

Linear Capital – 2022Q2 Newsletter



July 27, 2022

Dear Friends & Partners,

Thank you for being supportive along the way. We are very glad to present this letter to summarize our quarterly activities in Q2 2022.

--- Observation and Insights ---

The grand private capital market in China in Q2 of 2022 went down apparently in terms of activity. However, Linear continued to play the **"gaze-to-attack"** strategy as we shared with you in our last quarterly letter. Our pace in terms of capital deployment **slowed down by about 20%**, aiming to extend our investment period from 2-2.5 years to 2.5-3 years. We still believe the best tech deals are worth backing as they are blessed by industrial trends as well as government policies. These are highly investable assets for premium returns - **slow but steady and heavy**.

Majority of our team members live in Shanghai. We went through a city-wide lock-down for the entire April and May. It's unprecedented and will surely make a mark in history, but we made it. The city re-opened on June 1. Most activities have been returning to near-normal with small community-level lock-downs here and there.

We shared several reports during that time and I am attaching the link ([Memorandum - Analysis for Shanghai Pandemic's Impact on Linear Capital](#)) for your easy reference again. In hindsight, these two months were not wasted in that it allowed us to slow down and think more about why we are doing what we are doing and how we are doing it. It allowed us to review our past work without the market-clock ticking (well, you were not allowed to leave your house in April and contained to your community lot in May) and think about the question

"can we be better at what we do" towards our goal to become the best frontier tech investor in China.

A few things to re-iterate:

- We didn't waste much time though in terms of new deals - we tried our best to focus on the founders we already met before the lock-down. These "founders we already met" almost went out of stock near end of May, right before the June open-up.
- We had quite a few online conversations with many of our founders to find out the impact on them. We did an impact analysis and shared the reports with all of our LPs. We also held quite a few online seminars to share what we see, what we think and try to give them advice and maybe even just mental support during the hard time, including but not limited to,

- Linear Academy: Share Compensation Reward Practices for Startups



- Linear Family Firechat: How to deal with the capital market this year

正在讲话: 王淮 Harry 线性资本;

王淮 Harry 线性资本

Advice to Portfolio Founders

- Long China
- Keep morale up, over-communicate
- Praise proactivity, 逆境中锻造英雄
- 利用好这个机会做改革, 做优化: 做事方法和人员结构上 - no legacy burden
- Companies should pay immediate attention to customer relationships, cash flow and runway (inflow - outflow -> runway)
- Outflow: more rigid budget - spend wisely and strategically. Do ROI analysis and ask more questions before expenditure approval.
- Inflow: more attention on revenue, especially on payment settlement. Revenue reflected on bank balance is way more valuable than book numbers on contracts.
 - 客户知道你 => 相信你 => 买你
- Funds will be more selective - try to demonstrate why you are unique & excellent; show milestones during the fund raise process
- Fund raising strategy - focus on speed, not on valuation; as price will probably get worse in the next 6 months
 - Runway < 6 months, already too late; but better late than sorry, go out now
 - Runway 6-12 months, plan ahead and go out now, get the fund-raise done with 3-6 months
 - Runway 12-18 months, safe, but don't hesitate to interact with pursued investors
 - 18 months or above, ok not to raise now.

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管理成员 (57)

搜索成员

- Helen (主持人, 我) 腾讯会议商业版企业
- Ben Li (联席主持人) 腾讯会议商业版企业
- 王淮 Harry 线性资本 (访客)
- 王璞 (访客)
- 陈启明 (访客)
- 范凌 @特赞 tezn.com (访客)
- 冯昶 (访客)
- 楼晓都 (访客)
- 吕峰 (访客)
- 苏春园 (Chase) (访客)
- 孙辛 腾讯会议商业版企业
- 郑灿 Can (访客)
- ElaineLu (访客)
- Jimmy_支晓华_鲁尔 (访客)
- Kai (访客)

- Linear Acadamy: Amazon Day 1 + Leadership Principles

录制中

正在讲话: 亚马逊李奥 Iris;

