

IPO ANALYSIS

Research on potential upcoming IPOs from
selected candidate companies.

Qudian

OrthoPediatrics

MongoDB

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VentureDeal

Chinese Consumer Credit Provider Qudian Aims For \$769 Million IPO

Quick Take

Chinese online financial services firm Qudian (QD) intends to sell 37.5 million American Depository Shares [ADSs] at a midpoint price of \$20.50 per share for a total IPO of \$769 million.

Qudian uses big data and artificial intelligence to provide credit to consumers via its digital platform.

For investors who want access to the Chinese consumer finance market and who understand the company's organizational structure as a "VIE," Qudian represents a BUY opportunity.

Company and Technology

Beijing-based Qudian was founded in 2014 to provide online credit products with the aid of artificial intelligence and machine learning.

Management is headed by founder and CEO Min Luo and CFO Carl Yeung. Before founding Qudian, Mr. Luo served as a vice president of marketing of OkBuy.com, an online marketplace for apparel and shoe products in China, from 2010 to 2013. Mr. Luo was also the founder and CEO of Jiyiri.com, an online birthday-related service provider, from 2007 to 2009.

Carl Yeung has served as CFO at Qudian since October 2016. Mr. Yeung also currently serves as a director of Bumps to Babes Limited, a baby and maternity retail store chain in Hong Kong. Prior to joining Qudian, Mr. Yeung was a co-founder of Bababaobei Ecommerce Limited, a baby and maternity cross-border e-commerce platform in China.

Qudian provides online credit products with the aid of artificial intelligence and machine learning. The company's product targets quality, unserved or underserved consumers in China who need access to small amounts of credit but are underserved by traditional financial institutions due to their lack of traditional credit data and the operational inefficiency of traditional financial institutions.

Products are provided through a pure online platform, with nearly all of the transactions facilitated through mobile devices.

Below is a company-provided summary of various metrics.



(Source: [Qudian F-1/A](#))

Of note is the number of MAU (Monthly Active Users), which stood at nearly 29 million at the end of Q2 2017.

In total, the company has received \$874 million in 6 rounds from 5 investors, including Beijing Phoenix Wealth Holding Group, Hangzhou Liaison Interactive Information Technology, and Ant Financial.

Market and Competition

Qudian belongs to China's online consumer finance market, which is expected to experience rapid growth with outstanding online consumer loan balance growing to RMB 4 trillion by 2021, representing 31.4% of all outstanding consumer loan balances, according to a report by [Oliver Wyman](#).

The transaction volume of online consumption loans is expected to grow from RMB1.1 trillion in 2016 to RMB10 trillion in 2021 at a CAGR of 54.3%, and active borrowers for such loans are expected to reach 256 million in 2021.

Meanwhile, China's private consumption level has been growing rapidly at a compound annual growth rate, or CAGR, of 9.5% from 2010 to 2015. The high private consumption level implies growing demand for Qudian's product.

Competitive vendors that provide similar online access to credit include:

- [China Rapid Finance](#)
- [Yinker](#)
- [1caifu.com](#)

Financials and IPO Details

Qudian's recent financial results can be summarized as follows:

- Topline revenue has increased dramatically.
- Gross margin is high and growing.
- The firm is generating significant cash flow from operations.

Below are the company's operational results for the past two and half years (Audited GAAP for full years):

