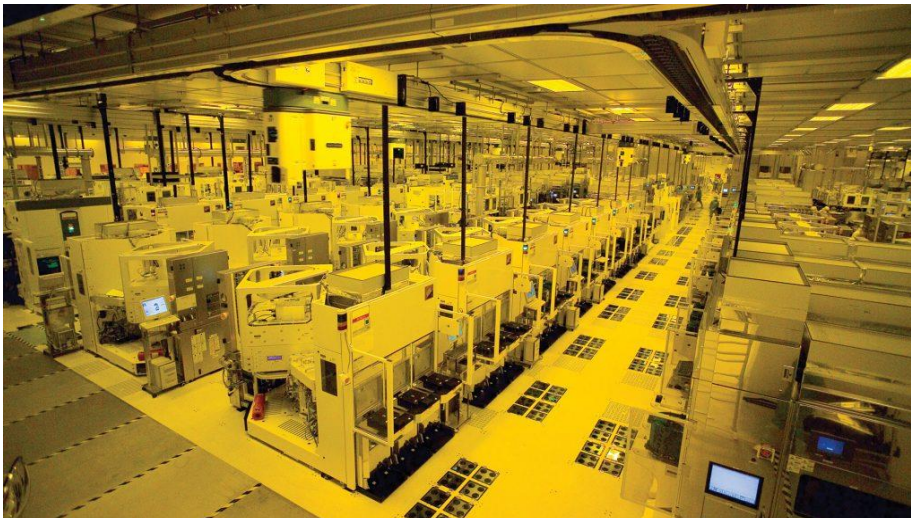


# Public Companies With Exposure To the Crypto Space

13 December 2017



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## BitMEX Research

Filtering out the hype with unbiased, evidence-based reports on the crypto-coin ecosystem.

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## Abstract

*The prices of crypto-related assets like Bitcoin have skyrocketed in recent months and many speculative investors understandably appear to want upside exposure to the space. However, the risk of a downwards correction is high, in our view. In this piece, we look at a potentially lower-risk method of obtaining upside by presenting a selection of listed equities which have some exposure and businesses in other areas.*

### Previous reports:

[Update: Bitcoin Cash Investment Flow Data](#)  
(01/12/17)

[Bitcoin's Unique Value Proposition](#)  
(29/11/17)

[Revisiting "The DAO"](#)  
(22/10/17)

[The Implications for Bitcoin of the New Bitcoin Cash Difficulty Adjustment Mechanism](#)  
(16/10/17)

## Overview

The price of Bitcoin is up over 1,600% YTD, while many alternative coins such as Ethereum and Litecoin have appreciated in value to an even greater extent, leading, in our view, to significant downside price risk. For example, potentially another four-year cycle of weak prices could be driven by the Bitcoin halving schedule. Existing investors in the space may wish to take some profits but still retain some upside exposure, and new investors in the space may wish to obtain some upside exposure while mitigating some of the downside risks.

Here is a list of public companies with some business segments driven by crypto-related areas, which may benefit from further crypto price appreciation, but which have other businesses that could mitigate the downside risks. Before investing in any of these, you should obviously do more research on your own: the information below is intended only as an introduction to the companies.

Stock	Website	Comment
	<a href="#">Tsmc</a>	Potentially a solid investment opportunity, with a strong high-margin business and good crypto upside linked to the core business.
	<a href="#">alchip</a>	More work may be required to determine the significance of the crypto-related business.
	<a href="#">gmojh</a>	Could be an interesting investment, although the crypto exchange is new and currently small in scale.
	<a href="#">globalunichip</a>	Strong ASIC design business, however the stock is expensive.
	<a href="#">gmo.jp</a>	Possible lack of focus on one crypto area.
	<a href="#">overstock</a>	Possible lack of focus on one crypto area.
	<a href="#">squareup</a>	Not clear if this business model has strong earnings power.



ig

Crypto trading may just cannibalize the existing clients.



plus500

Crypto trading may just cannibalize the existing clients.



garage

The link to crypto is weak.



premiumwater

The link to crypto is weak and it's not clear how shareholders may benefit from an ICO.



cmegroup

Crypto business may not be significant.



cboe

Crypto business may not be significant.



sbigroup

A link to the "fake Satoshi" may be worrisome.

