

Global Equity Research

Americas

Internet Services

Market Comment

UBS Investment Research Internet Search News

News on the Pay-Per-Call Model. Separately, Possible Changes at Google

■ Small, but Interesting Step Forward for Pay-Per-Call

Earlier this week, Citysearch (with CIRXIT) announced the rollout of its PFP-Calls product. It allows merchants "to track business leads through the number of phone calls they receive". It works by placing a toll-free phone number wherever the advertising is listed. This does not yet generate calls through a mouse click, but it is a step forward for local search and the pay-per-call model.

■ Pay-Per-Call Could be Important for Local Search

We are in the early stages of the pay-per-call model. We think it is particularly important for local businesses that don't necessarily have a Web presence, but want to participate in search ads (many place a greater value on a call than a Website visit). This model also helps blur the lines between yellow pages and online ads.

■ Separately, We Expect to See New Limits on Google Affiliates

Currently, there are no limits on the number of sponsored links to the same URL that appear for a keyword. GOOG is likely to limit this so that duplicates disappear. E.g., if you search for a term, you may see multiple sponsored links to the same URL (e.g.,multiple links to eBay.com, almost always placed by eBay affiliates). We expect GOOG to limit it so that each URL has only one link.

■ Google Advertising for One of Its Own Products

We believe that this is among the first times GOOG is advertising directly to consumers.

10 December 2004

www.ubs.com/investmentresearch

Benjamin A. Schachter

ben.schachter@ubs.com +1-212-713 9310

Pay-Per-Call Model

We think Citysearch's announcement earlier this week that it was rolling out its PFP-Calls product is an important step forward for the pay-per-call model. While it is very early in the evolution of the pay-per-call model, we think that as it matures, it will be an important driver for local search, particularly as it relates to shifting yellow pages dollars online.

In the case of Citysearch, the model works as follows: An advertiser chooses particular categories and locations (e.g., Restaurants, Manhattan) and Citysearch will place a trackable toll-free number wherever the ad appears on Citysearch. When a potential customer calls the business using that number, the business is charged a fee (the business places a monthly maximum they are willing to spend). Once the maximum is reached, the number is removed and Citysearch users must click through to reach the business's normal phone number (though the toll-free number still works).

This is an interesting first step for the pay-for-call model, but we think its potential could be much larger. The vision is for a consumer to be able to click on the link and be connected via voice to the business. This could happen either through the computer (though this will likely be limited by consumer reluctance and ability to navigate voice through the PC), or more importantly through a consumer's regular phone. The technology allows consumers to click on the link and then their phone rings while simultaneously ringing the phone of the desired business. We believe all businesses, but local in particular, may find this new model intriguing. Imagine how much more valuable it might be to a local restaurant to have a user call and make a reservation than to just click through to its Website.

This model also helps blur the lines between yellow pages and online advertising, as it is more relevant to the millions of local businesses that do not have a Web presence. We think it would be much more difficult to explain to a local dry cleaner why he needs to have a website, than it might be to try to sell him on the idea of paying for incoming calls. Again, we are in the early stages of this new model, but we believe its potential is worth watching. (UBS estimates that yellow pages advertising is a \$14 billion business in the U.S.)

In Unrelated News, We Expect to See New Limits on Google Affiliates

Currently, there are no limits on the number of sponsored links to the same URL that appear for a keyword. We believe that Google is likely to limit this so that duplicates do not appear. Currently, if you search for a term, you may see multiple sponsored links to the same URL (e.g., eBay.com, almost always placed by eBay affiliates). We think Google may limit it so that only one eBay.com link would appear.

We note that Yahoo! already has such restrictions in place, and even goes a step further in not allowing affiliate marketers to place a link to any site they do not own (on Yahoo!'s sites, affiliate marketers generally put up landing pages instead and then attempt to move users to the target site). If we are unclear in this, go to Yahoo! and Google and do a search for the term "Mcafee". You'll notice that on Google, there will be multiple sponsored links to Mcafee.com, whereas on Yahoo! there will probably be either none or only one link directly to Mcafee.com. The multiple listings on Google come from affiliate marketers. We think multiple links to the same URL is not inline with Google's stated mission of organizing the world's information and making it universally accessible and useful.

