Assessing the value of the CFA Designation in the field of finance

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To my parents, for their tireless love and support

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Introduction

The CFA exams are often dubbed the world's hardest exams in the field of finance (A Mooney, 2020). Every exam cycle hundreds of thousands of candidates pile into examination centres looking to either advance to the next level or complete the designation. Not only is the content complex and difficult but it is also broad in nature covering 10 different areas, each requiring different skills. Given the level of complexity, it is commonly known that candidates have to spend at least 300 hours studying for each level (S Butcher, 2022). In most cases, it requires more than 300 hours to adequately prepare. In addition to the time commitment required, the process can also be very disheartening due to the low pass rates (35%-50%) for each level. Based on the 10-year pass rate averages for the 3 exams there is only about an 8% chance that an individual passes each exam on the first attempt. Failing not only means that one has to go through the material again but will also have to pay the enrolment fee again.

There has been a lot of debate in the field of finance about whether the CFA designation is worth undertaking due to the difficulty of the exams, perceived pointlessness, and the time commitment required to complete the charter. It often takes candidates between 4-and 5 years to pass all the levels because of the high percentage of candidates failing respective levels. This paper is going to argue that there is real value in the CFA charter, showcasing that it is worthwhile, even with the claims against it. Thus, it will be advocating that the positives outweigh any potential weaknesses. The paper will make the argument for the CFA designation based on the following themes: Individuals can use it to change professions; It can lead to an increase in pay and career advancement in the same occupation; The performance of CFA charterholders improves relative to those that don't have the designation; It holds a lot of respect and credibility.

This thesis will contain 3 chapters. The first chapter will be based upon general information about the CFA, outlining basic themes such as what it is, passing rates, types of jobs candidates/charterholders have, history, MPS, curriculum etc. The second chapter will contain information outlining why the CFA charter is worthwhile and its overall value. The third chapter will focus on the implications of the thesis findings and will be based on the following themes: Comparing the value of the CFA to the traditional MBA; and that the CFA charter should become a requirement in asset management roles, similar to that of the CPA in public accounting.

Chapter 1: Outlining the CFA program

About the CFA

A chartered financial analyst (CFA) is a "globally-recognized professional designation given by the CFA Institute, that measures and certifies the competence and integrity of financial analysts" (Hayes, 2020). The CFA designation is designed to demonstrate a strong foundation in advanced investment analysis and portfolio management, accompanied by a strict emphasis on ethical practice. Unlike the legal and accounting professions, CFA is not a regulatory requirement for a job in finance, even in the investment management arena. That being said, CFA is increasingly preferred and required in the investment management sector, especially when seniority increases (Hayes, 2020).

Although the CFA is targeted at investment professionals, the CFA designation is valued not just in the investment management sector, but well recognized in the broader financial services industry globally. Given the level of commitment needed and the difficulty of the exams, charterholders gain a lot of credibility and respect in the finance industry.

As of March 2022, at least 175,000 people are charterholders globally, growing 3.5% annually since 2012, including effects of the pandemic (CFA Institute).

Type of Jobs		
Portfolio Management	25%	
Research	12%	
Consulting	10%	
Chief Level Executive	9%	
Investment Strategy	7%	
Risk Management	7%	
Wealth Management	5%	
Credit Analysis	5%	
Trading	4%	
Accounting	4%	
Financial Planning	3%	
Other	9%	

CFA candidates jobs		
Research	13%	
Accounting	9%	
Consulting	7%	
Portfolio Management	6%	
Risk Management	5%	
Wealth Management	5%	
Corporate Finance	5%	
Credit Analysis	4%	

(CFA Institute)

The table to the left showcases the breakdown of the types of jobs that CFA charterholders have. As expected, portfolio management and research (i.e. investment analysis) dominate the sectors most CFA charterholders currently work in at 25% and 12% respectively. It's not surprising as the CFA designation focuses on the investment management field which these 2 sectors are most applicable to. There are also high percentages of charterholders as chief level executives and in investment strategy which makes sense as often these are roles that investment professionals step into as progressions or exit strategies. Furthermore, what is interesting about this data is the broad applicability of the CFA charter in various other finance professions. It clearly adds value to areas such as risk management, wealth management and credit analysis given the mid-single-digit percentages of charterholders in these respective fields. The CFA material is broad, thus, is applicable to a lot of different finance roles.

Furthermore, the table to the right showcases what CFA candidates currently do. Several key insights can be determined from this table. Firstly, it should be noted that the table only includes non-student, employed candidates. The data reflect that about 70% of the survey participants are employed and around 23% are students. These students are starting their CFA journey before graduating in hope of better graduate job opportunities. Secondly, it can be said that professionals from certain professions, such as accountants and auditors, are using the CFA as a means to switch careers: 9% of CFA candidates come from an accounting or auditing background (second highest group after Research), but only 4% of CFA charterholders stayed in that career. Based on the survey data in the next section, this ties in with the view that CFA candidates currently in accounting/auditing roles are taking the CFA exams in the hope to switch careers into other areas of finance (especially corporate finance, investment banking and financial planning). Thirdly, portfolio management is a popular target career for CFA candidates: With only 6% of CFA candidates in the portfolio management sector compared to 25% of CFA charterholders, the CFA qualification is likely an effective way for candidates to move into this sector. Fourthly, candidates also take the CFA exams for career advancement: On average, there are a few other job functions (e.g. relationship / wealth management, credit analysis, consulting and risk management) that have similar proportions to the CFA charterholder %. Rather than just for switching careers, the CFA charter is also used by candidates to further advance in their chosen career path. If one can get the CFA designation it should allow them to get promoted and receive a pay increase.

History

The predecessor of the CFA Institute, the Financial Analysts Federation (FAF), was established in 1947 as a service organization for investment professionals (Tatham, 2018). The FAF founded the Institute of Chartered Financial Analysts in 1962; the earliest CFA charterholders were "grandfathered" in through work experience only, but then a series of three examinations were established along with a requirement to be a practitioner for several

years before taking the exams (Tatham, 2018). In 1990, in the hopes of boosting the credential's public profile, the CFA Institute (formerly the Association for Investment Management and Research) merged with the FAF and the Institute of Chartered Financial Analysts (Tatham, 2018).

