Richard Kramer, Analyst
Arete Research Services LLP
richard.kramer@arete.net / +44 (0)20 7959 1303

Rocco Strauss, Analyst
Arete Research Services LLP
rocco.struass@arete.net / +44 (0)20 7959 1304

Google: Pandora's Box Opens a Crack

Internet | **Best Idea: Long** | **21 July 2015**

It appears Google started to change its approach to its minimal – and often misleading – disclosure, which we think has both business and valuation benefits (see *Google: Opening Pandora's Box*, Feb. '15). **We see Google creating the illusion that transparency and capital returns are imminent, long before they have been delivered.** It can do this because underlying margins and growth are accelerating, cash has quietly been repatriated, and FX is masking underlying earnings power, helping Google reverse a period of underperformance and command a re-rating for its long-dominant position in Internet services. We think Google can show rising margins based on a mix away from hardware and towards its own Sites. **Blending our DCF, an 11x EV/Adj. EBITDA (similar to sector peers), and a 20x GAAP target P/E on '17 estimates plus net cash of $59bn (adjusted for tax), yields a new price target of $800, 21% upside on Google class C shares (our prior target of $675 was based on '16E EPS).** We keep our Best Idea Long rating, expecting Google has a carefully laid out script for the coming year, of modest revelations in disclosure, addressing "capital not employed," and seeing rising sales amidst easing FX burdens.

Transparency and Capital Returns: Raindrops in a Desert

Such is the paucity of fresh data coming from Google that a few numbers on YouTube (unlikely to be given on a consistent basis) were received with fervent enthusiasm. **After a period of the customary "soliciting investor feedback", we expect Google will make minimal concessions in reporting, like offering "metrics" on an occasional, inconsistent basis.** We think Google could circumvent any "10%" rule for segmental disclosure, but can see an "Amazon-AWS" moment of speculation around YouTube sales (if not segment profit, if reported), with arguments mustered for both the growth/scale vs. profit trade-off. Just as helpful, but even less likely, would be a regional breakdown of "Rest of World" (45% of sales, with reported sales 6-12% lower due to FX translation, despite hedging). **Similarly, the new CFO's very mention of the words "capital returns" were taken to mean dividends, buybacks and leverage were *fait accompli*.** Google could pay a $10/share dividend, costing ~$7bn, giving it a yield of 1.5% (similar to Apple's starting position); this would take less than a quarter of US-based cash and reflect <25% of likely FCF in 2016. Table 1 shows how Google increased US cash from $20bn to $29bn since 3Q14, helping avoid a messy "offshore cash/onshore debt" capital structure. Such a "pay-out ratio" would balance Google's desire to invest in world-changing projects with a need to mollify investors (and widen its appeal to income funds). **Even so, one can see in Table 2 how we think Google might have "written out" a script to gradually reveal "hints" around disclosure and reforming its cash-heavy capital structure.**

Table 1: Bringing Home the Bacon

	3Q14	4Q14	1Q15	2Q15
Net Cash	$53.5bn	$56.4bn	$58.5bn	$61.9bn
Gross Cash	$62.2bn	$64.4bn	$65.4bn	$69.8bn
Off-shore Cash	$41.8bn	$38.7bn	$37.6bn	$40.5bn
US Gross Cash	**$20.4bn**	**$25.7bn**	**$27.8bn**	**$29.3bn**

Source: Google, Arete Research estimates.

Table 2: Writing the Script

	2Q15	3Q15	4Q15
Transparency	YouTube metrics, (w/o compares)	More "new" metrics, w/o pt. of reference	Review whether **obliged to break out YT**
Capital Returns	Mention prospect, no commitment	"reviewing options" post-investor feedback	**Announce quarterly dividend** from 1Q16
Growth	Cite FX headwinds, w/o ref. to profits	Sales growth rises ex-FX headwinds, hedges	**Near to "normalised" ~20% RoW growth**
Margins	+50bps GAAP, +140bps non-GAAP	Easy comps vs. weak 3Q14 margins	**Proof that "discipline" not a "one-off"**

Source: Arete Research estimates.

