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ACCOUNTING FRAUD SERIES

LUCKIN COFFEE

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Founded in 2017, Luckin Coffee Inc. (“Luckin”) quickly emerged as the fastest growing coffee company in China. Within two years it had surpassed Starbucks’ store count fuelled by equity financing from world-class investors and an “asset-light” store design that promised effortless growth. Luckin went public through a US listing in May 2019 with an app-based business model set to disrupt the coffee industry. Following reported operational successes and several transformational strategic announcements, Luckin’s growth story looked limitless.

Yet after 18 months as a public company, Luckin paid \$180 million to settle charges of widespread fraud by the Securities and Exchange Commission (SEC) that inflated revenues in excess of 40%.¹

LUCKIN’S BUSINESS

History

Luckin was founded by Jenny Qian in June 2017. As a former executive of UCAR Inc., a Chinese ride-hailing company, Jenny Qian saw an opportunity to deploy a ride-hailing business model to revolutionize the coffee industry. After receiving seed financing from Charles Lu, the founder of UCAR Inc. and subsequent Chairman of Luckin, Jenny Qian opened her store in Beijing in October 2017.

Following a successful trial period of 9 stores in 2017, Luckin officially began its expansion in early 2018. From January 2018 to March 2019, Luckin’s growth was explosive. During this period, Jenny Qian and her team opened an average 5.2 stores per day, served a cumulative total of 16.9 million customers, and poured 111 million cups of coffee. Jenny Qian had a vision to open 10,000 stores by 2021 and surpass Starbucks to become China’s largest coffee chain.²

However, Luckin’s growth was not cheap. From 2017 through to March 2019, Luckin burned through RMB3.3bn (\$500mn) of cash, which was primarily used to fund store openings and marketing expenses. These expenditures were mainly financed by three rounds of equity financing from increasingly prominent investors (June 2018; November 2018; and April 2019). Notable pre-IPO investors included Blackrock and Singapore’s sovereign wealth fund (GIC). In April 2019, ~1.5 years after opening its first store, Luckin filed for a US IPO becoming one of the fastest businesses to reach unicorn status (>\$1bn valuation) in China.³

App-Based Business Model

A core differentiator for Luckin was its use of technology. The company was virtually cashless, as every transaction had to be bought through the Luckin App. Luckin management felt that an app-based model allowed the company to drive higher customer retention through more direct marketing; improve supply chain efficiencies through real-time inventory management and accurate demand forecasting; and lower operating costs (Luckin stores did not need cashiers, so a typical coffee shop would only employ 1-2 baristas).⁴

In the same era as Uber and WeWork, Luckin’s tech-based business model was very much in favour amongst investors. As the “pioneer of a disruptive new retail model”, Luckin had a significantly higher perceived growth profile than its traditional peers (i.e. Starbucks and Costa Coffee).⁵ This proved to be favourable to Luckin’s valuation as its Price-to-Sales ratio consistently averaged ~3x Starbucks’ trading multiple.

¹ <https://www.reuters.com/article/us-usa-sec-luckincoffee/luckin-coffee-to-pay-180-million-penalty-to-settle-accounting-fraud-charges-u-s-sec-idUSKBN28Q34P>

² <https://kr-asia.com/luckin-coffee-aims-for-10000-stores-by-the-end-of-2021>

³ <https://www.reuters.com/article/us-luckin-investigation-timeline-idUSKBN21L1HW>

⁴ <https://www.techinasia.com/starbucks-china-online-rdering>

⁵ <https://investor.luckincoffee.com/sec-filings/sec-filing/f-1a/0001047469-19-002872>

Store Network

The second prong to Luckin’s strategy was its “asset-light” store network. Approximately 90% of Luckin’s stores were called “Pick-up” stores. These stores were often located in the lobbies of office buildings or school campuses and by design were very basic: they had few-to-no seats and limited decorations. The idea being office workers or students would order a coffee on the Luckin App and swing by one of the “Pick-up” stores to grab it enroute to a meeting or a class.

