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The IPO of Uber – A Classroom Case

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Abstract

This case looks at the initial public offering (IPO) of 180m shares in Uber Technologies Inc. on May 9th 2019. It considers why the company was seeking to list its shares on the New York Stock Exchange (NYSE) at this time and the possible issue price for these shares using valuation multiples from a competitor (Lyft Inc.) that was already listed. The difficulties associated with valuing Uber's IPO are examined by considering the legal, regulatory, staffing and other problems which affected the company at this time. This case considers whether Uber had the characteristics of an unsuccessful IPO. The main purpose of this case is to highlight how the first-day returns for the IPO performed poorly relative to findings from the literature about past IPOs. Finally, the case considers possible explanations for the poor first-day returns.

Keywords: Uber, IPO, Underpricing, unsuccessful IPOs

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Jingjian Feng has a background in private equity within China and is a Finance graduate of the University of Dundee.

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Background

Uber Technologies Inc., (Uber) a multinational company with headquarters in the United States, was established in 2009 as "Uber Cab" (see Table 1). Uber is probably best known for its ride-sharing product which connects taxi drivers with potential customers, at the "fairest price possible" in more than 700 cities in 84 countries (Thelen, 2018). One of the main benefits is that foreign customers who may not be familiar with local languages and customs are able to use this service with the same mobile application that they would use in their home country.

Over time, Uber has expanded its services beyond the taxi business:

"*What began as a 'tap a button and get a ride' has become something much more profound: ridesharing and car-pooling; meal delivery [Uber Eats] and freight [Uber Freight]; electric bikes and scooters and self-driving cars and urban aviation*" (Uber Technologies Inc., 2019). Despite this diversification into many new areas, the financial statements of Uber reveal that the ridesharing segment accounted for more than 80% of the revenue in 2018.

As highlighted in Uber's IPO prospectus, the company has grown rapidly since its launch in 2009; this growth reflects an increasing demand for its services internationally. Over the past three years, gross bookings more than doubled from $19 billion in 2016, to over $40 billion in 2018. In order to expand its market share and achieve such growth, Uber has acquired a number of other related businesses both in the USA and overseas. For example, in 2018, Uber acquired JUMP Bikes for $200 million to integrate dockless e-bikes into their business; in 2019, Uber acquired Careem for $3.1 billion, the leading provider of ride sharing, meal delivery and payment services across the Middle East, North Africa, Pakistan and Turkey. Not all of Uber's acquisitions have been successful, however. For example, because of local competition and an unfamiliarity with local customs, Uber sold its businesses in parts of Asia and Eastern Europe to local players in return for an equity stake in the local players' companies (e.g. Didi in China; Grab in South East Asia and Yandex Taxi in Russia) (Uber Prospectus, p. 65, 2019). In addition, Mr Travis Kalanick, Uber's founder and "avatar of [the company's] aggressive approach to growth, competition and regulation" was "ousted" by investors as CEO in 2017 after concerns about the fast pace of change within the organisation; he was replaced by Dara Khosrowshahi although he remained as a director (Bond and Bradshaw, 2019)[1].

In the months prior to the IPO, Uber had several fallouts with the regulators in various countries (see Table 2) (Thelen, 2018). For example, regulatory authorities successfully challenged Uber's anti-competitive practices in a number of countries[2]. In addition, Uber faced several legal challenges in connection with its employment practices; for example *Uber v Islam* (2018),

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[1] Newspaper articles highlighted tension between Dara Khosrowshahi and Travis Kalanick, for example at his job interview with Uber's board in 2017 Dara Khosrowshahi stated that "There can be only one CEO at a time" (Bond and Bradshaw, 2019). Not long into his position of CEO, Dara Khosrowshahi implicitly criticised his predecessor by apologising for Uber's previous poor management; he promised to change Uber's management practices. Around this time, Mr Kalanick "who initially said he wanted to stay involved in strategy and decision making, exercised his right to fill two board seats" (Bond & Bradshaw, 2019).

[2] For example, in Singapore the competition regulator fined Uber $4.8m in connection with breaches of anti-competition regulations (Russell, 2018); Uber Bulgaria €50,000 was investigated and fined for unfair trading practices (Henley, 2017). In Canada, Uber had to suspend its operations in Quebec following new requirements about driver checks as well as training in addition to what the company called the "most restrictive and severe regulations imposed on [them]" (Henley, 2017).

which forced Uber to pay its UK drivers the minimum wage and holiday pay (Fredman & Du Toit, 2019). Uber's passenger safety has also been the subject of considerable media attention, culminating with the loss of its licence to operate in London in September 2017[3]. Uber has also had to pull out of a number of countries (e.g. Denmark) where the demands of regulators for technology related checks on cars could not be satisfied.