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# A slightly more detailed look into the companies

## TSMC

### Investment conclusion:

- Investing in TSMC is likely to be a good way of obtaining some moderate upside exposure to crypto while significantly mitigating or eliminating the downside risk.

### Overview:

- This Taiwanese company is the world's largest semiconductor foundry. TSMC is a pure play, focusing entirely on integrated-circuit fabrication.
- According to the most recent [quarterly earnings call](#), the crypto-mining-related business is \$375 million per quarter, which represents 5.1% of group sales. However, with crypto prices continuing to appreciate, it is likely that this business segment is growing very fast.

### Investment case:

- TSMC has extremely high profit margins, with an EBITDA margin of about 66% expected in 2017. In our view, the company is likely to be able to achieve similar margins in the crypto business.
- With current crypto prices, miners and ASIC designers are likely trying to make very large orders with TSMC, which could mean significant sales growth next year. If the crypto prices increase significantly, orders in 2018 could be very strong. If one is convinced 2018 is going to be a big year for crypto, TSMC could be a relatively less risky way of obtaining such exposure.
- Crypto mining is a challenging and competitive business, and much of the profit could end up at the company supplying the key equipment. TSMC is well positioned to benefit regardless which mining company becomes dominant. As Mark Twain once said, "When everyone is looking for gold, it's a good time to be in the pick and shovel business."
- TSMC also pays a healthy dividend, yielding c3.1%. The company has never cut its dividend and this should support the share price if the market weakens.
- TSMC is very focused on the core business as a semiconductor foundry and will not be distracted by investing in other blockchain related areas like ICOs or Ripple. In our view, companies with focus tend to perform better over the long term.



## Investment risks:

- TSMC are believed to currently have only one crypto-mining client, Bitmain, so there is significant customer concentration risk.
- The company has high exposure to Apple (APPL US) and the iPhone.

## Valuation metrics:

Ticker	2330 TT					
Stock Name	TSMC					
Currency	US\$ bn					
Year End	December					
<b>Market Cap</b>	<b>196.5</b>					
Cash	16.5					
Debt	(6.8)					
<b>EV</b>	<b>186.7</b>					
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017E</b>
Revenue	17.1	20.1	25.2	26.6	29.4	32.6
EBITDA	10.6	12.3	16.4	17.1	18.7	21.5
Net Income	5.6	6.3	8.7	9.7	10.4	11.4
<i>Revenue Growth</i>	<i>17.9%</i>	<i>17.3%</i>	<i>25.1%</i>	<i>5.6%</i>	<i>10.7%</i>	<i>10.7%</i>
<i>EBITDA Margin</i>	<i>61.7%</i>	<i>61.2%</i>	<i>65.0%</i>	<i>64.3%</i>	<i>63.5%</i>	<i>65.9%</i>
PE	34.9	31.0	22.6	20.3	18.9	17.3
EV/Sales	10.9	9.3	7.4	7.0	6.3	5.7
P/B	7.9	6.9	5.9	5.3	4.6	4.6
RoE	22.6%	22.3%	26.3%	26.0%	24.2%	26.5%
EV/EBITDA	17.7	15.2	11.4	10.9	10.0	8.7

(Source: Bloomberg, BitMEX Research)

# Alchip

## Investment conclusion:

- Alchip may merit further investigation to establish the significance of the crypto business.

## Overview:

- Alchip is a Taiwanese ASIC design and manufacturing company, of smaller scale than GUC (mentioned below).
- We do not know how significant crypto mining is for this company. A page in a recent company [presentation](#) explained some of the Bitcoin-mining-related products and in 2015, the company [completed](#) the first mining 16-nm tap out for the now defunct KNC miner.

## Investment case:

- This company is less well known and therefore the upside from strong crypto growth in 2018 could be significant.

## Investment risks:

- The scale of the company's Bitcoin business is not known.
- The earnings track record is unreliable, with the company making losses in 2016.
- The order outlook is said to have poor visibility relative to some other companies.
- The stock is up 171% YTD, indicating the crypto exposure may already be reflected in the valuation.

# GMO Financial Holdings

## Investment conclusion:

- GMO Coin may become a successful crypto exchange in Japan due to the company's existing infrastructure and expertise. Therefore, GMO Financial could represent an interesting investment opportunity.

