

DETERMINING THE SCALE OF THE MOST PROMINENT ASSET MANAGEMENT FIRMS USING DATA ANALYTICS

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ABSTRACT. Peter Phillips and other prominent authors shed light on the existence of hidden superpowers that exert influence over the world's most important corporations. This power also extends to major global communications entities. Phillips highlights that 17 of the so-called 'Giants' manage portfolios with a staggering \$1 trillion or more in assets. Additionally, there is a small group of institutions called the 'Big Three,' globally recognized asset management giants comprising BlackRock, Vanguard Group, and State Street Corporation. The discourse surrounding these 'Giants' and the 'Big Three' prompted the application of data analytics techniques to scrutinize and validate these assertions. Data, drawn from diverse sources such as Yahoo Finance and StockAnalysis.com, underwent meticulous cleaning to mitigate errors and address missing information. Subsequently, three hypotheses were subjected to rigorous evaluation through hypothesis testing. As a result of this process, only one of the three hypotheses proposed was rejected, leading us to conclude that the 'Big Three' indeed hold a very strong position among companies that belong to the most important indices (S&P 500, NASDAQ 100, DJIA) of the American financial markets.

KEYWORDS: hypothesis testing / asset management firms / the Big Three

DETERMINACIÓN DE LA ESCALA DE LAS FIRMAS DE GESTIÓN DE ACTIVOS MÁS PROMINENTES MEDIANTE EL ANÁLISIS DE DATOS

RESUMEN. Peter Phillips y otros autores destacados iluminan la existencia de superpotencias ocultas que ejercen influencia sobre las corporaciones más importantes del mundo, este poder también abarca a importantes entidades de comunicaciones a nivel global. Phillips resalta que 17 de los llamados 'Gigantes' gestionan portafolios de inversión con al menos \$1 trillón en activos. De la misma manera, existe un grupo pequeño de gestores de activos denominado los 'Tres Grandes' ('Big Three'), gigantes

E. L. García

reconocidos a nivel mundial en la gestión de activos que incluyen a BlackRock, Vanguard Group y State Street Corporation. El discurso en torno a estos 'Gigantes' y los 'Tres Grandes' motivó la aplicación de técnicas de análisis de datos para examinar y validar las afirmaciones realizadas sobre ellos. Los datos, recopilados de diversas fuentes como Yahoo Finance y StockAnalysis.com, fueron sometidos a una limpieza meticulosa para mitigar errores y abordar la falta de información. Posteriormente, tres hipótesis fueron sometidas a una evaluación rigurosa mediante pruebas de hipótesis (hypothesis testing). Como resultado de este proceso, solo una de las tres hipótesis planteadas fue rechazada, lo cual nos lleva a concluir que los 'Tres Grandes' efectivamente poseen una posición muy fuerte en las empresas que pertenecen a los índices más importantes (S&P 500, NASDAQ 100, DJIA) de los mercados financieros norteamericanos.

PALABRAS CLAVE: prueba de hipótesis / firmas de gestión de activos / los Tres Grandes

1. INTRODUCTION

The arrival of globalization meant that certain brands became famous worldwide, some of which include Starbucks, Google, Facebook or Coca Cola. However, there are other big, and perhaps unknown, companies who possess a disproportionate stake in these popular brands. Peter Phillips (2018) identifies the top 17 asset management firms, which he calls "Giants". These firms hold very strong positions among companies that belong to the most important indices (S&P 500, NASDAQ 100, DJIA) of the American financial markets. Accordingly, a consensus among various authors such as Lund and Robertson (2023) and McLaughlin and Massa (2020) reinforce the acknowledgment of the widely recognized concept known as the 'Big Three'. These mega companies are BlackRock, Vanguard Group and State Street Corporation.

Both the Giants and Big Three are entities that maintain extensive holdings in numerous companies across various industries and countries. One might wonder if they truly are of such immense scale or whether it is beneficial for a handful of companies to wield such substantial power and influence worldwide. However, this article does not delve into ethical considerations; rather, its primary focus is to assess the global relevance and influence of the Big Three in international business. This relevance will be measured by confirming or rejecting various hypotheses derived from statements made by Phillips (2018), Lund and Robertson (2023) and McLaughlin and Massa (2020), utilizing data analytics techniques. Data will be collected from different sources, cleaned, transformed and analyzed. In the following section, the basics of investments and data analytics will be explained.

Basic concepts in asset management

According to Smart et al. (2017), a common stock offers income and capital gains. An example of income gain are dividend distributions from the company's profits, whereas a capital gain refers to the stock's increase in price. Common stocks cannot be bought directly from the issuer, but have to be traded through a centralized entity that connects buyers and sellers, called stock exchange. Furthermore, an asset can be understood as anything that delivers value to the organization or stakeholders (Canadian Network of Asset Managers, 2018). An investment is the action of acquiring an asset with the main purpose of generating profit. Organizations whose goal is to execute investing activities and manage investment portfolios are usually called asset management firms. The Canadian Network of Asset Managers (2018) describes asset management as an integrated process with the aim of effectively managing assets in order to deliver services to customers.