Despite all of these issues, the Uber IPO still proceeded and was expected to raise $100 billion worth of funding.

Funding the Growth

Uber had initially financed its operations through a mixture of venture capital and private equity funding as well as debt. As of January 2018, Uber had $10.7 billion of equity funding[4] and $2.75 million billion of debt (Rowley, 2018). In order to attract a wider pool of investors and increase the liquidity of its equity for existing shareholders, Uber decided to list its shares for public trading. In early 2019, Uber proposed to issue a further 180 million shares via a listing on the NYSE bringing the total ordinary equity capital issued to over 1,682.5 million shares. To promote their listing, Uber decided to undertake a roadshow for potential investors informing them about the company. Before this IPO roadshow, the expected IPO price was anticipated to be between $48-$55 per share (Bullock, Bradshaw & Bond, 2019); indeed Morgan Stanley and Goldman Sachs had indicated that Uber's shares could be priced at over $70 a share after the IPO - valuing the company at approximately $120 billion (Bullock, Bradshaw & Bond, 2019). However, with the changing macroeconomic environment, in particular the US-China Trade War, questions started to be raised about the high valuations being suggested. In addition, the Uber IPO prospectus highlighted a slow-down in the growth rates anticipated for Uber – with the company's most recent growth being only 1% between Quarter 3 of 2018 and Quarter 4 of 2018 as competition for drivers intensified. Waters and Bond (2019) argue that in the months prior to the IPO Uber had difficulties attracting drivers to sustain growth in the ridesharing business: Uber "had to ramp up the incentives it pays to drivers to attract them to its network … [In 2019], it has been paying around $100m a month in inducements to drivers over and above the fares they collect". Uber was also facing significant competition from new entrants, such as Lyft, Inc. (Lyft) in North America. There was also concern because of the poor share price performance of Lyft which went public on March 29th 2019; from end of March to the end of April, Lyft's share price had fallen from $78.29 to $57.24. Prior to Uber's IPO, analysts also raised several concerns about Uber's prospectus (Wallace, 2019). Investors struggled to make reasonable projections about the company's future revenue because the prospectus lacked detailed disclosure about expected

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[3] Transport for London subsequently granted Uber a 15-month extension to its licence (which was subsequently extended by two months). In November 2019, Transport for London decided not to extend Uber's licence after it was revealed that several drivers have used a fake identity to secure employment with Uber; thus Uber's checks on its drivers were deemed inadequate (Bradshaw, 2019).

[4] According to the filing in advance of the share listing, Uber's shares before its IPO were held primarily by the SoftBank Vision Fund which owned 16.3 percent of the shares, Benchmark (11 percent), Uber co-founder Garrett Camp's startup studio Expa (6 percent), Saudi Arabia's Public Investment Fund (5.3 percent) and Alphabet (5.2 percent).

profitability ratios or metrics which would have enabled such forecasts to have been made (Wallace, 2019)[5].

As a result, the underwriters decided to price the IPO at the bottom end of the range at $45 per share when the shares were listed on May 9th 2019. This valued Uber at $82 billion on the day of the IPO. On that day, Uber issued 180 million common stock on the NYSE. Shares in Uber commenced trading at $42 and by the end of the day, their closing price as $41.57 – a drop of about 7.6%. This means that, at the close of the first day's share trading, Uber's market value was only about $75bn.