## Overview:

- GMO Financial are a listed subsidiary of GMO Internet, with GMO Internet owing 80.8% of GMO Financial. Therefore, the shares are not very liquid.
- This business includes a retail FX platform as well as the new GMO Coin exchange, which is 58% owned by GMO Financial.
- The crypto-mining business and ICO will not occur within this subsidiary, but will occur at group level inside GMO Internet.

## Investment case:

- GMO Financial offers more direct exposure to the crypto-exchange business than the parent. The exchange business is reasonably new and therefore has considerable growth potential.
- The FX trading-platform business is the largest retail platform in Japan, therefore GMO Financial may already have the infrastructure and expertise to build a successful crypto exchange.
- The exchange plans to offer a leveraged product shortly.

## Investment risks:

- We have not been able to identify any trading-volume data at GMO Coin, therefore the market share is likely to be low. However, a recent company [presentation](#) indicates that growth is strong.
- The company does [publish](#) monthly volume data for the non GMO Coin exchange businesses.

## Valuation metrics:

Ticker	7177 JP				
Stock Name	GMO Finance				
Currency	US\$ m				
Year End	March				
<b>Market Cap</b>	<b>767.7</b>				
Cash	413.9				
Debt	(1,224.1)				
<b>EV</b>	<b>1,577.9</b>				
	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
Revenue	218.9	214.2	228.2	241.8	242.3
EBITDA	83.4	79.7	92.1	108.9	103.7
Net Income	35.0	36.8	44.4	53.8	57.0
<i>Revenue Growth</i>		(2.1%)	6.5%	5.9%	0.2%
<i>EBITDA Margin</i>	38.1%	37.2%	40.4%	45.0%	42.8%
PE	22.0	20.8	17.3	14.3	13.5
EV/Sales	7.2	7.4	6.9	6.5	6.5
P/B	4.2	4.0	4.5	3.5	3.1
<i>RoE</i>	19.0%	19.2%	26.2%	24.6%	22.8%
EV/EBITDA	18.9	19.8	17.1	14.5	15.2

(Source: Bloomberg, BitMEX Research)



# Global Unichip

## Investment conclusion:

- Valuation ratios appear reasonably expensive and the stock price may already reflect the benefits of crypto.

## Overview:

- Global Unichip (GUC) is a Taiwanese fabless ASIC design company. TSMC holds about 34% of the shares in GUC, and the chairman of GUC also has a role at TSMC China. However, TSMC's technology library is open to other competing fabless companies.
- Crypto-mining-related sales are believed to account for around 20% of GUC sales in 2017, and this is likely to grow significantly in 2018, in our view.

## Investment case:

- At 20%, the crypto business is a significant part of sales. The mining business could become more competitive in 2018, making ASIC design key. If crypto prices increase in 2018, GUC is likely to perform well.

## Investment risks:

- The stock price is already following crypto markets to some extent, with the shares up over 300% in USD this year. There is significant downside risk if crypto markets collapse but this is still less risky than actually holding crypto tokens.
- The stock is expensive on a forward EV/EBITDA of 34.7x.
- GUC is also reliant on machine-learning/AI areas for growth in addition to crypto.

## Valuation metrics:

Ticker	3443 TT					
Stock Name	GUC					
Currency	US\$ m					
Year End	December					
<b>Market Cap</b>	<b>1,281.1</b>					
Cash	147.7					
Debt	-					
<b>EV</b>	<b>1,133.4</b>					
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017E</b>
Revenue	304.8	208.1	229.4	244.5	288.3	390.9
EBITDA	31.9	18.3	23.1	24.8	26.7	35.2
Net Income	20.7	9.7	14.5	15.6	17.1	26.5
<i>Revenue Growth</i>	<i>(2.1%)</i>	<i>(31.7%)</i>	<i>10.2%</i>	<i>6.6%</i>	<i>17.9%</i>	<i>35.6%</i>
<i>EBITDA Margin</i>	<i>10.5%</i>	<i>8.8%</i>	<i>10.1%</i>	<i>10.1%</i>	<i>9.3%</i>	<i>9.0%</i>
PE	61.8	131.5	88.6	82.3	74.9	48.4
EV/Sales	3.7	5.4	4.9	4.6	3.9	2.9
P/B	10.6	11.3	11.8	12.0	11.3	11.3
RoE	17.2%	8.6%	13.3%	14.5%	15.1%	23.3%
EV/EBITDA	35.5	62.1	49.1	45.7	42.5	32.2

(Source: Bloomberg, BitMEX Research)

# GMO Internet

## Investment conclusion:

- GMO Internet appears to lack focus in their crypto endeavors, therefore GMO Financial may represent be a better investment opportunity.