The “asset-light” store model was advantageous to the company’s growth story as it lowered store-level rental expense and capital expenditures, and allowed Luckin to quickly and easily open new stores fuelling the business’ exponential growth. In January 2020, after only 2 years in operation, Luckin announced that it had opened 4,500 stores, surpassing Starbucks’ store count to become the largest coffee chain in China.⁶

Industry Tailwind

To underpin and provide validity to the growth story, Luckin commissioned an independent market research report to assess and forecast China’s coffee industry. The report, which was heavily relied on by management and research analysts, found that “inconsistent qualities, high prices, and inconvenience” have caused China’s coffee penetration to lag other markets (2018 per capita coffee consumption was only 6.2 cups in Mainland China versus 279 cups in Japan; 388 cups in United States; and 867 cups in Germany).⁷ The report predicted that if these three pain points could be addressed, along with rising trends in urbanization and disposable incomes, the freshly brewed coffee market in China could increase at a 32% compound annual growth rate (CAGR) over the next five years.

UNPROVEN BUSINESS MODEL

At the time of the IPO, there were two important unproven elements to Luckin’s business model: a) a profitable Average Selling Price Net of Discounts (ASP) and b) consistent customer loyalty.

Profitable ASP

From Q1 2018 to Q1 2019, Luckin’s total transacting customer base grew from 485,000 to 16.9m (equivalent to ~36,000 new transacting customers per day).⁸ There were two main contributors to this explosive growth: store count and customer discounts.

Opening new stores (refer to Exhibit 1) does not inherently grow the customer base; Luckin still needed to attract people through its doors. To entice store visits, Luckin offered deep discounts to new customers. All first-time Luckin joiners received one free cup of coffee and six 50%-off coupons for future orders.⁹ It was also critical for Luckin to retain its customers since store expansion and new customer acquisitions were fruitless if customers stopped buying Luckin products after the initial purchase. The company used targeted advertisements to offer ongoing discounts to either reward loyal customers or engage with inactive ones.

In Q1 2019, Luckin’s steep discounts led to a reported ASP of RMB9.02 (\$1.34) per cup of coffee compared to store-level costs of RMB13.26 (\$1.98) per cup (refer to Exhibit 2). Per cup store-level costs included raw materials, low-value consumables, storage, logistic, rental, labour, and depreciation expenses. In other words, Luckin was

⁶ <https://investor.luckincoffee.com/news-releases/news-release-details/luckin-coffee-announces-smart-unmanned-retail-strategy-bringing>

⁷ <https://investor.luckincoffee.com/sec-filings/sec-filing/f-1a/0001047469-19-002872>

⁸ <https://investor.luckincoffee.com/sec-filings/sec-filing/f-1a/0001047469-19-002872>

⁹ <https://news.bloomberglaw.com/financial-accounting/luckin-fires-ceo-coo-after-probing-fabricated-transactions-1?context=article-related>

losing 44% on each cup of coffee sold. To become profitable, Luckin needed to be able to attract and retain customers without the use of heavy discounts.

Customer Loyalty (Volume)

Aside from ASP, volume was critical for Luckin's profitability. Volume per store (as measured by items sold per store per day) was particularly important considering ~62% of store-level costs were fixed (i.e. rental, labour, utility costs) meaning each Luckin store needed to sell a minimum number of items each day to break-even. To achieve this, Luckin customers needed to show loyalty by returning and buying an increasing number of items. Management expected that a mature store could sell up to 600-650 items per day in the long-term. In the quarter leading up to the IPO, Q1 2019, Luckin had not yet proven that there was customer loyalty as the average store sold 244 items per day. This was 32% less than Q4 2018 store-level volumes (356 per day) and 16.3% less than Q2 2018 (288 per day).

Once it became a public company in May 2019, Luckin was under immense pressure to prove that its operating model could in fact be profitable. The Company burned an average RMB9.2mn (\$1.37mn) per day in Q1 2019, and the market expected that Luckin would be generating positive free cash flow by Q4 2020. Management also guided that it could turn to store-level profitability by Q3 2019. As a result, market observers were keenly tracking profitability metrics (i.e. ASP and Store-Level Volumes) and Luckin had little time to deliver.