Table 3: Summ. Financials, '13-'17E | **Ticker: GOOG US** | **Price at 20 Jul. '15: $662**
Enterprise Value: $396bn | **Target Price: $800 (+21%)** | **DCF Value: $861**

Year to Dec.	Sales	Sales ex-TAC	Growth	GAAP EBIT	Margin	EPS	Non-GAAP EPS	P/E	Non-GAAP P/E	EV/Adj. EBITDA	FCF Yield
2013	$55.5bn	$42.3bn	*21%*	$15.4bn	*27.7%*	$18.8	$21.9	35.3x	30.3x	17.6x	*3%*
2014	$66.0bn	$52.5bn	*19%*	$16.5bn	*25.0%*	$20.6	$25.9	32.2x	25.6x	15.2x	*3%*
2015E	$74.7bn	$60.7bn	*13%*	$20.3bn	*27.2%*	$24.0	$29.7	27.6x	22.3x	13.0x	*4%*
2016E	$85.1bn	$69.7bn	*14%*	$24.8bn	*29.2%*	$29.3	$35.6	22.6x	18.6x	10.8x	*5%*
2017E	$96.3bn	$79.6bn	*13%*	$29.8bn	*31.0%*	$35.0	$41.6	18.9x	15.9x	9.2x	*6%*

Source: Arete Research ests. We adjust for tax on offshore cash in our EV. We use the GOOG (Class C shares) ticker.

For Reg. AC certification and Important Disclosures, see the last two pages of this report.

Going Against Type, to Please a New Audience

We still think – against all likelihood – that Google would benefit both shareholders and also its regulatory situation by holding an analyst day. An analyst day need not be a self-congratulatory event like Google's I/O developer conference or Brandcast – essentially pitches; but Google would do well to frame its own case for the trade-off between free services and the ad-funded business model, making a positive case with regulators and politicians that it should not be punished for commercial investments in building vast computing platform assets, populating them with "donated" data. In *Google: Future Shock* (July '14), we said Google left its top issues with investors mostly un-resolved. This is still the case, share price moves notwithstanding. Beyond this, Google could also cover reasons behind the sustainability of its core advertising business, and how it realises value from its many initiatives and Venture investments. Google might also narrow its focus as to which of its efforts in **e-commerce**, **transport**, **content distribution**, **health care**, **smart home** and **enterprise** could provide $7bn+ of extra sales (i.e., help Google grow 10%) in a few years' time. It is amazing how analysts – ourselves included – have been relatively untroubled by the -13% and -16% CPCs seen in 1Q15 and 2Q15, so long as TrueView ads were offered as an explanation, while Sites paid clicks growth accelerated from +25% yoy for three quarters to 30% yoy in 2Q15 (against a comp of +33% growth). Investors should know that some of this "new-found transparency" stems from the need to explain, and avoid a severe reaction to, the 1Q15 CPC number. **Its new CFO is less likely to get asked whether she cares about the share price – paying $5bn of stock comp costs in '15 – but Google's disclosure and capital return story are both more hope than reality for now.** We still think the top priority for Google must be to resolve its EU investigations around search results and bundling Android and GMS. Being the 2nd-largest lobbying spender in Washington is no guarantee US regulators will wave aside any future deals; **we see little chance Google undertakes large-scale M&A until it has a regulatory settlement (and can avoid in-depth investigations).**

Costs in US$, FX Masks Underlying Profits

Google IR suggests we should not assume the "missing" $800m and $1.1bn in 1Q15 and 2Q15 due to FX (after hedging) would have all flowed to the bottom line; **we think they are underplaying the impact of FX on earnings.** We think Google's cost base is primarily in the US (as well as in countries where it likely bases costs on US$). While it offers no headcount breakdown, Google has 76% of its "long-lived assets" in the U.S., and we expect it sources most of its "production equipment" in US$ (since component and hardware suppliers largely price in US$ globally). Adjusted for FX and realised hedging gains, "rest of world" sales grew 20% and 22% in 1Q and 2Q, respectively, while the UK rose 17% and 11%. **Table 4 shows that by our rough calculations, FX dampened Google EPS by ~10% in 1Q15 and ~15% in 2Q15; as FX impacts ease in 2H15, margins could rise further.** Moreover, accounting changes made in 2Q15 (after an "incorrect classification between legal entities") saw $1.34bn of '14 sales and $333m in 1Q15 "moved" from RoW to the US. **This should help future US cash generation.**