Collin (2023) identifies the steps of the asset management process. The first step consists on setting the goals and market assumptions for the portfolio. The strategy for asset allocation will then be developed along with capital deployment. The company should pick the financial assets in which the funds shall be invested: stocks, mutual funds, exchange traded funds (ETF) and others. Smart et al. (2017) assert that both

mutual funds and ETFs, are similar in that they allow the creation of well-diversified portfolios by holding a variety of securities. Nonetheless, ETFs can be bought or sold at current market price in regular stock exchanges, while mutual funds are traded through the fund itself or through a financial intermediary (Smart et al., 2017; U.S. Securities and Exchange Commission, 2021)

Basic concepts in data analytics

The relevance of data and data strategies for the organization is undeniable. Kambatla et al. (2014) refer to data as a resource, while Arora and Goyal (2016) point out that data is the biggest asset inside an organization. But data itself is not enough: it must be analyzed to derive value from it. This is where data analytics comes into place as a set of techniques that focus on gaining actionable insight for smart decision-making (Duan & Da Xu, 2021).

Arora and Goyal (2016) refer to four types of data according to its source or precedence, while other authors such as Kambatla et al. (2014), Vashisht and Gupta (2015) and Vanani and Majidian (2019) identify 3 categories and Stevens (2023) establishes only 2 categories. In this research, the 3-category classification is suggested: structured (e.g. Excel files, relational databases), semi-structured (e.g. text, emails) and unstructured (e.g. videos, audios).

The classification of data analytics methods is also a matter of debate. Duan and Da Xu (2021) describe 3 categories and Kelley (2020) details 6 categories, but the most popular is one with 4 categories described in Oracle (s/f), Stevens (2023) and Mathur (2023). Tom March (2020) describes the 4 main types of data analytics as follows:

- Descriptive Analysis: Valuable for recognizing past events.
- Diagnostic Analysis: Convenient for explaining the reasons behind occurrences.
- Predictive Analysis: Utilized to forecast future trends based on historical data.
- Prescriptive Analysis: Capable of predicting probable outcomes and offering decision recommendations.

Section 2 provides an in-depth examination of the techniques and methods available and explains the process utilized to prove or disprove the hypotheses. In Section 3, the project outcomes are elucidated. Section 4 offers a concise discussion on the hypothesis and collected data. Ultimately, Section 5 encapsulates the research's conclusions.

2. MATERIALS AND METHODS

Instruments

In data analytics, various approaches exist concerning the processes, methods and techniques employed. This section undertakes a comparative analysis of these approaches.

Notably, researchers such as Kelley (2020), Stevens (2023) and Peck et al. (2008) present different perspectives on the phases involved in data analytics projects, ranging from 5 to 6 phases, which is laid out in Table 2.

Table 1
Phases in a data analytics project

Phase	Kelley (2020)	Stevens (2023)	Peck et al. (2008)
#1	- Data Requirement Gathering	- Defining the question	- Understanding the nature of the problem
#2	- Data Collection	- Data Collection	- Deciding what to measure and how to measure it.
#3	- Data Cleaning	- Data Cleaning	- Data Collection
#4	- Data Analysis	- Data Analysis	- Data summarization and preliminary analysis
#5	- Data Interpretation	- Data Visualization and sharing findings	- Formal data analysis
#6	- Data Visualization		- Interpretation of results

Numerous criteria exist for classifying data analytics methods and techniques (Duan & Da Xu, 2021; Kelley, 2020; Stevens, 2023; Taherdoost, 2022; Vashisht & Gupta, 2015). Some of them are highlighted in Table 2. One prevalent classification method involves categorizing methods into two broad groups: qualitative and quantitative. As elucidated by Kelley (2020), qualitative analysis concentrates on handling unstructured data, while quantitative analysis involves the collection and processing of raw data into numerical formats.