LUCKIN'S STRATEGIC EVOLUTION

In its prospectus, Luckin described a mission "to be part of everyone's everyday life, starting with coffee".¹⁰ Coffee and coffee shops were essential to the core strategy. Shortly after becoming a public company, however, management started announcing several exciting growth opportunities outside of the core business.

The Luckin Tea initiative was first announced in April 2019 as an additional SKU in its coffee shops. However, in November 2019 the strategy evolved significantly when management announced that Luckin Tea would be sold under an entirely separate brand of stores and would operate as a franchise, rather than a store-owned, model. Management aimed for the Luckin Tea brand to become "China's largest freshly made tea player".¹¹ The market responded favourably to the announcement and research analysts subsequently revised their target share price upwards by 18% over the next two months.¹²

In January 2020, shortly after announcing that it had surpassed Starbucks as the largest coffee chain in China, Luckin announced a third leg to its growth story: un-manned retail. Management revealed that it is aiming to install 100,000 coffee vending machines and 100,000 regular drink machines throughout China by 2021.¹³ Management expected that these machines would sell products at similar prices to Luckin's stores with limited cannibalization. Research analysts covering the stock were excited by the strategy and added another 50% to Luckin's target share price.¹⁴ The strong financial performance in Q3 gave the market confidence in Luckin management's operational execution.

In the months following the IPO, Luckin also shifted its advertising strategy away from free product promotions and towards general advertising campaigns. Management credited this shift to a need to "strengthen our brand identity".¹⁵ Luckin reported advertising expense as a corporate expense rather than a store-level expense.

¹⁰ <https://investor.luckincoffee.com/sec-filings/sec-filing/f-1a/0001047469-19-002872>

¹¹ <https://investor.luckincoffee.com/static-files/fad0e07a-ac5a-4881-9ff3-fdc6af395f6f>

¹² S&P Capital IQ

¹³ <https://seekingalpha.com/article/4334984-luckin-coffee-buy-dips>

¹⁴ S&P Capital IQ

¹⁵ Q2 2019 Earnings Call, August 14, 2019

As a result of the new Luckin Tea and un-manned retail strategies, a reported store-level profit in Q3, and a number of other corporate initiatives (e.g., geographical expansion in the Middle East), Luckin generated a string of growth catalysts from September 2019 to January 2020. The market sentiment in January 2020 was that Luckin's growth was limitless. As a result, Luckin's stock increased by 237% from September 2019 to January 2020 and the Company's market capitalization reached a peak valuation of \$12.7bn. Luckin's success meant the combined worth of Charles Lu, Charles Lu's sister, and Jenny Qian's stock reached \$6.7bn only two years after the Company opened its first store.

CORPORATE OVERSIGHT

Luckin elected to use a dual share class structure following the IPO. This meant that pre-IPO shareholders received Class B shares (entitled to 10 votes per share) and post-IPO shareholders received Class A shares (entitled to 1 vote per share). The dual share class structure shifted the balance of power towards Luckin's pre-IPO investors (pre-IPO investors held 98.2% of the voting power compared to 84.3% of the economic interest). Luckin explained that the dual share structure was needed to strengthen the relationship with long-term shareholders; provide the company with greater flexibility for future strategic initiatives (mainly M&A); and to protect the company from potentially disruptive takeovers.

Three significant pre-IPO investors included Charles Lu (Chairman), Jenny Qian (CEO), and Sunying Wong (Charles Lu's sister). Following Luckin's IPO, Charles Lu, Jenny Qian, and Sunying Wong held 25.8% (worth ~\$1.2b), 16.6% (~\$800m), and 10.5% (~\$500m) of company stock respectively.¹⁶ Charles Lu and Jenny Qian had also each pledged 30% and 47% of their respective shares (Sunying Wong had pledged 100% of her shares) to secure working capital financing.¹⁷ Charles Lu had also pledged shares of his other business, UCAR Inc., and both Charles Lu and Jenny Qian had provided personal guarantees to obtain debt financing. Luckin had also collateralized its coffee machines to secure debt. As part of the IPO, pre-IPO investors agreed to a 180-day lock-up period and were therefore unable to sell any shares until November 2019. The end of the lock-up period coincided with Luckin's senior management stock option plan that started to vest in December 2019.