	Period from April 9, 2014 (inception) through December 31,						
	Year Ended December 31,				Six Months Ended June 30,		
	2014	2015	2016		2016	2017	
RMB	RMB	RMB	US\$	RMB	RMB	US\$	
(in thousands, except for share and per share data)							(unaudited)
Summary Consolidated Statements of Operations:							
Revenues:							
Financing income	21,094	153,554	1,271,456	187,550	323,964	1,527,426	225,307
Sales commission fees	2,926	62,182	126,693	18,688	27,710	251,169	37,049
Penalty fees	114	19,271	22,943	3,384	19,931	2,836	418
Loan facilitation income and others	—	—	21,754	3,209	—	51,705	7,627
Total revenues	24,133	235,007	1,442,846	212,831	371,605	1,833,135	270,402
Operating cost and expenses⁽¹⁾:							
Cost of revenue	(9,014)	(148,417)	(267,862)	(39,512)	(87,751)	(316,565)	(46,696)
Sales and marketing	(46,368)	(192,603)	(182,458)	(26,914)	(75,746)	(149,505)	(22,053)
General and administrative	(3,503)	(42,426)	(108,786)	(16,047)	(11,266)	(68,267)	(10,070)
Research and development	(4,360)	(37,530)	(52,275)	(7,711)	(13,096)	(63,489)	(9,365)
Loss of guarantee liability	—	—	(861)	(127)	—	(7,526)	(1,110)
Provision for loan principal, financing service fee receivables and other receivables	(1,667)	(45,111)	(132,177)	(19,497)	(34,692)	(99,028)	(14,607)
Total operating cost and expenses	(64,911)	(466,086)	(744,418)	(109,808)	(222,550)	(704,381)	(103,902)
Other operating income	—	—	14,646	2,160	2,531	37,523	5,535

(Source: [Qudian F-1/A](#))

Revenue

- 1H 2017: RMB 1.8 billion (\$270 million), 384% increase vs. prior
- 2016: RMB 1.4 billion (\$213 million), 609% increase vs. prior
- 2015: RMB 0.23 billion

Operating Margin (%)

- 1H 2017: 62%
- 2016: 48%
- 2015: Negative

Cash Flow From Operations

- 1H 2017: RMB1.4 billion (\$213 million) cash flow from operations
- 2016: RMB 0.79 billion cash flow from operations
- 2015: RMB 0.10 billion cash flow used in operations

As of 1H 2017, the company had RMB 11 billion (\$1.66 billion) in cash and RMB 7.9 billion in total liabilities.

Qudian intends to sell 35.625 million of Class A ADSs at a midpoint price of \$20.50 per share for gross proceeds to the company of approximately \$730 million subject to customary over-allotments to the underwriters.

In addition, selling shareholders intend to sell 1.875 million Class A ADSs totaling \$38.4 million.

Class B shares have ten votes per share vs. Class A which have one vote per share, so management and existing Class B shareholders will retain voting rights separate from economic rights.

Notably, major market indices now bar companies with multiple share classes from being included in their indices.

Qudian says it will use the net proceeds from the IPO as follows:

Marketing and borrower engagement activities

Strategic acquisitions

General corporate purposes

The above list is the sparsest that I have seen from an IPO proceeds description. Management is saying next to nothing about its plans for the IPO proceeds.

Listed managers of the IPO include Morgan Stanley, Credit Suisse, Citigroup, China International Capital, UBS Security, Stifel, Nicolaus and Needham & Company.

Commentary

Qudian is an extremely fast-growing online financial services company, with topline revenue growth of an eye-popping 384% growth in 1H 2017 vs. the same period in 2016.

Operating margin is growing, and the firm is generating significant cash flow from operations.

A downside to Qudian is its VIE (Variable Interest Entity) corporate structure, which means the entity going public will not own the underlying assets of the China-based firm; rather it will have contractual rights to the profits or losses therefrom.

Those contractual rights are predicated on management's discretion as well as that of the Chinese government, which may alter or eliminate such contracts at any time.

So, prospective investors have to make a decision: does the potential for post-IPO gain outweigh the risk of legal structure changes?

Additionally, management proposes to value the company post-IPO at approximately \$6.8 billion, or a Price/Sales multiple of **12.6x**.

This multiple is significantly higher than another Chinese online finance company, China Rapid Finance ([XRF](#)), which is currently trading at a Price/Sales multiple of **9.16x**.

China Rapid is a much smaller operation, and its financial performance is comparatively poor, so the multiple asked by Qudian's management appears to be reasonable.

