



Apple Stock Buyback



Apple

On January 7, Apple CEO Tim Cook revealed that the company had repurchased \$14 billion shares of company stock over the previous two weeks. This note and [the accompanying Excel workbook](#) show the impact of this stock buyback on the price of Apple's stock.

Stock Price Basics

You cannot change the underlying value of a company by simply

increasing or decreasing the number of shares held by the public. To put it bluntly, a company cannot increase its market value by simply giving more stock to existing shareholders. I'll explain why shortly. But first let's review some fundamental material.

Companies will occasionally split their stock. This usually means giving each current shareholder one (or more or even less) shares of stock to existing stockholders. Thus if you owned 100 shares of CaliforniaWineFan.com and the company did a two-for-one split, you would then own 200 shares.[\[1\]](#)

But the important fact about stock splits is that the company itself has not changed. Remember, the company has not sold this stock to the public. It has been gifted. There is no change in the company's balance sheet (with the exception of footnotes explaining stock held by the public).

The market value of any publicly-held company is equal to the current price per share multiplied by the number of shares held by the public.[\[2\]](#) For example, on January 24, 2014, the public held 891,990,000 shares of Apple stock. The price of the stock was \$542.82. The market value of Apple was \$484,190,011,800, nearly half a trillion dollars.

Suppose Apple had announced a two-for-one split over the weekend. There would be twice as many shares outstanding (1,783,980,000). But the market value of the firm would not have changed. Therefore the stock price must fall to $\$484,190,011,800 / 1,783,980,000 = \271.41 . This is exactly half what the price was before the split. **The price of the stock will always adjust to keep the market value of the firm stable.**

Now for the Fun Part

Apple bought back \$14 billion of their outstanding stock. The question is the number of shares they acquired for their \$14

billion. I've done the calculations two ways. The first assumes the purchases were made on a single day.[\[3\]](#) With a buyback price of \$546.07 per share, Apple would buy 25,637,739 of stock. This reduces the number of shares outstanding by 2.87%. This, in turn, boosted the stock price by 2.87%. Without the buyback, Apple's stock price would have been \$505.16 instead of the actual price of \$519.68.

A more realistic assumption is that Apple spread their stock purchases over the two week interval. Let's assume they spent the same amount each day. There were ten days when the U.S. markets were open so Apple would have bought \$1.4 billion each day. Using daily stock price data[\[4\]](#) from [Yahoo finance](#), I've converted that amount into a number of shares. Apple ends up repurchasing 27,532,343 shares of stock, a reduction in shares outstanding of 3.17%. This translates into a boost in the stock price of 3.17%. Without the stock buyback, the price would have been \$503.72 under this scenario.

I've used some shortcuts in these calculations. The percentage changes are small enough that my approximations should be fairly close to the true values. For those who want to know, the idea is simple. $\text{Market cap} = \text{Price} \times \text{Shares}$. A common approximation used by economists is that the percentage change in the market cap will equal the sum of the percentage changes in the price and the number of shares. We know the change in the market cap should be zero. That means the increase in the price should equal minus the percentage change in the number of shares. I've used that increase in the price to calculate what the price would have been without the stock buyback.[\[5\]](#)

[\[1\]](#) There is such a thing as a reverse stock split. If CaliforniaWineFan.com did a two-for-one reverse split, you would own 50 shares after the split.

[2] The market value of a firm is often called the “market cap” (short for market capitalization).

[3] This is unlikely and my calculations probably don't reflect reality. Buying that much stock on a single day would cause the stock price to change due to temporary excess demand. This implies that Apple would not be able to purchase as many shares as would be possible if the price remained constant.

[4] I have used the “adjusted closing price.” This price is adjusted for a dividend payment of \$3.05 per share on February 6.

[5] Gruesome details: Price without buyback = Actual price/(1-% change in number of shares). Remember, the percentage change in the number of shares is a negative number.