Table 2
Classification of data analytics methods

Qualitative Analysis	Quantitative Analysis				
	Descriptive	Inferential	Exploratory	Predictive	Prescriptive
- Content analysis	- Mean	- Regression analysis	- Cluster analysis	- Support vector machines	- Genetic algorithm
- Sentiment analysis	- Median	- Time series analysis	- Factor analysis	- Neural networks	

Qualitative Analysis	Quantitative Analysis				
	Descriptive	Inferential	Exploratory	Predictive	Prescriptive
- Narrative analysis	- Mode	- Hypothesis testing		- Decision tree	
- Grounded theory	- Standard deviation	- ANOVA			
	- Skewness				

Methodology design

We employed inferential analysis and hypothesis testing to validate certain statements outlined by Phillips (2018), Lund and Robertson (2023) and McLaughlin and Massa (2020). The project unfolded in five phases, following the approach detailed by Stevens (2023). In hypothesis testing, a hypothesis is a proposition regarding the value of one or more population characteristics (Peck et al., 2008). The null hypothesis (H_0), often the initial assumption, is the claim presumed to be true. Conversely, the alternative hypothesis (H_a), which represents an alternative scenario, stands as the second option. The outcome of the process may lead to either rejecting the null hypothesis or failing to reject it, signifying that the alternative hypothesis is deemed correct.

In Figure 1 you can see some of the most important elements in hypothesis testing. First, confidence level refers to the probability that the null hypothesis will be accepted. Conversely, significance level (α) is in the rejection area of the null hypothesis. Both confidence and significance level add up to 100% (or 1). P-value is referred to as the probability of rejecting the null hypothesis. If the p-value is lower than α , the null hypothesis is rejected. Otherwise, the test fails to reject null hypothesis.

The example in Figure 3 shows a two-tailed test as it has two rejection areas on both sides. A one-tailed test has only one rejection area, on the right or left.

Figure 1

Elements in hypothesis testing

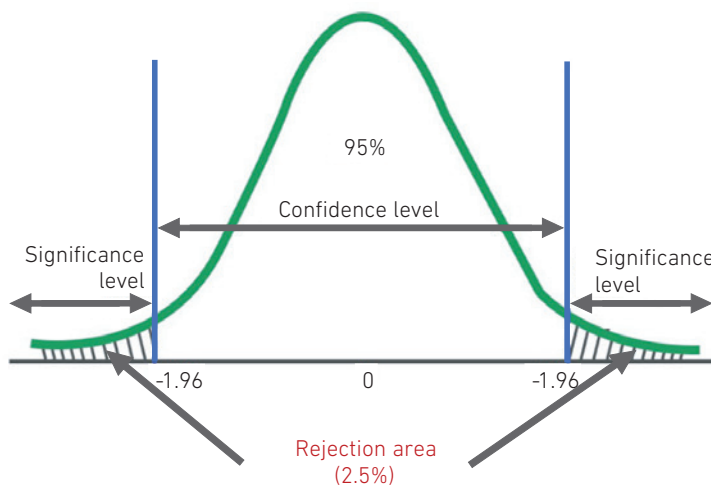
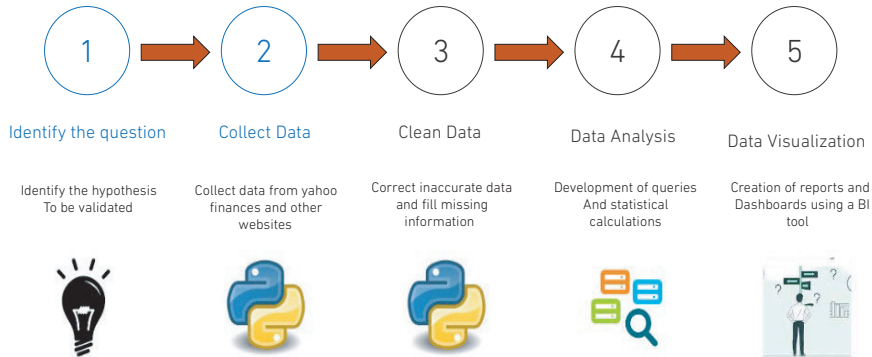


Figure 2 illustrates the stages of the data analytics project. Next, we will elaborate on each step:

Figure 2

Phases in data analytics project



Identify the question

In his book *Giants*, Peter Phillips (2018) states his intention to direct our concern towards powerful networks that affect our lives and society, making the following statements regarding this powerful grid:

- 17 of the most prominent asset management firms possess over \$1 trillion in assets as of 2017, as seen in Table 3.
- These top firms also tend to hold positions in each other, creating a solid network with shared investments worldwide.
- There are a total of 199 people in the boards of directors of the top 17 asset management firms, who control and manage an accumulation of \$41.1 trillion in assets.

While they do not agree on the exact numbers, Lund and Robertson (2023) and McLaughlin and Massa (2020) acknowledge BlackRock as the largest global asset manager draw the following deductions about the Big Three:

- They represent the largest owners of most companies included in the S&P 500, owning at least 22 % in 2019.
- Collectively, they hold an average 25 % of the votes in companies included in S&P 500.
- They have the power to influence the outcome of shareholder proposals at companies included in the Fortune 250.
- The Big Three are closely and exclusively related to passive investment.

