GRANT'S
INTEREST RATE OBSERVER®
Vol. 38, No. 4c 233 Broadway, New York, New York 10279 • www.grantspub.com FEBRUARY 21, 2020

Top of the heap

Never before have so many invested so much in so few, as Morgan Stanley approximately said in noting the record-breaking 18% share of S&P 500 market cap that the five biggest stocks command. Facebook, Inc. (FB on the Nasdaq) is one of this elite. International Business Machines Corp. (IBM on the New York Stock Exchange) was a titan of yesteryear.

Skipping down to the bottom line, we reaffirm the verity that the stock market is a fickle friend. We likewise attest to the truth that the penthouse of technology is a temporary address. As to the two famous stocks under the *Grant's* lens, we're bearish on both.

Scale has its diseconomies as well as economies. At some invisible inflection point, the colossus loses more in dexterity than it gains in power and loses more in political vulnerability than it gains in commercial prestige. And at some other unmarked bend in the road, the once admirable founder of a great business may undergo the not unfamiliar personality transformation from entrepreneur to lord of creation. We won't name names, but divorce and the red carpet eat up hours that the CEO-turned-public-celebrity used to spend running the business.

We humans do our best to cheer the success of our fellows, but the applause becomes ragged when a business visionary achieves a stock-market capitalization in excess of 5% of the S&P 500. Was it IBM's dominant market position or Kelly green envy that crystallized more than 20 antitrust actions, both private and public, against which Big Blue had to defend itself in the 20th century? It lost only one of these actions, according to Wikipedia, that being a 1932 complaint accusing the defendant of unlawfully forbidding the buyers of IBM tabulating equipment to purchase anyone else's punched cards except IBM's. But the cost of legal defense was heavy, less in fees than in management time and focus.

Just last week brought news of the Federal Trade Commission's investigation of the post-2010 corporate acquisitions of Facebook, Microsoft Corp., Amazon.com, Inc., Apple, Inc. and Alphabet, Inc., of which, according to PitchBook, there have been more than 530. Do the behemoths buy out promising startups for the purpose of denying those corporate embryos the chance to threaten the Silicon Valley status quo? The government says it wants to find out.

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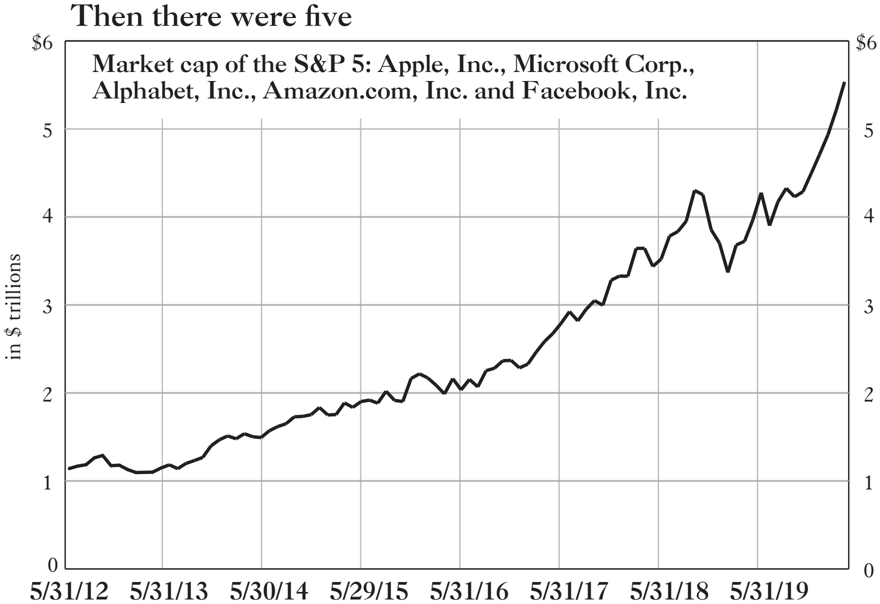
Though the FTC last summer lightened Facebook's bank account by $5 billion in penalties for the Cambridge Analytica scandal, and though Mark Zuckerberg was in Monday's *Financial Times* fairly inviting the government to pull up a chair and take a seat at the board meetings ("I believe good regulation may hurt Facebook's business in the near term, but it will be better for everyone, including us, over the long term"), the law of large numbers presents a more immediate threat to the company than the antitrust authorities.

