

ExxonMobil

S&P Dow Jones announced its reorganization of the Dow Jones Industrial Average (DJIA) today. Apple stock is splitting 4-for-1 on August 31 and S&P Dow Jones wanted to take advantage of this stock split to reorganize the DJIA. The DJIA is not market-cap weighted, but price weighted. To calculate the value of the DJIA, you sum up the price of each of its 30 components and divide by the divisor, which is currently 0.145798. When Apple splits 4-for-1 the divisor will have to change, so S&P Dow Jones decided to create a post-Covid DJIA. ExxonMobil, formerly Standard Oil of New Jersey, was removed from the DJIA, but Chevron, formerly Standard Oil of California, will remain. As ExxonMobil (XOM) is removed, so will Pfizer (PFE) and Raytheon (RTX) and in their place Salesforce.com (CRM), Honeywell (HON), and Amgen (AMGN) will be added. Honeywell was a member of the DJIA between 1925 and 2008. **Goodbye to an Original DJIA Member** ExxonMobil had been in the DJIA longer than any other stock, having been added on October 1, 1928. Chevron was added to the DJIA on February 19, 2008 (Chevron was in the DJIA in 1924-1925 and 1930-1999). Atlantic Richfield, another Standard Oil stock, was in the DJIA between 1928 and 1930. Ten years ago, ExxonMobil was the largest corporation in the world. Since then, ExxonMobil's capitalization has halved while the tech giants have grown in size. We discussed ExxonMobil in our blog "The First Billion Dollar Company." When the Supreme Court ordered the dissolution of Standard Oil on May 15, 1911, it was the largest corporation in the world, representing 6% of the capitalization of all shares in the United States. The company's shares were not listed on the NYSE because Standard Oil did not want to file its financial reports with the NYSE, so the stock traded over-the-counter. Standard Oil had 1 million shares outstanding and shares traded around 650 when the

antitrust lawsuit was filed by the government in 1909. The price stayed at that level until the antitrust decision was handed down in 1911. Standard Oil's price is illustrated in Figure

