

CRSP[®] INDEXES

CRSP RESEARCH DATA IN ACTION

JULY 2021



CRSP | CENTER FOR RESEARCH
IN SECURITY PRICES, LLC
An Affiliate of the University of Chicago Booth School of Business

CRSP U.S. HISTORICAL DATA IN ACTION

In a paper "[Do Stocks Outperform Treasury Bills?](#)" Professor Hendrik Bessembinder shows, using CRSP historical data, that most of the wealth created by the stock market since 1926 can be accounted by just a few stocks throughout the history. In fact, as of December 2019 data, the top 50 companies have created over 40% of total wealth.

The implication of this analysis is that majority of the stocks do not deliver the results. Of course, the challenge for investment professionals is to identify which stocks are the winners, which given the high concentration of gains is not an easy job.

Along the same line, CRSP provided data to WSJ for an interesting article that looked at the historical trend for companies that became the largest companies in the stock market by market capitalization (<https://www.wsj.com/articles/apple-still-wears-the-market-crown-it-can-easily-slip-11599231617>). Again the data suggested that in the past 95 years of data, there were only 11 companies that became the largest companies by market capitalization, a tiny sliver of more than 24,000 companies.

Not surprisingly, the list of the top 50 wealth creators completely contains the list of the 11 companies that became the largest companies by market capitalization, and responsible for over 15% of lifetime wealth.

11 Companies that Became Top 1 by Market Capitalization

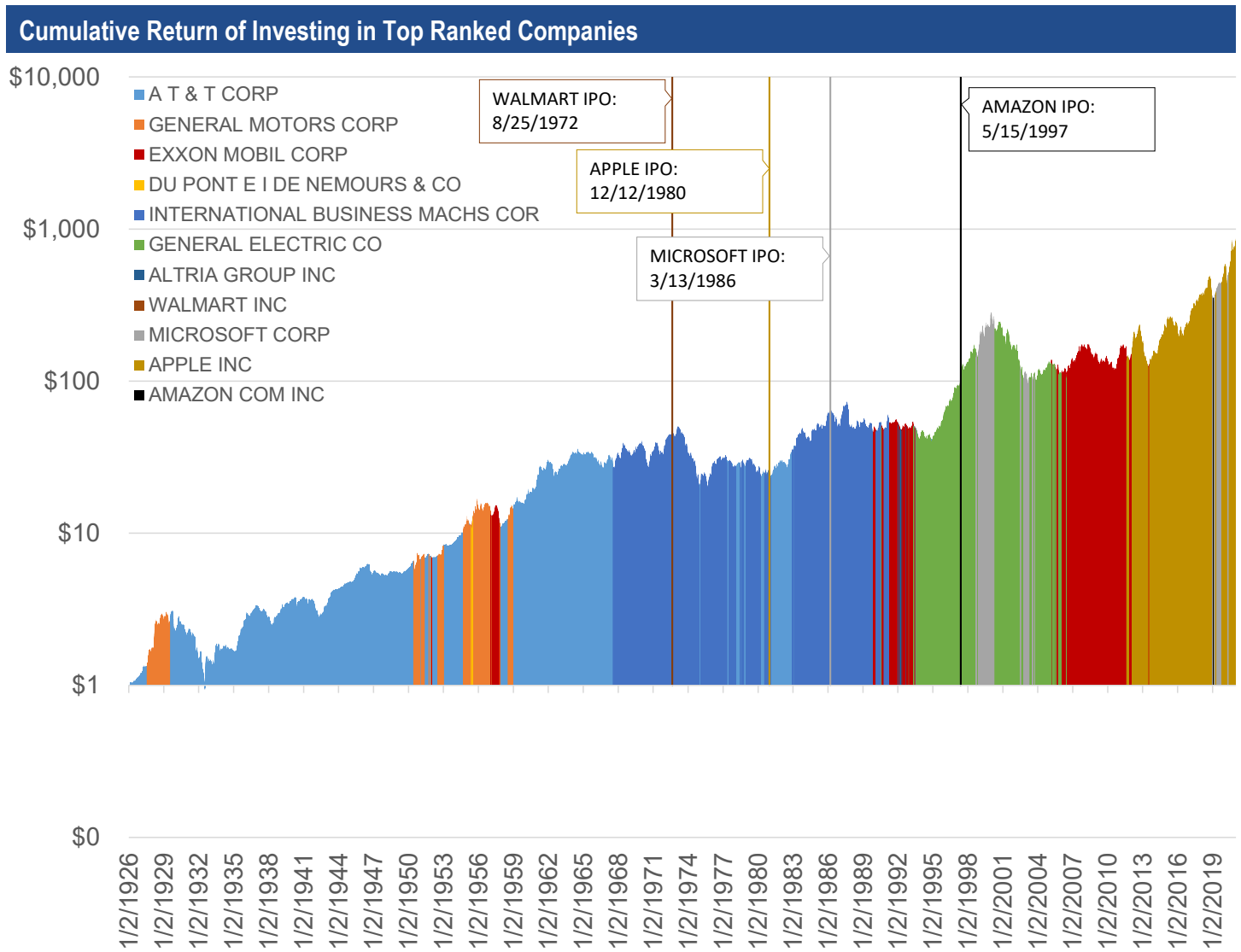
Company	Earliest Date To Achieve Top Market Capitalization	Lifetime Wealth Creation (\$ Millions) ¹	% of Total Lifetime Wealth ¹	Wealth Creation Rank ¹
A T & T CORP	Jan-26	\$311,533	0.66%	25
GENERAL MOTORS CORP	Jul-27	\$445,769	0.94%	13
EXXON MOBIL CORP	Dec-51	\$988,275	2.09%	3
DU PONT E I DE NEMOURS & CO	May-55	\$335,051	0.71%	21
INTERNATIONAL BUSINESS MACHS COR	Jul-67	\$525,896	1.11%	8
GENERAL ELECTRIC CO	Jul-90	\$461,360	0.97%	12
ALTRIA GROUP INC	Dec-91	\$470,343	0.99%	11
WALMART INC	Nov-92	\$541,397	1.14%	7
MICROSOFT CORP	Sep-98	\$1,411,616	2.98%	2
APPLE INC	Aug-11	\$1,643,938	3.47%	1
AMAZON COM INC	Jan-19	\$865,301	1.83%	4