Theoretical Background & Prior Literature

Underpricing on the IPO date

According Fama (1970) a market is efficient if prices reflect all available information. Fama (1970) distinguishes between three forms of efficiency: strong, semi-strong and weak form. Under the weak form of the efficient market hypothesis (EMH), which is the most relevant to this case, current share prices reflect all of the information in historical returns such that an investor should not be able to outperform by trading on past returns data. According to this hypothesis, current share returns are not predictable from past information. However, since the 1980s a growing strand of literature has cast doubt on this hypothesis. Several academics have argued that stock price changes are predicable based on historical returns data over long periods (De Bondt and Thaler, 1985; McMahon, 2005). In contrast to the EMH, most studies on IPO performance demonstrate that IPOs are underpriced; as a result, the share price is predictable since it is likely to increase on the first day of trading. For example Levis (1993) using a sample of 712 IPOs listed on the London Stock Exchange from 1980-1988 showed that the average first day return was about 14.3% during the sample period. Indeed, academic studies from 25 countries (including the USA) summarised in Jenkinson and Ljungqvist (1996) indicate that investors made positive gains on the first day of trading in all but one instance. These gains ranged from a low of 4.7% in the UK (Jenkinson and Mayer, 1988) to a high 166.6% in Malaysia (Dawson, 1987)[6]. In a more recent study by Ritter (2003), the author reports that analysis of studies in 38 countries documented average initial returns which were all positive and ranged from a low of 5.4% in Denmark (Jakobsen and Sorensen, 2001) to a high of 256.9% in China (Datar and Mao, 1997; Gu and Qin, 2000). The findings are consistent with the US results of Ibbotson et al. (1991) who analysed data for a sample of 14,840 IPOs in the US between 1960-2001 and found first day returns of 18.4% (tabulated in Ritter 2003)

Several explanations have been provided for IPO underpricing. Firstly, investors may not be familiar with the current operations and past performance of the company. New investors may therefore need to be compensated for the extra risk involved in purchasing shares in a company

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[5] For example. Wallace (2019) argues that data such as "How many drivers have there been over time? Undisclosed. … What was the breakdown between passenger rides and restaurant delivers? Undisclosed … What's maddening is that we see evidence of relevant metrics embedded like shrapnel throughout … Uber's filing … but the data are not complete or comparable".

[6] Over the long run however, results from academic studied indicate that IPO shares subsequently underperform for the next 36-month period. For example Jenkinson & Ljungqvist (1996) find that for that a group of 21 studies from 14 countries, IPO shares underperformed in 17 instances after the first day of trading sometimes by as much as 51% (Lee et al., 1994).

without a track record as a listed entity (Rock, 1986; Beatty and Ritter, 1986; Megginson and Weiss, 1991). Second, Ruud (1991) suggests that companies sell IPO shares at a discount in order to avoid law suits from new investors who might suffer a capital loss on the first day of trading. He argues that managers of IPO firms want to guarantee the success of the initial share issue so that any subsequent equity offering will be oversubscribed; underwriters often support managers who issue shares at a discount since they do not want to be left owning shares which have not been purchased during the IPO. Third, Welch (1992) has proposed that underpricing may arise as a result of a 'bandwagon effect' - if an investment bank initially sells IPO shares at a low price to sophisticated investors, other less sophisticated investors will subsequently buy the shares once trading commences following the listing causing the price to rise. Other explanations by Liu and Ritter (2010) suggest that the low IPO prices may be aimed at increasing the wealth of certain investment bank clients who may generate additional business for the bank in the future.

Whatever the explanation, the literature consistently documents that IPO shares typically earn investors a positive return on the first day of trading; this empirical regularity has been dubbed an "IPO underpricing puzzle" (Ruud, 1993) since it is inconsistent with the weak form of the EMH and suggests that owners who have worked hard to build up their company give away a proportion of it to new investors (via IPO underpricing) for free.

IPO underperformance on the 1st day of share trading

A second strand of literature examines the IPOs which underperform the market on the first day of trading. Studies point to examples of IPOs were the share price at the end of the first day's trading is less than the issue price. For example, SmileDirectClub's IPO on NASDAQ in September 2019, achieved a return of -27% on the first day of its trading (Reinicke, 2019). Peleten's share price fell by 11% on the first day of trading. WeWork did not even make it through the IPO process: when the company published its prospectus, the IPO was pulled as "investors… on high alert for unprofitable unicorn[7] companies looking to list on the public market" refused to pay the issue price (Reinicke, 2019).

The phenomenon of unsuccessful IPOs which earn a negative return on their first day of trading is not new. As far back as 2007, Elizabeth Demers and Philip Joos, developed an IPO failure prediction model based on an analysis of 3,973 IPOs (including 502 failures) for the period between January 1980 and December 2000. Demers and Joos (2007) examined the factors associated with IPO failure by analysing accounting information, stock market data, details about intermediaries and debt related characteristics. They reported that IPO "failures" tended to occur in certain industries (such as the high-tech sector), among firms with a large percentage of intangibles, poor operating performance and high levels of financial leverage. Paleari and Vismara (2007) add that unicorn IPOs tend to be associated with over-optimism and hype before the listing. Reinicke, (2019) argues that IPO failure rates tend to be time-period specific. For example, she highlights that "Unicorn startups… didn't fare well in 2019". The perception is confirmed by a large study of nearly 4,500 IPOs over 25 years by Goldman Sachs (Strauss,

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[7] The term "unicorn" refers to private firms with market valuations over $1 billion which eventually may seek a stock market listing. Kenney and Zysman (2019) argue about the difficulties associated with valuing unicorns for IPOs because of their size, age and poor earnings performance. Using the analogy of the Chesire Cats, they explain that these may turn out to be a very "short-lived breed".

