VOLUME	DATE	PRICE	VOLUME
F 6/27	62.26	15985720	F 6/ 6	57.28	9089748	F 5/16	51.73	3862916
T 6/26	61.35	25177346	T 6/ 5	57.75	9325588	T 5/15	51.81	6614588
W 6/25	61.76	14647593	W 6/ 4	56.77	8711330	W 5/14	51.43	7546072
T 6/24	61.13	9925277	T 6/ 3	56.94	18093167	T 5/13	52.05	9177190
M 6/23	60.90	8411746	M 6/ 2	57.78	12853756	M 5/12	51.61	4005143
F 6/20	60.67	24318096	F 5/30	57.46	10296519	F 5/ 9	50.93	4084856
T 6/19	61.05	18026605	T 5/29	56.55	10294236	T 5/ 8	51.12	4744942
W 6/18	61.90	20079069	W 5/28	55.13	18412533	W 5/ 7	50.71	5674957
T 6/17	61.20	17412363	T 5/27	56.75	21165453	T 5/ 6	52.04	7277027
M 6/16	60.53	19096755	M 5/26			M 5/ 5	51.41	8592640
F 6/13	61.12	30312561	F 5/23	56.61	54696103	F 5/ 2	50.28	4749655
T 6/12	61.40	85290286	T 5/22	52.58	6803020	T 5/ 1	49.69	4461774
W 6/11	58.35	20859712	W 5/21	52.65	10646775	W 4/30	49.20	5076572
T 6/10	57.15	5506983	T 5/20	50.65	6564496	T 4/29	49.41	5921132
M 6/ 9	57.54	5753170	M 5/19	50.55	5671552	M 4/28	48.63	5778913

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The Options Market: May 6, 2008

Derivatives Strategy Multi-Strategy Update

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06 May 2008

Daily

Chart of the Day Game on for BUD?

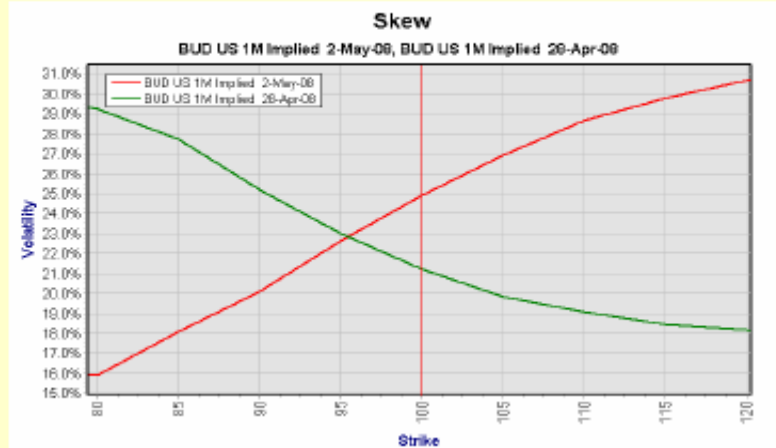
Stock traders may have noticed BUD's strong share price performance the past few days.

But we also highlight the change to the skew. In just a week, skew has changed from a more typical negative skew (the green line) to positive (red line).

This indicates that options traders are increasingly buying calls – effectively pricing in an increased chance of upside surprise.

We often see this occur when the market thinks an M&A deal is about to target a stock. If this is true – it could soon be game-on for BUD.

BUD Skew (1 day vs 1 week ago)



57.5 strike

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