亚马逊李奥 Iris

创新开始之处: 以服务客户为出发点逆向工作

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亚马逊云科技

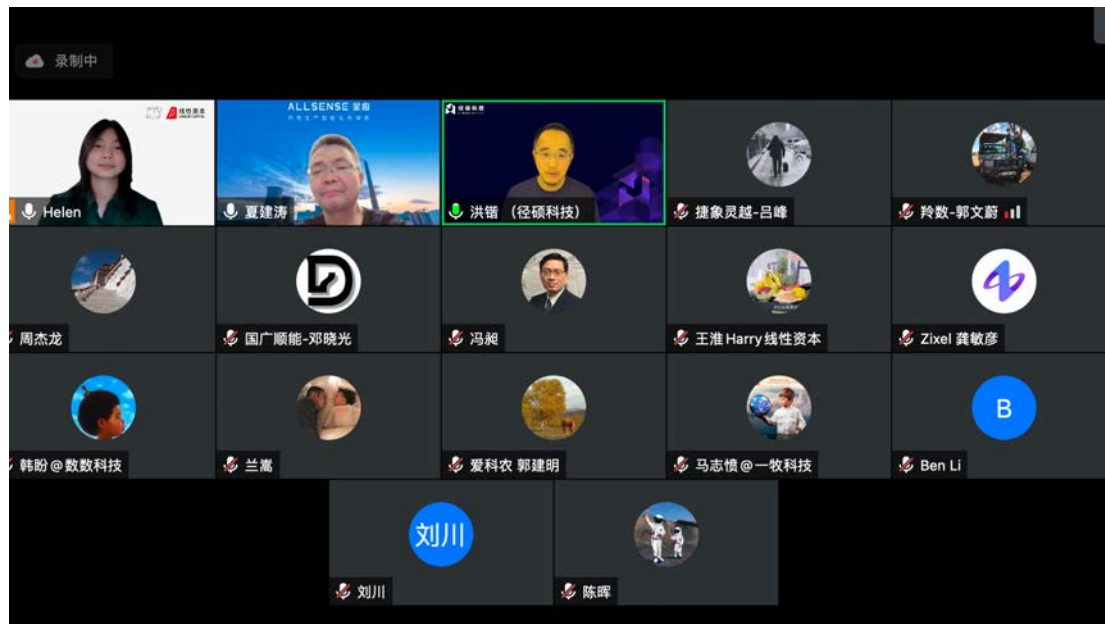
管理成员 (97)

搜索成员

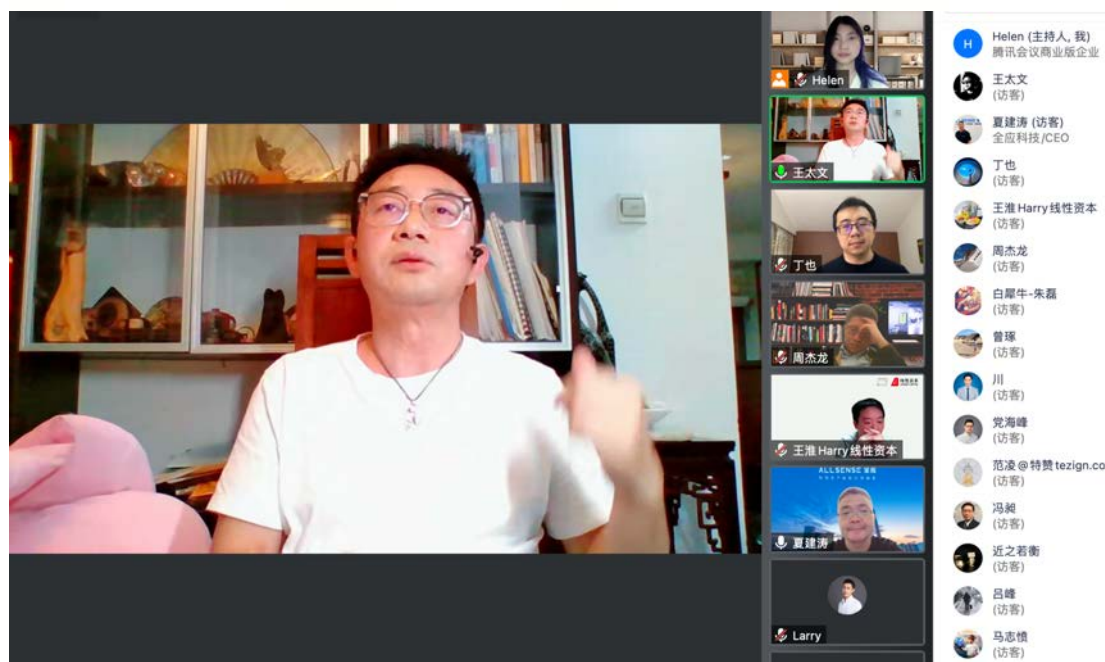
- Helen (主持人, 我) 腾讯会议商业版企业
- 亚马逊李奥 Iris (联席主持人, 访客)
- Dan (联席主持人, 访客)
- Cynthia (访客)
- 陈立 (访客)
- 陈旭 (访客)
- 川 (访客)
- 党海峰 (访客)
- 段先德 (访客)
- 范凌 @特赞 tezn.com (访客)
- 冯昶 (访客)
- 侯子文 (访客)
- 里奥 ~ 智能制造 (访客)
- 廖明生 (访客)
- 聆数 车联 (访客)