Phillips (2018), Lund and Robertson (2023) and McLaughlin and Massa (2020) expounded on a set of statements regarding some of the largest asset management

firms globally. The first and second statements center around the Big Three mentioned in Lund and Robertson (2023) and McLaughlin and Massa (2020), bringing up some important facts about their relevance and investing strategy. The last statement pertains to the top 5 US asset management firms selected from the list of 17 companies outlined by Phillips (2018), which includes BlackRock, Vanguard Group, JP Morgan Chase, Bank of America, and State Street. Table 3 contains the 3 tested hypotheses.

Table 3

Main statements made by Phillips (2018), Lund and Robertson (2023) and McLaughlin and Massa (2020)

Order	Statement	Null hypothesis (H_0)	Alternative hypothesis (H_a)
#1	The Big Three own 22 % of companies included in the S&P 500, each one owning 7.33 %.	$p = 7.33 \%$	$p < 7.33 \%$
#2	The "Big Three" are closely and exclusively related to passive investment (at least 90 % of the portfolio).	$p \geq 90 \%$	$p < 90 \%$
#3	Global media are controlled by the "Global Power Elite". The Big Three own at least 15.56 % of the largest global media corporations.	$p \geq 15.56 \%$	$p < 15.56 \%$

Collect Data

Data collection was performed using web scraping in the Python programming language. Collected data includes: company data (e.g. country, sector) from the Stock Analysis (2023a) website, top 10 mutual fund holders from the Yahoo Finance website, and the list of companies that compound the most important indices in the American exchanges: Standard & Poor 500 (Stock Analysis, 2023b), NASDAQ 100 (Stock Analysis, 2023c), Dow Jones Industrial Average (DJIA) (Stock Analysis, 2023d).

Neufeld (2023) singled out the leading 25 global stock exchanges, which boast a cumulative market capitalization of around \$107 trillion. Most notably, the New York Stock Exchange (NYSE) at \$25 trillion and NASDAQ at \$21.7 trillion collectively command nearly 44 % of this market value, for which the sample will include companies listed in both exchanges. As part of the analysis process, for each company under examination we systematically gathered data on the top 10 individual shareholders with direct investments in the organization, along with the top 10 mutual funds holding shares in the company through passive investment. Data was collected on March 5th, 2024.

Figure 3 shows an example of the data collection process, where top 10 holders (direct holders and mutual funds) of Apple (AAPL) are being web scrapped. Data was collected on January 28th, 2024.

Figure 3

Data collection process

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STEP 2: get data from the web...
Stock 1 of 519 --> AAPL
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	Holder	Shares	Date	Reported	% Out	Value	Type
0	Vanguard Group Inc	1299997133	Sep 29, 2023	8.36%	251679452883	Direct Holder	
1	Blackrock Inc.	1031407553	Sep 29, 2023	6.63%	199680508556	Direct Holder	
2	Berkshire Hathaway, Inc	915560382	Sep 29, 2023	5.89%	177252495543	Direct Holder	
3	State Street Corporation	569291690	Sep 29, 2023	3.66%	110214874658	Direct Holder	
4	FMR, LLC	298321726	Sep 29, 2023	1.92%	57755087974	Direct Holder	
5	Geode Capital Management, LLC	296103070	Sep 29, 2023	1.90%	57325556159	Direct Holder	
6	Price (T.Rowe) Associates Inc	216307878	Sep 29, 2023	1.39%	41877206501	Direct Holder	
7	Morgan Stanley	206732960	Sep 29, 2023	1.33%	40023502317	Direct Holder	
8	Northern Trust Corporation	168874976	Sep 29, 2023	1.09%	32694196384	Direct Holder	
9	Norges Bank Investment Management	167374278	Dec 30, 2022	1.08%	32403661242	Direct Holder	
10	Vanguard Total Stock Market Index Fund	462496298	Sep 29, 2023	2.97%	89539286115	Mutual Fund	
11	Vanguard 500 Index Fund	353157634	Sep 29, 2023	2.27%	68371320097	Mutual Fund	
12	Fidelity 500 Index Fund	170161953	Oct 30, 2023	1.09%	32943355139	Mutual Fund	
13	SPDR S&P 500 ETF Trust	163961069	Sep 29, 2023	1.05%	31742863959	Mutual Fund	
14	iShares Core S&P 500 ETF	138878373	Sep 29, 2023	0.89%	26848133859	Mutual Fund	
15	Vanguard Growth Index Fund	128896004	Sep 29, 2023	0.83%	24954267161	Mutual Fund	
16	Invesco ETF Tr-Invesco QQQ Tr, Series 1 ETF	124636013	Sep 29, 2023	0.80%	24129532877	Mutual Fund	
17	Vanguard Institutional Index Fund-Institutional Index Fund	98610773	Sep 29, 2023	0.63%	19091046254	Mutual Fund	
18	Vanguard Information Technology Index Fund	76972129	Aug 30, 2023	0.49%	14901804644	Mutual Fund	
19	Select Sector SPDR Fund-Technology	64668259	Sep 29, 2023	0.42%	12519775337	Mutual Fund	

Clean Data

Python programming language was also utilized for the data cleaning process. This phase consisted of validating data and handling missing values. Some of the tasks executed during the phase included performing data exploration, converting text into proper numeric format, dismissing duplicate data related to the total list of companies included in the analysis and standardizing the names of the mutual funds to more easily identify the holder.