The CFA exam was first administered in 1963 and began in the United States and Canada, but has become global with many people becoming charterholders across Europe, Asia, and Australia (Tatham, 2018).

Requirements

To become a CFA charterholder, candidates must satisfy these requirements (CFA Institute):

- Have obtained a bachelor's (or equivalent) degree, or be in the final year of a bachelor's degree program. However, an accredited degree may not always be a requirement.
- Pass all three levels of the CFA Program (mastery of the current CFA curriculum and passing three examinations).
- Have 4,000 hours in a minimum of 3 years of qualified work experience acceptable by the CFA Institute. However, individual-level exams may be taken prior to satisfying this requirement.
- Have two or three letters of reference.
- Become a member of the CFA Institute.
- Adhere to the CFA Institute Code of Ethics and Standards of Professional Conduct.

In terms of fees, there are a few things to point out. Firstly, there is a one-off registration fee of \$450. Everyone has to pay this fee before their first exam. Secondly, there is a difference between the early registration fee of \$700 and the standard registration fee of \$1,000. Thus, candidates can save money by registering early.

Due to the timing of the exams, completing all three levels of the CFA designation is possible within two years, but candidates must still complete the work experience requirement of 4,000 hours over a minimum of 3 years to become a charterholder (CFA Institute). It is very rare for someone to pass all three exams the first time they sit them, so typically candidates take numerous years to pass the 3 exams.

A charterholder is held to the highest ethical standards. Once an investment professional obtains the charter, this individual also makes an annual commitment to uphold and abide by a strict professional code of conduct and ethical standards. Violations of the CFA code of ethics may result in industry-related sanctions, suspension of the right to use the CFA designation or revocation of membership (CFA Institute).

Curriculum

The curriculum for the CFA program is based on a candidate's Body of Knowledge established by the CFA Institute. The CFA curriculum is updated annually to reflect the latest best practices, with the extent of changes varying by year and level. The curriculum comprises, broadly, the topic areas below. There are three exams/levels that test the academic portion of the CFA program. All three levels emphasize the subject of ethics. The material differences among the exams are:

- The Level I study program emphasizes tools and inputs and includes an introduction to asset valuation, financial reporting and analysis, and portfolio management techniques. The CFA Level I test has 240 questions, which are all in multiple-choice format; some of which require you to choose the correct way to complete a sentence, while others ask you to choose the best of three answers to a query.
- The Level II study program emphasizes asset valuation and includes applications of the tools and inputs (including economics, financial reporting and analysis, and quantitative methods) in asset valuation. The CFA Level II exam focuses on asset valuation and properly applying investment tools. The test format shifts away from multiple choice to vinaigrettes, such as testees have to read a case study that is approximately 1.5 pages long and then answer 6 multiple-choice questions based on the information contained in that passage.
- The Level III study program emphasizes portfolio management and includes descriptions of strategies for applying the tools, inputs, and asset valuation models in managing equity, fixed income, and derivative investments for individuals and institutions. In the final of the CFA exams, Level III requires test takers to demonstrate mastery of all content areas and be able to apply their skills to the planning and management of portfolios. This exam's morning session has 8 to 12 essay questions, each with multiple parts. Some questions require you to freely construct a response, while others provide instruction to address specific parts of the essay prompt. In the afternoon session, CFA Level III test takers must answer 10 item set questions.

There are 10 different content areas of the CFA exam: alternative investments, corporate finance, derivatives, economics, equity investments, ethics, financial analysis, fixed income, quantitative methods, and portfolio management. The program teaches a wide range of subjects relating to advanced investment analysis - including security analysis, statistics, probability theory, fixed income, derivatives, economics, financial analysis, corporate finance, alternative investments, portfolio management - and provides a generalist knowledge of other areas of finance.

Ethics

• The ethics section is primarily concerned with compliance and reporting rules when managing an investor's money or when issuing research reports. Some rules pertain more generally to professional behavior (such as prohibitions against plagiarism); others specifically relate to the proper use of the designation for charterholders and candidates. These rules are delineated in the 'Standards of Professional Conduct', within the context of an overarching 'Code of Ethics'.

Quantitative Methods

• This topic area is dominated by statistics: the topics are fairly broad, covering probability theory, hypothesis testing, (multi-variate) regression, and time-series analysis. Other topics include the time value of money—incorporating basic valuation and yield and return calculations—portfolio-related calculations, and technical analysis. Recent additions are a review of machine learning and big data.

Economics

• Both microeconomics and macroeconomics are covered, including international economics (mainly related to currency conversions and how they are affected by international interest rates and inflation). By Level III, the focus is on applying economic analysis to portfolio management and asset allocation.

Financial Reporting and Analysis

• The curriculum includes financial reporting topics (International Financial Reporting Standards and the U.S. Generally Accepted Accounting Principles), and ratio and financial statement analysis. Financial reporting and analysis of accounting information are heavily tested at Levels I and II but are not a significant part of Level III.

Corporate finance

• The curriculum initially covers the major corporate finance topics: capital investment decisions, capital structure policy and implementation, and dividend policy; this builds on the accounting, economics and statistics areas. It then extends to more advanced topics such as the analysis of mergers and acquisitions, corporate governance, and business and financial risk.

Portfolio Management

• This section increases in importance with each of the three levels—it integrates and draws from the other topics, including ethics. It includes: (i) modern portfolio theory (efficient frontier, capital asset pricing model, etc.); (ii) investment practice (defining the investment policy for individual and institutional investors, resultant asset allocation, order execution, and hedging using derivatives); and (iii) measurement of investment performance.

Security Analysis: Equity, Fixed Income and Alternative Investments

• The curriculum includes coverage of global markets, as well as analysis and valuation of the various asset types: equity (stocks), fixed income (bonds), derivatives (futures, forwards, options and swaps), and alternative investments (real estate, private equity, hedge funds and commodities). The Level I exam requires familiarity with these instruments. Level II focuses on valuation, employing the "tools" studied under quantitative methods, financial statement analysis, corporate finance and economics. Level III centres on incorporating these instruments into portfolios.