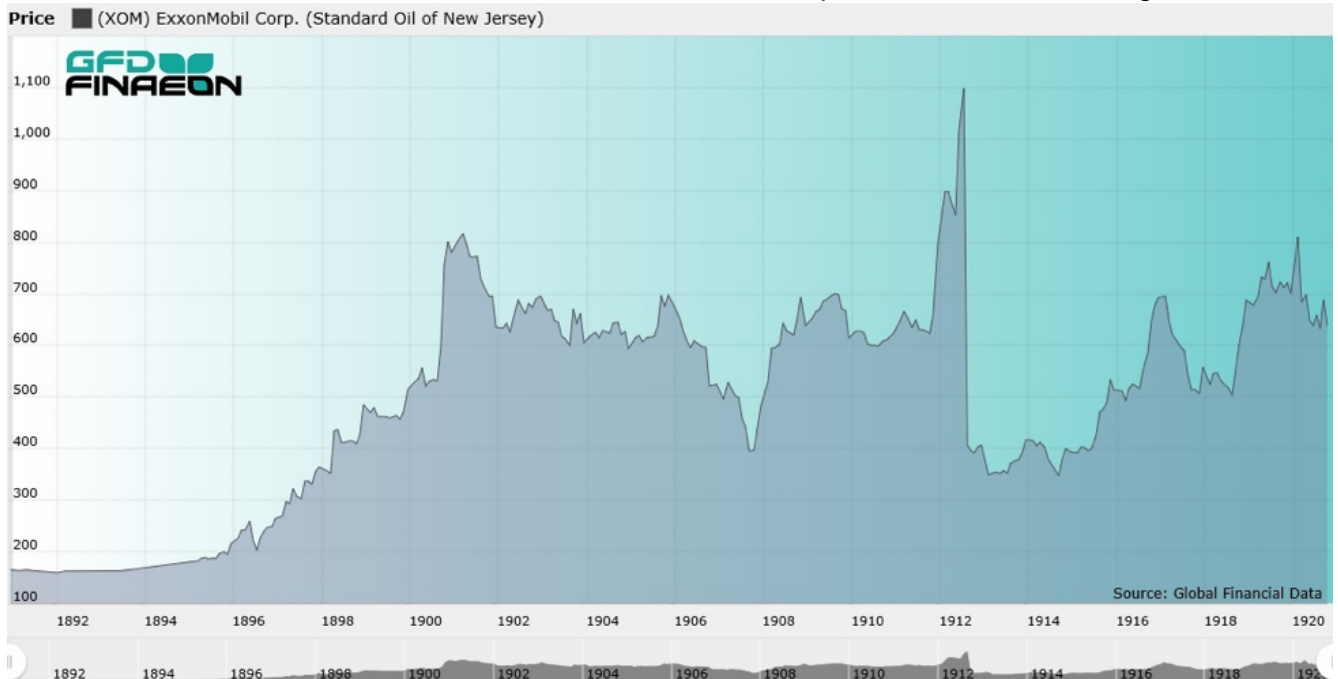


Figure 1. Standard Oil of New Jersey 1890-1920 On May 15, 1911, the Supreme Court decreed that Standard Oil should spin off 34 subsidiaries to its shareholders. Under the distribution made December 1, 1911, the stockholders of Standard Oil received one share of Standard Oil Co. of New Jersey and varying amounts of the 34 subsidiaries that were spun off from Standard Oil. **The 1st Billion Dollar Company: Standard Oil** By August 1912, when the distribution occurred, Standard Oil stock had risen in price to 1100 making Standard Oil the world's first billion-dollar corporation. In September 1912, Standard Oil distributed shares in the Standard Oil Subsidiaries, which traded separately from Standard Oil of New Jersey between September 1912 and February 1914. The Subsidiary's stock price rose from 675 to 990 in February 1914, as illustrated in Figure 2, while shares of Standard Oil of New Jersey were

1.



Figure 2. Standard Oil Subsidiary Stock 1911-1914 Fate of the Break-Up To answer this question, we took the prices of the 34 subsidiaries that were spun off from Standard Oil to see how the 34 companies performed between September 1913 when the subsidiaries started trading and today. Out of the original 34 companies only two have survived: Standard Oil of New Jersey, which is now ExxonMobil, and Standard Oil of California, now Chevron, both of which were in the DJIA yesterday. All these other companies either liquidated or were bought out by another company. The fate of the 34 subsidiaries is provided in Table 1.

Name	Acquired	Delisted
Pierce Oil Corp.	11/30/1938	Dissolved in 1940
Colonial Oil Co.	4/30/1919	Began liquidating in 1916
Vacuum Oil Co.	6/30/1920	Socony and Vacuum merged into S
Continental Oil Co.	12/31/1924	Merged into Continental Oil (ME) in
Washington Oil Co.	10/30/1926	Liquidated in 1957
Crescent Pipe Line Co.	12/31/1931	Went into Liquidation in 1925
Galena-Signal Oil Co.	12/31/1931	Acquired by Valvoline Oil Co. in 19
Solar Refining Co.	12/31/1931	Acquired by Standard Oil Co. of O
Cumberland Pipe Line Co.	8/31/1934	Completed liquidation in 1935
Standard Oil Co. (Neb.)	10/31/1939	Acquired by Standard Oil Co. of In
Prairie Oil & Gas Co.	4/30/1940	Merged into Consolidated Oil Corp
Indiana Pipe Line Co.	1/30/1943	Merged into Buckeye Pipeline Co.
New York Transit Co.	1/30/1943	Merged into Buckeye Pipeline Co.
Northern Pipe Line Co.	2/27/1943	Merged into Buckeye Pipeline Co.
Standard Oil Co. (Kan.)	8/31/1950	Recapitalized as Coastal Plains Oi
South West Pennsylvania Pipe Lines	12/31/1952	Completed its liquidation in 1954
Eureka Pipe Line Co.	3/30/1961	Shares acquired by Pennzoil and C
Standard Oil Co. (Ky.)	10/31/1961	Merged into Standard Oil co. of Ca
National Transit Co.	12/29/1961	Acquired by Pennzoil in 1965
Anglo-American Oil Co., Ltd	5/29/1930	Bought by Jersey Standard in 1930
Buckeye Pipe Line Co.	7/24/1964	Acquired by the Pennsylvania Co.
Southern Pipe Line Co.	4/30/1965	Merged into Ashland Oil & Refining
Swan & Finch Co.	5/30/1969	Completed its liquidation in 1974
Trans Union Corp. (Union Tank Line)	2/10/1981	Trans Union Corp. merged into Ma
Marathon Oil (Ohio Oil Co.)	3/11/1982	Merged into United States Steel C
Chesbrough-Ponds, Inc.	2/10/1987	Merged into Unilever in 1987
Standard Oil Co. (Ohio)	6/29/1987	Merged into BP America Inc. in 19
Amoco Inc. (Standard Oil Co. (Ind.))	12/31/1998	Merged with British Petroleum Co.
PennzEnergy Co. (South Penn Oil Co.)	8/17/1999	Merged into Royal Dutch Petroleu
Mobil (Standard Oil Co. of N. Y.)	11/30/1999	Merged into ExxonMobil in 1999
Atlantic Richfield Co. (Atlantic Refining Co.)	4/17/2000	Merged into BP Amoco plc in 2000
Chevron (Standard Oil Co. (Cal.))		
ExxonMobil Co. (Standard Oil Co. (N.J.))		