The US Government vs Apple

The U.S. government has apparently decided Apple is the enemy. Two separate events have led me to this conclusion. Consider this the case of the US government vs Apple.

First is the antitrust case against Apple. As the Wall Street Journal editorialized, [“Apple Found Guilty of Competing.”](#) The details are straightforward. **Amazon.com sets the prices it charges for books. Apple simply charges a 30 percent markup over the publisher's price. Yet, somehow, it is Apple that is guilty of price-fixing.**

The judge in this case, Denise Cote, stated *before the case had even begun*, that it was her “tentative view” that Apple was guilty of antitrust. She then proceeded to allow lawyers

from the Antitrust Division to present arguments that are well beyond the precedents established over the past century of antitrust law.

Judge Cote has appointed Michael Bromwich as an external monitor to review antitrust within Apple. Mr. Bromwich has used this appointment to conduct an inquisition within Apple, demanding access to executives who could not possibly have known anything about the iBooks business. The list includes lead product designer Jony Ivy and board member Al Gore. And, for his efforts, Mr. Bromwich is being paid – better sit down – a paltry \$1,100 *per hour*. And, having no background at all in antitrust, Mr. Bromwich has been forced to retain the firm Fried Frank at an hourly rate of \$1,025. Apple is paying all these bills out of stockholder income. In his first two weeks, the total billing was \$138,432.40. Nice work if you can get it.

While this case confirms my opinion that large parts of the federal government have become little more than shakedown and extortion operations (*viz.*, [the SEC is now the Shakedown and Extortion Commission](#)), there is one other fact that has become interesting. This involves technology.

I use quite a bit of government data. Long-time readers of this blog will recognize work on the [labor force participation rate](#). That research used data from the Bureau of Labor Statistics (BLS), part of the U.S. Department of Labor. The one-screen query engine is written in Java. This query does not work on my Macbook Pro (OS X 10.9.1, Safari 7.0.1 (9537.73.11), also doesn't work with Firefox for the Mac.) To run this query, I must fire up my old Windows XP computer (on which I use Firefox almost exclusively).

Labor Force Statistics from the Current Population Survey HELP

<p>1 Sex</p> <p>Both Sexes Men Women</p>	<p>2 Race</p> <p>All Races White Black or African American Asian</p>	<p>3 Ethnic Origin</p> <p>All Origins Hispanic or Latino Mexican American Puerto Rican</p>
<p>4 Age</p> <p>16 to 19 years 16 to 24 years 16 to 64 years 18 to 19 years</p>	<p>5 Education (25 years and over only)</p> <p>All educational levels</p>	<p>6 Marital Status</p> <p>All marital statuses Married, spouse present</p>
<p>7 Labor Force Status</p> <p>Civilian noninstitutional population Civilian labor force Civilian labor force participation rate</p>	<p>8 Seasonal</p> <p><input checked="" type="checkbox"/> Seasonally Adjusted <input checked="" type="checkbox"/> Not Seasonally Adjusted</p>	<p>9 Periodicity</p> <p><input type="checkbox"/> Annual <input type="checkbox"/> Monthly <input type="checkbox"/> Quarterly</p>

