CFA DAY 2014

October 7, 2014
Maria Curie-Skłodowska University
Prof. Krzysztof Jajuga

CFA Society
Poland

MAIN CHANGES ON FINANCIAL MARKETS – LAST 25 YEARS



Globalization

Technological progress (computers, telecom)

Medialization

Diversity and complexity of financial instruments

Increase of the value of financial assets comparing to real assets

Increasing role of financial decisions comparing to production decisions in companies

Increase of wealth of households

New types of risk

MAIN CHANGES ON FINANCIAL MARKETS – LAST 25 YEARS

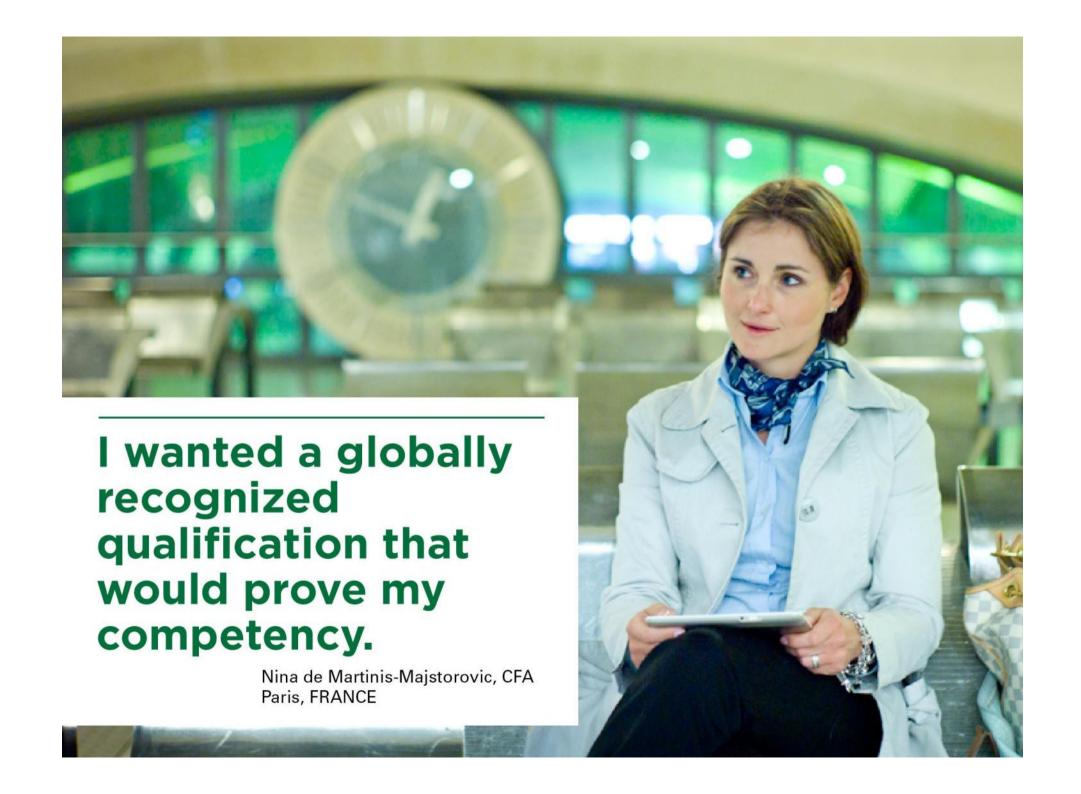


Question:

How you can benefit from these changes?

Answer:

Enter Chartered Financial Analyst profession



"Among the countless finance degrees around the world, the Chartered Financial Analyst qualification has become the gold standard."

Financial Times
13 August 2010

The Economist

"Whereas there are tens of thousands of finance degrees available around the world, ranging from the excellent to the worthless, there is only one CFA... explosive growth has made it, in effect, global currency."

-The Economist, 2005

THE CFA CHARTER



- Graduate-level investment credential
- Held by more than 100,000 investment professionals working in more than 130 countries
- Recognized by regulatory bodies in many countries as a proxy for meeting certain licensing requirements
- More than 180 universities around the world incorporate the CFA curriculum into their degree programs



Mission Statement



To lead the investment profession globally by setting the highest standards of ethics, education, and professional excellence.

CFA PROGRAM

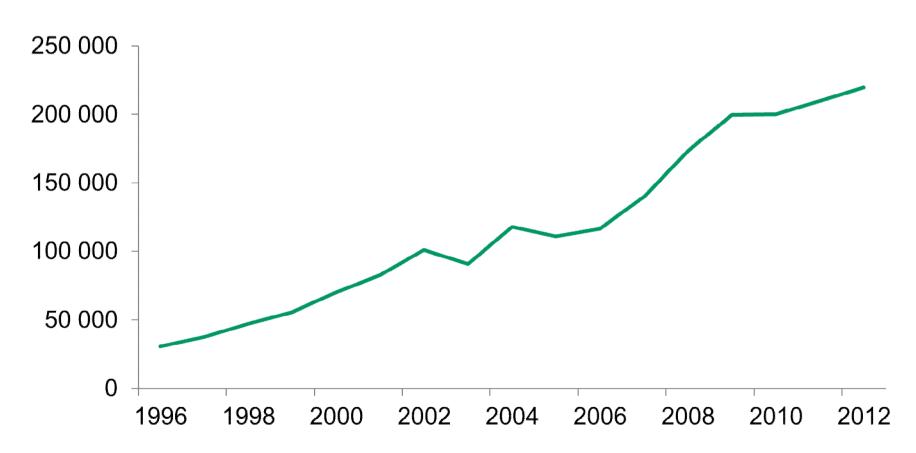


- Started in 1963, administered by CFA Institute (former AIMR)
 - Association of Investment Management Research), located
 in Charlottesville, Virginia www.cfainstitute.org
- Standard of professional excellence within global investment community
- Self-study curriculum
- Body of Knowledge
- High prestige, better investment decisions, good education