## Overview:

- GMO Internet is a group of Japanese companies based in internet infrastructure and digital payments. The main business lines of the company are online credit-card transaction processing, domain-name services, and SSL certificates.
- In October 2017, the company [announced](#) the launch of a Bitcoin-mining business and a potential ICO.
- The company also has a subsidiary called [GMO Coin](#), a crypto exchange.

## Investment case:

- GMO offers broad exposure to different areas in crypto, ICOs, mining, and the operation of exchanges.
- The core business of SSL certificates is enjoying strong growth, with sales up about 90% in 2017.

## Investment risks:

- The company is entering competitive fields and GMO appear to lack focus by trying many different areas at the same time. They may not succeed in all ambitions.
- GMO plans to launch a 7-nm mining chip next year, which may be ambitious, especially as Bitmain is likely to be a strong competitor and it's not clear who GMO's mining-chip manufacturing partners are.
- The effective ownership of the exchange business (GMO Coin) is low, at only 46%.

## Valuation metrics:

Ticker	9449 JP					
Stock Name	GMO Internet					
Currency	US\$ m					
Year End	December					
<b>Market Cap</b>	<b>2,056.9</b>					
Cash	865.3					
Debt	(802.8)					
<b>EV</b>	<b>1,994.3</b>					
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017E</b>
Revenue	932.4	961.6	1,035.7	1,044.0	1,245.0	1,329.7
EBITDA	169.2	172.7	180.4	171.2	205.4	205.3
Net Income	56.6	53.8	55.3	110.9	66.7	63.8
<i>Revenue Growth</i>	<i>20.3%</i>	<i>3.1%</i>	<i>7.7%</i>	<i>0.8%</i>	<i>19.2%</i>	<i>6.8%</i>
<i>EBITDA Margin</i>	<i>18.1%</i>	<i>18.0%</i>	<i>17.4%</i>	<i>16.4%</i>	<i>16.5%</i>	<i>15.4%</i>
PE	36.3	38.2	37.2	18.5	30.8	32.2
EV/Sales	2.1	2.1	1.9	1.9	1.6	1.5
P/B	5.9	5.9	5.6	4.0	3.6	3.6
<i>RoE</i>	<i>16.1%</i>	<i>15.4%</i>	<i>15.1%</i>	<i>21.4%</i>	<i>11.8%</i>	<i>11.2%</i>
EV/EBITDA	11.8	11.5	11.1	11.7	9.7	9.7

(Source: Bloomberg, BitMEX Research)

# Overstock

## Investment conclusion:

- The company may lack focus in the crypto space and the stock may already be rallying as a result of the crypto exposure.

## Overview:

- Overstock is an American e-commerce company focused on furniture and bedding.
- For several years, company CEO and founder Patrick Bryan has enthusiastically supported Bitcoin. This may stem from his anti-Wall Street stance, which itself grew after several prominent investment banks and hedge funds were accused of targeting Overstock with a naked short selling campaign in 2005. Bryan was eventually mostly vindicated after winning a payout in a settlement of the issue.
- Overstock first accepted Bitcoin payments in 2014 and became involved in several projects, including the Counterparty platform in 2014 and then the tZERO platform, which first launched Overstock stock as an instrument in 2016 and is currently building a distributed ledger system.

## Investment case:

- Overstock offers broad exposure to the space.

## Investment risks:

- Like many of the companies mentioned in this list, Overstock seems to lack focus and is experimenting with various crypto related ideas.
- The shares are up 214% YTD, partly as a result of the crypto theme.