Given Qudian's tremendous growth, strong financial performance and potential for further growth as China's consumers access more debt capital for purchases, the IPO looks to be strong.

OrthoPediatrics Sets Terms For \$52 Million IPO

Quick Take

Medical device company [OrthoPediatrics](#) (Pending:[KIDS](#)) has filed an [amended S-1/A registration statement](#) for a \$52 million [Initial Public Offering](#).

The firm develops pediatric orthopedic devices to treat children who suffer from deformity, spinal and sports injury trauma.

Given the firm's clear focus on large and growing children's treatment markets, its financial performance to-date and management's proposed valuation, my opinion on the IPO is a BUY.

Company Recap

OrthoPediatrics was founded in 2006 by Nick Deeter, who is now Chairman and CEO of WishBone Medical, an unrelated firm.

Since its founding, the firm has "received regulatory clearance for 17 surgical systems for trauma, long bone deformity and correction, scoliosis and sports medicine."

Management also claims to have "established the only global sales and distribution system in pediatric orthopedics, with distribution partners throughout the USA and over 30 countries abroad."

Squadron Capital owns 66.8 percent of the company's stock pre-IPO, which will be reduced to 44.6% post-IPO.

CEO Mark Throdahl will own approximately 1.6 percent of the company's stock post-IPO.

IPO Details and Commentary

KIDS intends to sell 4 million shares of common stock at a midpoint price per share of \$13.00 for gross proceeds of \$52 million, not including customary additional shares offered to the underwriters.

Assuming a successful IPO, the company's post-IPO valuation would be \$156 million subject to underwriter share overallotment purchases and employee equity incentive plan shares outstanding.

The firm's financial performance has been impressive, growing in current and previous years.

Its topline revenue growth rate through the first half of 2017 was 22 percent vs. the same period in 2016.

Gross margin in 1H 2017 was 74%, which is an excellent result.

Management sees a global market size of \$2.5 billion for children-specific orthopedics devices, with \$1.1 billion of that located in the U.S. I was not able to independently confirm those assertions.

Regarding the overall global orthopedics market, [Grand View Research estimated](#) its value in 2015 at \$29.7 billion. Pediatrics would be a small fraction of that total.

[Technavio](#) issued a report that asserts a CAGR from 2016 to 2020 of the global orthopedic device market of 4 percent, which is a moderate growth figure.

I previously wrote about OrthoPediatrics' IPO prospects in my article, [OrthoPediatrics Files For \\$57.5 Million IPO](#).

In that article, I highlighted the firm's improving financial performance across most metrics and use of proceeds mostly for channel inventory build and sales & marketing efforts.

With an expected market capitalization of \$156 million, which represents a Price/Sales multiple of **3.6x**, valuation is reasonable when compared to a basket of publicly held [Healthcare Products](#) firm multiple of **3.34x** per the NYU Stern School ([January 2017 data](#)).

Given the firm's focus on the underserved children's specialty orthopedics market, its potential growth characteristics and the proposed valuation, my opinion on the IPO is a BUY.

MongoDB Publicly Files For \$100 Million IPO

Quick Take

[MongoDB](#) (Pending: [MDB](#)) has filed an [S-1 registration](#) for a \$100 million IPO, although the amount will likely change. MongoDB provides a pure-play document database (NoSQL) family of products based on an open source business model enhanced by value-add services.

The firm has the revenue growth trajectory to go public depending on management's valuation expectations. I'll provide a final opinion when we know more details about IPO terms.

Company and Technology

New York-based MongoDB was founded in 2007 to develop a scalable, non-relational database framework that uses dynamic schemas to facilitate storage and retrieval of more complex data structures easily and quickly.

Management is headed by Dev Ittycheria, who has been with the firm since September 2014 and was previously President, Enterprise Service Management at BMC Software.

The company's technology offerings include:

- MongoDB 3.4 - Enterprise Advanced - Most recent version of its flagship database
- MongoDB Stitch - Database Backend-as-a-Service
- MongoDB Atlas - Database-as-a-Service offering

MongoDB also offers additional solutions tailored to specific needs, such as Enterprise for OEM and Professional.