When forming the Board of Directors, Luckin elected to follow "home country practice" rather than US listing rules that generally require that the majority of the board is independent. As a result, Luckin's Board of Directors was composed of six insiders and two outsiders. All the six insiders had previous ties to UCAR Inc. many of whom had made early exits from UCAR at handsome profits. One of Luckin's outside directors was a seasoned director having sat on many US-listed Chinese firms, including one firm under investigation by the SEC for fraud.

FINANCIAL REPORTING COMPLEXITIES

As a relatively straight forward business, there were several elements that made Luckin's financial reporting surprisingly complex.

To circumvent specific foreign ownership laws in China, that would otherwise prevent trading on foreign exchanges, Luckin used a Variable Interest Entity (VIE) operating model. The structure meant that Luckin's intellectual property was held in a separate entity controlled by Chinese nationals (Jenny Qian and another employee owned 83.3% and 16.7% of the entity respectively), and Luckin had a contractual relationship with the VIE. Although this is a relatively

¹⁶ S&P Capital IQ

¹⁷ <https://investor.luckincoffee.com/sec-filings/sec-filing/f-1a/0001047469-19-002872>

common method for Chinese firms to raise foreign capital, the structure is a source of controversy as it increases the opaqueness of financial reporting and reduces shareholder control.

Luckin's prospectus also disclosed several related party transactions. These transactions included loans owed and owing from management-linked entities, marketing expenses paid to QWOM Digital Technology Co., Ltd. and rent paid to UCAR Inc. QWOM Digital was listed as an affiliate of Charles Lu and had a controversial past, as the founder, who was also directly linked to Luckin, spent time in prison for illegal marketing activities.^{18,19}

As a company with less than \$1.07bn in revenue in the last fiscal year, Luckin qualified as an "Emerging Growth Company" under applicable U.S. federal securities laws and was therefore eligible for reduced public company reporting requirements. Luckin elected to take advantage of these exemptions, which include a number of more relaxed governance and financial reporting standards. The most notable exemption is that Luckin did not need the auditor to provide an attestation on the effectiveness of management's internal controls. Management had already self-disclosed two material internal control weaknesses including a "lack of sufficient accounting and financial reporting personnel with requisite knowledge and experience" and a "lack of financial reporting policies and procedures commensurate with US GAAP / SEC requirements".²⁰

An ongoing financial reporting issue among US-listed Chinese firms was the lack of transparency in reviewing auditor working papers. In the US, the PCAOB has regulatory oversight to review audit working papers; however, the Chinese government expressly prohibited the PCAOB from inspecting such papers for Chinese headquartered companies. As a result, the PCAOB was not able to review EY's work on the Luckin audit.

Luckin's management was heavily incentivized by the share price and the Company's non-independent board, powerless shareholder base, and weak internal controls provided limited oversight. Coupling these factors with a complex financial reporting structure, several related party dealings, and an unprofitable business model carrying high expectations, management had both the incentive and ability to commit fraud.

THE COLLAPSE

Following the new strategic announcements, operational successes, and a successful \$865m equity and debt financing in late 2019 and early 2020, Luckin's stock price reached \$50.02 per share on January 17, 2020 (a 149% increase from the IPO price of \$20.38 per share). Two weeks later, on January 31st, 2020, a detailed research report prepared by an anonymous short seller was published. The report alleged Luckin was fraudulently inflating a number of key metrics including "Number of Items per Store per Day"; "Net Selling Price per Item"; and advertising expense. The short seller went to great lengths to support the report findings including reviewing 11,260 hours of store traffic video and hiring 92 full-time and 1,418 part-time staff to run surveillance at stores.²¹