## Valuation metrics:

Ticker	OSTK US					
Stock Name	Overstock					
Currency	US\$ m					
Year End	December					
<b>Market Cap</b>	<b>1,376.3</b>					
Cash	92.3					
Debt	(56.1)					
<b>EV</b>	<b>1,340.1</b>					
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017E</b>
Revenue	1,099.3	1,304.2	1,497.1	1,657.8	1,800.0	1,815.0
EBITDA	28.2	31.1	30.0	24.6	38.2	7.4
Net Income	14.7	84.4	8.9	2.4	12.5	(11.9)
<i>Revenue Growth</i>	<i>4.3%</i>	<i>18.6%</i>	<i>14.8%</i>	<i>10.7%</i>	<i>8.6%</i>	<i>0.8%</i>
<i>EBITDA Margin</i>	<i>2.6%</i>	<i>2.4%</i>	<i>2.0%</i>	<i>1.5%</i>	<i>2.1%</i>	<i>0.4%</i>
PE	93.8	16.3	155.4	562.7	109.9	(115.7)
EV/Sales	1.2	1.0	0.9	0.8	0.7	0.7
P/B	44.5	11.6	10.7	9.2	8.0	8.0
RoE	47.4%	71.0%	6.9%	1.6%	7.2%	(6.9%)
EV/EBITDA	47.6	43.1	44.7	54.6	35.1	180.4

(Source: Bloomberg, BitMEX Research)



# Square

## Investment conclusion:

- The crypto story may already be well understood by the investment community and there may be considerable downside risk due to the valuation rating.

## Overview:

- Square is a digital-payment-solutions company based in the US.
- Square recently announced the launch of a new product that allows users to buy and sell Bitcoin on a mobile application.

## Investment case:

- The new Bitcoin application has received positive feedback since the launch for its ease of use.

## Investment risks:

- The stock is very expensive based on traditional valuation metrics.
- The Bitcoin application does not offer users the ability to send payments on the Bitcoin network by itself.
- It is not clear if the business model of buy/sell Bitcoin inside a mobile application is profitable.

## Valuation metrics:

Ticker	SQ US					
Stock Name	Square					
Currency	US\$ bn					
Year End	December					
<b>Market Cap</b>	<b>14.9</b>					
Cash	0.9					
Debt	(0.4)					
<b>EV</b>	<b>14.4</b>					
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017E</b>
Revenue	0.2	0.6	0.9	1.3	1.7	1.0
EBITDA	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	0.1
Net Income	(0.1)	(0.1)	(0.2)	(0.2)	(0.2)	0.1
<i>Revenue Growth</i>		171.5%	53.9%	49.0%	34.9%	(43.4%)
<i>EBITDA Margin</i>	(40.2%)	(17.5%)	(15.5%)	(11.6%)	(7.8%)	14.0%
PE	(174.7)	(142.4)	(96.6)	(82.8)	(86.7)	137.5
EV/Sales	70.6	26.0	16.9	11.3	8.4	14.8
P/B		91.7	54.4	29.3	25.8	25.8
<i>RoE</i>		(64.4%)	(56.3%)	(35.4%)	(29.8%)	18.8%
EV/EBITDA	(175.7)	(148.7)	(109.0)	(97.9)	(108.3)	105.7

(Source: Bloomberg, BitMEX Research)

# IG Group

## Investment conclusion:

- A strong crypto business may cannibalise earnings from other areas, so the crypto-related upside may be limited.

## Overview:

- IG Group is a UK-based CFD and spread-betting-platform company.
- Due to their high volatility, crypto-related trading products are offered and are likely to be contributing to earnings as the volatility of other products is lower.

## Investment case:

- IG is one of the largest and strongest CFD companies in the retail space.

## Investment risks:

- One of the big challenges for the company is the regulatory environment in the UK and Europe. The retail leveraged trading industry is under close scrutiny by regulators.
- While the crypto business may perform well, it's not clear that this will result in new clients or whether IG's existing clients will merely enjoy trading and switch to whichever product offers volatility.

