

MASTER'S IN FINANCIAL ENGINEERING (MFE)

Presented By:

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The Master's in Financial Engineering (MFE)

- Financial engineering is the application of financial economics, mathematics, computer technology, and the scientific method to the optimal sourcing, utilization, and protection of financial assets.
- At Berkeley, the MFE program comprises four 8-week academic terms, and one 10-week internship term, over a 12-month period. Berkeley is the only U.S. university where the program is housed within the business school.



The Master's in Financial Engineering (MFE) (2)

- In the U.S., programs somewhat similar to Berkeley exist at Carnegie Mellon, M.I.T., Columbia, Cornell, Michigan, NYU, and, recently, Princeton. Other universities have some aspects of an MFE.



MFE Students and Curriculum

- Berkeley seeks students from around the world with superior quantitative aptitude and training, with the ability to think critically, and with the desire to apply their knowledge to practical ends.
- At Berkeley these students are trained in financial economics; in stock, bond, derivative, and project valuation; in portfolio management; in the art/science of innovation; and in the dynamics of capital markets.



MFE Students and Curriculum (2)

- A 10-week internship program augments student's academic learning.
- The complete scope of the Berkeley MFE program, and the complete curriculum, can be found at www.Haas.Berkeley.edu/MFE.



The Concurrent MBA and MFE at Berkeley

- Berkeley has a pilot program allowing students to concurrently earn an MBA and an MFE degree.
- The concurrent MBA/MFE degree program is a two-year program, including the summer, and requires a higher than normal student course load.
- MBA/MFE students complete about 80% of the combined MBA and MFE coursework (details on the MFE website).
- Initial indications are that this is a successful program and that it will be made a regular offering at Berkeley.



Joint MFE Programs with other U.S. Universities

- U.C. Berkeley and U.C.L.A. are in the final stage of preparation for a joint MFE program to start in April 2003. There would be about 60 students at each campus.
- Each student would take the same courses, at the same time, from the same professors. This would be accomplished using interactive, distance learning technology.



Joint MFE Programs with other U.S. Universities (2)

- The best-qualified professors from each university would teach in the program.
- The curriculum, teaching assignments, internships, and placement would be centralized under a single Executive Director and a joint faculty management committee. Students would participate in the collegial atmosphere at one of the campuses.