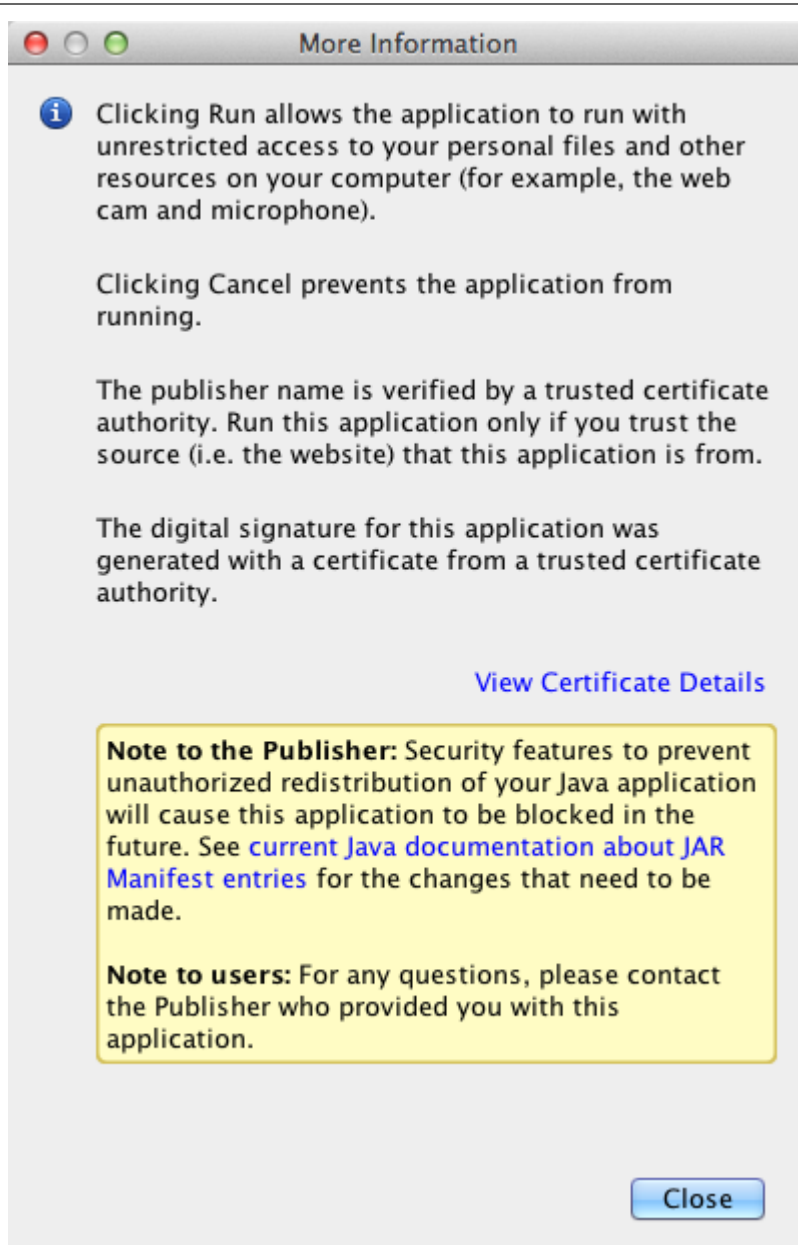
10 Your Selection: (0 series selected) NOTE: Select a maximum of 200 series.

BLS One-Screen Query

In this case, “does not work” means the query is so slow as to be useless. I have used Safari with the BLS query engine for years, but for the last three months it has been useless.

And it’s even worse. **When I first open the query screen, I get a warning message from Apple. Apparently BLS has not updated their Java JAR file to current standards. I have written to them about this several times. To date there has been no response and no fix.**





Apple Warning Message Expalded

Why does the U.S. government hate Apple? After all, the company hired former EPA head Lisa Jackson. Are Tim Cook and company not giving enough campaign contributions? It can't be their votes because California is a determinedly Democrat state. On the other hand, New York is tilted almost as far left as California. Consider the many ways New York-headquartered J.P. Morgan Chase has been shaken down by a variety of federal government agencies. **My guess is that the federal government is resorting to the ultimate bullying tactic: picking on someone that you know won't fight back. In this case, fighting back would mean turning either state from blue to red. Good luck with that.**

Time to Sell Netflix and Buy Amazon and Apple



Netflix, Amazon, and Apple logos

Disclaimer: I am not an investment adviser of any kind. Over my long career I have picked some winners and some losers. But most of my portfolio is in mutual funds with low expense ratios. The advice I'm giving here is my opinion only. If you choose to act on it, you're on your own.