Equity and fixed income

• The curriculum for equity investments includes the functioning of the stock market, indices, stock valuation, and industry analysis. Fixed income topics similarly include the various debt securities, the risk associated with these, and valuations and yield spreads.

Derivatives

• The curriculum includes coverage of the fundamental framework of derivatives markets, derivatives valuations, hedging and trading strategies involving derivatives, including futures, forwards, swaps, and options. The curriculum incorporates various pricing models and frameworks, such as Black–Scholes and binomial option pricing (extending to coverage of interest rate trees), while coverage of the underlying mathematics is conceptual as opposed to technical.

Alternative Investments

• The curriculum includes coverage of a range of topics in the alternative investment category. Topics include hedge funds, private equity, real estate, commodities, infrastructure, and other alternative investments, including, as applicable, strategies, sub-categories, potential benefits and risks, fee structures, and due diligence.

As you can see in the passages above not only does the difficulty of content increase but the format of the exams shift from singular multiple-choice, to vinaigrettes then to essay based. In addition, the testable content areas of the exam change also. The table below indicates that there is a significant amount of variation in the content. There is a big change in portfolio management which starts at the lowest bracket in level 1 but then moves into the highest joint bracket in level 2, and then becomes the largest portion in level 3 by a significant amount. Furthermore, areas such as quantitative methods, financial reporting and analysis, and corporate issuer, which are relatively important in levels 1 and 2, are not tested in level 3. Apart from the content areas discussed previously the other areas remain roughly around the same level of importance throughout the 3 exams.

	Level I	Level II	Level III
Ethics and Professional Standards	15%-20%	10%-15%	10%-15%
Quantitative Methods	8%-12%	5%-10%	0%
Economics	8%-12%	5%-10%	5%-10%
Financial Reporting and Analysis	13%-17%	10%-15%	0%
Corporate Issuer	8%-12%	5%-10%	0%
Equity Investments	10%-12%	10%-15%	10%-15%
Fixed Income	10%-12%	10%-15%	15%-20%
Derivatives	5%-8%	5%-10%	5%-10%
Alternative Investments	5%-8%	5%-10%	5%-10%
Portfolio Management and Wealth Management	5%-8%	10%-15%	35%-40%

(CFA Institute)

Ethics adjustment

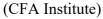
The CFA has placed a large emphasis on ethics given the high level of trust and responsibility that is required for those in the financial services industry. The CFA Institute states that "the Board of Governors instituted a policy to place particular emphasis on ethics. Starting with the 1996 exams, the performance in the ethics section became a factor in the pass/fail decision for candidates whose total scores bordered the minimum passing score. The ethics adjustment can have a positive or negative impact on these candidates' final results" (CFA Institute).

Furthermore, the CFA Institute has been rather secretive when it comes to releasing information surrounding the minimum passing score (MPS). The CFA Institute "has a policy of not releasing either the minimum passing score or individual candidate scores. Consequently, CFA Institute does not release specific information about the ethics adjustment or the candidates who were affected. The adjustment has had a net positive effect on candidate scores (and thus pass rates) in most exam sessions. The published pass rates always take into account the ethics adjustment for borderline candidates" (CFA Institute).

Pass rates

The CFA designation is different to other educational degrees/certifications, such as an MBA, in which the difficult part is getting into the program. The material and content, oftentimes, are not nearly as difficult as the entry. Whereas, with the CFA charter anybody can take it, but the actual program itself is difficult and rigorous. The difficulty of the exams and low pass rates make the CFA charter unique and compelling. Getting the balance between being too easy and being too hard is very strenuous as if passing rates are too high, it lacks prestigiousness, but if they are too low candidates may end up not undertaking the designation due to the high level of stress and laborious process.

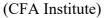






(CFA Institute)



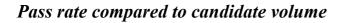


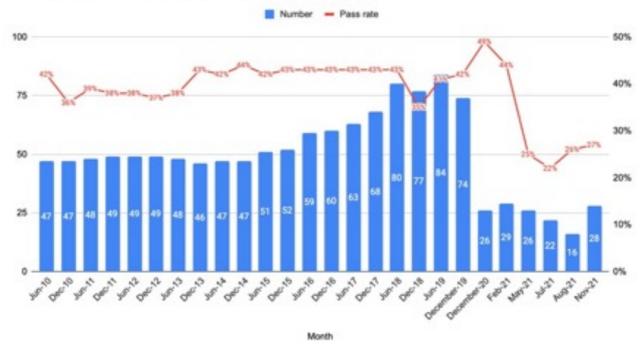




As one would expect, the average pass rate increases as one progress throughout the 3 levels. Since 2010, the historical CFA pass rates for:

- Level 1 ranges from 22%-49%, with an 11-year average of 39%;
- Level 2 ranges from 29%-55%, with an 11-year average of 44%;
- Level 3 ranges from 39%-56%, with an 11-year average of 50%.





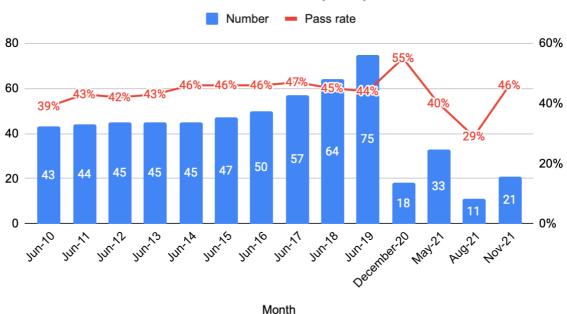
CFA Level 1 Pass Rates vs Volume (000')

(CFA Institute)

The key insights looking at this data are that:

- CFA exam's popularity is evident in this chart, with Level 1 candidate growth accelerating steadily since 2015. This has taken a hit since the pandemic, with annual candidate volumes about 60% of previous years.
- CFA Level 1 pass rates have remained relatively stable and above 40% since 2014 for paper-based exams. The recent Dec20 exam's jump in Level 1 pass rate to 49% is most likely due to the additional time candidates have due to multiple COVID-19 exam postponements.
- Unfortunately, not many candidates were able to sit the exam even on Dec20 due to the ongoing pandemic situation, and this is reflected in Feb21's data as well.
- However, in May'21, CFA Level 1 experienced a monster drop in pass rates since 2010, the historical CFA pass rates for Level 1 had been about 36%-49%, averaging 42%. This has dropped to 25% in the May'21 exams, and further, dropped in Jul'21 to 22%, before rebounding to 26% in Aug'21.