- Linear Acadamy: Organization Culture of Alibaba

- Linear Family Firechat: Icebreaking and internal sharing among Linear portfolio founders



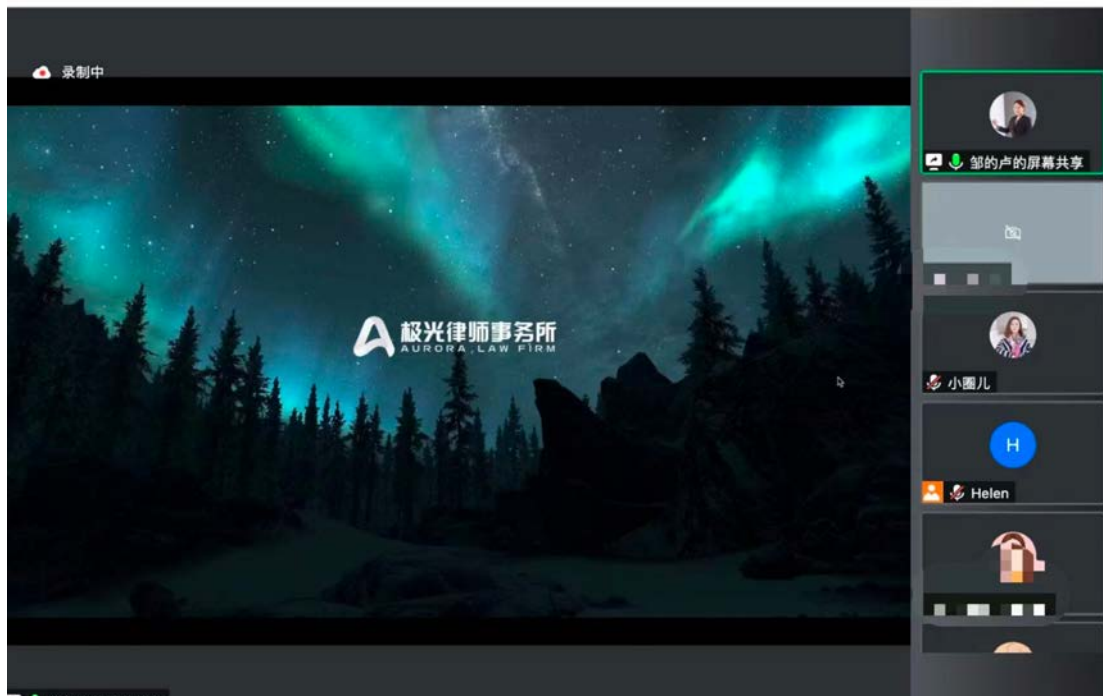
- Linear Academy: Sharing from Wang Tai Wen (an ex-Huawei senior management and early time key employee)



- Linear Academy: HR management during covid situation

张秋枫 1270

张秋枫 1270



- Linear Acadamy: How incentive mechanism helps company growth

事业部下辖的区域的奖金包：要增长、要降低费用

$$\text{奖金包} = \text{基线奖金包} \times (1 + \text{业绩增长率}) + \text{减员、降成本费用} \times 50\%$$

业绩增长率 = (当年销售收入 - 上年销售收入) / 上年销售收入

基线奖金包一般为上一年奖金包，如果经营发生实质性变化，可以适当修正

众思咨询 | 激发组织活力、增强组织能力、提升组织绩效

35

管理成员 (130)

正在讲话: 18603013755;

18603013755

Helen@线性资本 (腾讯会议商业版企业)

18603013755 (访客)

Cynthia (访客)

1 (访客)

白旭晖 (访客)

陈海 (访客) 中信银行软开/项目

陈珏 (访客)

陈立 (访客)

董君 (访客)

朵云夏 (访客)

范凌@特赞 tezn. (访客)

冯昶 (访客)

郭建明 (访客)

郭彬彬 (访客)

国广顺能-邓晓光 (访客)

- and so on...

We also wanted them to help each other in all possible creative ways by consulting with each other and pilot testing with each other whenever it makes sense.