GROWING DEMAND FOR CFA CHARTER

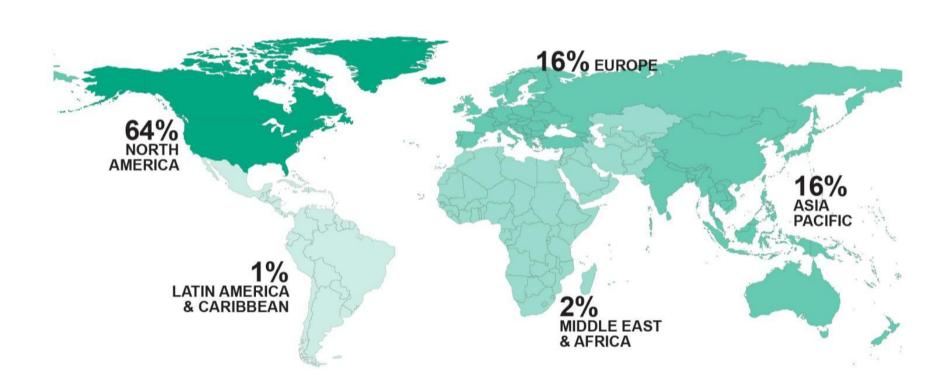


Candidate exam registration



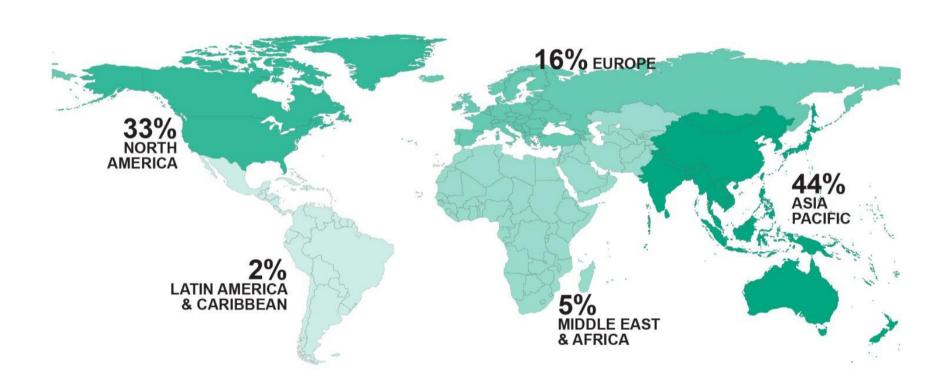
CFA INSTITUTE MEMBERS BY REGION





CFA PROGRAM CANDIDATES BY REGION







EMPLOYERS SEEK OUT THE CFA CHARTER



"Enrollment in or completion of a CFA designation [program] would be an asset"

-Investment Banking Analyst, Goldman Sachs, 2010

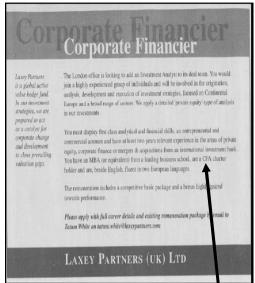
"You have, or are in the final year of [earning], your CFA designation"

-Equity Research Associate, Bank of America Merrill Lynch, 2010

"Completed [the CFA Program] or working towards CFA designation is advantageous"

- Analyst, BlackRock, 2010

Job Ads Around the World



London, UK

The Chartered **Financial Analyst** (CFA) designation required

CFA is a plus

Senior Investment Officer (Asset Allocation Specialist)

Investment Officer

al Modeling Specialist)

NEW YORK CITY OFFICE OF THE COMPTROLLER CHIEF INVESTMENT OFFICER

The Comproduct of the City of New York serves as investment advisor and custodian to five [5] comproducts of the City of New York serves as investment advisor and custodian to five [5] and investment policies, standards and guidelines. The CIO will also oversee the development of oversiting and oversient of investment advisors and consultance.

tion and increasing or necessaries normal and consumers.

Working with an internal staff (currently totaling 55, with substantial unfortated ground), the CiO

and reductions in the rheeds when and recommendation of necessary order week in the research. Working will an internal staff Courterity folding 55, with substantial anticipated ground), the GIU [Internal conditionate in the development and recommendation of investment anticipated ground), the GIU [Internal investment and in incredation and management or external interaction and management are responsible for case standard of the investment program of the Systems. The position creates significant involvement with the locality of sorts retirement extens recognition investment to the best produced with the content of the sorts of sorts and their investment of the sorts. istaum of the investment program of the Sosient. The position critical signalizant involvement with boards of each referencest Sistem regarding investment decisions and their implementation. the neuron of each reasonant regional regional increasing increasing out for an argumentation.

Candidates should have at least ten (10) years of progressively expensible extensive tensions are accommon to the control of the contro

Candidates should have at least ten (10) years or more of progressively responsible executive feed interactions of the control Experience working directly for a public pension fund or similar public sector entity is preferred. An independence degree is required and a graduate degree in business administration or equivalent action is strongly preferred, delithrough, the same of causing the preferred delithrough preferred. The Chartered Fine Chartered Fine action is strongly preferred, delithrough, the same of causing the strongly preferred delithrough, the same of causing the strongly preferred delithrough preferred. Chartered Fine Chartered Fine action of causing the same of causing t and condidute should have a strong understandillen and verbal communication skills Also impurem isched financial professionals and the ability to work with

residency required within ninety (90) days of appointment. This position is open until filled. Resumes should be mailed to: Mr. David Morris