• CFA Institute has implied that this low pass rate is temporary and due to pandemic disruption. Going forward, they do expect the pass rate to approach pre-COVID historical levels in time — so long as pandemic conditions subside.

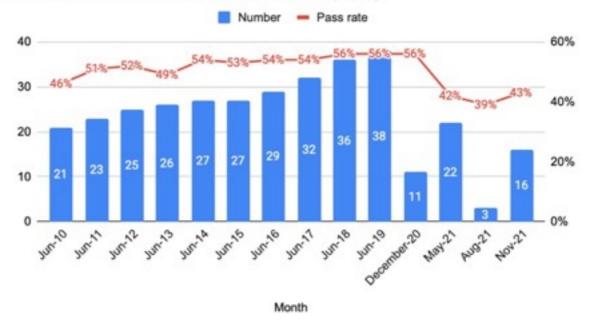


CFA Level 2 Pass Rates vs Volume (000')

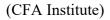
(CFA Institute)

The conclusion for CFA Level 2 pass rates and candidate volume is similar to Level 1:

- Level 2 pass rates were relatively stable and above 40% since 2011, with a significant jump to 55% pass rates for Dec20 Level 2 candidates.
- Level 2 candidate growth has been accelerating since 2015 as well, but this has dropped to lower levels since the pandemic and CBT format change.
- Excluding the Dec'20 'pandemic exam', pass rates have been on a steady/downward trend from 2017 until the end of 2021. After the lowest pass rates ever in Aug21, Nov21 results rebounded back to the long term average, an encouraging sign that the impact of pandemic disruption on pass rates is nearly over.



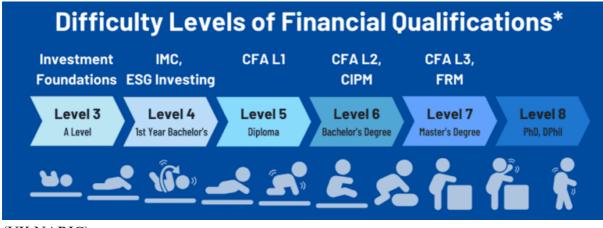
CFA Level 3 Pass Rates vs Volume (000')



Key information is that:

- CFA Level 3 is a little different from other levels, whereby the pass rates are very stable and consistently higher than the rest. This can be explained by natural selection: Level 3 candidates by definition are highly skilled and knowledgable at this point, having passed Level 1 and Level 2.
- Similarly to Level 1 and Level 2, CFA Level 3's pass rate experienced a big drop during the May 21 exam cycle, recording a new low of 39% in the Aug21 exam. One noticeable difference is the Level 3 Aug21 exam cohort is really small, with only 2,769 candidates taking the exam.
- That said, it is showing initial signs of climbing back up to 43% with the latest Nov21 exams, but still below average.
- There has been noise surrounding the lower passing rates seen since the introduction of computer-based testing. The CFA Institute has stated that computer-based testing is neither harder nor easier than paper-based testing. They use robust statistical analysis and processes to ensure that "the bar" remains unchanged for every exam administration, employing techniques that are well established by psychometricians to ensure that the exam is neither easier nor harder because it is administered in a computer-based setting. In their move to computer-based testing, they went to great lengths to ensure the continued integrity of the exams and the CFA charter. In short, the CFA institute believes that computer-based testing is not harder or easier.

Measure of difficulty





According to UK NARIC, the CFA exams have been benchmarked individually by Level under UK Regulated Qualifications Framework (RQF):

- CFA Level 1's difficulty is comparable to a Diploma of higher education (Level 5 qualification under RQF);
- CFA Level 2's difficulty is comparable to a Bachelor's degree (Level 6 qualification under RQF);
- CFA Level 3's difficulty is comparable to a Master's degree (Level 7 qualification under RQF).

MPS

The CFA Board has adopted the following Guiding Principles for the Board and management to consider when setting the CFA examination minimum passing score (CFA Institute).

The MPS process should:

• Ensure fair treatment of all candidates while reflecting the high standards of CFA charterholders worldwide;

• Employ relevant expertise and best practices of the testing industry as well as the sound judgment of informed decision-makers;

• Be appropriately transparent to all stakeholders while maintaining the integrity of examination information;

• Seek consistency over time in methodology and continuity in results while allowing for flexibility based on evolving circumstances.

Unfortunately, the CFA Institute doesn't disclose the official minimum passing score (MPS), which varies from exam to exam. Simply put, the minimum passing score (MPS) is

the lowest score a candidate can get and still pass their CFA exam. There are no topicspecific passing scores. So as long as your overall score matches or beats the minimum passing score, you should pass. In the earlier days, the MPS was a simple formula – 70% of the highest scoring candidate for that year. If the highest-scoring candidate scored 90%, the MPS would therefore be 70% * 90% = 63%. Presently, the MPS is determined by a custom methodology devised by CFA Institute, and one of the primary inputs is a series of workshops based on the Angoff model.

Here's how the MPS for each Level are determined:

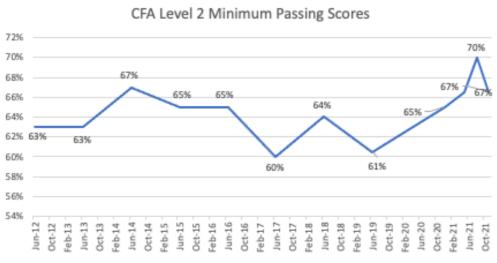
- 1. A large, diverse group of CFA charterholders evaluate the entire exam individually question by question and makes a judgment on the performance of the just-competent candidate. In other words, envisioning a candidate they judge to be just good enough to pass, they estimate the probability that this candidate will get this question right (CFA Institute).
- 2. Once all the evaluations are done, the charterholders take a look at actual candidate performance and the evaluation process is repeated (CFA Institute).
- 3. Psychometricians oversee the entire process and the result of this workshop is the main reference (but not the final word) for setting the MPS (CFA Institute).
- 4. The CFA Institute Board of Governors then puts all information on the table. All available information is considered including recommendations from the Angoff workshop (the most important input), and then a final decision is made on the MPS. The objective is to set a consistent competency level across years (CFA Institute).