Advertising delivers 98% of Facebook's revenue and 85% of Alphabet's. There are only so many ad dollars to

Then there were five



source: The Bloomberg

go around, or, at least, there were until Mike Bloomberg joined the Democratic presidential scrum. And online platforms don't snag every ad dollar.

Last year, global advertising outlays increased by 2.5%, to reach $618.7 billion, according to estimates from the World Advertising and Research Center. Grabbing market share, Facebook and Alphabet generated top-line growth of 26.6% and 18.3%, respectively.

How much more share is grabbable? This year will be the first in which digital-ad spending tops the analog kind, WARC says. It seems that the digital share will continue to expand, but what happens when it stops?

Perhaps the stock-market standing of such established ad agencies as Omnicom Group, Inc., Interpublic Group of Cos., Inc. and Publicis Groupe S.A. affords a preview. Given the ferocity of the digital competition and the fact that advertising expenditures grow in line with GDP, the three trade at an average of 12.3 times trailing earnings. In contrast, Facebook and Alphabet change hands at 34 and 31 times earnings, respectively, or a little less after adjusting for the fines and tributes they have paid to assorted governments worldwide.

Even the duo's combined 53% share of global online advertising understates their dominance, according to eMarketer. Last year, the owner of Google generated 46% of its revenues in the United States; Facebook earned exactly the same proportion of revenue in the 50 states and Canada. The pair ring the cash register in 61% of American online advertising outlays.

Average per-user revenue, which Facebook reports, brings the figures down to earth. Thus, in October–December 2019, Facebook earned $41.41 for every American and Canadian and $13.21 for every European.

But oxygen is thin at the summit. "We are seeing headwinds in terms of targeting and measurement, but as I noted, the majority of that impact lies in front of us," Dave Wehner, Facebook's CFO, said on the Jan. 29 earnings call. "Just as a reminder, we utilize signals from user activity on third-party websites and services in order to deliver relevant and, in fact, effective ads to our users."

"By 'signals,'" colleague Evan Lorenz points out, "Wehner is actually talking about snooping. Like many another company, Facebook uses the digital files—'cookies'—that websites place on consumers' computers and phones, as well as the location data they glean from phones and on anything else they can find to target their trusting consumers. The fact that such data are becoming harder to procure could lower the return on investment for Facebook's advertisers."

On Feb. 4, Alphabet released the latest version of its Chrome browser, which enjoys a 69% share on desktops and a 40% share on phones, according to Michael Levine, analyst at Pivotal Research Group. Concerningly for Facebook, the new release limits third-party cookies. Indeed, in 2022, Alphabet plans to remove all such peeping software. This followed an update from Apple last year that alerts iPhone users when a closed app is mining location data. "According to ad-tracking company Teemo's CEO, opt-in rates to share data with apps when they're not in use are often below 50%," Levine wrote the other day in the course of demoting Facebook to a sell. "Three years ago, those opt-in rates were closer to 100%. . . . The party is going to be coming to an end."

Governments, too, are upping the ante in digital privacy. The European Union's General Data Protection Regulation limits online data collection. Starting Jan. 1 under a new state law, California consumers can deny their personal data to digital platforms. While the law has jurisdictional force only within the Golden State, its influence could prove far-reaching. *The Washington Post* reports that there are businesses launching for the very purpose of automating consumer requests to withhold their data. And whether or not Trump's re-election campaign is concerned about data integrity, it's certainly focused on results. To that end, Axios reports, the campaign is de-emphasizing Facebook in this election cycle. "Facebook wants to take important tools [i.e., results-tested algorithms] away from us for 2020," the campaign tweeted in November. "Tools that help us reach more great Americans & lift voices the media and big tech choose to ignore! They want to raise prices and to put more of your hard earned small dollar donations into their pockets." Sad!

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Money-burning, venture-capital-backed startups likewise threaten Facebook—though only because those loss-making ventures had for so long enriched it. You'll recall that the aspiring unicorns spend around 40 cents of every dollar raised on advertising, mostly on Facebook and Google (*Grant's*, March 8, 2019).