2019). This study documented that the five key factors which determined whether an IPO could be unsuccessful were: the sector in which the company operated (with healthcare companies performing the worst of any US industry); firm age with older companies which have historically "waited too long to enter the public markets" performing badly; a high pre-IPO valuation; a concern about low profitability levels and a high growth rate of sales which cannot be sustained after the listing. Analysts may have been concerned that the different factors highlighted in Demers and Joos (2007) and Strauss (2019) characterised Uber's IPO and may have suggested that the equity listing would be unsuccessful on the first day of the share trading.

Valuation of the IPO Company

Several studies have explored the different valuation methods used by underwriters to price their IPOs. For example, Roosenboom (2007) examined a sample of 228 IPOs on the Euronext from 1990 to 1999 and reported that the most commonly used methods to determine the offer price typically involve price/earnings multiples, the dividend discount model and the discount cash flow model. Kim and Ritter (1999) outline the difficulties associated with using these approaches to value high-growth, technology companies suggesting that the use of conventional valuation approaches based on an industry price/earnings multiple or dividend yield ratio may not be appropriate since such firms typically obtain a listing before earning (any or sizeable) profits or paying dividends. Further, such companies typically have net cash outflows forecast for many years into the future as they invest in growth. As a result, Roosenboom (2012) has proposed that different multiples from other quoted firms in the same sector can be used to value technology companies which are seeking to list on a stock market for the first time. Multiples such as Price-to-Revenue, Price-to-Assets, Price-to-R&D or Price-to-Some Non-Financial Measure of Activity can be employed when trying to set the issue price at the time of an IPO.

Valuing Uber's IPO

According to Uber's prospectus, both the EBITDA and cash flow were negative before the IPO suggesting unstable earnings. Furthermore, the company had never distributed any dividends, leaving only multipliers based on other measures as suitable valuation methods. These multiples from a listed competitor (such as Price-to-Revenue) could then be multiplied by the measure for the unquoted Uber (such as Revenue per share) to arrive at a forecast for the price of the IPO.

Two companies are commonly viewed as the main competitors of Uber – Didi and Lyft. Didi is a private company headquartered in Beijing, China which acquired the loss-making division of Uber in China in 2016; as such, it is not very helpful when valuing Uber since it is not listed. Lyft, is another ride-sharing company which obtained a listing on NASDAQ in March 2019. Although, the company operates only in the United States and Canada, it is the closest comparator to Uber currently listed on the stock market[8]; it is therefore used in this case.

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[8] Damodaran (2019) notes several problems associated with using Lyft multiples for valuing Uber. For example, Uber's presence extended beyond Lyft's operations which focused exclusively on the US & Canada. Further,

Based on the figures provided in the financial report of Lyft and the Uber prospectus several valuation multiples can be computed: Price-to-Revenue, Price-to-Assets, Price-to-R&D or Price-to-Bookings[9]. In addition, four different prices for Lyft shares can be considered when determining the multiples – the price on the date of the Lyft IPO; the price of a share in Lyft on the date of Uber's IPO; and the median and mean prices of Lyft shares in the period between the Lyft and Uber IPOs (29 March 2019 – 10 May 2019).

Table 3 shows the different multiples computed using comparable accounting data from Lyft. In addition, Table 4 shows a summarised Income Statement and Balance Sheet for Uber taken from its prospectus.

After the IPO

The IPO literature suggests that on the first day of trading the share price of the IPO firm typically increases (Levis 1993, Ritter 1991). However, in the case of Uber, the return was -7.62%[10]. On the second day trading, Uber's returns were still negative at -10.75%. Over a longer period, between 9th May and 12 July 2019, the return was -2.27% which meant that its post-IPO price was lower than the price of the IPO (see Figure 1).