We do not yet have a clear timetable for when this potential change might occur, or exactly what any new rules might be, but we would be surprised if it happened during the holiday season.

It is also unclear how a potential change by Google to move to rules more similar to Yahoo!'s regarding affiliate marketing might impact its revenue. On the one hand, limiting the number of times a URL can appear would likely increase the bidding for that keyword, but it might also decrease the number of ads on that page. At the end of the day, we think it should increase relevancy, as we believe too many relevant sponsored links are being "pushed out" by affiliates advertising the same URL.

If such a change in Google's affiliate ads were to move forward, we think it would likely impact Google's revenue in the short-term. By how much is hard to quantify, in our view, as we think it would be very difficult accurately estimate how many keywords would be affected. However, we think for the long-term integrity of the advertising network, something needs to be done.

Google Advertising for One of Its Own Products

In our Web searching, we came across a banner ad for Google's Desktop Search product. We believe that this among the first times Google has advertised directly to consumers. The company confirmed that it is indeed running a small experimental test for the Desktop Search product.

■ Statement of Risk

Yahoo and Google generate the majority of their revenue from online advertising. Online advertising is a relatively new industry. There is risk that the industry could fail to grow for a variety of reasons. Yahoo and Google's businesses could suffer if the online advertising industry were to become depressed.

Yahoo and Google face significant competition from a large number of other companies, including Microsoft. They also face competition from smaller start-ups that are developing new competing technologies. Yahoo and Google's share of online advertising dollars could fall because of this competition.

■ Analyst Certification

Each research analyst primarily responsible for the content of this research report, in whole or in part, certifies that with respect to each security or issuer that the analyst covered in this report: (1) all of the views expressed accurately reflect his or her personal views about those securities or issuers; and (2) no part of his or her compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed by that research analyst in the research report.

Required Disclosures

This report has been prepared by UBS Securities LLC, an affiliate of UBS AG (UBS).

UBS Investment Research: Global Equity Ratings Definitions and Allocations

UBS rating	Definition	UBS rating	Definition	Rating category	Coverage ¹	IB services ²
Buy 1	FSR is > 10% above the MRA, higher degree of predictability	Buy 2	FSR is > 10% above the MRA, lower degree of predictability	Buy	41%	33%
Neutral 1	FSR is between -10% and 10% of the MRA, higher degree of predictability	Neutral 2	FSR is between -10% and 10% of the MRA, lower degree of predictability	Hold/Neutral	50%	33%
Reduce 1	FSR is > 10% below the MRA, higher degree of predictability	Reduce 2	FSR is > 10% below the MRA, lower degree of predictability	Sell	9%	27%

^{1:} Percentage of companies under coverage globally within this rating category.

Source: UBS; as of 30 September 2004.

KEY DEFINITIONS

Forecast Stock Return (FSR) is defined as expected percentage price appreciation plus gross dividend yield over the next 12 months.

Market Return Assumption (MRA) is defined as the one-year local market interest rate plus 5% (an approximation of the equity risk premium).

Predictability Level The predictability level indicates an analyst's conviction in the FSR. A predictability level of '1' means that the analyst's estimate of FSR is in the middle of a narrower, or smaller, range of possibilities. A predictability level of '2' means that the analyst's estimate of FSR is in the middle of a broader, or larger, range of possibilities.

Under Review (UR) Stocks may be flagged as UR by the analyst, indicating that the stock's price target and/or rating are subject to possible change in the near term, usually in response to an event that may affect the investment case or valuation. **Rating/Return Divergence (RRD)** This qualifier is automatically appended to the rating when stock price movement has caused the prevailing rating to differ from that which would be assigned according to the rating system and will be removed when there is no longer a divergence, either through market movement or analyst intervention.

EXCEPTIONS AND SPECIAL CASES

US Closed-End Fund ratings and definitions are: Buy: Higher stability of principal and higher stability of dividends; Neutral: Potential loss of principal, stability of dividend; Reduce: High potential for loss of principal and dividend risk.