- We made sure our staff were well taken care of during the time by organizing logistics of food and medicines, as well as holding weekly meetings and 1on1s throughout the entire lock-down period. **The morale stayed high during the tough two months.**

- We stick to our plan of investing ~US\$70m in our fund 5 for 2022. We will use much of Q3 for hiring, catching up with our "top 100 talents program"(百人计划) which lagged progress when we were busy in chasing deals last year, and deeping diving to domain researches.

Starting June 1, we have been back to work at the office and a lot of us have been travelling and working very hard to catch up with the work discounted by the lock-down.

Something new to share:

- I and many of Linear colleagues have been meeting founders face to face in the past month or so. Many of our portfolio companies have been hit by the covid but their morale is still pretty high. **They plan by all means to make up what's lost in the first half of 2022 by over-working the remaining half.** And they are confident about that, which is quite encouraging and inspiring. They are our best assets, and our source of confidence in China.
- Clearly the government realizes the damage to the economy derived from the dynamic zero-covid policy, and **they are loosening the restriction.** They shorten the quarantine period for cross-border travellers from previous 14+7 to 7+3. They asked municipal government to check travel history from the past 7 days instead of 14 days previously. While the dynamic zero-covid policy is still the policy, we believe the meaning of "dynamic" is being interpreted in a way that will take more of the economic impact into account.
- We did see price cuts even for the early stage deals. **30-50% discount was achievable.** We think the price for early stages won't bounce back by the end of year unless there are major financial incentives from the government.
- Not surprisingly, with the cooling-down of the capital market, the quantity of new founders has decreased. **However, surprisingly, the quality of new founders increased,** based on all the startups we ran into and a few term sheets we signed during the last 3-4 months. **Our interpretation is that in the worst times of the capital market, only the best out of the best dared to leave their current jobs to start up new ventures, and were able to raise fund.**
- With that, you can **buy a piece of better quality startup at a much lower price** during the capital market storm - that's a golden opportunity as we see it. We just need to make sure they can survive the market storm in the next few years.
- We also believe hardship is the furnace that makes iron into steel. We encourage our founders to take advantage of that, by being agile and staying alive.

Lastly, I want to emphasize the question about changes to the investable opportunity sets for USD investors.

Our observation is that in terms of restrictions by law, not much change at all. But in terms of preferences by the founders, the trend is indeed gradually towards favoring RMB. If you would say the favor score for USD v.s RMB was 8:2 a few years ago. Now it is probably 6:4.

Why?

It's more based on the facts that USD deals are harder to get listed in the US, while the Hong Kong stock market still needs time to catch up. Also, there is fear among founders that many USD funds may not be able to continue to raise enough money, so less likely to fund them in the future. However, we see that the government still welcomes USD funds to invest in most areas, except for very sensitive areas, like national security or human genomics, personal privacy data at scale, etc.

As a counter-measure, our QFLP plan is moving forward, with the intention of **allocating 20-30% of our USD fund to be able to cover the deals requesting RMB currencies**. More to report in Q3.

While there are still major uncertainties ahead (like the geopolitical challenges, etc), what can be worse than the last few months as we experienced it personally! We made it.

I am confident we are more capable than ever before.

BTW, I will be visiting Singapore from 9/20 to 9/30. If you will be around, I'd love to catch up in person. I really miss seeing all of you face to face. Please let Ben or myself know.

Best regards,
Harry

--- Investments ---

We closed 6 new deals in Q2 2022, while another 1 deal is under closing. Please see below for details.

Company HT

- Microsphere (微球) is a very important kind of biomedical raw materials. The market size of microsphere is more than 10 billion USD. The traditional way to produce microsphere has problems in quality control. The variance of the produced microsphere size is greater than 50%. Based on microfluidic, it is focusing on developing a new generation of microsphere production solution, which is high throughput. Below is a product diagram for your easy reference. By using its product, the variance of the microsphere size is less than 5%, which is 10 times better than that of the traditional solution.

Company B

- A synthetic biology company focusing on artificial species design. Its core task is to perform species design with software engineering concepts, and unlock the productivity of the bio-industry. Its key product is a library of artificial species and related industrial pipelines, with a focus on food, daily chemical, and medical protein development. It is committed to building a comprehensive biotechnology ecosystem based on artificial species architecture.

Company W

- Designs and manufactures intelligent robots used in construction. It is aiming to design intelligent robots that construction workers can use. Therefore, it can accelerate the intelligent transformation of China's construction industry. The major part of work they started replacing is the plastering process in construction. They are able to replace 10 workers with 1 robotic plastering machine and 1 coordinating worker.