Data Analysis

First, we used hypothesis testing to prove or disprove the thesis that each of the Big Three, as stated in Lund and Robertson (2023) and McLaughlin and Massa (2020), own an average of 7.33 % (22 % in total) of the companies included in the S&P 500. Since we are working with proportions and our sample is very limited, t-test was used. Hypothesis was tested with a confidence level of 95 % and alpha value of 0.05. The hypotheses are:

Null hypothesis (H₀): $p = 7.33\%$.

Alternative hypothesis (H_a): $p <> 7.33\%$

The second statement under scrutiny points out that the Big Three are closely and exclusively associated with passive investment. Because authors Lund and Robertson (2023) and McLaughlin and Massa (2020) do not provide an exact quantification of how much of the portfolio is deemed to consist 'close or exclusively' of passive investment, an assumed figure of 90 % is adopted for analysis purposes. Passive investment, by definition, entails an investment strategy crafted to minimize risk and streamline portfolio selection by favoring assets like mutual funds and ETFs. Additionally, the

t-test was employed for further evaluation, with a confidence level of 95 % and significance level equal to 0.05. The hypotheses are:

Null hypothesis (H_0): $p \geq 90 \%$

Alternative hypothesis (H_a): $p < 90 \%$

Peter Phillips (2018) states that global media are owned and controlled by the Global Power Elite. Table 4 contains 5 of the companies identified by Phillips (2018), of which two are not listed in any exchange (Time Warner and Viacom/CBS). Next, we calculated what share of the media firms is owned by the Big Three in terms of money and percentage. It is important to highlight that 21st Century Fox is now called Fox Corporation, and Time Warner is now called Warner Bros Discovery. According to the table in Table 4, the Big Three possess an average 15.56 % of the world’s largest media as of 2017: 18.16 % of Comcast Corp., 17.81 % of Disney, and 10.72 % of 21st Century Fox.

Table 4

Top transnational news and entertainment corporations (Phillips, 2018)

Asset Management Firm	Money invested Media Company (Billion USD)				
	Comcast Corp.	Disney	Time Warner	Viacom and CBS	21st Century Fox
<i>BlackRock</i>	14.400	9.300	4.000	1.280	0.852
<i>Vanguard Group</i>	12.300	10.700	4.500	1.390	0.997
<i>State Street</i>	7.300	7.100	2.700	0.861	0.588
Bank of America	2.300	1.800	0.517	0.154	0.064
e	2.160	2.500	0.707	0.252	0.135
JPMorgan Chase	2.100	1.800	0.636	0.476	0.162
Capital Group	2.100	--	0.907	1.740	0.000
UBS	1.400	0.927	0.395	0.168	0.083
Goldman Sachs Group	1.190	0.921	0.908	0.109	0.207
Prudential Financial	0.737	0.310	0.000	0.068	0.070
Morgan Stanley	0.663	2.700	0.624	0.215	0.569
Total owned by firms	46.65	38.06	15.89	6.71	3.73
Owned by 'Big Three'	34.00	27.10	11.20	3.53	2.44
Market Cap in 2017	187.19	152.14	(Not listed)	(Not listed)	22.74
% Owned by 'Big Three'	18.16 %	17.81 %	(Not listed)	(Not listed)	10.72 %
% Average Owned by 'Big Three'	15.56 %				

Dellatto (2023) wrote an article listing world's largest media companies as of 2023. The task at hand is to verify the notion that the Big Three still own at least 15.56 % of the largest global media corporations in 2023 using t-test. The sample will include the following publicly traded media companies: Comcast Corp. (NASDAQ: CMCSA), Fox Corp. (NASDAQ: FOX), Disney (NYSE: DIS), Omnicom Group (NYSE: OMC), Charter Communications (NASDAQ: CHTR), and Warner Bros Discovery (NASDAQ: WBD). These are the hypotheses:

Null hypothesis (H_0): $p \geq 15.56 \%$

Alternative hypothesis (H_a): $p < 15.56 \%$

Data Visualization: Power BI

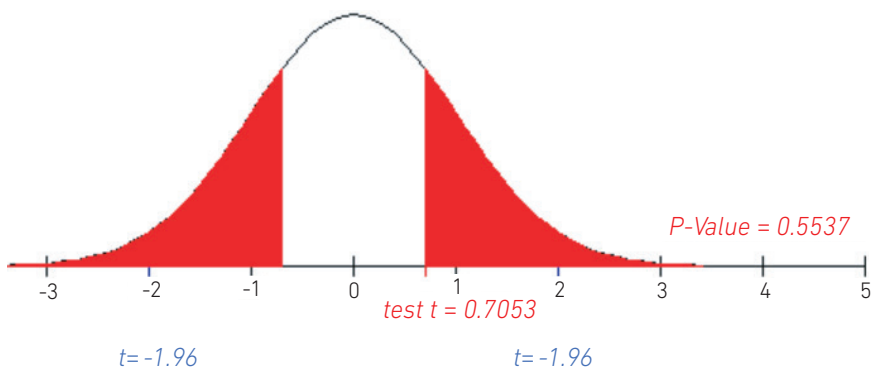
Once data has been properly collected, formatted and analyzed it is time to share the results. There are many data visualization tools in the market today (Tripathi & Bagga, 2020; Srivastava et al., 2022) that can be evaluated and selected according to the user's needs. Some of the most popular are Power BI, Zoho Analytics, Tableau, Locker and Qlik. Power BI was the selected BI tool as it is supported by most platforms. In addition, Power BI works in the cloud and on-premise (Tripathi & Bagga, 2020).

3. RESULTS

The first hypothesis states that the "Big Three" hold an average of 7.33 % (22 % in total) of all the companies included in the S&P 500 index. As shown in Figure 4, for a confidence level of 95 % and alpha equal to 0.025 for a two-tailed test, the calculated p-value is 0.5537. Since the p-value is higher than α , we fail to reject the null hypothesis (H_0): $p = 7.33 \%$.

Figure 4

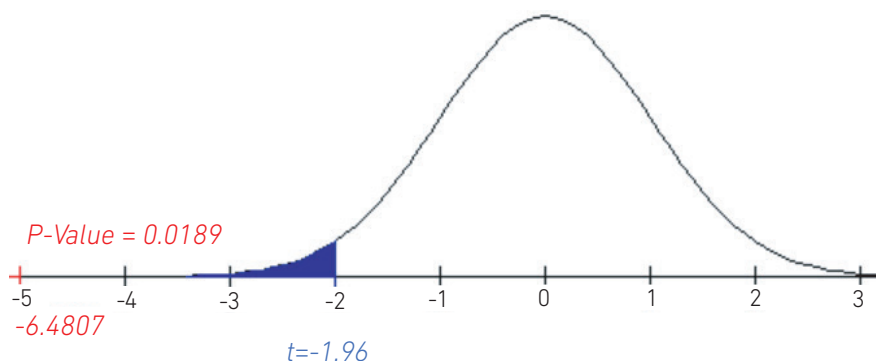
Illustration of the results of hypothesis testing related to ownership in companies in S&P 500 using t-test



In regards to the second hypothesis about the Big Three’s association with passive investment, the test results are delineated below. As illustrated in Figure 7, the proportion of the portfolio allocated to mutual funds or ETFs was computed under the assumption that it constitutes a minimum of 90 % (≥ 90 %) of the entire portfolio. Employing a 95% confidence level for this test, corresponding to a significance value of 0.05 for a left-tailed test, the calculated p-value is 0.0189 as shown in Figure 5. Since the p-value is lower than α , we reject the null hypothesis (H_0): $p \geq 90$ %.

Figure 5

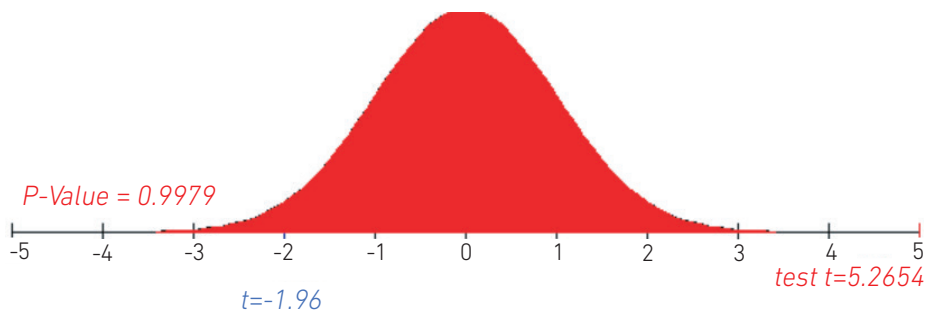
Illustration of the results of hypothesis testing related to passive asset management using t-test



The third hypothesis refers to the control of the largest media corporations by certain “Giants” in the asset management sector, confirming that the “Big Three” own at least 15.56 % of big media companies. After considering a confidence level of 95 % and a significance level of 0.05 for a left-tailed test, the p-value is 0.9979 (see Figure 6). Since the p-value is not lower than α , we fail to reject the null hypothesis (H_0): $p \geq 15.56$ %.