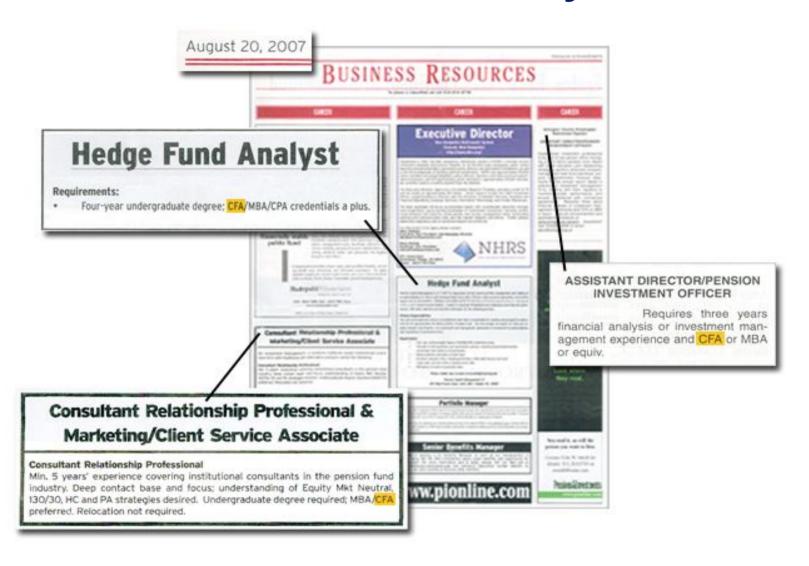
Heidrick & Struggles 40 Wall Street, 48th Floor New York, NY 10005 or can be forwarded via email to: CIO-NYC@heidrick.com.

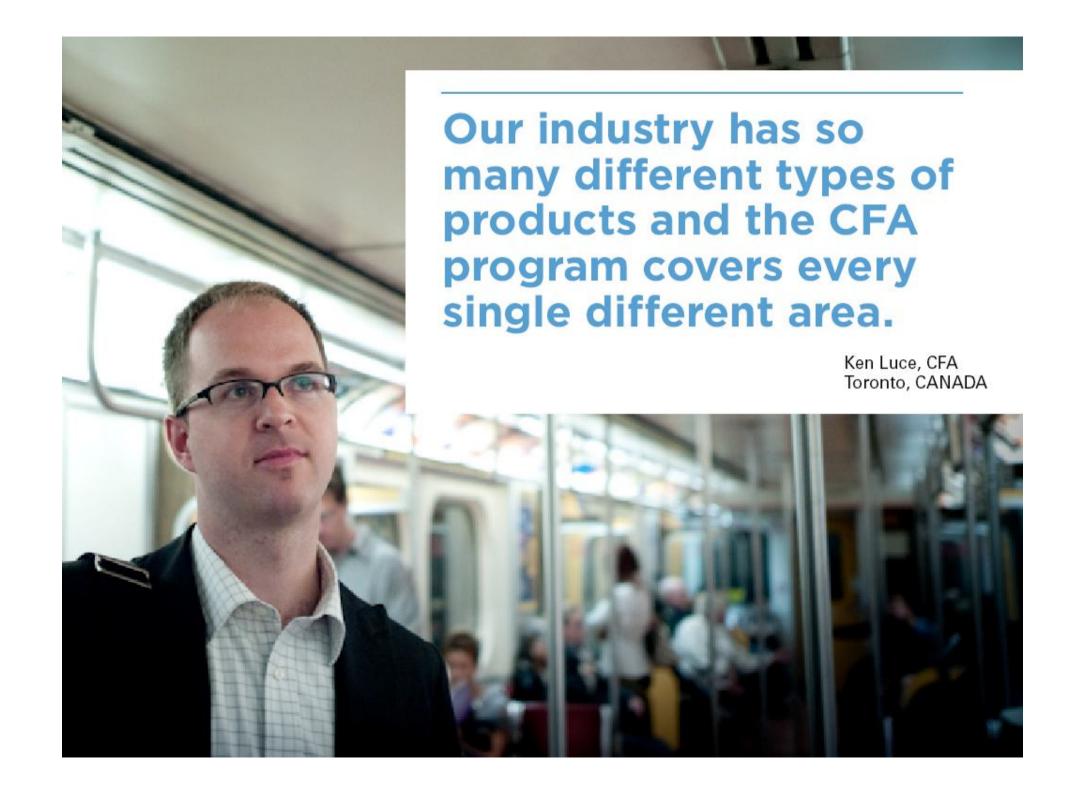
The City of New York is an

designation strongly preferred

The Chartered Financial Analyst (CFA)

Pensions and Investments Online Job Ads Shown in One Day





WHAT YOU LEARN AS A CFA CHARTERHOLDER



- Investment (equity and fixed income) analysis
- Portfolio management
- Wealth planning
- Economic theory
- Alternatives and derivatives
- Performance measurement & evaluation
- Risk management
- Financial reporting
- Quantitative methods





$$\sqrt{\text{CFA CHARTER}} = \text{ETHICS}$$

CFA EXAM



CFA Program Candidate Body of Knowledge

- Ethical and Professional Standards
- Quantitative Methods
- Economics
- Financial Reporting and Analysis
- Corporate Finance
- Equity Investments
- Fixed Income
- Derivatives
- Alternative Investments
- Portfolio Management and Wealth Planning



Investment Tools

Asset Classes and Valuation

Portfolio Management

THREE LEVELS OF CFA EXAM





Ethics & Professional Standards

Investment Tools

Quantitative Methods Economics Financial Reporting & Analysis Corporate Finance

Asset Classes

Equity Investments
Fixed Income
Derivatives
Alternate Investments

Portfolio Management & Wealth Planning

CFA EXAM FORMAT



	Multiple Choice	Item Set (Objective)	Constructed Response (Essay)
Level I	100%		
Level II		100%	
Level III		50%	50%

CFA EXAM FORMAT



- Level I 240 Total Multiple Choice Questions over 360 minutes. 1.5 minutes per item. Exam given in two three hour blocks with 120 questions in the morning and 120 questions in the afternoon.
- Level II 20 item sets with 6 items each. 120 items over 360 minutes. 3 minutes per item. 10 item sets in morning and 10 item sets in afternoon.
- Level III 10 item sets with 6 items each over 180 minutes. Set of constructed response (essay questions) over 180 minutes. Essay in morning, item sets in afternoon.