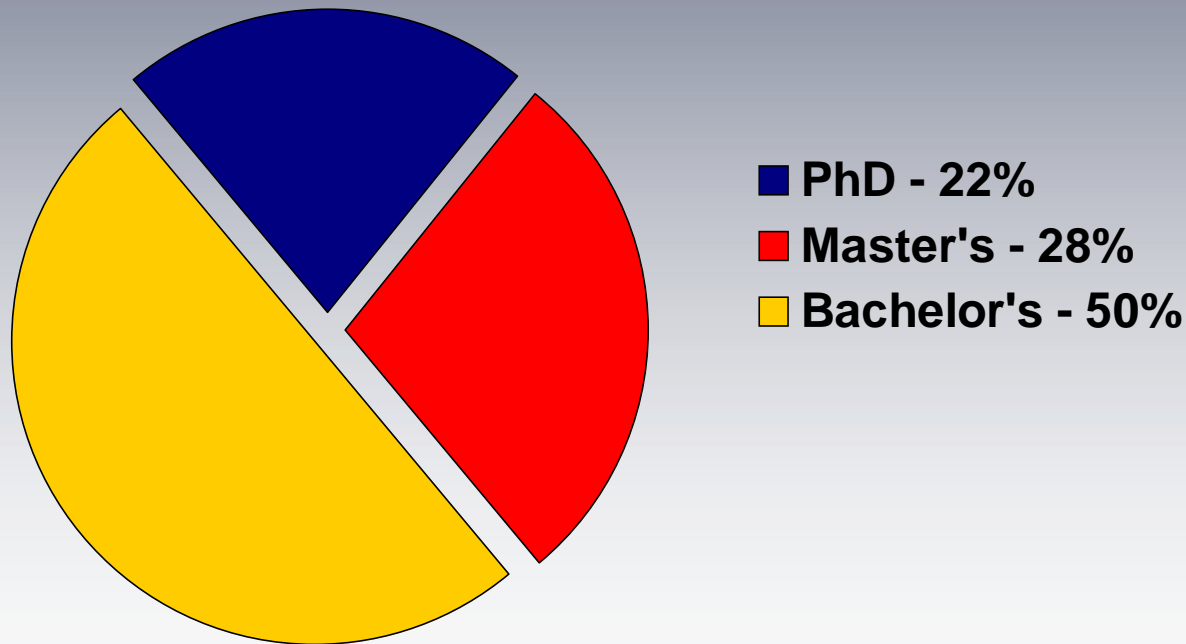
International Joint MFE Programs

- Once established, the Berkeley/UCLA joint MFE would seek interest from universities outside the U.S.
- A prerequisite for successful joint programs is an effective interactive, distance learning capability. Telephony and IP technology is rapidly developing to meet this need. Pedagogical techniques are similarly evolving.
- We envision professors from interested universities first participating in the Berkeley/UCLA program, and then leading the program at their home university.
- Students would participate at their home university.