UK and European Investment Fund ratings and definitions are: Buy: Positive on factors such as structure, management, performance record, discount; Neutral: Neutral on factors such as structure, management, performance record, discount; Reduce: Negative on factors such as structure, management, performance record, discount.

Core Banding Exceptions (CBE): Exceptions to the standard +/-10% bands may be granted by the Investment Review Committee (IRC). Factors considered by the IRC include the stock's volatility and the credit spread of the respective company's debt. As a result, stocks deemed to be very high or low risk may be subject to higher or lower bands as they relate to the rating. When such exceptions apply, they will be identified in the Companies Mentioned table in the relevant research piece.

Companies mentioned

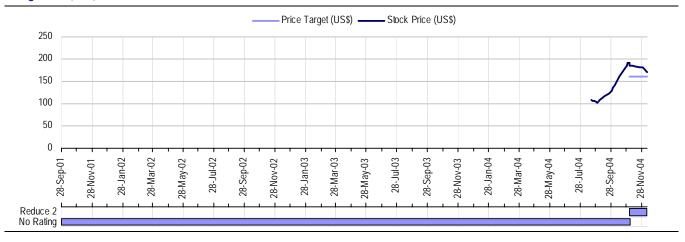
Company Name	Reuters	Rating	Price
Google Inc. ^{2,5,13,16}	GOOG.O	Reduce 2	US\$169.98
Yahoo Inc. ¹⁶	YHOO.O	Neutral 2 (RRD)	US\$37.05

Price(s) as of 8 December 2004. Source: UBS.

^{2:} Percentage of companies within this rating category for which investment banking (IB) services were provided within the past 12 months.

- 2. UBS AG, its affiliates or subsidiaries has acted as manager/co-manager in the underwriting or placement of securities of this company or one of its affiliates within the past 12 months.
- 5. UBS AG, its affiliates or subsidiaries expect to receive or intend to seek compensation for investment banking services from this company within the next three months.
- 13. UBS AG, its affiliates or subsidiaries beneficially owned 1% or more of a class of this company's common equity securities as of last month's end (or the prior month's end if this report is dated less than 10 days after the most recent month's end).
- 16. UBS Securities LLC and/or UBS Capital Markets LP makes a market in the securities and/or ADRs of this company. Unless otherwise indicated, please refer to the Valuation and Risk sections within the body of this report.

Google Inc. (US\$)



Yahoo Inc. (US\$)



Source: UBS; as of 8 December 2004.

Note: On October 13, 2003, UBS adopted new definition criteria for its rating system. (See 'UBS Investment Research: Global Equity Ratings Definitions and Allocations' table for details.) Between January 11 and October 12, 2003, the UBS ratings and their definitions were: Buy 1: Excess return potential > 15%, smaller range around price target; Buy 2: Excess return potential > 15%, larger range around price target; Neutral 1: Excess return potential between -15% and 15%, smaller range around price target; Neutral 2: Excess return potential between -15% and 15%, larger range around price target; Reduce 1: Excess return potential < -15%, smaller range around price target. Prior to January 11, 2003, the UBS ratings and definitions were: Strong Buy: Greater than 20% excess return potential, high degree of confidence; Buy: Positive excess return potential; Hold: Low excess return potential, low degree of confidence;

Reduce: Negative excess return potential; Sell: Greater than 20% negative excess return potential, high degree of confidence. Under both ratings systems, excess return is defined as the difference between the FSR and the one-year local market interest rate.

Global Disclaimer

This report was produced by: UBS Securities LLC, an affiliate of UBS AG (UBS).

Head Office: UBS Limited, 1 Finsbury Avenue, London, EC2M 2PP, UK Phone: +44-20-7567 8000

Local Office: UBS Securities LLC, 1285 Avenue of the Americas, New York, NY 10019 Phone: +1-212-713 2000

This report has been prepared by UBS AG or an affiliate thereof ("UBS"). In certain countries UBS AG is referred to as UBS SA.