Recent technological developments have led me to wonder whether this might be the right time to sell Netflix and buy Amazon and Apple. The two technological developments I've seen recently are included in Apple OS X Mountain Lion and iOS 5.x. Both, however, work only with Apple TV, a small box that will set you back all of \$100. Read on.

Apple OS X Mountain Lion (10.8)

Mountain Lion includes a brand new feature that lets you seamlessly and easily mirror your Mac's screen onto your flatscreen using Apple TV. We've been using it to watch

streaming video from Amazon.com. Get this: Amazon Prime costs \$80 per year and allows unlimited streaming of many titles at a price of zero. *Caveat emptor*: some videos that show up as available for streaming are not free. Read carefully and make your decisions before you have that second beer.

Compare that to Netflix streaming: about \$96 per year but, frankly, with a crappy title list. It looks to me like the major studios have decided Netflix is not paying them enough for content and are signing on with Amazon instead. And Amazon has struck a deal with IMDB.com (the internet movie database site) to place click-through links on IMDB when a title is available for streaming on Amazon.

So let's spell it out. Amazon's deal is cheaper, has higher-quality titles, offers the opportunity for pay-per-view for newer releases, and will work with any flatscreen that supports Apple TV. Which is all of them. (Our homemade home theater system is a Vizio 40 inch flatscreen, a Sony amplifier/tuner, a couple of speakers, and Apple TV. We also have an HD DVD player which we don't use much any more.)

Apple Airplay

The second option is streaming video wirelessly from your iPhone or iPad to Apple TV via Airplay. ***This does not work with Amazon's mobile streaming app.*** However, you can mirror pretty much anything you can put on the iPad screen onto the flatscreen. The setup can be tricky ([click here for a lengthy discussion with many tips](#)), but once it's working, it works very well. And the cost of this option is zero – whatever video you can download and put on the iPad you can play on your flatscreen. (Disclaimer: our tests have not been exhaustive. We welcome comments about what works and what doesn't.)

What's Reed Hastings Up To?

With all that in mind, Netflix CEO and serial entrepreneur Reed Hastings has done something astounding. The two paragraphs below are [from a Wall Street Journal article](#):

“Reed Hastings, chief executive of Netflix Inc. and a Facebook Inc. board member, disclosed on Thursday a purchase of roughly \$1 million in Facebook stock.

In a filing with the U.S. Securities and Exchange Commission, Mr. Hastings disclosed buying 47,846 Facebook Class A shares on Wednesday at a weighted average price of \$21.03 each. Facebook's stock closed trading Wednesday at \$20.72.”

Mr. Hastings is on Facebook's board and apparently didn't own much FB stock before this. Perhaps he was under pressure to join the other directors and make a commitment to the company.

Maybe Facebook wants to buy Netflix. The only reason I can think of for a move like that is Netflix's one viable asset: their huge inventory of DVD disks. Their pioneering video streaming technology is probably worth quite a bit, too – to the right buyer.

So maybe I'm wrong. The downside risk of selling Netflix right now is that some other company might buy them. Probably not Google because they own Youtube. But Facebook? Your guess is as good as mine.

AAPL Tops \$500 and Peter

Boockvar Gets It Wrong

AAPL tops \$500 and Peter Boockvar gets it wrong. In today's [Wall Street Journal Market Beat blog](#) there is a short article about Apple stock hitting \$523.76. Mr. Boockvar says, "...Apple's stock has gone parabolic. And, parabolic moves always end one way, back to the place where the parabolic move began. ..."

Wow. Did someone pay him for that bit of incisive – and completely incorrect – analysis? Even under the incredible mismanagement of the current administration, the U.S. economy has continued to grow. Tell us, Peter, when does that "parabola" return to its point of origin? I know several people who bought AAPL at the equivalent of \$1 per share, maybe less. I hope Mr. Boockvar is not suggesting that the parabola will return to that point. Highly doubtful.