CFA Institute's stance is that credentialing programs are designed to measure whether a candidate has the necessary knowledge, skills, and abilities to perform a certain job function. They are not designed to indicate the relative performance within those skills. The MPS can vary somewhat from year to year based on the difficulty of the questions asked, it is designed to be a consistent benchmark of the necessary knowledge, skills, and abilities. CFA Institute's official guidance states that the minimum passing score reflects the score that can be achieved by a 'just competent' candidate, which is supposed to be consistent across the years, whether it's 2010, 2015 or 2020.



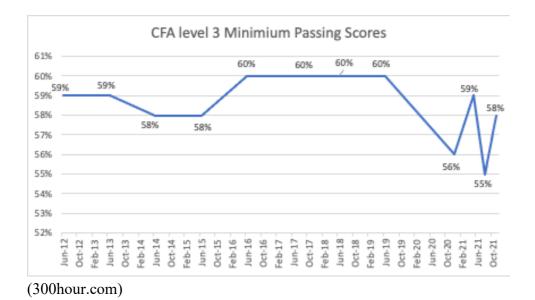
(300hour.com)

300hour.com estimated that CFA Level 1's MPS ranged from 56%-74% from 2012-to-2021, with a 10 year average of 64%.

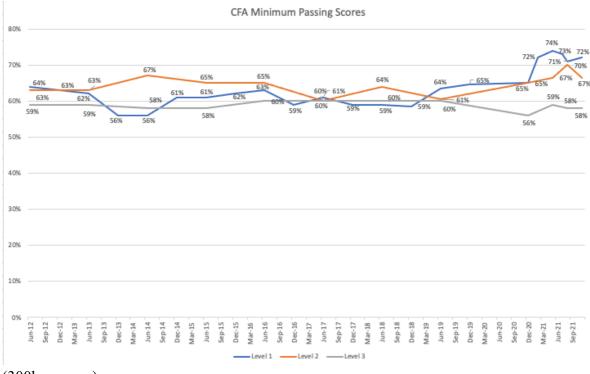


(300hour.com)

300hour.com estimated that CFA Level 2's MPS ranged from 60%-70% from 2012-2021, with a 10-year average of 65%.



300hour.com estimated that CFA Level 3's MPS ranged from 55%-60% from 2012-2021, with a 10 year average of 58.5%.



(300hour.com)

Chapter 2: Valuating the worth of the CFA Program

Having discussed the background of the CFA designation and important information associated with it, it is crucial to investigate the worth of the CFA charter. Interestingly only 1/5 people that begin the designation end up finishing it (E Boyde, 2004). With close to 1,000 hours of preparation required it is vital to research whether the time, commitment, stress and money spent completing the designation are outweighed by the apparent benefits of getting the designation (CFA Institute).

The prestige of the CFA Designation

The CFA is the most prestigious designation in finance and investment (S Ng). The designation commands a lot of respect and esteem for those individuals that become charterholders. This has resulted in interest in the CFA designation being at an all-time high. As of March 2022, there are more than 175,000 CFA charterholders worldwide in 160+ countries, with an annual growth rate of 6% over the past 10 years (CFA Institute).

Employers know that in earning the designation, charterholders have certain personal traits, a passion for finance and have gained a specific skillset. According to Kunal Kapoor, CFA, CEO of Morningstar, Inc values come from:

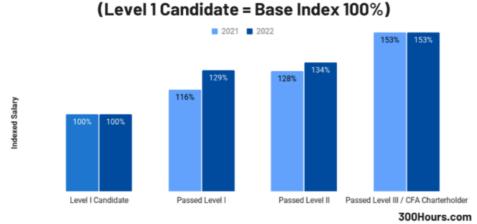
- "Have experienced one of the industry's most rigorous curricula to gain an unmatched level of professional competence and expertise;
- Adhere to the highest standards of ethics and professionalism and operate with an investor-first mindset;
- With the evolving market landscape, there is also an increased focus on ESG (environmental, social and governance) investment principles. CFA charterholders are well-positioned to lead in this area of socially responsible investing;
- Have access to continuing professional development opportunities that help them achieve success at every stage of their careers; and,
- Have already demonstrated a tremendous level of grit, determination, and commitment that can be advantageous in the competitive financial services industry" (Horan, 2019).

The prestige of the CFA designation has resulted in the charterholders being increasingly preferred by investment management firms. According to the McLagen Study 2017 "excluding junior staff members, the CFA charter is required or preferred by more than 90% of investment management firms. The requirement for a CFA charter increases with seniority, with 25% of firms requiring senior and executive-level employees to have a CFA charter" (Hanano, 2020).

Increase in pay

One of the biggest reasons why candidates decide to undertake the CFA designation is the expectation that there will be a substantial increase in pay for those that become charterholders. Given this attractive consequence of gaining the charter, it is important to analyze if it is true.

300hour.com went about researching how much a CFA charter increases pay. The key differentiator of their CFA salary analysis was the removal of the "work experience/seniority effect" on average total compensation so that they could better capture the true effect of the CFA Program on average pay. Separating the influence of work experience on reported salary data is vital in undertaking such salary analysis. Taking raw data without allowing for the work experience factor alters the findings and makes these types of reports less useful for potential CFA candidates in deciding whether CFA is worthwhile. This is an issue as candidates progress through the CFA program, their work experience also tends to increase, which leads to difficulty in attributing rises in pay to the CFA qualification alone – the pay increase could just be due to the candidates' work experience increasing.



% Change in Average Salary by CFA Exam Status

(300hour.com)

Even after removing the work experience factor, there is a very clear increase in average pay as candidates progress through the CFA Program. In 2022, candidates who passed CFA Level 1 on average experienced a 29% increase, whereas candidates that passed CFA Level 2 saw an average increase of 34% in their total compensation. Whereas, on average, submissions that indicated they passed CFA Level 3 or are CFA charterholders earned 53% more than CFA Level 1 candidates (300hour.com). That said, to get the most of the 'CFA effect' on pay, one should aim to pass CFA Level 3, which on average increases your salary by 53% (300hour.com).