This report is for distribution only under such circumstances as may be permitted by applicable law. It has no regard to the specific investment objectives, financial situation or particular needs of any specific recipient. It is published solely for informational purposes and is not to be construed as a solicitation or an offer to buy or sell any securities or related financial instruments. No representation or warranty, either express or implied, is provided in relation to the accuracy, completeness or reliability of the information contained herein, except with respect to information concerning UBS AG, its subsidiaries and affiliates, nor is it intended to be a complete statement or summary of the securities, markets or developments referred to in the report. The report should not be regarded by recipients as a substitute for the exercise of their own judgement. Any opinions expressed in this report are subject to change without notice and may differ or be contrary to opinions expressed by other business areas or groups of UBS as a result of using different assumptions and criteria. UBS is under no obligation to update or keep current the information contained herein. UBS, its directors, officers and employees (excluding the US broker-dealer unless specifically disclosed under required disclosures) or clients may have or have had interests or long or short positions in the securities or other financial instruments discussed in this report, and may have or have had a relationship with or may provide or has provided investment banking, capital markets and/or other financial instruments discussed in this report, and may have or have bad a relationship with or may provide or has provided investment banking, capital markets and/or other financial services to the relevant companies. Employees of UBS may serve or have served as officers or directors of the relevant companies. UBS may rely on information barriers, such as "Chinese Walls," to control the flow of information contained in one or more areas within UBS,

The securities described herein may not be eligible for sale in all jurisdictions or to certain categories of investors. Options, derivative products and futures are not suitable for all investors, and trading in these instruments is considered risky. Past performance is not necessarily indicative of future results. Foreign currency rates of exchange may adversely affect the value, price or income of any security or related instrument mentioned in this report. For investment advice, trade execution or other enquiries, clients should contact their local sales representative. Neither UBS nor any of its affiliates, nor any of UBS' or any of its affiliates, directors, employees or agents accepts any liability for any loss or damage arising out of the use of all or any part of this report. Additional information will be made available upon request.

United Kingdom and rest of Europe: Except as otherwise specified herein, this material is communicated by UBS Limited, a subsidiary of UBS AG, to persons who are market counterparties or intermediate customers (as detailed in the FSA Rules) and is only available to such persons. The information contained herein does not apply to, and should not be relied upon by, private customers. Switzerland: Distributed by UBS AG to persons who are institutional investors only. Italy: Should persons receiving this research in Italy require additional information or wish to effect transactions in the relevant securities, they should contact Giubergia UBS SIM SpA, an associate of UBS SA, in Milan. South Africa: UBS South Africa (Pty) Ltd (incorporating J.D. Anderson & Co.) is a member of the JSE Securities Exchange SA. United States: Distributed to US persons by either UBS Securities LLC or by UBS Financial Services Inc., subsidiaries or UBS AG; or by a group, subsidiary or affiliate of UBS AG that is not registered as a US broker-dealer (a "non-US affiliate"), to major US institutional investors only. UBS Securities LLC or UBS Financial Services Inc. accepts responsibility for the content of a report prepared by another non-US affiliate when distributed to US persons by UBS Securities LLC or UBS Financial Services Inc., and not through a non-US affiliate. All transactions by a US person in the securities mentioned in this report must be effected through UBS Securities LLC or UBS Financial Services Inc., and not through a non-US affiliate of its directors and senior officers will be provided upon request. Hong Kong: Distributed by UBS Securities Asia Limited. Singapore: Distributed by UBS Securities Singapore Pte. Ltd. Japan: Distributed by UBS Securities Japan Ltd to institutional investors only. Australia: Distributed by UBS AG (Holder of Australian Financial Services Licence No. 231087) and UBS Securities Australia Ltd. (Holder of Australian Financial Services Licence No. 231088) only to "Wholesale" clients as defined by s7

© 2004 UBS. All rights reserved. This report may not be reproduced or redistributed, in whole or in part, without the written permission of UBS and UBS accepts no liability whatsoever for the actions of third parties in this respect.