Explaining the decline

A number of discussions in the financial press sought to explain why Uber's share price declined on the first day of trading. For example, Bond and Bullock (2019a) reported that Uber's chief executive, Dara Khosrawoshahi linked the drop in share price to the uncertainty associated with the US-China trade war which created increased volatility in the stock market. However, analysts put forward alternative explanations; they attributed this first-day negative return to the lack of profitability in the sector; for example, Alejandro Ortiz, principal investor at SharesPost highlighted that "ride-hailing as an industry is yet to show a profit" (Bond and Bullock, 2019a). Others have highlighted that Uber has been a net user rather than a net generator of cash; in particular, they have noted that this "cash-burn rate" has increased at Uber to "$1 billion a quarter"[11] (Johnston, 2019). Bond and Bullock (2019a) explained how Uber struggled to attract drivers, and had to offer more incentives which resulted in lower growth rates than anticipated. In addition, the ride-hailing market was seen as highly competitive, and Uber was forced to offer discounts (Bond and Bullock, 2019b). Analysts cast doubt over the business model Uber operates (Bond and Bullock, 2019b), in particular they argue that investors were reluctant to invest in "highly capital-intensive, deeply unprofitable, and untested business models at this stage of the lifecycle."

Uber has had major restructuring in the last three years, following a number of failed investments in China, South East Asia and Russia. In addition, 20% of Uber's revenue is not derived from ridesharing but from other activities such as Uber Eats unlike Lyft, which has only one operating segment – ridesharing.

[9] UBER defines bookings as the total dollar value, including any applicable taxes, tolls, and fees, of Ridesharing and New Mobility rides, Uber Eats meal deliveries, and amounts paid by shippers for freight.
[10] This is in contrast with Lyft's first day return of 8.74%. However, on the second day of trading in Lyft's shares, significant negative returns of 11.85% were achieved (offsetting the initial first-day gain).
[11] According to King & Newcomer (2018) "[s]ince its founding [in 2009], Uber has burned through about $10.7 billion [in 9 years]. … Few companies in history have grown so fast or lost so much money in such a short period of time." Johnston (2019) suggested that this cash-burn rate is increasing noting that Uber "continues to burn cash at a rate of $1 billion a quarter".

Uber's chief executive blamed the negative first-day returns on questions raised about Uber's future projections and on the negative market sentiment: "There are many versions of our future that are highly profitable and valuable, and there are of course some that are less so. During times of negative market sentiment the pessimistic voices get louder and the optimistic voices pull back". The chief executive emphasised that the IPO had raised $8 billion in funding, which would enable to company to improve its margins and profitability.

Whilst investors have suffered as a result of Uber's share performance, underwriters appear to have benefited financially from this IPO – underwriters have received over $106.2m in fees. The top three underwriters were Morgan Stanley, who earned about $40.6m, Goldmann Sachs $21.2 million and Bank of America Merill Lynch $10.5 million (Bond & Bullock, 2019b)

Required:[12]

(i)   Outline why Uber wants to go public at this time?

(ii)   What are the non-financial factors which might have caused Uber to reconsider the IPO?

(iii)   Did Uber have the characteristics of a failed IPO as highlighted by Demers & Joos, (2007) and Strauss (2019)?

(iv)   Compute the following ratios for Uber based on the financial and other information supplied in Table 3: Revenue per share, Assets per share, R&D per share and Bookings per share.

(v)   Use the Price-to-Revenue, Price-to-Assets, Price-to-R&D or Price-to-Bookings multiples for Lyft to estimate the range of possible IPO prices for Uber on May 9th 2019.

(vi)   If the actual IPO price was $45 per share comment on why this price may have been selected.

(vii)   What are the lessons from this case about IPOs and share price performance?