On February 3rd, 2020, Luckin issued a press release that "categorically denie[d] all allegations in the report" and, although it did not provide specific data to refute the report, provided comfort to investors by "firmly stand[ing] by its business model".²² Luckin's response was further supported by research analysts and other prominent investors

¹⁸ <https://investor.luckincoffee.com/sec-filings/sec-filing/f-1a/0001047469-19-002872>

¹⁹ <https://technode.com/2019/06/10/what-ever-happened-to-luckins-yang-fei/>

²⁰ <https://investor.luckincoffee.com/sec-filings/sec-filing/f-1a/0001047469-19-002872>

²¹ https://cdn.gmtresearch.com/public-ckfinder/Short-sellers/Unknown%20author/Luckin%20Coffee_Anonymous.pdf

²² <https://investor.luckincoffee.com/news-releases/news-release-details/luckin-coffee-responds-anonymous-report-containing-misleading>

who publicly discredited the report. As a result, investors regained confidence in the business and Luckin's share price recovered in mid-February.

On March 27th, 2020, Luckin announced the appointment of two independent directors to the board and a change to the audit committee. Five days later, Luckin issued a press release announcing that an internal investigation had found that management fabricated RMB2.2bn (\$315mn) worth of sales from Q2 2019 to Q4 2019, which cumulatively represented an estimated 47% of Luckin's revenue over the period.²³ The press release also stated an undisclosed amount of expenses had been inflated. Luckin's stock fell by 76% and trading was halted.

AFTERMATH

On April 29th, 2020, the SEC opened an investigation,²⁴ and on May 12th, Luckin dismissed Jenny Qian, the COO, and six others involved.²⁵ Charles Lu stayed on but was later terminated on July 5th, 2020. Luckin officially filed for bankruptcy on February 5th, 2021.²⁶ Executives perpetrated the alleged fraud using a web of related parties that were buying redeemable coffee vouchers in bulk. The bulk purchases were then compensated by Luckin through raw material purchases and marketing expenses. It was widely alleged that the network included Charles Lu's relatives, friends, former associates at UCAR, and a number of Luckin employees.²⁷

In June 2021, Luckin finally released unaudited re-stated financial statements for the Q2 and Q3 2019 periods. The financial statements showed that management had inflated Q2 (Q3) revenues, cost of goods sold, and marketing expenses by 38% (83%); 26% (63%); and 20% (43%) respectively. The restatements also show that store-level profits in Q3 2019, which management reported as RMB64mn (\$9.3mn) in profits (a major catalyst in Luckin's share price as it proved the operating model could be profitable), should have instead been reported as a RMB357mn (\$518mn) loss.²⁸

²³ <https://investor.luckincoffee.com/news-releases/news-release-details/luckin-coffee-announces-formation-independent-special-committee>

²⁴ <https://www.wsj.com/articles/sec-investigates-starbucks-china-rival-luckin-over-accounting-scandal-11588152604>

²⁵ <https://investor.luckincoffee.com/news-releases/news-release-details/luckin-coffee-announces-changes-board-directors-and-senior>

²⁶ <https://www.globenewswire.com/news-release/2021/02/05/2170477/0/en/Luckin-Coffee-s-Restructuring-Efforts-Move-Forward-with-Commencement-of-its-Chapter-15-Case-in-the-United-States.html>

²⁷ <https://www.wsj.com/articles/behind-the-fall-of-chinas-luckin-coffee-a-network-of-fake-buyers-and-a-fictitious-employee-11590682336>

²⁸ <https://investor.luckincoffee.com/news-releases/news-release-details/luckin-coffee-inc-announces-restatements-unaudited-second-and>