GRADING PROCESS

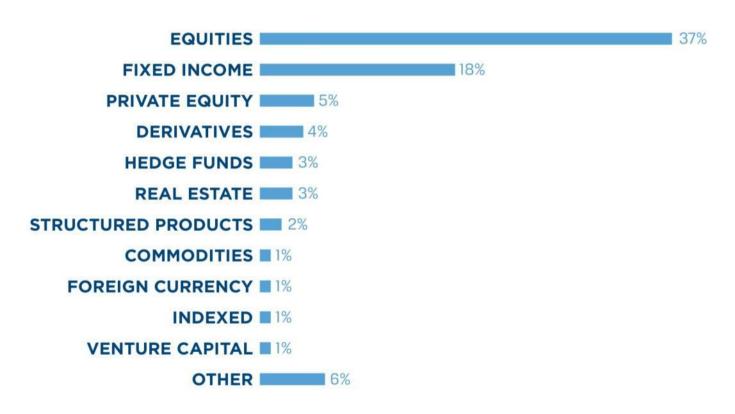


Exam	Grading Process
I and II	Machine graded; extensive sampling
	 Item Sets – Machine graded; extensive sampling Constructed Response – Graded by teams of charterholders; structured and detailed process

WHAT CAN I DO WITH CFA CHARTER?



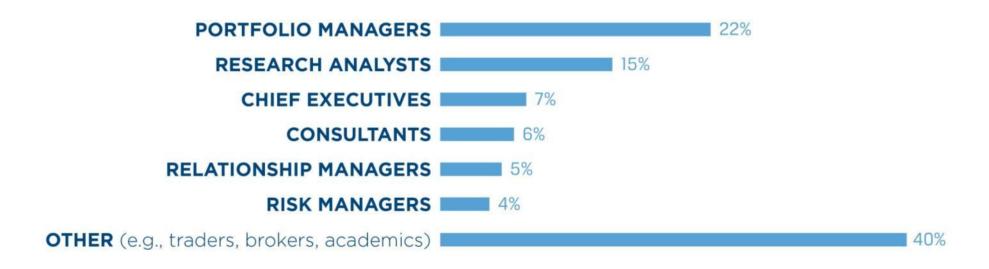
Charterholder employment by sector



WHAT CAN I DO WITH CFA CHARTER?