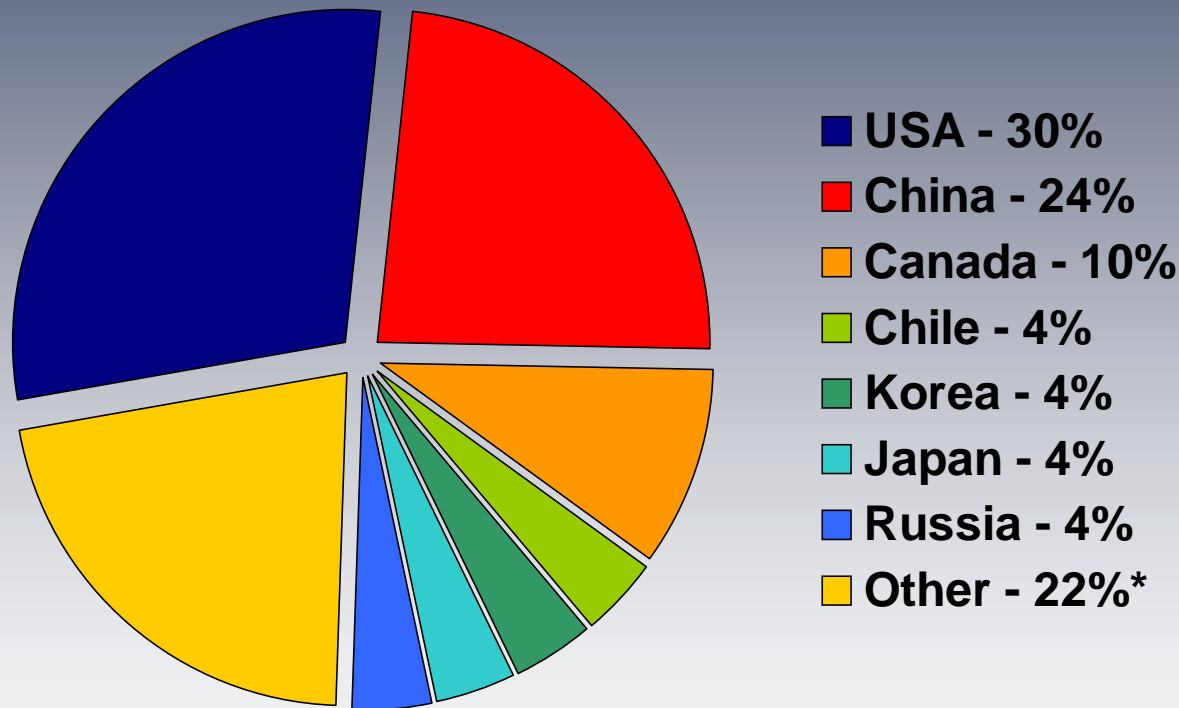


Berkeley's First MFE Class – Educational Background

Total Enrollment - 50 Students



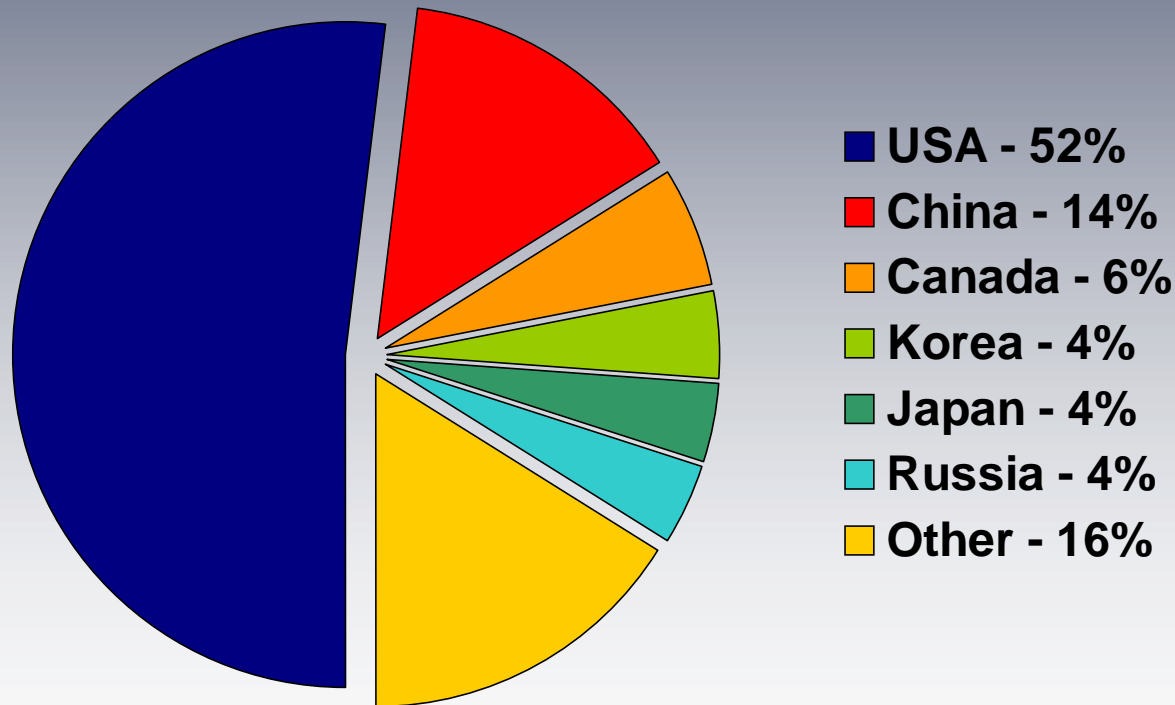
Berkeley's First MFE Class – Country of Citizenship



* 2% each – France, Georgia, Hong Kong, India, Indonesia, Israel, Netherlands, Pakistan, Taiwan, Turkey, and Zimbabwe



Berkeley's First MFE Class – Country of Residency



Graduate Employment Opportunities

- Investment Banks – Trading, securities valuation, risk management, corporate financial structuring, project evaluation.
- Commercial Banks – Loan structuring, loan default evaluation, currency trading, asset/liability portfolio optimization, bank-wide risk management.
- Investment Firms – Portfolio optimization, optimal trading strategies, performance-risk control, performance measurement and assessment.



Graduate Employment Opportunities (2)

- Commercial Enterprises – Capital structuring, project evaluation, currency management, enterprise-wide risk management.
- Insurance Companies – Structured policies and securities, liability-portfolio risk management, asset/liability optimization.
- Government – Optimal budgeting, energy/natural resource contracting, incentive contracting (with private industry).



Concluding Thought

- Financial engineering will grow in global importance due to:
 - The globalization of production and distribution.
 - The drive for increased economic efficiency.
 - The universality of money.



Interested in a Deeper Understanding of Finance?

- **Master's in Financial Engineering Program (MFE)**
 - 12 Month program leading to a Master of Financial Engineering degree from U.C. Berkeley.
 - www.haas.berkeley.edu/MFE
- **Financial Investment Technology (F.I.T.)**
 - 7 January – 1 February, 2002
 - One-month intensive course in quantitative financial economics leading to an F.I.T. Certificate.
 - www.haas.berkeley.edu/finance/FIT
- **Berkeley Program in Finance (BPF)**
 - Twice yearly, two-day seminar in contemporary issues in finance.
 - www.haas.berkeley.edu/BPF