Table 4: What FX Might Have Done to EPS

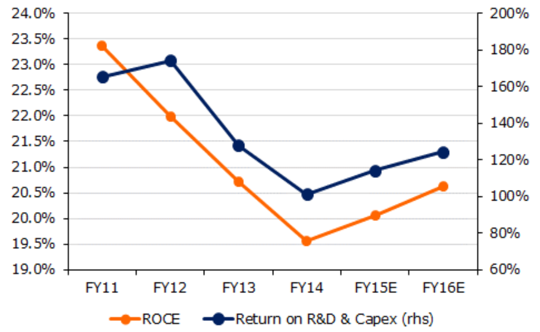
	1Q15	2Q15
Reported Sales	17,258	17,727
Const. FX Sales	18,053	18,830
Difference	*4.6%*	*6.2%*
TAC	3,445	3,512
Other COGS	3,162	3,366
Gross Margin	*63.4%*	*63.5%*
Reported Gross Margin	*63.2%*	*62.9%*
R&D	2,808	2,845
G&A	1,637	1,450
S&M	2,168	2,205
EBIT	4,833	5,452
Reported EBIT	4,447	4,825
Difference	*8.7%*	*13.0%*
OI&E, ex FX Losses	219	230
PTP	5,052	5,682
Tax @ Same Rate	1,197	1,175
EPS	**5.59**	**6.52**
Reported EPS	5.10	5.69
Difference	*9.7%*	*14.6%*

Source: Arete Research.

Google's Mix Boosts Margins

Google's four-year flirtation with hardware – stretching back to Motorola in '12 – is finally waning. The Nexus range settled into a minimal niche, attracting vendors looking to trade off publicity for producing zero-margin devices carrying Google's brand. The latest Nexus 9 tablet was hardly visible in HTC's results. This removes low gross margin product from the mix: anyone hear a mention of Chromebooks recently? By virtue of attracting users to its "one billion" audience properties (YouTube, Gmail, Android, Maps, Search), it will rely less on its Network, where its take rate is anyways rising. **Simply put, Google has to pay less to acquire traffic from its Network, and less to distribute its Sites-based products.** YouTube may change this: content acquisition costs are part of "Other COGS" – a total of $12.8bn in '15, excl. stock comp – as well as gross payments to Play Store providers, data centre costs, and amortisation ($1.1bn in '14, excl. a $378m write-down, with $865m in purchased asset amortisation

Fig. 1: Declining Returns Reversing?



Source: Arete Research.

expected in '15). We think YouTube already has far higher music engagement than dedicated services like Spotify or Pandora, and far broader reach than Netflix, valued at $50bn. As one can see in Fig. 1, **we think Google can now show rising ROCE and returns on capex and R&D, as the latter two are reined in.** We see the record FCF of $4.5bn in 2Q15 supporting our FCF forecast of $18.8bn in '15E (up from our previous $18bn, partly due to "discipline" shown in 2Q15). Google still has ample investments (many in enterprise) it could do more to either justify or profit from. **No one would assume Google is investing in cloud, enterprise, home automation or transport purely for defensive (or altruistic) reasons.** There are still many assets Google has, but investors largely overlook: It is owed $1.5bn by Lenovo, holds $1bn of Lenovo and Arris shares, and refuses to disclose how it values the $1.6bn Google Ventures fund, which includes 250+ private company stakes, worth in aggregate far more than the value of funds invested. **This circles back to any additional disclosure Google might wish to make, and ironically, perhaps it feels less compelled to do so now that its share price is again rising.**