Charterholder employment by title



THE GLOBAL EMPLOYERS **OF CHARTERHOLDERS**

















MorganStanley SmithBarney







THE CFA EQUATION



Bachelor's degree or in final year of bachelor's

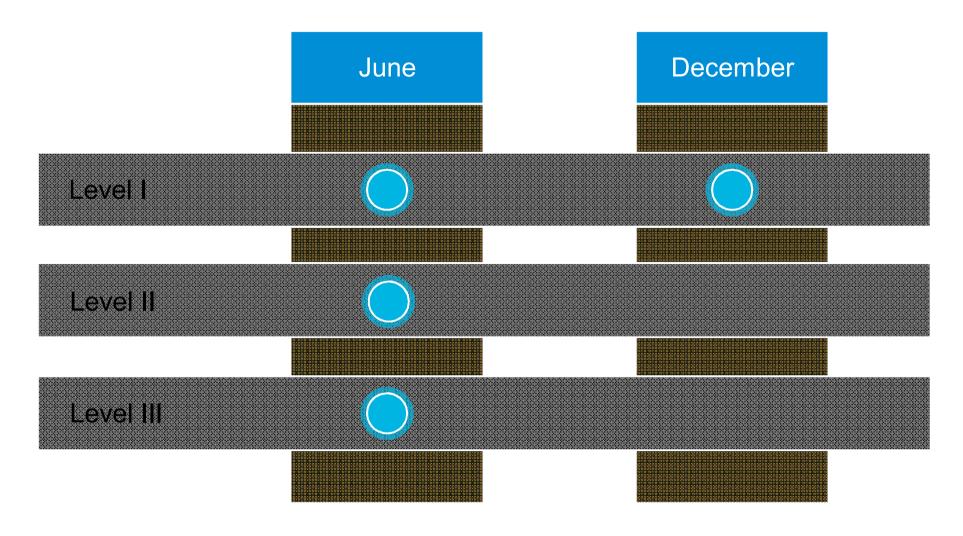
Level I, II, III Exams



CFA CHARTER

EXAM SCHEDULE







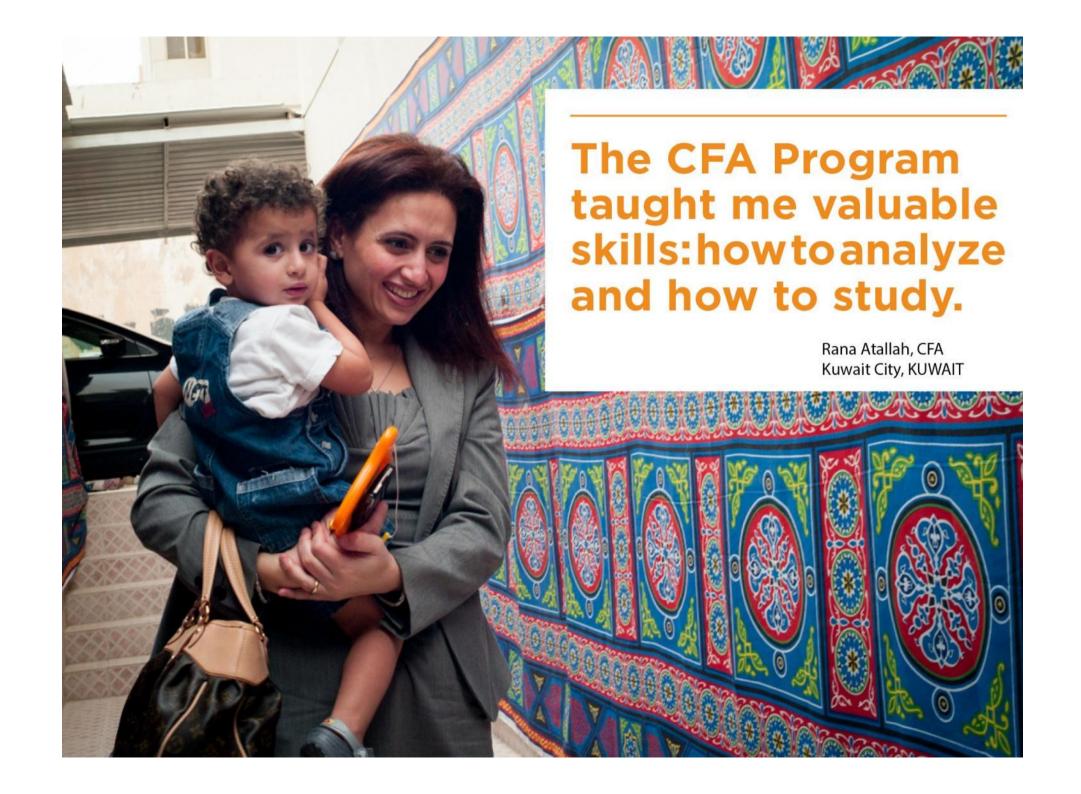
ENROLLMENT DETAILS

The Cost of CFA Program Levels I, II, and III

One-Time Initial Enrollment Fee US\$450

Exam Registration Fee US\$825 (680,1210)

Fees vary depending on the deadline by which enrollment and/or registration is completed and by the curriculum format that is chosen.



WITH CFA CHARTER, YOU...



- Develop a comprehensive investment perspective
- Gain fluency in practical investment analysis and management skills
- Earn credibility with industry peers
- Become part of a global community of top industry professionals
- Gain the flexibility to work in any market
- Are sought out by top industry employers
- Demonstrate a commitment to ethics and professional standards



CFA SOCIETY POLAND



- Established in April 2004 as Polish Association of Investment
 Professionals www.cfa.society.org/poland
- Approved in December 2004
- Successfully serving CFA charterholders and CFA Program candidates locally
- Promoting the highest professional and ethical standards in the investment industry
- Providing a networking platform for investment community as well as other stakeholders

CFA Society Poland has more than 370 members and more than 1700 candidates

CFA SOCIETY POLAND



KEY OBJECTIVES:

- Implement principles of ethics, education and professional excellence in investment industry
- Create a local investment professional network with global outreach of worldwide colleagues who provide sense of community and support one another professionally and socially
- Continuous education for members
- Career development and Job placement
- Increase awareness about CFA Program and values of CFA Charter

CFA INSTITUTE RESEARCH CHALLENGE





- Worldwide intercollegiate competition between teams of Students
- Organized by CFA Society Poland
- Analysis of a publicly traded company
- Interview company management
- Mentoring by a investment professional
- Research report writing
- Presentation of research



3,000+ Students

1,200+ Industry Volunteers

650+ Universities

111 CFA Society Hosts

87 CFA Local Level Challenges

55 Countries









Wroclaw University of Economics Winners 2013



Benefits to students:

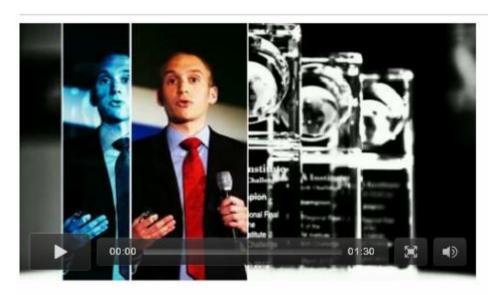
- Interact with investment professionals
- Get real-world experience in equity analysis
- Understand the CFA Institute Code of Ethics and Standards of Professional Conduct
- Learn how to write sell-side research report
- Enrich presentation skills

Benefits to universities:

Gain global exposure







STEP 1. Form the team of 3-5 business and finance students.

STEP 2. Find/Contact the Faculty Adviser in your University.

STEP 3. Your university must be registered via Application Form.

STEP 4. Register your team after confirmation of your University participation.

STEP 5. Visit the Kick-Off Meeting, which is planned for **November 2014**



3,000+ Students

1,200+ Industry Volunteers

650+ Universities

111 CFA Society Hosts

87 CFA Local Level Challenges

55 Countries







Raport:

http://www.cfainstitute.org/community/challenge/about/Pages/past_champions.aspx

Presentation:

http://www.cfainstitute.org/community/challenge/about/Pages/past_champions.aspx



Thank you for attention!