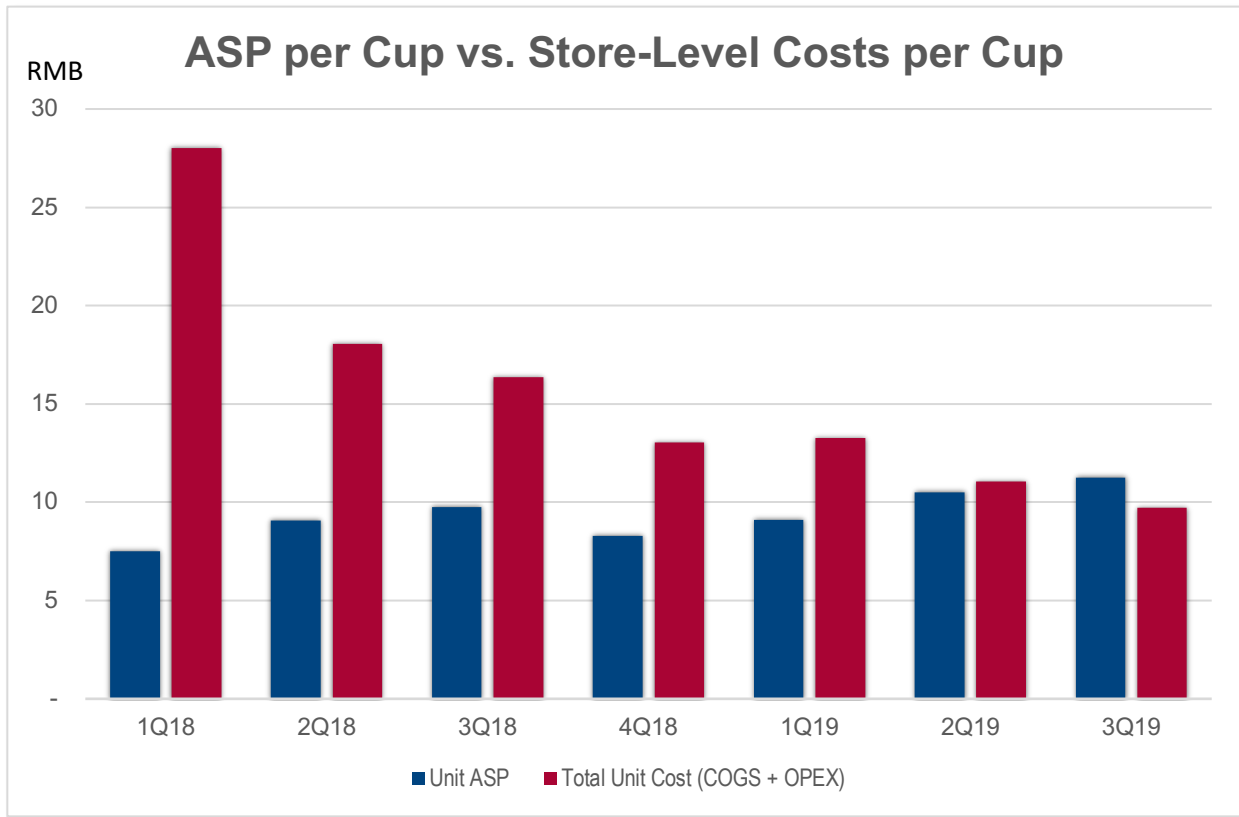
Exhibit 1 – Store Count²⁹



This figure shows total store count on the left axis, represented using blue bars, and quarterly net additions represented on the right axes using solid red line.

²⁹ <https://investor.luckincoffee.com/static-files/fad0e07a-ac5a-4881-9ff3-fdc6af395f6f>

Exhibit 2 – ASP vs. Store-Level Costs per Cup³⁰



This figure shows average selling price per unit (Unit ASP) in blue, and unit cost of goods sold and operating expenses (Unit Total Cost) in red.

³⁰ <https://investor.luckincoffee.com/sec-filings/sec-filing/f-1a/0001047469-19-002872>,
<https://investor.luckincoffee.com/static-files/e228e5f9-c47f-47e4-b8dd-f1cabe870ebb>,
<https://investor.luckincoffee.com/static-files/399afeb2-3d54-4cc4-8030-d3672d865a71>