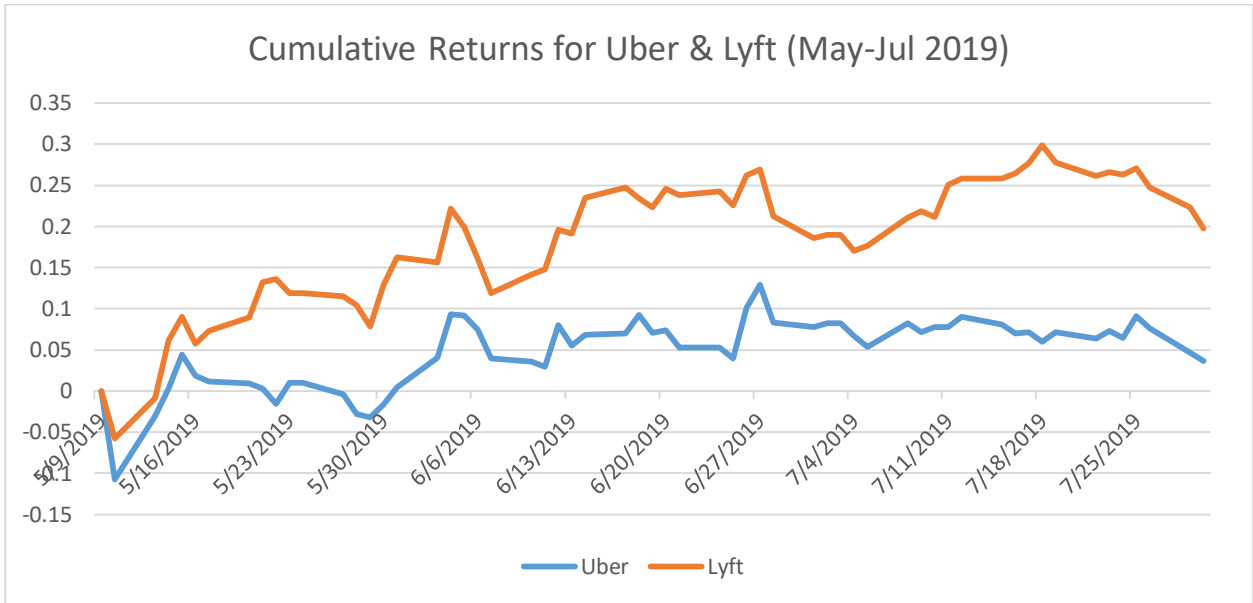---

[12] A teaching note is available in Appendix 1

Figure 1: Cumulative Returns for Uber & Lyft

Table 1: Pre-IPO background information

Background Details	Uber was founded in 2009 and incorporated in Delaware, USA as Ubercab, Inc. in July 2010. The company changed its name to Uber Technologies, Inc. in February 2011. It sought a listing on the NYSE in May 2019.
Sector	According to Bloomberg (2020), Uber is in the internet-based services industry.
Financing (pre-IPO)	According to its prospectus, Uber had long term debt amounting to $6,869 million; convertible debt and redeemable convertible debt $2,070 million. It had a negative value for total shareholders' equity of $7,385 million following several years of large deficits. However, Uber expected this negative equity to become positive following the share issue associated with the IPO
Performance	Uber's 2018 financial statements indicated the company had a revenue of $11,270 million (up from $7,932 in 2017), expenses of $14,303 resulting in a loss from operations of $14,303 million. In 2018 it had total assets of $23,988 million ($15,426 in 2017) of which current assets were $8,568 million, property plant and equipment $1,641 million and intangible assets including goodwill $235 million
Growth	Between 2017 and 2018, Uber's gross bookings grew by 45%. Over the same period, revenue grew by 42% from $7.9 billion in the prior year, while net income improved from a loss of 4 billion in 2017 to a profit of $1.0 billion in 2018.

Table 2: Risk factors affecting Uber

Risk Factor	Explanation
Competition	The sector is highly competitive, with low cost alternatives and low barriers to entry. It is characterised by low switching costs, and well-capitalized competitors in all the regions in which Uber operates.
Lack of profitability	Uber has incurred significant losses since inception, in all their major markets. In addition, they expect their operating expenses to increase significantly putting profitability at risk.
Regulatory risk	Uber's business would be adversely affected if regulations in countries are changed such drivers would be classified as employees instead of independent contractors increasing the costs for the company. In addition, Uber may suffer a data breach or other unauthorised access to confidential information about its clients. Uber may be blocked from providing services in certain jurisdictions or may be forced to modify their business model in certain countries.
Attracting sufficient drivers	In order to sustain growth, Uber will need to attract more drivers and may have to increase incentives in order to achieve this goal.
Reputational risk	Negative media coverage and publicity, surrounding a number of safety incidents adversely affected Uber's reputation in 2017.
Expansion beyond core activities	Uber's growth has led it to enter new regions, and markets where it has not previously operated giving rise to cultural challenges and operational risks
Technological challenges	Uber may fail to maintain their leadership in technological innovations. Its technological superiority may disappear as competitors develop such platforms before them which are superior to the current technology employed by Uber.