Source: CRSP US Stock Databases

¹ Data is as of December 2019 from <https://wpcarey.asu.edu/department-finance/faculty-research/do-stocks-outperform-treasury-bills>

Using CRSP data, we decided to see whether a simple investment strategy – investing into the top capitalized company (using it as a oversimplified proxy for a safe and sure investment) – would result in a performance better than simply investing in the overall market. The investment strategy would let us invest into the company while it maintains the top position, and invest the entire amount into the next company that becomes number 1. For example, AT&T is ranked top 1 at the beginning of our data, 1/2/1926, therefore we invest \$1 into AT&T. General Motors Corp. becomes Top Ranked company on July 21, 1927, and we invest the entire amount accumulated by July 21, 1927, into General Motors Corp starting from July 22, 1927. We continue to keep the investment in General Motors Corp. while it maintains its top position.

This simplified investment strategy would have yielded a whopping 836x of the initial investment: \$1 invested in 1926 would become ~ \$836 by 12/31/2020!



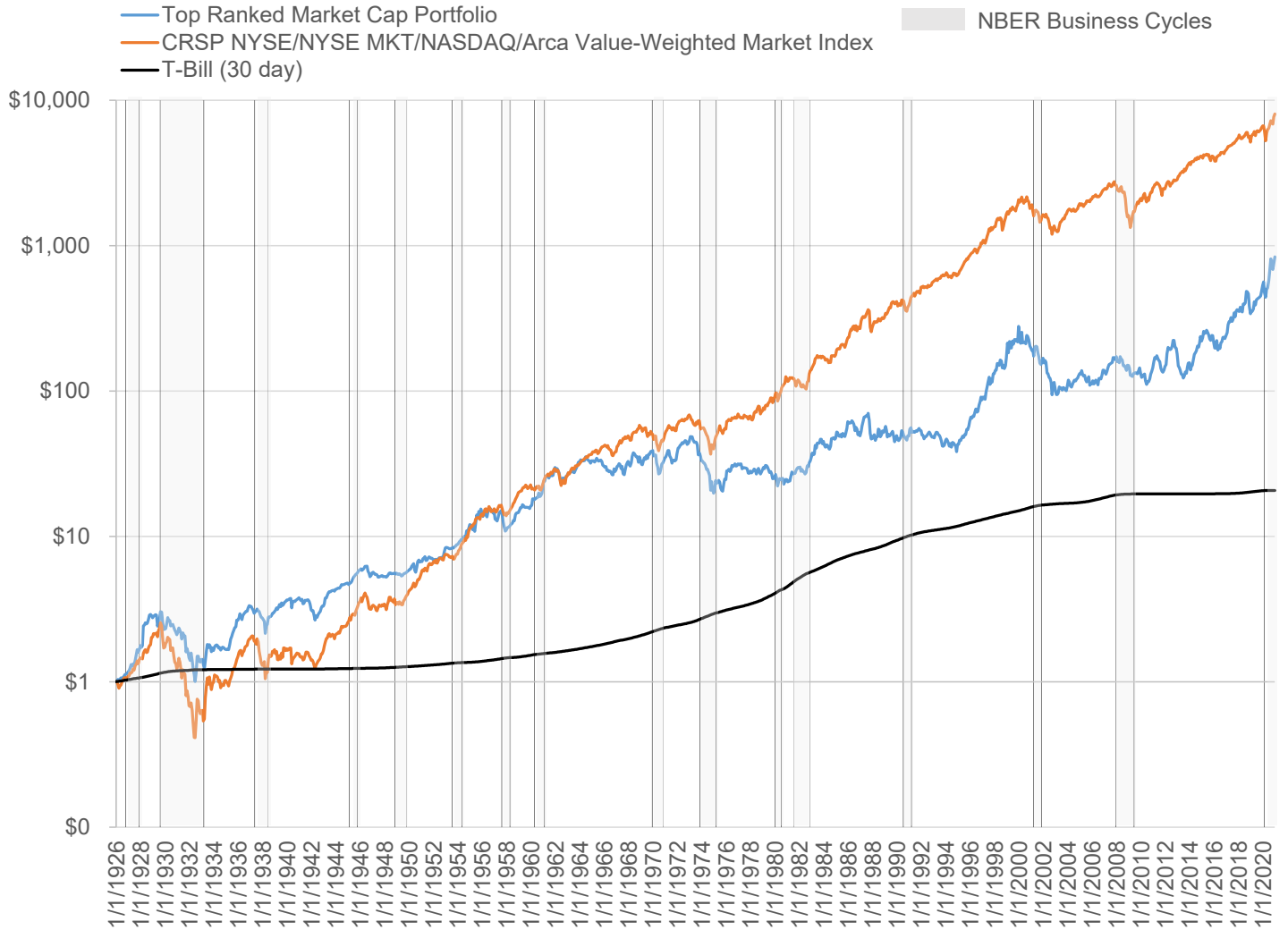
Source: CRSP US Stock Databases

Note: Based on daily total return

While this result kept up with inflation, and outperformed investing in 30-day Treasuries, the strategy's performance is dwarfed by the results of investing in the entire market, as represented by CRSP NYSE/NYSE MKT/NASDAQ/Arca Value-Weighted Market Index, which would have netted almost \$8,000, or 10 times more.

This is not a surprising result since by the time the company reached its top position we have missed on a portion of the wealth creation activity since its IPO date. However, this simplified analysis also illustrates that the task of picking winners is a tough one.