Search, Android, and Other Big Questions

Google has long faced the notion that search was growing less relevant, but hedges this with a combination of Android, Maps and deep links with web brands/apps. It is some comfort that mobile search has overtaken desktop in 10 markets, including the US and Japan, without materially denting results, while 30% of mobile search queries involve location, playing to Google's resource base in Maps and signalling even deeper efforts in local advertising. There is no evidence Facebook or Apple are able to replicate Google's search corpus, and Bing has made a series of bizarre moves (potentially divorcing with Yahoo while transferring sales teams to AOL). While advertisers bemoan the shortcomings of search, they probably cannot avoid working with Google given its scale. **Even with TAC growing slower than sales in '15, many rival Internet publishers rely on Google's annual $14bn of traffic acquisition payments: this buys a lot of bitten tongues.** We do not see Apple easily shifting away from Google for mobile Safari search given Google Search remains among the top free iPhone apps. We do think Google needs to act to revive Android, after several years of mixed messages for vendors, and with so many "official" (i.e., GMS) Android smartphone/tablet vendors barely making profits on hardware (see *Smartphones: Down to the Final Four,* July '15). T rying to standardise the low-end with Android One just further narrows the space for branded vendors. As we said in Feb., "Google must offer more ways for partners to benefit from the Android ecosystem" before it feels the pain from nearly half of "Android" devices shipping in '15 being Android Open Source, not Google's GMS. **Google has hardly resolved the long-term debate over the centrality of search, or the threat to Android from the relentless rise of Apple among affluent users (now reaching 250m devices p.a.), but neither of these risks has harmed results.**

Valuation: Uncharted Waters?

As Google shares reach new highs, there is a temptation to wave aside valuation caution. We resist this, partly due to Google's scale: moon-shots are needed to bring meaningful sales growth to a business already on track for $75bn of '15E sales. There is obviously upside based on our DCF, which yields an ~$860 fair value. If Google keeps ramping FCF (and should have rising depreciation after its surge in capex) while FX pressures ease, this supports a rising DCF value. There is also an argument that Google deserves a premium to our sector average of 11x EV/EBITDA, but here we exercise restraint until the regulatory investigations are finalised. This multiple yields a fair value of ~$776. Finally, we roll forward our 20x GAAP P/E to 2017 estimates and see Google worth ~$762. Blending these three approaches gives us a new $800 target price for YE16. The one-off $522m payment in capital stock to Class C shareholders is part of a deal after new shares were issued; this should not create differential EPS in future. **Our theme for 2015 in Internet stocks was the way in which the Davids (smaller companies) would get crushed by the Goliaths, Facebook and Google. Both names remain Best Idea Longs, with our Google target showing a further 21% upside, even if near-term performance pauses to digest a one-time unprecedented rise in market value.**

Regulation AC - The research analyst(s) whose name(s) appear(s) on the front cover of this report certify that: all of the views expressed in this report accurately reflect their personal views about the subject company or companies and its or their securities, and that no part of their compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed in this report.

Required Disclosures

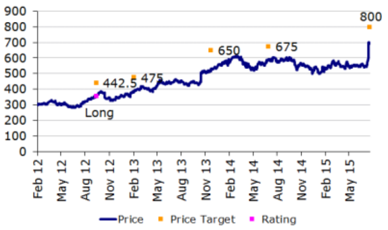
Company Name: Google (Best Idea Long), Target Price: $800 (YE16)

Valuation Methodology: We value Google on a blend of a DCF, 11x '17 Adj. EBITDA, and 20x '17E GAAP EPS of $35, plus net cash it held at 2Q15, adjusted for offshore tax.

Investment Risks:

1) Google is facing various regulatory investigations, which could force a structural separation of its search and other units or bring large fines;
2) Rivals may attack Google's search dominance with deals to buy market share, or encourage customers to use vertical search on their sites;
3) Google services face reputational risk from its tax and privacy policies;
4) Google is exposed to lower ad pricing based on rising levels of digital ad inventory and competes with multiple alternative digital ad platforms and locations;
5) Costs of distributing video or acquiring content for YouTube could rise significantly; advertisers may only slowly shift to digital and mobile and reduce spend on traditional media.

Price Chart



Source: Arete Research.

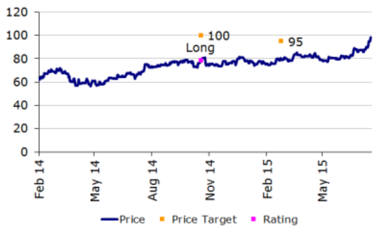
Company Name: Facebook (FB US-$98; Long), Target Price: $95 (YE15)

Valuation Methodology: We value Facebook based on a blend of an 11x 2017E Adj. EV/EBITDA and a DCF (25% sales CAGR until 2021, 8% WACC, 4% terminal growth rate).