CFA DAY 2014

Maria Curie-Skłodowska University

Andrzej Pasławski, CFA



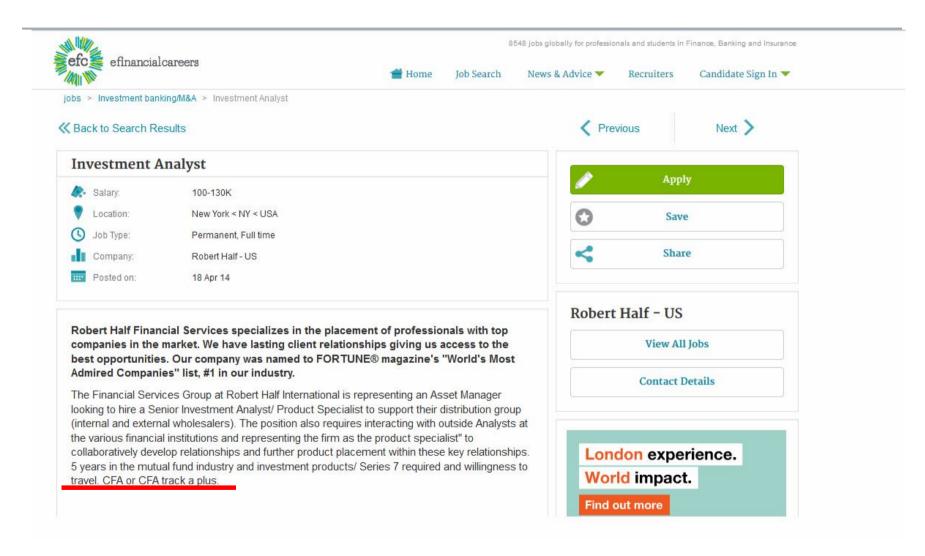
CHARTERHOLDERS IN POLAND





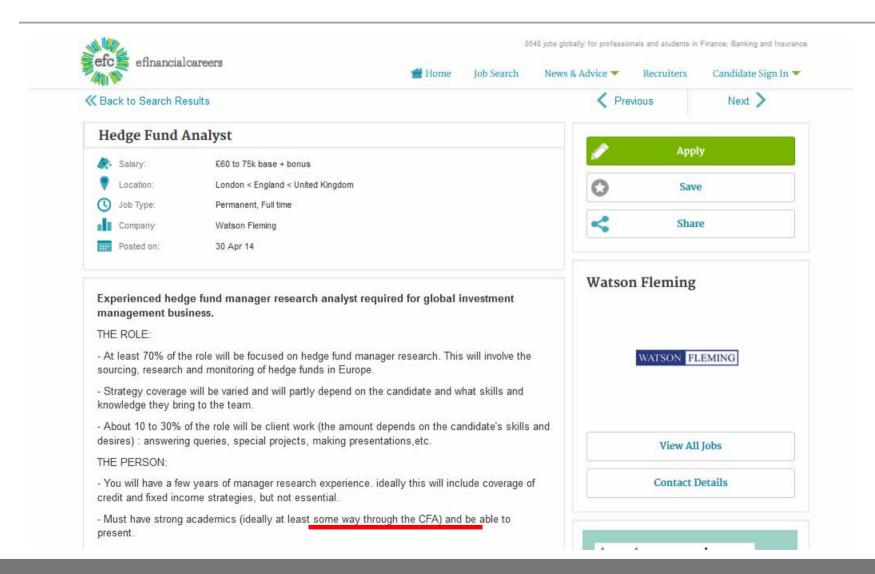
FINANCIAL CAREER





FINANCIAL CAREER





FINANCIAL CAREER



Analityk Instrumentów Kapitałowych

Warszawa PCKS12422 6174380

For our Client, leading investment bank in the world we are looking for qualified candidates for Capital Markets Analyst position. Suitable candidate should have wide interest in financial instruments of capital markets, strong analytical as well as communication skills. The role is based in Warsaw office with focus on close cooperation with unit in London.

Opis stanowiska / Job description:

- Preparation and supervision of the daily P&L process, including explanation of P&L
- Ensure that the month end numbers agree to the sum of the daily P&L or provide meaningful explanations
- Monitor of all pricing and valuation issues, including off-market rate analysis in respect of all positions held by
- Coordinate balance sheet substantiation and control
- Project work covering controls enhancement, efficiency initiatives and strategic developments in order to provide business advantage
- Prepare regular and ad-hoc analysis of aspects of the business both tactical and strategic
- Contribute significantly to individual development

Kogo szukamy / Profile description:

- University Degree, preferably in finance
- At least 3 year of relevant experience in finance or in audit for financial institution
- Knowledge and understanding of financial markets and instruments (Interest Rates, FX & derivatives)
- Fluency in English is a must
- Strong attention to details and excellent analytical and quantitative skills
- Ability to work independently and solve complex problems with minimal direction
- Ability to communicate effectively with team located abroad
- Ability to perform multiple tasks in a fast paced, continually changing environment Available to travel abroad (London)
- CFA qualifications preferred or in progress of obtaining
- Knowledge of VBA and Access is an advantage.

Jak aplikować / How to apply:

Osoby zainteresowane ofertą prosimy o przesyłanie aplikacji klikając przycisk Aplikuj.

Wydrukuj ogłoszenie

COMPENSATION CALCULATION



Country Differences US\$

	Australia (220)	<u>Canada</u> (2326)	Germany (272)	Hong Kong (478)	<u>Japan</u> (254)	Singapore (280)	South Africa (201)	Switzerland (414)	United Kingdom (851)	United States (10,229)
Median Salary	\$100,399	\$72,549	\$99,465	\$84,306	\$ 115,199	\$60,910	\$86,632	\$122,514	\$131,544	\$113,000
Median Bonus	\$18,149	\$16,122	\$25,220	\$15,192	\$28,799	\$15,227	\$24,990	\$33,508	\$56,376	\$35,000
Median Non-Cash Compensation	\$0	\$806	\$0	\$0	\$0	\$0	\$3,332	\$3,769	\$9,396	\$5,000
Median Total Compensation	\$131,291	\$100,762	\$128,2 1 7	\$114,098	\$163,199	\$79,592	\$134,946	\$170,354	\$217,048	\$170,000
90 th Percentile	\$393,101	\$307,929	\$312,408	\$400,000	\$393,598	\$330,612	\$383,180	\$356,859	\$647,185	\$530,000