Furthermore, the CFA institute is divided into different societies based on location. Looking at data for the New York society in 2018 the median total compensation for noncharterholders with a bachelor's degree was \$88,000, whereas compensation for CFA charterholders on average can expect an increase of around 76% in compensation compared to non-charterholders when both groups have a bachelor's degree. In addition, this analysis can be performed for those that possess a graduate degree. The median total compensation for non-charterholders with a graduate degree was \$132,000, whereas CFA charterholders with a bachelor's degree was \$233,000 (CFA Institute). This highlights that CFA charterholders on average can expect an increase of around 76% in compensation compensation for non-charterholders with a graduate degree was \$132,000, whereas CFA charterholders with a bachelor's degree was \$233,000 (CFA Institute). This highlights that CFA charterholders on average can expect an increase of around 76% in compensation compared to non-charterholders when both groups have a graduate degree. Therefore, in both cases having the CFA designation appears to increase total compensation by 76%, indicating that gaining the charter is very worthwhile in terms of getting higher compensation. It is important to note that unlike the analysis performed from 300hour.com the CFA data does not control for other variables such as years of experience and job title.

Ability to change roles

Type of Jobs		
Portfolio Management	25%	
Research	12%	
Consulting	10%	
Chief Level Executive	9%	
Investment Strategy	7%	
Risk Management	7%	
Wealth Management	5%	
Credit Analysis	5%	
Trading	4%	
Accounting	4%	
Financial Planning	3%	
Other	9%	

CFA candidates jobs		
Research	13%	
Accounting	9%	
Consulting	7%	
Portfolio Management	6%	
Risk Management	5%	
Wealth Management	5%	
Corporate Finance	5%	
Credit Analysis	4%	

(CFA Institute)

The table to the right showcases what professions CFA candidates are currently in. It is important to note that students make up about 23% of survey respondents, and thus have been excluded from this analysis. It is clear to see that research is the largest background that candidates come from. Apart from research the division of candidates between other financial professions is broad in the 5-7% range, indicating that there is interest to become CFA charterholders from diverse backgrounds. It becomes interesting when the table to the right is compared to the table to the left, which outlines the type of jobs that CFA charterholders have. As expected, portfolio management and research (i.e. investment analysis) dominate

the sectors most CFA charterholders currently work in at 25% and 12% respectively. It's not surprising as the CFA designation focuses on the investment management sector which these 2 sectors are most applicable to. What is fascinating is that there is a large portion of accountants and auditors using CFA as a means to switch careers: 9% of CFA candidates come from an accounting or auditing background (the second-highest group after research), but only 4% of CFA charterholders that stayed in that career. Based on the survey data in the next section, this ties in with the view that CFA candidates currently in accounting/auditing roles are taking the CFA exams hoping to switch careers into other areas of finance (especially corporate finance, investment banking and financial planning). Furthermore, portfolio management is a popular target career for CFA candidates: With only 6% of CFA candidates in the portfolio management sector compared to 25% of CFA charterholders, the CFA qualification is likely an effective way for candidates to move into this sector.

This data showcases that in addition to the increase in salary and career advancement that CFA charterholders gain, there is another benefit in the sense that individuals can use the charter to move into financial subsectors that are extremely lucrative. Areas such as portfolio management are hard to break into, thus, gaining the designation can help significantly in career moves.

Increase in performance

The CFA designation was created for investment professionals to increase their knowledge and improve their craft. The overall goal of investment management is to have a high level of performance to increase wealth for clients and their firms. There was a study performed by Qiang Kang and Xi Li looking at how the CFA designation impacts the performance of sell-side analysts who make stock recommendations. This question is important to the investment industry, for which sell-side stock recommendations form part of the stock analysis and selection process. It is also of importance to markets, which are dependent on the accuracy of the price discovery process. Furthermore, the issue is of considerable concern to sell-side analysts themselves—and to investment professionals more widely—who must commit substantial time to learning the CFA Program curriculum and studying for the exams (Kang, 2018).

It is important to see how the study was conducted. Firstly, to see if the CFA Program improves investment predictions, the authors analyze the recommendations of around 9,900 sell-side analysts between 1993 and 2015. This is a considerably longer dataset than that used in previous, comparable studies. The authors divide the period into two (1993–2000 and 2001–2015) to see if the regulation relating to analysts enacted after 2000 would skew performance. For each analyst, the authors create a recommendation portfolio, which comprises long positions in stocks that the analyst rated 1 or 2 and short positions in stocks that the analyst rated 4 or 5. The authors then calculate equal-weighted returns for each portfolio. The recommendation portfolio is believed to be a better proxy for performance than

the analysis of earnings forecasts used in previous studies. Secondly, career progression was measured by how many times an analyst was included in Institutional Investor's All-America Research Team. Becoming an All-America Research Team analyst is widely considered a measure of successful performance, meriting better chances of promotion and higher pay (Kang, 2018).

The authors found that of the 9,843 analysts whose performance was evaluated, 3,386 of them (about a third) are CFA charterholders. Since there are no requirements for analysts to be formally certified, the authors consider that this fact alone provided anecdotal evidence that the CFA Program offers benefits to analysts and their employers. More concretely, the authors found that the recommendation performance of CFA charterholders improved by about 4.7% a year in terms of abnormal returns, based on the recommendation portfolios (Kang, 2018). In addition, the probability of CFA charterholders being voted on to the Institutional Investor's annual All-America Research Team also increased, by around 2.0 percentage points, which represents an increase in the probability of nearly a fifth as compared with non-charterholders (Kang, 2018). Being an All-America Research Team analyst often leads to greater career opportunities, such as internal and external promotions, and increases an analyst's profile within the industry (Kang, 2018).