All was fine and dandy until the money started to run out. Brandless, a SoftBank Corp.-backed direct-to-consumer food and paper-products company shuttered last week, the first Vision Fund bankruptcy but far from the first Vision Fund commercial embarrassment. (By our count, seven SoftBank investees are slashing payrolls to reduce losses, not counting The We Co., which required emergency life support last year.) Casper Sleep, Inc., the money-losing mattress company, did survive to list shares on Feb. 5, but the $476 million

International Business Machines Corp. at a glance
all figures in $ millions

	2015	2016	2017	2018	2019
revenues	$81,741	$79,919	$79,139	$79,591	$77,147
profit before taxes	15,945	12,330	11,400	11,342	10,166
taxes	2,581	449	5,642	2,619	731
net income	13,190	11,872	5,753	8,728	9,431
cash	8,194	8,527	12,580	11,997	8,868
debt	39,889	42,168	46,824	45,812	62,899
total assets	110,495	117,470	125,356	123,382	152,182
cash flow from operations	17,008	17,084	16,724	15,247	14,770
capital expenditures	3,781	3,726	3,313	3,716	2,370
dividends	4,897	5,256	5,506	5,666	5,707
buybacks	4,609	3,502	4,340	4,443	1,361
acquisitions	3,349	5,696	496	139	32,630

source: company reports

listed value was less than half the $1.1 billion quoted in the final private funding round.

"We recognize that the era of growth at all costs is over," Uber Technologies, Inc. CEO Dara Khosrowshahi, wrote in the company's Feb. 6 earnings announcement. It can't be good for the ad business.

Between the third and fourth quarters, Facebook's year-over-year revenue growth slowed to 24.6% from 28.6%. "We expect our year-over-year total reported revenue growth rate in Q1 to decelerate by low to mid single-digit percentage points as compared to our Q4 growth rate," Wehner warned on the Jan. 29 call, citing the maturity of the business and the anti-snooping zeitgeist, otherwise known as "signal issues." Even so, the Street estimates that Facebook will compound revenues by 18% per year between 2020 and 2023.

"FB is operating on the 'efficient frontier' of behavioral targeting, which creates the problem of the 'winner's curse,'" Levine concluded his comment last week. "Loss of signal is far more damaging to FB than any of the other web platforms, is the consistent industry feedback we have heard [from our surveys]. We think that a huge part of why FB has been highly successful in the ecommerce vertical is that it is able to leverage cross-site behavior to better see purchase history/purchase intent and is hence extremely effective at getting targeted ecommerce ads in front of users at the right time."

Of the 56 analysts who cover Facebook, 46 say buy. As for the FB insiders, they are heavy and habitual sellers. Since we had our first bearish say on Facebook in the issue of *Grant's* dated Aug. 11, 2017, the stock has generated a 29.6% total return versus 45% for the S&P 500.

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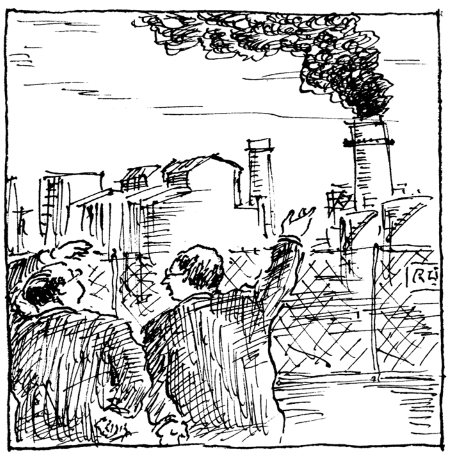
While Facebook may be flagging its future problems, don't expect the same courtesy from every gigacap. In 1985, when IBM was king of the mountain—it closed the year accounting for 6.4% of the S&P's market cap—you would have searched the Big Blue 10-K report in vain for warnings about the rise of personal computer-clones or client-server computing and what those disruptive forces implied for the legacy mainframe business.

Not that Chairman John R. Opel and CEO John F. Akers, jointly addressing the shareholders, ignored the subject of risk. "While we are optimistic about the future," the two wrote, "our experience in 1985 makes it clear that much depends on the United States setting its economic house in order, beginning with reduction of the federal deficit."

