5th Year Career Development Report
Baruch MFE Program

Financial Engineering MS Program
Baruch College City University of New York

March 2021
The Baruch College Financial Engineering Master’s Program produces competitive, successful, and highly skilled financial practitioners by promoting the study of mathematical and algorithmic models in finance. A distinguishing factor is the strength and unity of the alumni community, as evidenced by the 90% response rate to the career development survey that forms the base of this report.

Report Overview

This second edition of the Baruch MFE Career Development Report presents the results of a career development survey conducted on Baruch MFE classes of 2013 to 2015, who have been working for 4 to 6 years after graduation. The survey was distributed to all of the 2013-2015 Baruch MFE alumni. Of the 68 alumni surveyed, 61 responded, representing a 90% response rate.

60 of the 61 alumni who responded continue to work in the financial services industry. 88% of them work in the United States within the Greater New York City area.

**Employment Industry**

- **Finance** 98%
- **Other** 2%

**Employment Location**

- **Greater New York City Area** 88%
- **Beijing & Shanghai** 5%
- **Singapore** 2%
- **Hong Kong** 2%
- **London** 3%
- **Other** 12%
Job Tenure
After completion of the Baruch MFE program, 77% of alumni continued employment at their initial post-MFE firm or changed jobs once. 53% have remained with their current firm for over 4 years.

Number of Jobs since Graduation from the Baruch MFE Program

<table>
<thead>
<tr>
<th>Number of Jobs</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>43%</td>
</tr>
<tr>
<td>2</td>
<td>34%</td>
</tr>
<tr>
<td>4 or More</td>
<td>16%</td>
</tr>
</tbody>
</table>

Number of Years at Current Firm

<table>
<thead>
<tr>
<th>Years at Current Firm</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over 4 Years</td>
<td>53%</td>
</tr>
<tr>
<td>1 - 2 Years</td>
<td>8%</td>
</tr>
<tr>
<td>2 - 4 Years</td>
<td>26%</td>
</tr>
<tr>
<td>1 Year or less</td>
<td>13%</td>
</tr>
</tbody>
</table>

Institution Type and Area of Focus

51% of the alumni are employed on the sell-side, 47% on the buy-side, and the rest work either in tech or fintech.

Institution Type

<table>
<thead>
<tr>
<th>Institution Type</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bank</td>
<td>47%</td>
</tr>
<tr>
<td>Hedge Fund</td>
<td>27%</td>
</tr>
<tr>
<td>Asset Management Firm</td>
<td>11%</td>
</tr>
<tr>
<td>Fintech</td>
<td>7%</td>
</tr>
<tr>
<td>Technology Firm</td>
<td>2%</td>
</tr>
<tr>
<td>Other</td>
<td>6%</td>
</tr>
</tbody>
</table>

Market Focus

<table>
<thead>
<tr>
<th>Asset Class</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equities</td>
<td>35%</td>
</tr>
<tr>
<td>Fixed Income</td>
<td>25%</td>
</tr>
<tr>
<td>Commodities/Currencies</td>
<td>5%</td>
</tr>
<tr>
<td>Other</td>
<td>5%</td>
</tr>
<tr>
<td>Cryptocurrency</td>
<td>2%</td>
</tr>
<tr>
<td>Macro/Cross-Asset</td>
<td>28%</td>
</tr>
</tbody>
</table>

28% of the alumni focus on the macro/cross-asset\(^1\) space, while 25% and 35% are involved with fixed income and equities, respectively.

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\(^1\) Any response containing more than 3 asset classes was counted towards macro/cross-asset.
Nature of Work and Job Satisfaction

Over 50% of alumni perform coding, data analysis, and modelling on a daily basis.

**Daily Tasks**

- Coding: 70%
- Data analysis: 60%
- Modelling: 50%
- Risk monitoring: 40%
- Portfolio monitoring: 30%
- Systems design: 20%
- Alpha research: 10%
- Market monitoring: 5%
- Algo development: 2%
- Client interaction: 1%
- Team management: 0%
- Trade execution: 0%
- Strategic planning: 0%

**Use of MFE Knowledge**

- Strategic planning: 20%
- Trade execution: 15%
- Team management: 10%
- Client interaction: 5%
- Market monitoring: 2%
- Algo development: 1%
- Systems design: 1%

87% of alumni are using knowledge acquired from the Baruch MFE program in majority of their daily work[^2], and 44% are using the Program's teachings in over 70% of their work.

**Number of People Managed**

- None: 71%
- 1-4: 26%
- 5-9: 3%

29% of the alumni are in managerial positions, and 3% are leading medium-sized groups.

[^2]: Usage of MFE knowledge is reported on a scale of 0 to 10, with 10 representing 100% of the work being related to or using knowledge obtained from the Baruch MFE Program, while 0 means that none is relevant.
Over half of the alumni report that computer programming exceeds 50% of their daily work.