Figure 6

Illustration of the results of hypothesis testing related to ownership in big media companies using t-test



4. DISCUSSION

In the previous chapter three hypotheses were tested using statistical techniques. Here, some charts will be employed to strengthen our results.

McLauglin and Massa (2020) stated that 22 % of the shares in the S&P 500 were held by the Big Three, up from 13 % in 2008. Figure 7 shows the share of the companies in the most important indexes in US exchanges that they own: 28.31 % in S&P 500, 24.54 % in NASDAQ 100, and 28.24 % in DJIA.

Figure 7

Value of ownership of the Big Three in US indices

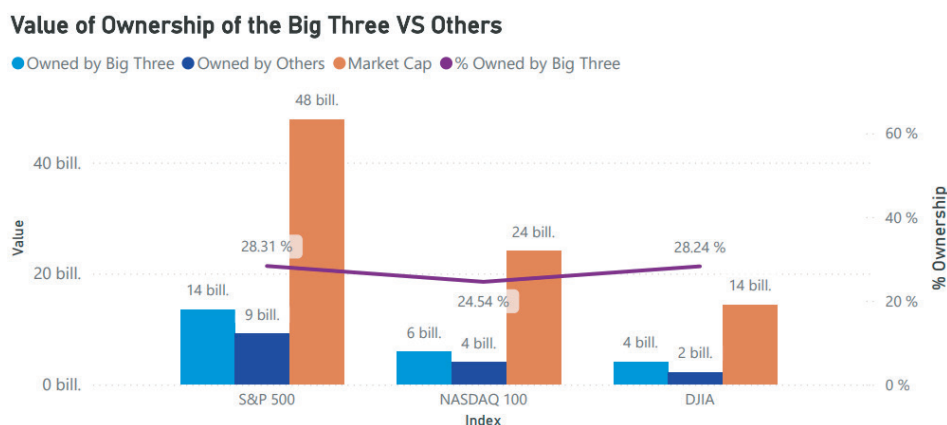


Figure 8. Illustration of the results of hypothesis testing related to the ownership in big media companies using t-test.

Furthermore, individually the Big Three are each among the Top 5 holders in the S&P 500, which are listed in Figure 8. Vanguard Group Inc is the largest investor with \$7.3 trillion, followed by BlackRock with \$3.7 trillion and State Street Corporation with \$2.6 trillion.

Lund and Robertson (2023) refer to the Big Three as passive investors. Figure 9 illustrates the type of investment that each of the Big Three has in the S&P 500 companies. Direct Holder refers to a company investing in a particular asset as an active investor, whereas Mutual Funds is related to a passive investment strategy. Contrary to the author's statement, data shows that the largest assets managers in the world prefer active investing over passive investing. The asset manager with the highest proportion of its portfolio invested using active investment is BlackRock with 88.72 %, followed by State Street Corporation with 75.06 % and lastly Vanguard Group Inc with 55.29 %. Based on the data, Lund and Robertson's statement on big asset managers and passive investment lacks support.

Figure 8

Top 5 holders in S&P 500

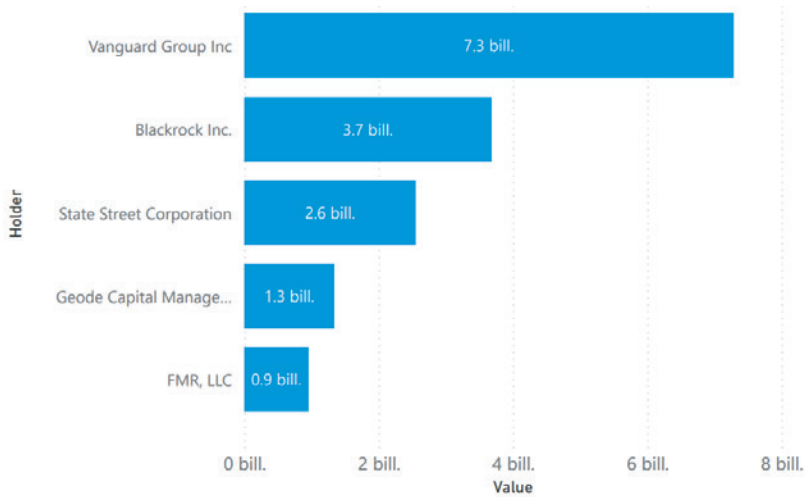
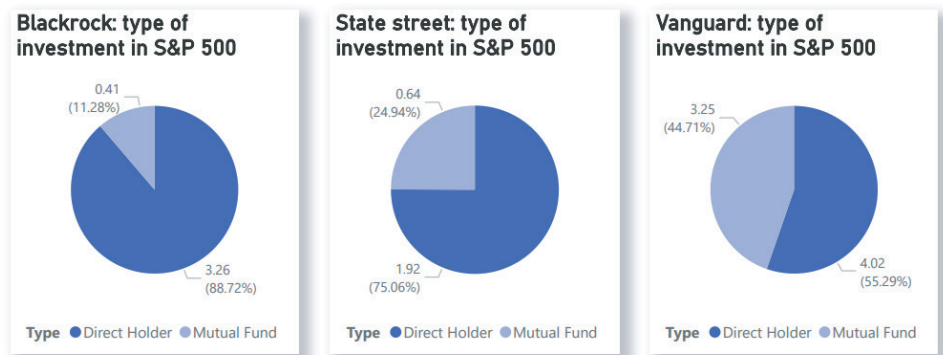