Table 1. Fate of Standard Oil Subsidiaries We also recalculated the market capitalization of

Standard Oil, summing together the market cap of Standard Oil of New Jersey and the subsidiaries that were spun off in 1913. We found that in most years between 1913 and 2010, Standard Oil would have been the largest corporation in the world. The subsidiaries had a larger market cap than ExxonMobil during most of the twentieth century. The market capitalization of ExxonMobil, the subsidiaries and the entire company at ten-year intervals is provided in Table 2.

Year	Subsidiaries	ExxonMobil	Combined
1911			665
1913	874	388	1,263
1920	1,357	614	1,971
1930	1,993	1,203	3,195
1940	1,207	938	2,145
1950	5,301	5,557	10,859
1960	9,087	8,931	18,019
1970	20,646	16,411	37,057
1980	89,619	34,859	124,478
1990	97,981	64,490	162,471
2000	54,193	302,211	356,405
2010	183,634	368,712	552,346
2020	227,869	295,247	523,116

Table 2. Market Capitalization of Standard Oil, 1911 to 2019 Shares in the subsidiaries began trading over-the-counter and on the New York Curb in September 1913. None of the Standard Oil companies traded on the NYSE at that point in time. Of the original 34 companies, 14 eventually moved to the New York Stock Exchange between 1918 and 1963. Standard Oil of New Jersey (ExxonMobil) and Atlantic Richfield moved to the NYSE in 1920 and Standard Oil of California moved to the NYSE in 1921. The remaining 20 companies remained on the Curb/AMEX until they were bought out or liquidated. The dates that each of the companies moved from the Curb to the NYSE is provided in Table 3.

Company	Moved to NYSE
Pierce Oil Corp.	8/31/1918
Atlantic Richfield Co. (Atlantic Refining Co.)	3/1/1920
ExxonMobil Co. (formerly Standard Oil (N.J.))	3/1/1920
Trans-Union Corp. (Union Tank Line)	3/31/1921
Chevron (Standard Oil Co. (Cal.))	6/30/1921
Mobil (Standard Oil Co. of N. Y.)	12/9/1926
Prairie Oil & Gas Co.	12/20/1928
Standard Oil Co. (Kan.)	3/27/1930
Marathon Oil (Ohio Oil Co.)	8/21/1930
Amoco Inc. (Standard Oil Co. (Ind.))	8/30/1934
Standard Oil Co. (Ohio)	1/27/1941
Buckeye Pipe Line Co.	6/25/1956
Chesebrough-Ponds, Inc. (Chesebrough Mfg. Co.)	1/2/1962
PennzEnergy Co. (Pennzoil - South Penn Oil Co.)	8/30/1963

Table 3. Standard Oil Companies that Moved to the New York Stock Exchange In order to calculate the total return to investors, we assumed that whenever a company was dissolved or bought out, the cash from those shares was invested in the remaining Standard Oil companies, weighted by market capitalization. We treated Standard Oil as if it had been an ETF that could be re-invested in. Over time, the number of remaining companies declined until only two of them survived: Chevron and ExxonMobil. Figure 1 compares the returns to Chevron, ExxonMobil, (Standard Oil excluding ExxonMobil), and the S&P 500. The graph reflects the results in Table 4 with Chevron being the top performer and ExxonMobil second. Standard Oil excluding ExxonMobil and the S&P 500 performed similarly with the S&P 500 currently taking the lead over Standard Oil excluding ExxonMobil. Since 1913, the Standard Oil subsidiaries has