Investors have provided more than \$345 million since the firm's inception, and include top-tier venture capital firms, late-stage investors and corporate venture groups.

Market and Competition

According to a [2015 market research report](#) by Allied Market Research, it expected the NoSQL global market to reach \$4.2 billion by 2020, representing a CAGR of 35.1% from 2014 to 2020, and eating into the "megavendor" share of the SQL market.

Of the changing DBMS market, Gartner analyst Merv Adrian [stated in 2016](#) that:

"Clearly the picture is changing, and though the effects are just beginning to be significant, they will grow substantially through this decade. The picture in 2020 will be quite different."

Major competitive vendors that provide competing NoSQL database technologies include:

- Couchbase
- MarkLogic
- Basho
- Cassandra
- DataStax

The area where software firms such as MongoDB compete intensely is in recruitment. So, in that respect, the firm competes with a much greater pool of deep-pocketed companies for talented programmers necessary to continue innovating and driving product development forward.

Financials and IPO Details

MongoDB's recent financial results can be summarized as follows:

- Dramatically growing topline revenue, but at a steadily decreasing rate
- High and growing gross margin
- Uneven cash used in operations, but increased cash burn in 2017 vs. 2016

Below are the company's operational results for the past three and half years (Audited GAAP for full years):

	Year Ended January 31,			Six Months Ended July 31,	
	2015	2016	2017	2016	2017
	(in thousands, except share and per share data)				
Consolidated Statements of Operations Data:					
Revenue:					
Subscription	\$ 34,109	\$ 58,561	\$ 91,235	\$ 40,213	\$ 61,718
Services	6,679	6,710	10,123	4,906	6,272
Total revenue	40,788	65,271	101,358	45,119	67,990
Cost of revenue ⁽¹⁾ :					
Subscription	11,305	13,146	19,352	8,675	13,765
Services	6,805	7,715	10,515	5,628	5,622
Total cost of revenue	18,110	20,861	29,867	14,303	19,387
Gross profit	22,678	44,410	71,491	30,816	48,603
Operating expenses:					
Sales and marketing ⁽¹⁾	52,072	56,613	78,584	37,454	49,037
Research and development ⁽¹⁾	33,316	43,465	51,772	25,240	28,826
General and administrative ⁽¹⁾	13,005	17,070	27,082	13,531	16,704
Total operating expenses	98,393	117,148	157,438	76,225	94,567
Loss from operations	(75,715)	(72,738)	(85,947)	(45,409)	(45,964)
Other income (expense), net	(660)	(306)	(15)	233	676
Loss before provision for income taxes	(76,375)	(73,044)	(85,962)	(45,176)	(45,288)
Provision for income taxes	298	442	719	150	481
Net loss	\$ (76,673)	\$ (73,486)	\$ (86,681)	\$ (45,326)	\$ (45,769)

(Source: MongoDB [S-1](#))

Revenue

- 1H FYE 2017: \$68 million, 51% increase vs. prior
- 2017: \$101.4 million, 55% increase vs. prior
- 2016: \$65.3 million, 60% increase vs. prior
- 2015: \$40.8 million

Gross Margin (%)

- 1H FYE 2017: 71%
- 2017: 71%
- 2016: 68%
- 2015: 56%

Cash Flow From Operations

- 1H 2017: \$27 million cash used in operations
- 2017: \$38 million cash used in operations
- 2016: \$47 million cash used in operations

As of July 31, 2017, the company had \$92.5 million in cash and short-term investments and \$130 million in total liabilities (Interim unaudited figures).

The firm intends to raise \$100 million in gross proceeds from an IPO of its Class A common stock.

Class A common has all economic rights and one vote per share. Class B common has no direct economic rights and 10 votes per share. Class B can also be converted into Class A at any time.

