On the Quantitative Investment Recruitment in China

The purpose of this paper is to present our recent observations and analysis of the onshore financial markets. As recruiters, we always try to forecast the market by studying the notable news and policy changes.

Overview

With both A-Share stock and onshore bond markets being turbulent, many of the roof-top terraces are now closed in mainland China to prevent extreme incidents from happening. However, while fundamental managers struggling to achieve their yearly performance target, the quant guys are having a great time hedging against market volatility.

Being our first report on quant, we need to admit that this is a domain very new to us; we have only started recruitment in this area since mid-2017. The past year for us was both exciting and frustrating. The exciting part was we got to meet with so many extraordinary people and work with them, while the confusing part was nearly everything we learnt from CFA courses and Bloomberg articles were failed to apply to the local market recruitment.

For one thing, the market only came to existence in 2005, and most of the quant shops onshore have less than 5 years of experience. During the market crisis in 2017, some quant shops were squeezed-out due to the dramatic environment change, and most quantitative strategies were proven invalid. Right now the market is eagerly searching for more efficient strategies on money making.

2018 is a crucial year for quantitative investment since the remaining key players are planning for (potential) expansion plan; the market is now heated, and top talents are usually offered with extremely high offer by the fierce competition. The market and people working in it are so dynamic that we need to drop OUR old methodologies as recruiters, and try to watch every episode of the daily changes to keep up with it.

After months of reflections, we come to some clues of hiring for quants onshore, and now we would love to share with you. It is the first of our quantitative investment report, and we aim to serve you with a full-sketch of the market. We will cover a wide range of issues and to try to be as detailed as we can.

A Glance at the China Quantitative Investment Market

With the first stock index futures introduced in 2010, usually we define that year as the Year Zero of China quantitative investment. Before that, most of the Chinese interested in quant were flocked overseas in places like London Financial City or New York Wall Street. The year 2012 marked as the first year that lots of quant candidates started returning home, with lots of new quant shops established in 2013.

Right now the majority of onshore people are on the small business side. Generally speaking, if a quant shop has the AuM of more than RMB 3 billion and a team of more than 30 people. It is already a large fish in the ocean.

A Sketch on the Current Domestic Talent Pool

Geographically speaking, more than 40% of the shops are in Shanghai, with 20% in Beijing, and the rest distributed in Shenzhen and the rest of Yangtze River Delta.

Majority of the firms are high frequency focused, with CTA and equity as their major alpha strategy generators. They do use the classical multi-factor strategies for beta and alpha, yet globally applied solutions like Barra strategies are deemed as slightly out-dated by most of these shops due to domestic high-frequency limitations, and the differences market fluctuations in trading environments.

In terms of the talent pool demography, the market currently has a strong desire for junior and middle level candidates. By mid-level, it means people with 4-7 years of experiences. Those with more than 8 years of experiences of candidates probably had already started their own shops and is now sitting on the investment committee or owning their own business. These people brought up the first generation of home-grown quant talents.

The junior talents got into the firms upon graduation and are now ready to make their first career change choices. However, we are not sure with the immaturity of the market status-quo, how good were their trainings. Hence the recruitment assessment tools right now are quite limited, and we need face-to-face meetings to further identify and develop the talent market.

On the other hand, those who returned from oversea markets may experience a strong feeling of cultural mis-fit. For the momentum on market right now is more profit generation focused. Only a few firms have the foresightedness of setting-up risk control departments, and only a few firms use proprietary OMS & EMS systems. Multi-billion level quant shops are gradually getting the importance of the importance to protect their data and trading practice, yet it is still a long way from market waking-up.

Hence, a small tips when hiring overseas returnees is that if looking at a profile that one has been switching jobs frequently upon returning to China. There is a high chance that this person switched jobs to find a comfortable place to work for. The senior one was overseas, the higher chance one may feel uncomfortable when getting back to ones home market.

Fresh Talent Resources:

Major talent generating universities of China Mainland:

Tsinghua University, Peking University, Fudan University, Shanghai Jiao Tong University, Zhejiang University, Renmin University of China, University of Science and Technology of China and etc.

Major talent generating university of Overseas:

MIT/ Stanford, Harvard, Cal-Poly, Oxford, Cambridge, ETH Zürich, Imperial College London, University of Chicago, and etc.

Following Relevant Education Backgrounds are highly needed on Quantitative-oriented positions:

- Mathematics (including Fundamental Mathematics, Computational Mathematics and Applied

Mathematics, including Operational Research)
- Economics (including theoretical economic and applied economics)
- Finance (including Macro finance and Investment)
- Statistics (including Mathematic Statistics and Applied Statistics)

Recent Policy Changes and How They May Affect the Talent Market

Starting with the oil futures this march, we've seen signals from the regulators to boost the market stability and to provide a healthier beta for common investors on the market who wants to participate in financial market trading.

A-share right now is infamous of its volatility and non-market driven changes. For a healthier market, the regulators' now realise that their goal are aligned with the ESG & ETF products. Though the changes are still under its way to a more visible status, and they don't have any positive effect to high frequency trading. We believe that it is merely a beginning that all leading domestic mutual fund are trying to formulate their FoF based on quant strategies, transferring onshore investment firms to a more utilitarian tool for the commonwealth investors.

Compensation Structure of the Market

Withstanding to the market status described, the rule of compensation structures are defined by the domestic side; meaning a sophisticated structure with heavily weighted bonus and some tax-evasion methods.

Here is the compensation level of the current quant market (non-PhD hiring). We have sampled around 300 candidates and the listed range are the mid range of the surveyed pool. Please understand we have ruled out many high frequency trading shops since their compensations & total package are too extreme to be use as valid data points. For specific inquiry, please feel free to contact us for discussions:

Seniority (Years)	Annually Guaranteed (CNY)	Annual Bonus (CNY)
2-4	150k-270k	70k-250k
4-7	300k-600k	200k-450k
8-12	600k-1.5mil	400k-1.3mil

For candidates with 12 years or higher, the range goes even wider, with options often taking in to the formulate. Hence we have excluded these data entries for case by case review.

To a certain level, the ranges reflect a highly chaotic market in terms of compensations structures. As more than 50% firms on the market are of less than 10 years of establishment, the compensation & benefit structures of each firm are highly different. In certain extreme cases, there are partners who are willing to distribute more than 60% of its yearly profit as employee bonus pool.

Along with that, tax-evasion methods are widely popular among the firms. Yet the approaches are quite different towards one and another. We will discuss that case by case when certain situation happens. Right now, for reference, please refer to our compensation report explaining the Chinese bureaucratic ranking and general tax-evasion methods issued in November, 2017.

Hot Hiring Trends Right Now

1. **Top 1:** FoF & FoHF among mutual funds and pension funds
2. **Top 2:** OMS & EMS system/ application developers
3. **Top 3:** Alpha Equity Researcher/ Portfolio Managers (junior to middle level)

By our understanding, the market is still in a stage where wild growth is happening and only a few regulations are there to correct wrong doing trading, especially on the domestic side. Risk models and custodian services are in dire need for heavy inspections. However, as these are not mandatorily asked by the regulators, these cost centres are usually overlooked within the current market. Most hirings are still in commercial lines and technological department with aggressive KPIs in a short time frame.

It is our sincere hope that this general report of ours may trigger more in-depth discussions. Our goal and mission are to help all the relevant parties understand the market clearly. Hence, should you have any ideas or opinions that willing to share or to have a further discussion on, please feel free to drop us a message.

Until next time!

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