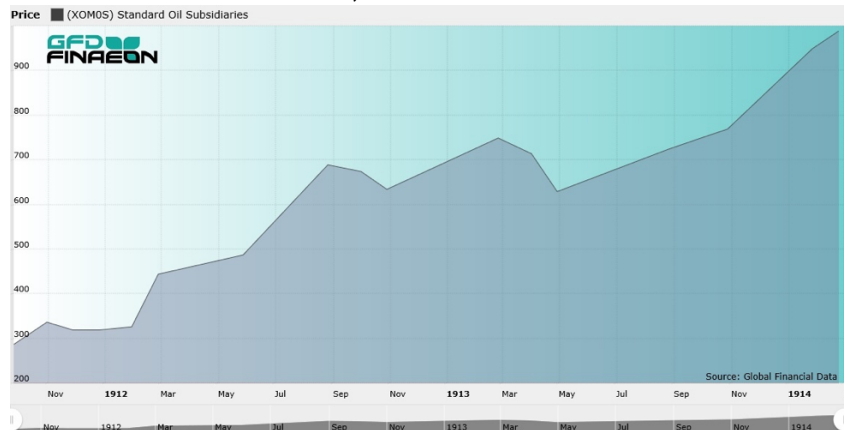


Figure 3. ExxonMobil, Chevron, Standard Oil Excluding Exxon and S&P 500, 1913 to 2020

As the Figure 1 shows, the two surviving companies have outperformed the rest of the subsidiaries. Chevron has had the highest return and ExxonMobil the second highest. The Standard Oil Subsidiaries, excluding ExxonMobil, were the worst performing of the four. In addition to the calculations for the return to all of the Standard Oil companies and Standard Oil excluding ExxonMobil, we also put together a subset of large Standard Oil companies that included Standard Oil Co. of Nebraska, Kansas, Kentucky, Ohio, Indiana, New York, California and New Jersey as well as the Ohio Oil Co. and Atlantic Richfield. These companies represented 75% of the capitalization of Standard Oil and its subsidiaries in 1913. *GFD calculates custom price and return index series on all these companies and subjects. These are available as part of the GFD Indices.* Table 4 provides information on the returns to each of the stocks and groups between September 1913 and July 2020. ***It is interesting that on a total return basis, all the Standard Oil choices outperformed the S&P 500.*** Nevertheless, the differences in the returns are small meaning that the Standard Oil stocks performed about the same as the rest of the stock market during the past 107 years. Both Chevron and ExxonMobil remain below the highs they reached in 2008. During the past 12 years, ExxonMobil's annualized return has fallen from 7.92% in 2007 to 6.13% in 2020.

Company	\$1 Invested Price	\$1 Invested Return	Annual Return Price	Annual Return Return
Chevron	4761.44	560850.7	8.24	13.17
Exxon	579.567	60536.83	6.13	10.84
SO Large	388.697	39004.71	5.73	10.38
Standard Oil	320.308	32682.73	5.54	10.20
SO x/XOM	282.143	30633.88	5.41	10.14

S&P 500	383.48	26265.58	5.72	9.98
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Table 4. Returns to Chevron, ExxonMobil, Standard Oil and the S&P 500, 1913 to 2020 And Then There Was One

Salesforce.com replaced ExxonMobil because it reflects the American economy of 2020 better than ExxonMobil. The market capitalization of Salesforce.com is larger than that of ExxonMobil. We suspect that ExxonMobil was removed, rather than Chevron, because the price of ExxonMobil's stock is lower than Chevron's and there just wasn't room for two former Standard Oil companies in the DJIA. Energy stocks have performed poorly since the Covid sell-off in February and few people believe that the price of oil will recover soon. Two years ago, General Electric, another long-term member of the DJIA was removed because its stock price had fallen so dramatically. Dow Jones changes the components of the DJIA as the demands of the economy shifts. The reduction in the number of energy stocks in the DJIA reflects the declining importance of energy in the world relative to other goods. Sources: GFDdatabase, GFD US Stocks, and GFD Indices