Figure 9

Type of investment developed by the Big Three in S&P 500 companies



Phillips's (2018) research pointed out that the global power elite controls global corporate media, such as Comcast Corp. or Disney. Figure 10 lists the biggest media corporations and calculates how much of them is owned by the Big Three. It is clear that the Big Three hold important positions in companies like Comcast Corp. (CMCSA: 29.12 %), Disney (DIS: 28.73 %), Warner Bros Discovery (WBD: 31.65 %), and Omnicom Group Inc. (OMC: 40.87 %).

Figure 10

Ownership of the Big Three on Big Media companies

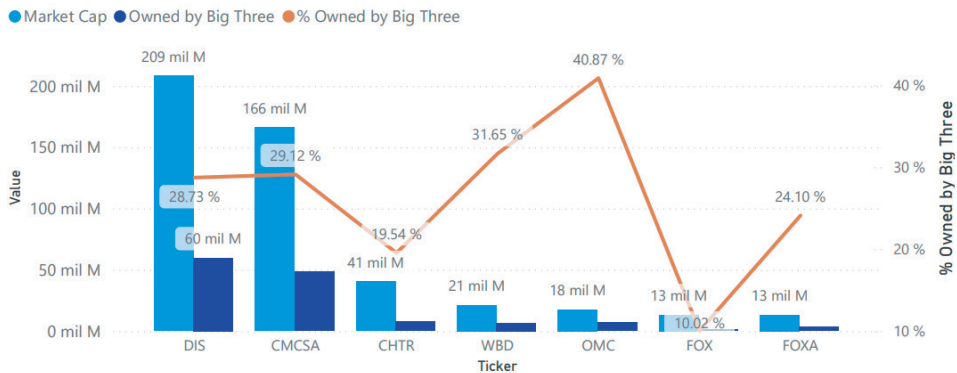


Table 6 not only shows individual investment in big media corporations, but also the total value invested by the Big Three as a whole. The Top 3 asset managers possess 28.73 % of all big media firms, worth \$135 billion.

Table 6

Total ownership of the Big Three in big media companies

Ticker	Market Cap	Owned by Big Three	% Owned by Big Three
DIS	208.54 bn	60 bn	28.73 %
CMCSA	166.22 bn	48 bn	29.12 %
CHTR	40.53 bn	8 bn	19.54 %
WBD	21.15 bn	7 bn	31.65 %
OMC	17.66 bn	7 bn	40.87 %
FOX	13.40 bn	1 bn	10.02 %
FOXA	13.39 bn	3 bn	24.10 %
Total	480.89 bn	135 bn	28.01 %

5. CONCLUSION

This article delves into insights provided by key sources such as Phillips (2018), Lund and Robertson (2023) and McLaughlin and Massa (2020) regarding the most prominent asset managers, often referred to as 'Giants' or the 'Big Three'. Distilling information from these references, three hypotheses were formulated and scrutinized through hypothesis testing, as detailed in Table 3. The results of the data analytics process unfold as follows: Hypothesis #1, positing that the Big Three collectively own an average of 7.33 % of

companies within the S&P 500, was supported. Conversely, the hypothesis #2 suggesting that the Big Three control over 90 % of the portfolio in passive investment was rejected. Meanwhile, the hypothesis #3 asserting that the 'Global Power Elite' commands approximately 15.56 % of the largest media corporations did not face rejection.

As of March 2024, the Big Three command formidable influence, holding 28.31 % of the total market value of S&P 500, 24.54 % of NASDAQ 100, and 28.24 % of DJIA. This substantial ownership underscores the undeniable level of power and influence they wield to advance their interests.

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