Python, C++, R, and SQL are the most commonly used programming languages, each with 25% or over reported usage. Python is the most popular, with 85% adoption rate and SQL comes second at 41%.

All surveyed alumni report job satisfaction of 3 or above, with 56% reporting a score higher than or equal to 8 (which is the median).

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3 Job satisfaction is reported on a scale of 0 to 10, with 10 being the most satisfied and 0 being the least satisfied.
COVID-19 Pandemic

This year’s survey included a special section dedicated to understanding the pandemic’s impact on Baruch MFE alumni.

**Were You Furloughed or Laid Off due to Covid-19?**

Only 7% of all surveyed alumni were furloughed or laid off due to COVID-19.

**Change in Career Goals due to COVID-19**

Just 8% of the alumni have considered or decided to change career fields; an additional 21% started or began searching for another job.

**Amount of Time Spent Working from Home since March 2020**

<table>
<thead>
<tr>
<th>Percentage of Time</th>
<th>Response Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>75-100%</td>
<td>87%</td>
</tr>
<tr>
<td>50-75%</td>
<td>5%</td>
</tr>
<tr>
<td>25-50%</td>
<td>3%</td>
</tr>
<tr>
<td>0-25%</td>
<td>5%</td>
</tr>
</tbody>
</table>

87% of the alumni surveyed reported that 75-100% of their work schedule was spent working from home. Only 5% of alumni spent 25% or less of their time working from home.
Overworking was reported to be the biggest challenge of working from home, with nearly 50% of Baruch MFE alumni indicating it as a challenge. This was followed by getting distracted at 39%, and difficulty communicating with other team members at 31%.

89% of alumni reported their work from home productivity to be about the same or better relative to their productivity working from the office.

Allocation of Time Saved by Not Commuting

- Working on your primary job
- Exercise/outdoor leisure
- Indoor leisure
- Education/training
- Childcare
- Working on a second job or my own business

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Compensation

The following compensation results are based on the responses of 57 alumni. Four alumni were excluded as they either don’t work in finance, or are based in Beijing/Shanghai. This section pertains to total yearly compensation, which includes both base salary and yearly bonus. The reported base salaries concentrate in a compressed range between 100-200k, and the great majority fall below 250k. The charts below show compensation distributions by institution type, role, as well as work experience and education obtained prior to starting the Baruch MFE program.

- **Institution Type**

Bank Total Compensation

- Hedge Fund Total Compensation

- Asset Management Total Compensation

- Fintech Total Compensation
• **Role**

**Buy-side Quant Research**
- 15 Datapoints
- $0k/year - $1mil +
- 25% $200k, 50% $400k, 75% $600k, 100% $800k

**High Frequency Trading**
- 4 Datapoints
- $0k/year - $1mil +
- 50% $400k

**Desk Quant**
- 11 Datapoints
- $0k/year - $1mil +
- 25% $200k, 50% $400k, 75% $600k, 100% $800k

**Risk Management**
- 10 Datapoints
- $0k/year - $1mil +
- 25% $200k, 50% $400k, 75% $600k, 100% $800k

**Portfolio Management**
- 3 Datapoints
- $0k/year - $1mil +
- 50% $200k

**Quant Consulting**
- 5 Datapoints
- $0k/year - $1mil +
- 50% $400k

**IT/Operations**
- 5 Datapoints
- $0k/year - $1mil +
- 50% $200k
• Prior Experience

Here, prior experience refers to the amount of work experience before joining the Baruch MFE Program. The meritocratic nature of the finance industry and the fact that prior work experience is often not finance-related make it possible for alumni with one year or fewer prior work experience to reach the highest level of compensation.
- **Prior Education**

Here, prior education refers to the highest level of education attained before joining the Baruch MFE program. Previous graduate degrees did not seem to influence total pay significantly. The broadest range of compensation is seen among alumni who only held a bachelor's degree before joining, albeit the compensation medians are relatively close for all levels of prior education.

![Bachelors Total Compensation](image)

- **Bachelors Total Compensation**

- **Masters Total Compensation**

- **Ph.D. Total Compensation**

![Masters Total Compensation](image)

![Ph.D. Total Compensation](image)
Job Satisfaction

In this section, Baruch MFE survey respondents were separated into four roughly equal groups based on their job satisfaction rating. The following shows the total compensation distribution for these four groups.

**Job Satisfaction Rating: 0-6**
- $0k/year
- $200k
- $400k
- $600k
- $800k
- $1mil +

**Job Satisfaction Rating: 7**
- 10 Datapoints

**Job Satisfaction Rating: 8**
- 13 Datapoints

**Job Satisfaction Rating: 9-10**
- 19 Datapoints

The Report was generated in collaboration with Dr. Lev Borodovsky, editor of The Daily Shot
For questions regarding this survey, please contact Dan Stefanica at Dan.Stefanica@baruch.cuny.edu
Layout and graphics generation: Jessica Vittoriano (Baruch College ’23) and Paul Menestrier (Baruch College ’20)