Cumulative Return of Investing in Top Market Cap Ranked Companies vs. US Total Market and T-Bills



Source: CRSP US Stock Databases, CRSP Historical Indexes, CRSP US Treasury Database; NBER.org

Note: Based on daily total return; 30-day T-bills are used

See how US Market Investment outcome for the past 95 years compares to other investment alternatives using this valuable illustration: http://www.crsp.org/files/CRSP_Big_Picture_2021.pdf

SERVICES OFFERED BY CRSP

Research Products

Academic, practitioner, and government institutions for whom data quality, accuracy and completeness are essential rely on CRSP data products. Our portfolio of stock, indexes, mutual fund, treasury, and REIT market databases is relied upon by those whose research and publications must withstand rigorous analysis for accuracy. Quantitative analysts in the commercial market depend on CRSP's historical depth and unrivaled quality in order to perform backtesting and modeling calculations. In the government sector, regulators and policy makers value CRSP's complete data sets as the basis for financial and economic research.

- [CRSP US Stock Databases](#)
- [CRSP 10](#)
- [CRSP Historical Indexes](#)
- [CRSP US Index History Files - Intraday](#)
- [CRSP/Compustat Merged Database](#)
- [CRSP US Treasury Database](#)
- [CRSP/Ziman Real Estate Database](#)
- [CRSP Survivor-Bias-Free US Mutual Funds](#)
- [CRSP Cap-Based Portfolio Index](#)
- [CRSP Customized Data Sets](#)

For more information regarding CRSP Research Products, contact subscriptions@crsp.org.

Investment Products

Since 2013, CRSP LLC has maintained, disseminated and expanded its' proprietary investable index product line. Currently comprising over 66 capitalization-based, industry sector and value and growth style indexes, the CRSP Market Indexes (CRSPMI) suite blends ongoing advancements in academic research with the most efficient and productive industry practices. CRSPMI continues to dedicate resources and personnel to expand its capabilities and services for providing a broad, efficient and low-cost set of performing index products and benchmarks for the entire investment community.

CRSPMI offers indexes covering the entire U.S. equities marketplace, from its flagship Total Market Index to a broad set of different cap segments (Large, Mega, Mid, Small, Micro) with Value and Growth versions of each, as well as 11 Sector Indexes. A [quick reference guide](#) provides an overview of the CRSPMI index offerings.

CRSPMI distributes its investable indexes and related constituents, corporate actions and rebalancing information to a broad community of licensed clients over multiple delivery channels, including [direct client feed](#), secure website and approved third-party redistributors.

About CRSP

Since 1960, CRSP has provided research-quality data to scholarly researchers and advanced the body of knowledge in finance, economics and related disciplines. Today, nearly 500 leading academic institutions in 35 countries rely on CRSP data for academic research and to support classroom instructions

Citing CRSP

Any dissemination (including by electronic means or in any other form) of the graphs or information herein shall include an attribution to CRSP as follows.

"This data and information is based on data from the Center for Research in Security Prices, LLC (CRSP), ©YYYY."

YYYY being the year the database was published.

Disclaimers

CRSP, its affiliates, its parent company, and its third party suppliers do not make any representations or guarantees regarding the accuracy of the data or information. Although the contents have been obtained from sources believed to be reliable, they are provided to your institution on an "as is" basis without warranties of any kind. With respect to this service and the contents, and to the fullest extent permitted by applicable law, CRSP, its affiliates, its parent company, and its third party suppliers hereby disclaim all express, implied and statutory warranties of any kind to the Subscriber or any third party, including, but not limited to, representations and warranties regarding accuracy, completeness, correctness, merchantability, or fitness for any particular purpose, or any representations or warranties arising from usage or custom or trade or by operation of law. CRSP, its affiliates, its parent company, and its third party suppliers, assume no responsibility for the consequences of any errors or omissions. In no event shall CRSP, its affiliates, its parent company, or its third party suppliers be liable to the Subscriber or to any third party for any loss or injury caused in whole or in part by contingencies beyond their control or negligence in procuring, compiling, or delivering any data or information. In no event shall CRSP, its affiliates, its parent company, or its third party suppliers be liable to the Subscriber or any third party for any claim arising out of or relating to CRSP-provided data or information, including, but not limited to, any decision made or action taken by your institution and any and all users affiliated with your institution based on the use of the data or information or for any types of damages (such as, but not limited to, direct, consequential, special, incidental, punitive or indirect damages), even if advised of the possibility of such damages.