Investment Risks:

1) Facebook competes for volatile digital advertising budgets with larger vendors like Google and a range of smaller companies;
2) Without having its own hardware ecosystem Facebook is beholden to the policies of Apple and Google around apps permissions;
3) Facebook is likely to face scrutiny over user data and privacy, especially in the EU where data protection laws are stronger;
4) A high-profile COO may leave in the coming few years, while the company will also likely continue to use its cash flow to acquire more technology assets.

Price Chart



Source: Arete Research.

Primary Analyst(s) Coverage Group: ASOS, Alcatel-Lucent, Alibaba, Apple, Autohome, Baidu, Bitauto, BlackBerry, Criteo, Ctrip.com, Ericsson, Facebook, Google, HTC, LG Electronics, Nokia, Qihoo, Qunar, Rocket Fuel, Samsung Electronics, Sony, Technicolor, Tencent, Twitter, Vipshop, Weibo, Yahoo, Yelp, Zalando.

Potential Conflicts: None.

Rating System: Long (L), Positive (+ve), Neutral (N), Negative (-ve), and Short (S) - Analysts recommend stocks as Long or Short for inclusion in Arete Best Ideas, a monthly publication consisting of the firm's highest conviction recommendations. Being assigned a Long or Short rating is determined by a stock's absolute return potential, related investment risks and other factors which may include share liquidity, debt refinancing, estimate risk, economic outlook of principal countries of operation, or other company or industry considerations. Any stock not assigned a Long or Short rating for inclusion in Arete Best Ideas may be rated Positive or Negative indicating a directional preference relative to the absolute return potential of the analyst's coverage group. Any stock not assigned a Long, Short, Positive or Negative rating is deemed to be Neutral. A stock's absolute return potential represents the difference between the current stock price and the target price over a period as defined by the analyst.

Distribution of Ratings - As of 30 June 2015, 15% of stocks covered were rated Long, 30% Positive, 10% Short, 30% Negative and 15% deemed Neutral.

Global Research Disclosures - This globally branded report has been prepared by analysts associated with Arete Research Services LLP ("Arete LLP"), Arete Research, LLC ("Arete LLC"), and Arete Research Asia Ltd. ("Arete Asia"), as indicated on the cover page hereof. This report has been approved for publication and is distributed in the United Kingdom and Europe by Arete LLP (Registered Number: OC303210, Registered Office: Southampton House, 317 High Holborn, London WC1V 7NL), which is authorized and regulated by the UK Financial Conduct Authority ("FCA"); in North America by Arete LLC (15 Broad St, Boston, MA 02109), a wholly owned subsidiary of Arete LLP, registered as a broker-dealer with the Financial Industry Regulatory Authority ("FINRA"); and in Asia by Arete Asia (CE No. ATS894, Registered Office: Suite 5A, Abdoolally House, 20 Stanley Street, Central, Hong Kong), which is authorized and regulated by the Securities and Futures Commission in Hong Kong. Additional information is available upon request. Reports are prepared using sources believed to be wholly reliable and accurate but which cannot be warranted as to accuracy or completeness. Opinions held are subject to change without prior notice. No Arete director, employee or representative accepts liability for any loss arising from the use of any advice provided. Please see www.arete.net for details of any interests held by Arete representatives in securities discussed and for our conflicts of interest policy.

U.S. Disclosures - Arete provides investment research and related services to institutional clients around the world. Arete receives no compensation from, and purchases no equity securities in, the companies its analysts cover, conducts no investment banking, market-making or proprietary trading, derives no compensation from these activities and will not engage in these activities or receive compensation for these activities in the future. Arete restricts the distribution of its investment research and related services to approved institutions only. Analysts associated with Arete LLP and Arete Asia are not registered as research analysts with FINRA. Additionally, these analysts may not be associated persons of Arete LLC and therefore may not be subject to Rule 2711 restrictions on communications with a subject company, public appearances and trading securities held by a research analyst account.