The analysis reveals that being a CFA charterholder benefits an analyst in terms of better performance and career outcomes. It should be noted that there are a couple of limitations to the study. Firstly, it focuses solely on the sell-side and does not assess the performance of buy-side analysts. Secondly, it focuses on US analysts only, thus, the effects on the performance of CFA charterholders outside the United States remain unknown (Kang, 2018). Given that no study can be perfect and each has its own circumstances, Qiang Kang and Xi Li showcase that the designation can increase analyst performance and enhance the chance of receiving career accolades

Time spent on exams and difficulty

Having identified and explained the benefits of the CFA designation. It is important to express that there are some potential weaknesses or factors that make the CFA unattractive to candidates. Firstly, the exams take a lot of time and effort to study for. Candidates spend an average of 323 hours preparing for each exam level (CFA Institute). This can be broken down further into 303 hours for Level I, 328 hours for Level II, and 344 hours for level III (CFA Institute). Not only do the exams take a lot of time absolutely but the amount of time and commitment increases as candidates progress through the program. As with anything, time spent especially with the amount required to pass the CFA is an opportunity cost. There are several things in society such as work, friends and family that are important and require time and effort. Spending 300+ hours studying for an exam takes away time that could be spent doing such activities.

Following on from the time commitment required to pass the exam, the CFA designation process can be quite disheartening and frustrating given the low pass rates. The pass rates for the respective exams are provided in chapter two. The probability of passing all three exams the first time around is about 8%. The low pass rates of the exams do give the designation a lot of respect and credibility as it takes a competent candidate to pass any given level and an outstanding candidate to pass all three levels the first time around. However, there is a fine line between ensuring the designation is credible due to a low pass rate and making the process disheartening and unattractive as it is too hard. There is a view in a sector of the finance community that believes the CFA process is disheartening and a waste of time due to the low probability of passing the exams. If candidates fail they not only have to spend more money on enrollment fees but also have to spend a significant amount of time preparing. It can be very hard to adequately prepare for the exams while trying to manage everything else in a candidate's life, especially work requirements. Those opposed to the CFA charter believe that the benefits of the CFA do not outweigh the cost, stress and low probability of passing.

Chapter 3: Implications

MBA vs CFA

MBAs and the CFA charter are two popular postgraduate degrees/professional designations that financial professionals can undertake. Given that at times individuals have to decide between the two it is important to conduct a compare and contrast analysis to highlight the similarities and differences. First, the CFA charter is meant for those professionals that desire roles such as an investment analyst, portfolio manager, strategist, consultant, and wealth manager. There are certain requirements to becoming a charterholder such as passing the three exams and one of the following: a bachelor's degree, be within eleven months of graduation from the date you sit for the Level I exam, a combination of 4,000 hours of full-time work experience and university education accrued over a minimum of 36 months. The cost of completing the charter is around \$2,400–4,590 USD. There are around 170,000 CFA charterholders and the average salary of charterholders is \$180,000 (CFA Institute).

MBAs are beneficial for people who want to have a job such as a business manager, portfolio manager, financial analyst, strategist, or consultant. The cost of an MBA ranges from \$80,000–125,000 USD, but depends on the institution you go to as costs fluctuate significantly. Although an MBA is not a requirement for most positions it is often preferred by employers. The focus on an MBA is difficult to nail down as there are a lot of different routes one can go down due to the various concentrations. Those that possess MBAs is very concentrated due to more than 100,000 degrees awarded annually, with an average salary of \$107,000 (CFA Institute).

Although MBAs and the CFA designation can be used by individuals to advance their careers and gain knowledge, there are fundamental differences and nuances between the two. First, even though the CFA designation can be useful in various financial fields, it is primarily suited for investment management. This is dissimilar to an MBA which is useful in countless business/financial occupations. The CFA designation is a great deal more specialised and distinguished. Secondly, there are a lot more MBA graduates than CFA charterholders; as noted, there is a total of 170,000 CFA charterholders in the world compared to 100,000 new MBA graduates each year. The scarcity of CFA charterholders generates esteem and status for the institute and the program. Third, the curriculum of the programs is different in nature. The CFA program is universal so that two charterholders across the world can be compared apple to apple because they studied the same material and took the same test. This is in contrast to an MBA because the quality and education received by an MBA graduate depend on the institution where it was received. For example, an MBA at Harvard is not the same as an MBA from Rider University. Now, while it is true that the one received at Harvard is going to cost more it is far more selective, has better professors, and is likely to result in better career opportunities due to the University's reputation and

alumni network. Fourth, there is a sizeable variation in cost between the CFA program and an MBA degree, with the CFA program being significantly cheaper as compared to anywhere the MBA is from.

A key benefit of the CFA program is that a hiring manager knows that CFA charterholders regardless of location will have received the same education and required a similar knowledge base to pass the exams. Hiring managers cannot say the same about MBA graduates due to the vast differences in options out there. In saying that an MBA from a top institution is not only going to be a great education but will help extensively in securing a job due to the alumni network. Therefore, an MBA from a top institution and the CFA designation are both quality options for those that want to advance their financial career. They are tailored to slightly different career paths but have value regardless of where one ends up.

Mandating the CFA designation in the field of investment management

In the field of professional investing the CFA designation and institute have a certain reputation and pedigree associated with it. No other professional designation carries the same weight for asset managers and other financial industry participants. If one desires to become a top-level investment professional, becoming a CFA charterholder is the more appropriate route. In this day and age, the CFA charter is simply highly expected to the point that it is almost a universal requirement. According to the McLagen Study 2017 "Excluding junior staff members, the CFA charter is required or preferred by more than 90% of investment management firms. The requirement for a CFA charter increases with seniority, with 25% of firms requiring senior and executive-level employees to have a CFA charter" (Hanano, 2020).

The interesting thing about the designation is although it is exceedingly encouraged it is not required in investment management. In industries such as accounting, it is almost impossible to become a public accountant without being a CPA. However, regulators, colleges, and certification programs in more than 30 countries/territories view the CFA charter as filling the gap left by the absence of mandatory qualifications (CFA Institute). In some countries—including the United States, the United Kingdom, and Singapore—the CFA designation is viewed by regulators as a mark of competency (CFA Institute). For example, the NYSE and the Financial Industry Regulatory Authority (FINRA) require that their members who function as research analysts pass the Research Analyst Qualification Examination (series 86 and 87). A research analyst who has passed CFA Levels I and II may request an exemption from Series 86. In addition, the University of California Berkeley waiver for 2 MBA courses with CFA Level III completion. Furthermore, The Professional Risk Manager program recognizes other professional designations and gives partial credit towards completion of the requirements for the PRM certification. CFA charterholders need only pass PRM exams III and IV to obtain the PRM designation. The CFA Program was benchmarked as comparable to an English Qualification and Credit Framework (QCF) Master's level 7 qualification.