Management says it will use the net proceeds from the IPO as follows:

Although we have not yet determined with certainty the manner in which we will allocate the net proceeds of this offering, we currently intend to use the net proceeds from this offering for working capital and other general corporate purposes, including continued investments in our product offerings, growing our customer base, expanding the subscriptions of our existing customers, driving usage of MongoDB Atlas, fostering the MongoDB developer community and expanding our international footprint.

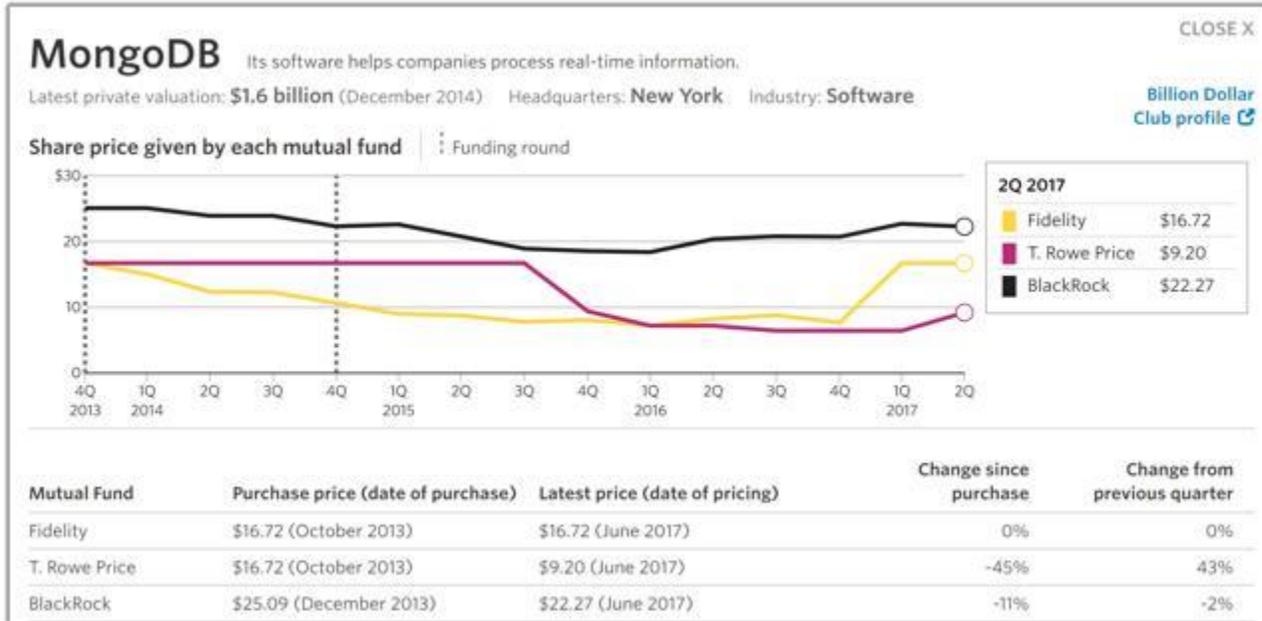
Listed managers of the IPO include Morgan Stanley, Goldman Sachs, Barclays, Allen & Company, Stifel, Canaccord Genuity and JMP Securities.

Commentary

MongoDB is primarily a subscription-based business, obtaining 71% of its 1H 2017 revenue from its MongoDB Enterprise Advanced product.

The firm wants to essentially go down market with its Atlas Database-as-a-Service offering to continue its growth trajectory. This makes sense but may involve a higher CAC (Customer Acquisition Cost) in the process.

In its most recent private valuation at June 30, 2017, the firm was given a mark of \$1.6 billion from Fidelity, although as the valuation history shows below, there is wide variation in valuations:



(Source: [WSJ Startup Stock Tracker](#))

MongoDB has all the characteristics of a high growth technology startup seeking to tap public markets and, unfortunately, a multi-class share structure that some believe results in lower public market performance due to misalignment of voting and economic rights.

We don't know the expected share price range or post-IPO market cap. When we learn those details, I'll provide a final opinion.