Table 3: Valuation of Uber using Lyft multiples

	LYFT			
Time	Lyft's Price on IPO date of LYFT	Lyft's Price on IPO date of UBER	Lyft's Median Price over 3/29-5/10	Lyft's Mean Price of 3/29-5/10
Price ($)	72	51.09	60.12	61.77
Multiples				
price/rev	10.13	7.19	8.46	8.69
price/t assets	5.81	4.12	4.85	4.98
price/R&D	72.57	51.50	60.60	62.26
price/bookings	2.71	1.92	2.26	2.33
Accounting Data ($)				
	UBER		LYFT	
Revenue per share	?		7.11	
Total Assets per share	?		12.39	
R&D per share	?		0.99	
Bookings per share	?		26.55	

Table 4: Extract from Uber's financial statements
Statement of Profit or Loss for the year ended 31 December 2018 (all in millions)

Revenue	**11,270**
Costs and expenses	
Cost of revenue, exclusive of depreciation and amortization shown separately below	5,623
Operations and support	1,516
Sales and marketing	3,151
Research and development	1,505
General and administrative	2,082
Depreciation and amortization	426
Total costs and expenses	**14,303**
Loss from operations	**-3,033**
Interest expense	-648
Other income (expense), net	4,993
Income (loss) from continuing operations before income taxes and loss from equity method investment	1,312
Provision for (benefit from) income taxes	283
Loss from equity method investment, net of tax	-42
Net income (loss) from continuing operations	**987**
Income from discontinued operations, net of income taxes	—
Less: net loss attributable to redeemable non-controlling interest, net of tax	-10
Net income (loss) attributable to Uber Technologies, Inc.	**997**

Consolidated Balance Sheet Data:	**31-Dec**	**Adjusted**
Cash and cash equivalents	6,406	14,882
Working capital	4,399	11,825
Total assets	23,988	32,460
Long-term debt, net of current portion	6,869	4,535
Redeemable convertible preferred stock warrant liability	52	—
Convertible debt embedded derivatives	2,018	—
Total liabilities	17,196	13,651
Redeemable convertible preferred stock	14,177	—
Additional paid-in capital	668	29,331
Accumulated deficit	-7,865	-10,334

The adjusted column takes into account the 180 million ordinary shares issued at $45 per share in the IPO after deducting underwriting discounts and commissions

Other Financial and Operating Data (in millions)	**2018**
Monthly Active Platform Consumers	91
Trips	5,220
Gross Bookings	$49,799
Number of ordinary shares in issue after IPO	1682.561965

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Appendix 1: Teaching Note

(i) Outline why Uber wants to go public at this time.

According to the case study Uber decided to go public to attract a wider pool of investors and to increase liquidity. By going public, Uber avoids the need to raise finance from private investors on a regular basis – thus providing a quicker way of raising finance. It also facilitates takeovers in the future if their shares are listed. A listing allows its equity investors to "cash in" some of their shares; thus, it provides an exit route for the venture capital/private equity investors who may want to move on to other start-up investments. Uber has a high "cash-burn" rate and the funds raised will allow it to continue to grow using cash resources.

(ii) What are the non-financial factors which might have caused Uber to reconsider the IPO?

We would expect students to refer to the risks identified in Table 2. In addition, students should highlight the regulatory difficulties which Uber has experienced in the Background section of the case. Students might also highlight the leadership and governance issues discussed in the background section of the case. Students can mention the tension between the current CEO Dara Khosrowshahi and the founder and former CEO Mr Travis Kalanick who remained on the board of directors. Students might also highlight whether the current governance structure of Uber pre-IPO is appropriate for a publicly listed entity (see footnote number 1). Depending on the background of the students, the class might be asked to undertake a SWOT analysis of Uber prior to the IPO which could inform subsequent questions on whether Uber should have proceeded with the IPO and if it did whether any subsequent underperformance could have been anticipated.

(iii) Did Uber have the characteristics of a failed IPO as highlighted by Demers & Joos, (2007) and Strauss (2019)?