The CFA designation is, therefore, clearly not only encouraged to be able to get a job in investment management but is also valued by regulators, certification and educational programs, and benchmarking/accreditation centres. The praise and the backing for the CFA program by these entities is no surprise given the overwhelming benefits of the designation provided in Chapter Two; namely, the prestige of the CFA, increase in pay, ability to change role, and improved sell-side performance. The author is arguing for regulation to go further and for the CFA Program to become a licensing requirement. Given the study by Qiang Kang and Xi Li 2018, there is clear empirical evidence that the program improves analysts' competency. This should supply policymakers with concrete evidence supporting that the CFA program is meaningful and worthwhile to the point that it should become a requirement.

Individuals and entities provide their savings to investment management companies with the expectation that they will be able to build wealth for them. However, across all domestic actively managed equity funds, 88.4% underperformed their respective benchmark over the last 15 years according to the S&P SPIVA report (Rosenberg, 2020). Furthermore, more than 80% of large-cap funds underperformed the S&P 500 over the last five years (Rosenberg, 2020). Clearly, there is a lack of performance in active management compared to passive management. Given that individuals/entities decide to go down the active management route, it is important that they invest their money with high-performing managers. The study by Qiang Kang and Xi Li 2018 showcases that those analysts with the CFA designation outperformed those without the designation. Given that there is empirical evidence that active investing is struggling against their respective benchmarks, it is vital to choose those investment managers that are getting high returns and building wealth for their clients, which the study highlights CFA charterholders are doing.

The investment industry is built upon trust and respect. Clients allow investment management companies to manage their money and savings without having great insight into what they are investing in. Investment management companies and employees, thus, have great potential to conduct unethical activities. The CFA Institute understands the issue that asymmetrical information between managers and clients can cause so it has a strict commitment to ethics. Once an investment professional obtains the charter, this individual makes an annual commitment to uphold and abide by a strict professional code of conduct and ethical standards. Violations of the CFA code of ethics may result in industry-related sanctions, suspension of the right to use the CFA designation, or revocation of membership. Furthermore, the CFA has placed a large emphasis on ethics across all three exams with a significant portion of the material and exam based on ethics, as well as having an ethics adjustment to candidates scores. The Board of Governors instituted a policy to place particular emphasis on ethics. Starting with the 1996 exams, the performance in the ethics section became a factor in the pass/fail decision for candidates whose total scores bordered the minimum passing score.

Therefore, the requirement of the CFA designation in the investment management field can increase the competency of analysts to increase clients' wealth as well as contribute to a more ethical sector.

Conclusion

In conclusion this paper outlined what the CFA program is, why it is worthwhile undertaking and what the implications of this finding. As seen in Chapter One, a chartered financial analyst (CFA) is a "globally-recognized professional designation given by the CFA Institute, that measures and certifies the competence and integrity of financial analysts" (Hayes, 2020). The CFA designation is designed to demonstrate a strong foundation in advanced investment analysis and portfolio management, accompanied by a strict emphasis on ethical practice. Although the CFA is targeted at investment professionals, the CFA designation is valued not just in the investment management sector, but well recognized in the broader financial services industry globally.

Chapter Two highlighted what the benefits of the CFA program are and why it is beneficial even with the considerable time and effect required to be successful. There are a number of key benefits.

First, the CFA designation is very prestigious. The prestige of the CFA designation has resulted in the charterholders being increasingly preferred by investment management firms. The CFA charter is required or preferred by more than 90% of investment management firms. The requirement for a CFA charter increases with seniority, with 25% of firms requiring senior and executive-level employees to have a CFA charter (Hanano, 2020).

Second, CFA candidates and charterholders see an increase in compensation. In 2022, candidates who passed CFA Level 1 on average experienced a 29% increase, whereas candidates that passed CFA Level 2 saw an average increase of 34% in their total compensation. In addition, on average, submissions that indicated candidates passed CFA Level 3 or are CFA charterholders earned 53% more than CFA Level 1 candidates (300hour.com).

Third, there is an ability for candidates to change roles and careers with the charter; namely, there is an ability for candidates interested in the highly sought after portfolio management to use the CFA charter to gain entry into it. Only 6% of CFA candidates work in portfolio management whereas the percentage increases to 25% as candidates gain the charter.

Finally, there is an improvement in performance by sell side analysts who gain the designation. A study performed by Qiang Kang and Xi Li authors found that the recommendation performance of CFA sell side charterholders improved by about 4.7% a year in terms of abnormal returns, based on the recommendation portfolios (Kang and Li, 2018). In addition, the probability of CFA charterholders being voted on to the Institutional Investor's annual All-America Research Team also increased, by around 2.0 percentage

points, which represents an increase in the probability of nearly a fifth as compared with noncharterholders (Kang, 2018).

Chapter Three outlined what the key implications are on the finance industry considering the findings of Chapter Two. The first part of the chapter compared MBAs to the CFA designation. It showcased that a key benefit of the CFA program is that a hiring manager knows that CFA charterholders regardless of location will have received the same education and required a similar knowledge base to pass the exams. Hiring managers cannot say the same about MBA graduates due to the vast differences in options out there. In saying that an MBA from a top institution is not only going to be a great education but will help extensively in securing a job due to the alumni network. An MBA from a top institution and the CFA designation are both quality options for those that want to advance their financial career. They are tailored to slightly different career paths but have value regardless of where one ends up.

Second, the author argued that given how a CFA designation is advantageous, based on Chapter 2, there is a call for the investment management field to make the CFA charter a requirement. At the moment there are a number of regulators, colleges, and certification programs in more than thirty countries/territories who view the CFA charter as filling the gap left by the absence of mandatory qualifications (CFA Institute). Although the CFA program is increasingly preferred and encouraged, it is still a step away from being a regulatory requirement. The author believes there is clear empirical evidence that policymakers should make the charter a requirement in the investment management industry.

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