COMPENSATION CALCULATION

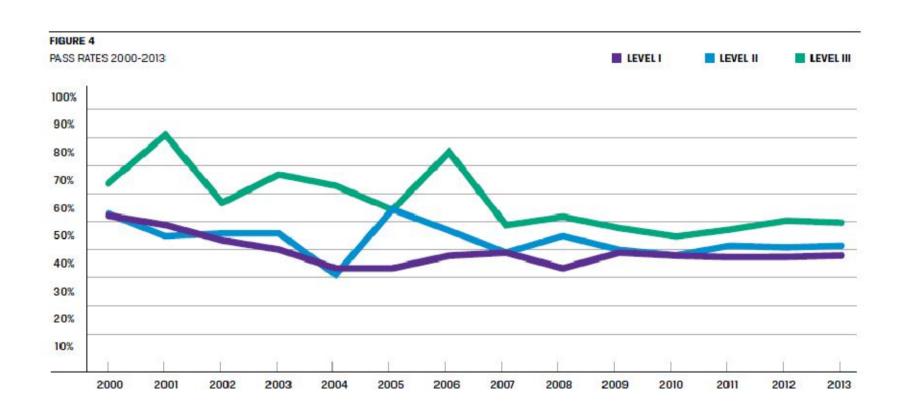


Country Differences – 5+ years of experience only US\$

	Australia (150)	<u>Canada</u> (1505)	Germany (180)	Hong Kong (296)	<u>Japan</u> (206)	Singapore (148)	South Africa (121)	Switzerland (310)	United Kingdom (558)	United States (7639)
Median Salary	\$123,568	\$81,416	\$110,644	\$103,028	\$118,079	\$85,274	\$99,960	\$125,655	\$150,336	\$125,000
Median Bonus	\$38,615	\$23,296	\$32,542	\$25,640	\$28,799	\$27,409	\$33,320	\$41,885	\$75,168	\$43,625
Median Non-Cash Compensation	\$0	\$2,015	\$0	\$0	\$0	\$0	\$ <mark>4</mark> ,998	\$4,188	\$12,000	\$8,150
Median Total Compensation	\$179,945	\$124,945	\$157,831	\$152,558	\$163,300	\$119,383	\$163,268	\$183,874	\$272,484	\$200,000
90 th Percentile	\$542,541	\$390,958	\$372,286	\$512,800	\$393,598	\$414,188	\$424,830	\$389,530	\$789,264	\$600,000

PASS RATES 2000 - 2013







7. A company currently has a debt-to-equity ratio of 1.25. Common shareholder's equity is \$4,000,000, consisting of 1.5 million shares outstanding with a current price of \$28/share. Part of the company's debt currently outstanding is \$1,000,000 of convertible bonds. Each \$1,000 par value bond can be converted into 50 common shares at any time during the next three years. The coupon rate on the bonds is 6 percent with interest paid annually. If all convertible bonds are converted, the company's debt-capital ratio is *closest* to:

A. 42.5%.

B. 44.4%.

C. 80.0%.



Under U.S. GAAP, if the bonds are converted, liabilities are decreased by the book value of the bonds, and the equity is increased by the same amount.

Debt/Equity = 1.25; Equity = \$4,000,000

Debt = $1.25 \times 4,000,000 = 5,000,000$

Shares issued on conversion: $1,000,000/1,000/bond \times 50 \text{ shares/bond} = 50,000 \text{ shares}$

Equity Issued: \$1,000,000

Debt Reduction: \$1,000,000 resulting in \$4,000,000 outstanding

New Debt/Capital ratio: Debt/(Debt + Equity) = 4,000,000/(4,000,000+5,000,000) =

44.4%



14. An analyst gathers the following information about two companies for the year ending 31 December 2008:

	Company 1	Company 2
Dividend payout ratio	37.5%	40.0%
Return on assets	12%	10.0%
Financial leverage	1.6	2.0

Which of the following *best* describes the expected growth rate of Company 1? The expected growth rate of Company 1 compared to Company 2 is:

A. lower.

B. greater.

C. the same.



ANSWER: C

"An Introduction to Security Valuation," Frank K. Reilly and Keith C. Brown 2008 Modular Level I, Vol. 5, pp. 146-147

Study Session 14-56-f, g

Estimate the dividend growth rate, given the components of the required return on equity and incorporating the earnings retention rate and current stock price;

Describe a process for developing estimated inputs to be used in the DDM, including the required rate of return and expected growth rate of dividends.

ROE = Return on assets x Financial leverage;

Retention rate = 1 - (Payout ratio);

g = Retention rate x Return on equity

Company 1: ROE = $12\% \times 1.6 = 19.2\%$; g = (1 - 0.375) = 12%

Company 2: ROE = $10\% \times 2.0 = 20.0\%$; g = (1 - 0.400) = 12%



SMC Case Scenario

Ian Sherman, CFA, is a portfolio manager at SMC, an investment advisory firm which offers investment products and services to individual and institutional clients. SMC has adopted the CFA Institute Research Objectivity Standards and implemented policies in compliance with the Standards.

All of SMC's investment professionals have earned CFA charters. Sherman tells prospective clients, "The CFA charter is the highest credential in the global investment management industry. As charterholders we are committed to the highest ethical standards. Completion of the program has dramatically improved the team's portfolio management knowledge and their ability to achieve better performance results."

Sherman has earned a reputation for consistently outperforming the market. Over the long run, his mutual funds have outperformed their respective market benchmarks by a wide margin. For the past 12 months the funds have slightly underperformed the benchmarks. Some clients have noticed that Sherman's fund performance information has not been updated on the advisor's website in the past six months. When clients inquire about fund performance, Sherman provides them with accurate updated information.



Annette Martineau, CFA, works as an analyst for Sherman and presents her recently completed research report and sell recommendation on Muryan Corporation, which is held in one of Sherman's funds to SMC's Investment Committee. After much debate about the company and its prospects, the committee reaches a consensus recommendation that is contrary to Martineau's. Martineau informs Sherman, "I accept that the committee's recommendation has a reasonable basis, but I strongly believe that my recommendation is more appropriate. I have been diligent in my research and have a deeper understanding of the industry and its competitive factors."

The following week, Martineau prepares for an investment conference, open to the general public but typically attended only by investment professionals, by reviewing SMC's policies regarding public appearances. The policies state:

- Employees should remind audience members to judge the suitability of the investment in light of their own unique circumstances.
- Employees should make full disclosure of all conflicts of interest, both their own and those of the firm.
- Employees may not provide research reports to audience members. Research reports are reserved exclusively for SMC clients.



- 1. In which of the following actions does Sherman *most likely* comply with the requirements and recommendations of the CFA Institute Standards of Professional Conduct? When he:
 - A. references the CFA program and designation.
 - B. provides performance information on the advisor's website.
 - C. references the enhanced portfolio management skills of his team.