Students might calculate whether Uber had the various characteristics which the literature associated with failed IPOs:

Characteristics of a failed IPO	Uber's position
Industry	A high tech sector which was one of those industries associated with unsuccessful IPOs that achieved a negative return on the first day of share trading
A high level of intangibles	The ratio of intangibles to property plant and equipment in Uber was (235 / 1641) x 100 = 14.3% (see table 4). A substantial proportion of costs related to Research & Development - ($1505/$14303) x 100 = 10.5% (see Table 4). In addition Uber's business model relied heavily on branding and marketing.
Poor operating performance	From Table 2, Uber has incurred significant losses since inception, in all their major markets. In addition, they expect their

	operating expenses to increase significantly putting profitability at risk. From Table 4, Uber reported a loss from operations of $3,033 million.
High growth rate which is not sustainable	From Table 1, Uber's growth rate between 2017 and 2018 has been very high: Uber's gross bookings grew by 45%. Over the same period, revenue grew by 42% from $7.9 billion in the prior year, while net income improved from a loss of 4 billion in 2017 to a profit of $1.0 billion in 2018. Students may discuss whether this level of growth is sustainable given the risks identified in Table 2 – the availability of drivers, potential acquisition targets, regulatory risks and competition.
Timing of IPO in a volatile market	Students should refer to the IPO underperformance on the first day of trading section where Reinicke (2019) pointed out IPOs fared badly in 2019. In addition, the IPO of Uber's nearest competitor Lyft, earned negative returns in the first two days of its trading (see footnote 10).
Time to listing – waiting too to enter the public market	Uber chose to wait 9 years before seeking a listing. At the time of its IPO it had a large expected market capitalisation which tends to characterise 'unicorns' (see footnote 7)
High level of financial leverage	Uber had total long term debt (including convertible debt) of $8,939 million. Therefore its long term debt to total assets pre-IPO percentage was ($8,939/$23988 x 100) was 37.26% (Table 4). It had a negative value for total shareholders' equity of $7,385 million which suggests that Uber's financial leverage was relatively high.

Therefore, Uber had a lot of the characteristics of failed IPOs with negative returns in the first day of trading. Students can link this to the discussion on unicorn IPOs in footnote 7

(iv)   Compute the following ratios for Uber based on the financial and other information supplied in Table 1: Revenue per share, Assets per share, R&D per share and Bookings per share.

LYFT				
Time	Lyft's Price on IPO date of LYFT	Lyft's Price on IPO date of UBER	Lyft's Median Price over 3/29-5/10	Lyft's Mean Price of 3/29-5/10
Price ($)	72	51.09	60.12	61.77
Multiples				
price/rev	10.13	7.19	8.46	8.69
price/t assets	5.81	4.12	4.85	4.98
price/R&D	72.57	51.50	60.60	62.26
price/bookings	2.71	1.92	2.26	2.33
Accounting Data ($)				
	UBER		LYFT	
Revenue per share	6.70		7.11	
Total Assets per share	14.26		12.39	
R&D per share	0.89		0.99	
Bookings per share	29.60		26.55	

(v) Use the Price-to-Revenue, Price-to-Assets, Price-to-R&D or Price-to-Bookings multiples for Lyft to estimate the range of possible IPO prices for Uber on May 9th 2019.

Valuation based on the multiples of Lyft	Price on 9th May 2019
Price/Revenue	48.17
Price/Total Assets	58.75
Price/R&D	45.83
Price/Bookings	56.83

The range of prices based on these multiples is $45-$59 per share. However, students might want consider how comparable Lyft is with Uber. In particular, Lyft is a North American based ride-share company while Uber has a global presence in more that the ride-share market.

(vi) If the actual IPO price was $45 per share comment on why this price may have been selected.

The price, at the low end range of the valuation estimates could have been selected for a variety of reasons. Firstly, this reflects a lower level of market sentiment in the US stock market around the time of IPO. In addition the share price performance of the rival company Lyft, which had undertaken an IPO in March had been declining. Finally, there could be company/industry characteristics – Uber has never been profitable, and there has been low growth in the sector.

(vii) What are the lessons from this case about IPOs and share price performance?

Prior research on IPOs demonstrates underpricing – the share price is likely to increase on the first day of trading. This has not been the case of Uber's IPO, the share price dropped by 7.6% on the first day trading. The case raises concerns about IPO being issued in times of negative market sentiment, in a relatively new sector (the ridesharing industry). Investors were affected by the volatility in the share price of the rival company Lyft. They have raised several concerns about the business model operated by Uber and Lyft, in particular they argued that the companies were operating in an unproven industry which is yet to generate profits and show signs of growth. Several concerns were also raised by investors on the prospectus itself, which did not have the required disclosures which would have enabled investors to make predictions on the company's futures.