Company H

- Committed to the R&D of general-purpose parallel processor chips. Also, the company has established software tools and ecosystems for general-purpose parallel computing. It has a new SIMT fine-grained instruction set and has developed the underlying hardware architecture by themselves. From the perspective of software developers, the newly designed architecture provides excellent general programming ability and efficient parallel computing capabilities. Typical applications include deep learning inference and training, data analysis, graphics, images, speech, etc.

Company U

- Exosome (外泌体) is a cutting-edge technology emerging since 2013 Nobel Prize announcement. Two major application scenarios of exosome are medicine carrier and raw material for cosmetic medicine. How to make a standard exosome carrier is a difficulty in the industry. Based on optimized SNP and BG (molecular), the company obtained a standard exosome carrier. We believe Uminbio has the potential to make exosome become a main-stream solution in medicine carrier applications.

Company A

- Whose digital microfluidic platform, based on large-scale electronics technology, is committed to achieving a high degree of integration and automation of complex experimental procedures at single cells level, and is used in fundamental bio-related research, cell line development, cell therapy development, synthetic biology and other scenarios. In layman's words, it allows thousands of single cell experiments to be conducted in parallel, thus resulting in huge improvement in research efficiency for industrial drug discovery or academic lab work. The founding team has a rare inter-discipline background. The founder received PhD degree in Electrical engineering from Cambridge and specialized in bio-electronics.

Company C

- Unstructured data derived from certain specific scenes has been booming and kept growing fast now and in the foreseeable future. The demand for developing and utilizing such scene-based unstructured data (in order to optimize and iterate the tech applications in that specific scene) is getting more and more realistic. It is a company dedicated to developing a data infrastructure platform for development and operation of scene-based unstructured data, by involving deep learning, simulation and digital twin system related technologies. It starts with autonomous driving scene and aims to help those autonomous driving applications realize fast reiteration and increase their performance by tens of times.

Highlights of Holdings

- [CryptoSpace](#) announced they have raised their Angel Round. Linear is their leading investor.
- [Mindverse](#) announced they have closed Angel Round led by Sequoia Seed Fund, Linear co-invested with K2VC.
- [J-Elephant Technology](#) announced they have closed Angel Round and Pre-A round. In Angel Round, Sequoia Seed Fund, Legend Star and Innovation Works co-invested in it. In Pre-A round, Linear Capital and Challengers co-invested in it, Sequoia Seed Fund and Legend Star followed-on.
- [WEFLY](#) (Qifei Aviation) announced they closed Angel Round co-invested by Linear Capital and Ince Capital.
- [JING Digital](#) released news that the company has raised Series A and Series A+ in a year. Linear continued to bet on the mar-tech company as the leading investor in Series A round.

--- Other things you may be interested in ---

We were awarded by quality media outlets.

- Linear Capital was awarded as [Top Early Stage Investing Fund](#) by 36kr and Chinaventures.com, [Top Investing Funds in Artificial Intelligence and Big Data](#) by Chinaventures.com.
- Our Managing Director, [Songyan Huang](#) was listed in [Top 40 Investors under Age 40](#) by Cyzone.
- Almost 20 of our portfolio founders were listed in [「X·36under36」](#), a well-respected entrepreneurs' list released in 2022 by 36kr.

Linear hosted many events to keep in touch with our portfolio companies as well as reach out to audiences like students, entrepreneurs and talents in tech companies . We tried to be more creative during the lockdown period.

- Linear team [hosted nine online events during the two-month lockdown](#) in Shanghai. The topics covered how to prepare for the "capital winter", management lessons from Amazon, experience sharing from portfolio companies on how to work efficiently even in lockdown, etc.
- We [adjusted our logo and released a special customized NFT](#) for the new logo.
- Linear rolled out our [Linear Fellow project](#) to attract more talents overseas.

Also, we'd like to share with you some other updates about Linear portfolio companies.

- **Zion**, the low-code development platform, [developed a mini program on WeChat during lockdown to connect volunteers with residents who needed help in a more efficient way](#). Linear helped Zion broadcast the mini program. This is what we believe -- technology should help people be more productive and build a better society.
- **Gerry Guo**, the founder and CEO of Lean Digital, [was elected as the team leader for the Fusion Technology and Application Standard WorkGroup of the Information Technology Standardization Committee](#). This is professional recognition from industry.

Best regards,

Linear Team