They weren't wrong about the gross public debt—from that day till this, it's climbed to $23.3 trillion from $1.9 trillion—only about its relevance to corporate performance. It was rather the advent of such scrappy startups as Dell Technologies, Inc., Compaq Computer Corp. and Apple that, as early as 1986, deflated IBM's earnings and Akers's salary and pushed the company into a posture of strategic retreat.



"What the heck, Harry. We just dye it green."

By the end of the 1980s, to borrow from a superb Wiki article on the history of Big Blue, "IBM was clearly in trouble. It was a bloated organization of some 400,000 employees that was heavily invested in low margin, transactional commodity businesses. Technologies IBM invented and/or commercialized—DRAM, hard disk drives, the PC, electric typewriters—were starting to erode. The company had a massive international organization characterized by redundant processes and functions—its cost structure couldn't compete with smaller, less diversified competitors. And then the back-to-back revolutions—the PC and the client server—did the unthinkable. They combined to dramatically undermine IBM's core mainframe business."

You couldn't blame the research department. In the 1980s, IBM employees copped two Nobel prizes in physics as well as innumerable plaudits for discoveries in mathematics, telecommunications and allied fields. But the managerial errors of the same decade bore the evil fruit of an $8.1 billion loss in 1992, the largest in American business in a single year up until that time.

The "perpetual, ominous force called IBM," as *Datamation* magazine put it in 1971, was a thing of the past. Between 1985 and 2019, revenues crawled ahead at the compound annual rate of 1.3%, net income at 1.1%. Each trailed the average 2.6% yearly jump in consumer prices. But even those dismal facts overstate Big Blue's financial performance. In 1985, the company paid a corporate tax rate of 44%. In 2019, it paid 7%. Pretax earnings actually declined at a 0.4% compound annual rate over the past 34 years. And while IBM's equity capitalization now stands at $133.8 billion, that not inconsiderable sum represents a mere 0.48% of the S&P 500.

"Why isn't this company growing?" an investor rhetorically asks Lorenz. "You are a tech company—and one of the biggest tech companies in the world with Watson [the question-answering supercomputer that beat a pair of mortals at *Jeopardy!* in 2011], blockchain and all of these other initiatives you've talked about in the past. Why are your earnings flat? Why are your revenues flat? It just doesn't make sense."

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IBM divides its operations into four parts: cloud and cognitive software (33% of fourth-quarter revenue; transaction processing, AI- and cloud-related businesses), global business services (19%; consulting, business-process outsourcing and application management), global tech services (32%; IT outsourcing) and systems (14%; mainframes and related software). Rounding out the quartet is the finance subsidiary, which funds customers and distributors as well as factoring a portion of IBM's accounts receivable.

The IBM share price has jumped by 12.7% this year on the strength of fourth-quarter revenue (up 3% versus a third-quarter slip of 0.6%) and a surprise switch in the C-suite. Out is the eight-year-tenured CEO Virginia Rometty; in is Arvind Krishna, the senior vice president in charge of cloud and cognitive software.

In her time on the bridge of the former dreadnought, IBM produced declining revenue while its stockholders earned a minus 3% return, the fetching dividend yield—over 4% today—included.

Whatever Krishna can or can't do to restore IBM's long-lost organic growth, he's the acknowledged architect of the largest software acquisition in history. This was IBM's $34 billion purchase of the open-source business provider Red Hat in July 2019. The price was equivalent to 10 times the acquiree's enterprise value to sales and 53 times its earnings before interest, taxes, depreciation and amortization. To convey a sense of scale, Red Hat's pre-transaction revenues represent 4.5% of the new parent's.

In the service of reinvigorating IBM's growth, Red Hat is expected to sell subscriptions, services and training around open-source software. "Open-source" is the collaborative, wiki kind of software—the copyright holder grants users the right to do with it what they will. IBM is especially focused on Red Hat's OpenShift product, which is built around Kubernetes, the five-year-old shareware designed by Alphabet that accounted for less than 25% of Red Hat's sales prior to the IBM acquisition. OpenShift is a container platform that allows customers to port programs between internally run servers and cloud servers owned by the likes of Amazon or Microsoft.

"If that description doesn't help your mind's eye form an image," Lorenz comments, "know that IBM mentioned OpenShift 12 times on the fourth-quarter call and 52 times during the Aug. 2, 2019 investor-day meeting."