All information is provided for informational purposes only. Every effort is made to ensure that all information given in this publication is accurate, but no responsibility or liability can be accepted by CRSP® nor its licensors for any errors or for any loss from use of this publication. Neither CRSP® nor any of its licensors make any claim, prediction, warranty or representation whatsoever, expressly or impliedly, either as to the results to be obtained from the use of the CRSP Sector Indexes or the fitness or suitability of the Indexes for any particular purpose to which they might be put. CRSP® does not provide investment advice and nothing in this document should be taken as constituting financial or investment advice. CRSP® makes no representation regarding the advisability of investing in any asset. A decision to invest in any such asset should not be made in reliance on any information herein. Indexes cannot be invested in directly. Inclusion of an asset in an index is not a recommendation to buy, sell or hold that asset. The general information contained in this publication should not be acted upon without obtaining specific legal, tax, and investment advice from a licensed professional. No part of this information may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise. Distribution of the CRSP® index values and the use of their indexes to create financial products require a license with CRSP® and/or its licensors. The Industry Classification Benchmark ("ICB") is owned by FTSE International Limited ("FTSE"). Neither CRSP® nor FTSE accept any liability to any person for any loss or damage arising out of any error or omission in the ICB. Past performance is no guarantee of future results. Charts and graphs are provided for illustrative purposes only. Index returns shown may not represent the results of the actual trading of investable assets. Certain returns shown may reflect back-tested performance. All performance presented prior to the index inception date is back-tested performance. Back-tested performance is not actual performance, but is hypothetical. The back-test calculations are based on the same methodology that was in effect when the index was officially launched. However, back-tested data may reflect the application of the index methodology with the benefit of hindsight, and the historic calculations of an index may change from month to month based on revisions to the underlying economic data used in the calculation of the index.

CRSP uses various trademarks and trade names in the ordinary course of its business, including without limitation, CRSP's corporate name and logo. All other trademarks or trade names referred to in this paper are the property of their respective owners. Solely for convenience, the trademarks and trade names in this paper may be referred to without the ® and ™ symbols, but such references should not be construed as any indicator that their respective owners will not assert, to the fullest extent under applicable law, their rights thereto.

The Industry Classification Benchmark ("ICB") is a product of FTSE International Limited ("FTSE") and is licensed for use. FTSE is part of the London Stock Exchange Group plc and its applicable group undertakings (the "LSE Group"). The LSE Group includes (1) FTSE International Limited ("FTSE"), (2) Frank Russell Company ("Russell"), (3) FTSE Global Debt Capital Markets Inc. and FTSE Global Debt Capital Markets Limited (together, "FTSE Canada"), (4) MTSNext Limited ("MTSNext"), (5) Mergent, Inc. ("Mergent"), (6) FTSE Fixed Income LLC ("FTSE FI") and (7) The Yield Book Inc ("YB"). FTSE Russell® is a trading name of FTSE, Russell, FTSE Canada, MTSNext, Mergent, FTSE FI, YB. "FTSE®", "Russell®", "FTSE Russell®", "MTS®", "FTSE4Good®", "ICB®", "Mergent®", "The Yield Book®" and all other trademarks and service marks used herein (whether registered or unregistered) are trademarks and/or service marks owned or licensed by the applicable member of the LSE Group or their respective licensors and are owned, or used under license, by FTSE, Russell, MTSNext, FTSE Canada, Mergent, FTSE FI, YB. FTSE International Limited is authorized and regulated by the Financial Conduct Authority as a benchmark administrator.