Answer: A

Guidance for Standards I-VII, CFA Institute 2009 Modular Level II, Volume 1, pp., 29-31, 64, 105-7 Demonstrate a thorough knowledge of the Code of Ethics and Standards of Professional Conduct by applying the Code and Standards to specific situations.

Sherman's comments about his staff and the CFA Program are all acceptable,



- 2. According to CFA Institute Standards, Martineau's *best* immediate course of action regarding her initial research report and recommendation on Muryan is to:
 - A. leave her name on the report and take no further action.
 - B. leave her name on the report and document her difference of opinion.
 - C. issue her own independent recommendation since she has a reasonable basis.

Answer: B

Guidance for Standards I-VII, CFA Institute 2009 Modular Level II, Volume 1, pp. 80-83, example 5. Study Sessions 1-2-a

Demonstrate a thorough knowledge of the Code of Ethics and Standards of Professional Conduct by applying the Code and Standards to specific situations.

Martineau need not remove her name from the report, but she should document the difference of opinion.



- 3. Which of SMC's policies regarding public appearances is *least likely* consistent with both the requirements and recommendations of the CFA Institute Research Objectivity Standards?
 - A. Statement 1.
 - B. Statement 2.
 - C. Statement 3.

Answer: C

The CFA Institute Research Objectivity Standards recommend that firms provide full research reports on the subject companies discussed to members of the audience at a reasonable price. At a minimum, the covered employee should disclose whether a written research report is available to members of the audience who are not clients of the firm, the approximate cost, and how a listener might acquire the report. Firms should make copies of the full research report available for purchase or review; for example via the firm's website.



Joenia Dantas Case Scenario

Joenia Dantas is a financial risk manager for Alimentos Serra (AS), a Brazilian manufacturer and exporter of soybean-based food products. AS is a privately held corporation, wholly owned by Cesar Serra. Recently, AS took out a R25,000,000, four-year, floating-rate bank loan requiring semi-annual payments of interest based on SELIC (Banco Central do Brasil's overnight lending rate) plus a spread of 4.50 percent and repayment of principal at maturity. Serra believes that interest rates will rise in the near future and worries that AS will be unable to absorb the higher loan costs associated with an increase in rates. Dantas tells him that she will convert the loan to a 10.80 percent fixed rate by entering into the pay-fixed side of a four-year, R25,000,000 notional principal interest rate swap with semi-annual payments that exchanges SELIC for a fixed rate of 10.80 percent. She explains that the swap will act as a hedge for the loan, reducing the company's net cash flow risk and net market value risk.



Discussions with Dantas about using interest rate swaps to reduce risk cause Serra to think about the fixed income portion of his personal investment portfolio, which includes R12.0 million in bonds that have a modified duration of 5.50 years. Serra's beliefs about rising interest rates make him want to reduce the bond portfolio's modified duration to 2.00 years using interest rate swaps. In order to determine the correct swap position, he needs to learn how to calculate the modified duration of a swap. He asks Dantas how to do this. She explains it to him, using the example described in Exhibit 1.

Exhibit 1
Data for Swap Example

Maturity of swap	4 years
Payment structure	semiannual
Fixed rate on swap	10.8%
Duration of 4-year, 10.8% coupon bond	2.91 years

Serra decides to use a swap that has a modified duration of -2.40 years for the pay-fixed side to reduce his bond portfolio's duration to the desired level.



In addition to the current needs, in six months AS will enter into a four-year, quarterly payment, R50,000,000 loan to fund local projects. Dantas expects to borrow these funds at a floating rate and convert the loan to fixed using an interest rate swap. She explains to Serra that AS can commit to a fixed rate of 14.3 percent for the future loan by buying a payer swaption today with an exercise rate of 14.3 percent for a four-year swap with quarterly payments and a notional principal amount of R50,000,000.



- 7. Dantas' explanation of her plan to convert the four-year loan from floating to fixed is *most likely*:
 - A. correct.
 - B. incorrect, because the fixed loan rate will be 15.30%.
 - C. incorrect, because the swap should be entered to pay SELIC.

Answer: B

Converting a floating-rate loan to a fixed-rate loan requires entering into a plain-vanilla (fixed-for-floating) interest rate swap on the pay-fixed side. The swap should have the same maturity, the same payment frequency, and the same floating interest rate index as the loan and its notional principal should be equal to principal balance of the loan. The borrower will pay the fixed rate on the swap (here 10.80%) and receive the index (SELIC) from the swap counterparty. The borrower will pay the index (SELIC) plus any spread (4.50%) to the lender. The net, fixed interest rate on the swapped loan is the fixed rate on the swap plus any spread over index on the loan or 10.80% + 4.50% = 15.30% in this situation.



- 9. The duration of the interest rate swap described in Exhibit 1 is *closest* to:
 - A. -2.41 years.
 - B. -2.66 years.
 - C. -2.91 years.

Answer: B

The duration of the pay-fixed position in an interest rate swap is equal to the duration of a floating rate bond with the same payment frequency minus the duration of a fixed rate bond with coupon rate equal to the fixed rate and maturity equal to the swap maturity. The duration of the floating rate bond is, on average, half of the time interval between payments (in this case, half of 0.5 years or 0.25 years.) The duration of the fixed rate bond is given as 2.91 years. 0.25 years-2.91 years = -2.66 years.



- 10. In order to reduce the duration of his bond portfolio to the desired level, Serra will enter into a pay-fixed swap position with a notional principal *closest* to:
 - A. R17.5 million.
 - B. R27.5 million.
 - C. R42.0 million.

Answer: A

When the current duration (DB), the target duration (DT), and the value (B) of the bond portfolio are known and the duration of the swap has been calculated, the notional principal of the appropriate swap (NP) is found as:

$$NP = B \left(\frac{MDUR_T - MDUR_B}{MDUR_S} \right).$$

In this case, the notional principal is:

$$12,000,000 \left(\frac{2.00 - 5.50}{-2.40} \right) = 17,500,000.$$



Thank you for attention!