If there's urgency in this push, it's because IT infrastructure hardware, software and services, the lines from which the cloud is taking share, generate three-quarters of IBM's sales. The remedial grand plan is to sell a client the expertise to allow him to choose among numerous cloud vendors and shift programs between internally run servers and external clouds. On the Jan. 21 call, management highlighted the introduction of Cloud Paks, i.e., IBM software products on OpenShift's platform, as an example of this strategy.

Mainframe sales dwindle but don't stop. The new models that debut every two years or so deliver a three- or four-quarter revenue bulge, following which is a year of renewed decline. Thus, the release of the latest IBM mainframe, the z15, in September, propelled a 16% boost in systems-division revenue in the final three months of 2019.

Even so, company-wide, pretax profits fell by 9.9% on a reported basis and by 2% after adjusting for acquisition-related accounting. In 2020, the combination of Red Hat and the z15 product cycle will likely deliver the strongest revenue growth in years. Earnings growth is another matter.

Uncertain, too, is whether IBM's move into OpenShift will prove the slam-dunk that the growth-hungry investors are hoping for. Toni Sacconaghi, who rates IBM a market perform for Bernstein Research, attended KubeCon, a Kubernetes conference in San Diego, Calif. in November. "Our conversations at KubeCon suggest that ~80% of IBM middleware was not 'cloud-native' until just several months ago, and even today, most of it continues to run sub-optimally within the cloud/containers (e.g., containerized Websphere takes two minutes to boot instead of two or three seconds)," Sacconaghi reported. "Moreover, IBM's official Kubernetes session was the most poorly attended talk we went to at KubeCon."

The company that revolutionized computing in the 1960s with the System/360 is an also-ran in the 21st-century cloud. Including Red Hat, IBM owns 2.5% of that market (Amazon has 29% and Microsoft 15%, as Gartner Consulting compiles the figures). And despite its lower revenue base, IBM isn't matching the growth of its much larger rivals. Thus in the fourth quarter, IBM logged a 23% boost in cloud revenue (with Red Hat's help); Amazon's comparable figure was 34% and Microsoft's, 62%.

"Equally worrisome," Lorenz points out, "is the poor performance at IBM's global-business-services (GBS) division, a unit that ought to be relatively protected from cloud-related headwinds. Registering a 0.3% revenue shrinkage in the fourth quarter (after adjusting for currency moves), GBS failed to offset the decline in the global-technology-services (GTS) unit, which posted a 4% shrinkage in revenue and is the business most exposed to the cloud transition. In the fourth quarter, new contract signings for the GBS and GTS divisions fell 9%, backlog by 3%.

"Then, too," Lorenz continues, "abstracting from the server cycle, currency fluctuations and M&A, it appears that IBM's other businesses depreciated by 3% to 4% in the final three months of the year. 'We have a sell rating on the stock because we truly see little to no outlook for EPS growth with Red Hat doing little to change that trajectory,' Lisa Ellis, who covers IBM at MoffettNathanson LLC, tells me. 'It is just a chronic underperformer... about 75% of revenues and a greater share of profit is in enterprise IT infrastructure, which is somewhere around the fourth inning or so of migration to the cloud. Here we are deep into the middle innings and they really don't have an answer for those clients in terms of a long-term architecture transition.'"

Such is the thought process on Planet Equity. Creditors are of a very different mind. In the summer of 2018, when we last tackled IBM, the senior unsecured 4s of 2042 traded at 99 to yield 4.07%. Today, they change hands at 117.88 for a 2.91% yield to worst.

Yes, interest rates have shrunk, but that fact hardly explains why the IBM investor is settling for so meager a pickup over the Apple senior unsecured 3.85s of 2043, which deliver a 2.87% yield to worst. Single-A-rated IBM shows net leverage of 3.1 times trailing Ebitda; Apple, rated double-A-plus, boasts a net cash position of $103.8 billion.

To pay down the Red Hat-related debt, IBM is suspending its buyback program, which, in the three years ended 2018, soaked up an average of $4.1 billion of shares. So vanishes one important source of self-help for the share price.

Over the past 12 months, insiders have sold 20,124 shares at an average price of $137.36 for net proceeds of $2.8 million. Of the 23 analysts who cover the stock, six say buy, 14 hold and three sell. But you know what "hold" means.

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