Singapore Disclosures - This document is distributed in Singapore only to institutional investors (as defined under Singapore's Financial Advisers Regulations ("FAR")) in reliance on Regulation 27(1)(e) of the FAR read in conjunction with Section 23(1)(f) of the Financial Advisers Act, Chapter 110 of Singapore. This document does not provide individually tailored investment advice. Subject to the foregoing, the contents in this document have been prepared and are intended for general circulation. The contents in this document do not take into account the specific investment objectives, financial situation or particular needs of any particular person. The securities and/or instruments discussed in this document may not be suitable for all investors. You should independently evaluate particular investments and strategies and seek advice from a financial adviser regarding the suitability of such securities and/or instruments, taking into account your specific investment objectives, financial situation and particular needs, before making a commitment to purchase any securities and/or instruments. This is because the appropriateness of a particular security, instrument, investment or strategy will depend on your individual circumstances and investment objectives, financial situation and particular needs. The securities, investments, instruments or strategies discussed in this document may not be suitable for all investors, and certain investors may not be eligible to purchase or participate in some or all of them. This document is not an offer to buy or sell or the solicitation of an offer to buy or sell any security and/or instrument or to participate in any particular trading strategy. This document may not be reproduced or provided to any person in Singapore without the prior written permission. The use or reliance on any information in this document is at your own risk and any losses which may be suffered as a result of you entering into any investment are for your account and Arete Research Services LLP and its affiliates shall not be liable for any losses arising from or incurred by you in connection therewith. You will conduct your own evaluation and consult with your own legal, business and tax advisors to determine the appropriateness and consequences of any investment and you will make any investment pursuant to an independent evaluation and analysis of the consequences of the same in reliance only upon your own judgment and not in reliance upon this document and/or any views, representations (whether written or oral), advice, recommendation, opinion, report, analysis, materials, information or other statement by Arete Research Services LLP or any of its affiliates, agents, nominees, directors, officers or employees. Arete Research Services LLP and its affiliates do not hold out any of its affiliates, agents, nominees, directors, officers or employees as having any authority to advise you, and Arete Research Services LLP and its affiliates do not purport to advise you on any investment. You will evaluate and accept all of the risks associated with an investment in any investment. Accordingly, Arete Research Services LLP and its affiliates is entitled to rely on your own independent evaluation and analysis. Any investment will be made at your sole risk and Arete Research Services LLP and its affiliates are not and shall not, in any manner, be liable or responsible for the consequences of any investment.

Section 28(e) Safe Harbor - Arete LLC has entered into commission sharing agreements with a number of broker-dealers pursuant to which Arete LLC is involved in "effecting" trades on behalf of its clients by agreeing with the other broker-dealer that Arete LLC will monitor and respond to customer comments concerning the trading process, which is one of the four minimum functions listed by the Securities and Exchange Commission in its latest guidance on client commission practices under Section 28(e). Arete LLC encourages its clients to contact Anthony W. Graziano, III (+1 617 357 4800 or anthony.graziano@arete.net) with any comments or concerns they may have concerning the trading process.

Asian Disclosures - The contents of this document have not been reviewed by any regulatory authority in Asia. You are advised to exercise caution and if you are in doubt about any of the contents of this document, you should obtain independent professional advice. Whilst considerable care has been taken to ensure the information contained within this document is accurate and up-to-date, no warranty is given as to the accuracy or completeness of any information and no liability is accepted for any errors or omissions in such information or any action taken on the basis of this information. The information may not be current and Arete Asia has no obligation to provide any updates or changes.

General Disclosures – This research is not an offer to sell or the solicitation of an offer to buy any security or in any particular trading strategy in any jurisdiction. It does not constitute a personal recommendation or take into account the particular investment objectives, financial situations, or need of the individual clients. Clients should consider whether any advice or recommendation in this research is suitable for their particular circumstances and, if appropriate, seek professional advice. The price and value of the investments referred to in this research and the income from them may fluctuate. Past performance is not a guide to future performance, future returns are not guaranteed, and a loss of original capital may occur. Fluctuations in exchange rates could have adverse effects on the value or price of, or income derived from, certain instruments. As with all investments, there are inherent risks that each individual should address.