## Valuation metrics:

Ticker	IGG LN					
Stock Name	IG Group					
Currency	US\$ m					
Year End	May					
<b>Market Cap</b>	<b>3,293.5</b>					
Cash	416.0					
Debt						
<b>EV</b>	<b>2,877.1</b>					
	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018E</b>
Revenue	637.8	668.3	677.4	735.1	670.0	708.2
EBITDA	316.2	330.7	285.1	329.1	294.2	332.9
Net Income	222.3	237.8	209.2	245.6	216.6	232.4
<i>Revenue Growth</i>	<i>(2.3%)</i>	<i>4.8%</i>	<i>1.4%</i>	<i>8.5%</i>	<i>(8.9%)</i>	<i>5.7%</i>
<i>EBITDA Margin</i>	<i>49.6%</i>	<i>49.5%</i>	<i>42.1%</i>	<i>44.8%</i>	<i>43.9%</i>	<i>47.0%</i>
PE	14.8	13.8	15.7	13.4	15.2	14.2
EV/Sales	4.5	4.3	4.2	3.9	4.3	4.1
P/B	4.3	3.5	3.6	3.4	3.5	3.5
RoE	28.9%	25.1%	23.2%	25.5%	22.9%	24.5%
EV/EBITDA	9.1	8.7	10.1	8.7	9.8	8.6

(Source: Bloomberg, BitMEX Research)

# PLUS 500

## Investment conclusion:

- Similar to IG, Plus 500's stronger crypto sales may cannibalize earnings from other areas.

## Overview:

- Plus 500 is a UK-based online retail trading platform.

## Investment case:

- Plus 500's technology platform lets it roll out new instruments faster than many of its peers, so it may be able to capitalise on new trends faster in the volatile crypto space.
- Plus 500 trades at a discount to IG, due to IG's stronger reputation and longer track record. However, customer retention at Plus 500 is improving and there is increased focus on loyal, higher-value customers rather than on speculative clients who may lose all their money and leave.

## Investment risks:

- Regulation and possible stricter rules related to CFDs are a major risk, just like for IG.

## Valuation metrics:

Ticker	PLUS LN					
Stock Name	PLUS 500					
Currency	US\$ m					
Year End	December					
<b>Market Cap</b>	<b>1,438.0</b>					
Cash	220.0					
Debt						
<b>EV</b>	<b>1,195.8</b>					
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017E</b>
Revenue	56.1	115.1	228.9	275.7	327.9	385.7
EBITDA	23.2	67.3	145.4	132.9	151.0	225.4
Net Income	17.1	50.6	102.5	96.6	117.2	166.9
<i>Revenue Growth</i>	<i>12.2%</i>	<i>105.0%</i>	<i>98.9%</i>	<i>20.4%</i>	<i>19.0%</i>	<i>17.6%</i>
<i>EBITDA Margin</i>	<i>41.3%</i>	<i>58.5%</i>	<i>63.5%</i>	<i>48.2%</i>	<i>46.0%</i>	<i>58.4%</i>
PE	82.8	28.0	13.8	14.7	12.1	8.5
EV/Sales	21.3	10.4	5.2	4.3	3.6	3.1
P/B	118.5	20.8	12.8	12.0	10.4	10.4
RoE	143.1%	74.4%	92.8%	82.1%	86.2%	122.7%
EV/EBITDA	51.6	17.8	8.2	9.0	7.9	5.3

(Source: Bloomberg, BitMEX Research)



# Digital Garage

## Investment conclusion:

- One could consider a pair trade, long Digital Garage and short Kakaku.com, although the link to a real crypto business seems insignificant and unlikely.

## Overview:

- Digital Garage is a Japanese technology investment fund, with the primary asset being a price-comparison website called Kakaku.com (2371 JP).
- Digital Garage also has an investment in the blockchain-infrastructure company Blockstream.
- In theory, one could go long Digital Garage and short Kakaku.com to increase exposure to Blockstream.

## Investment case:

- Blockstream has rolled out a [satellite](#) product, broadcasting Bitcoin blocks all over the world.

## Investment risks:

- Blockstream's business model appears unclear. The company seems focused on technology and infrastructure rather than on commercialisation and therefore may not be able to generate earnings.
- The link to Blockstream is very limited.

## Valuation metrics:

Ticker	4819 JP					
Stock Name	Digital Garage					
Currency	US\$ m					
Year End	June					
<b>Market Cap</b>	<b>1,310.7</b>					
Cash	364.9					
Debt	(244.5)					
<b>EV</b>	<b>1,190.3</b>					
	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018E</b>
Revenue	189.7	322.0	334.1	333.5	376.0	524.0
EBITDA	25.7	33.2	39.5	54.9	46.7	41.6
Net Income	26.8	31.3	28.2	44.5	44.4	51.0
<i>Revenue Growth</i>	<i>42.3%</i>	<i>69.7%</i>	<i>3.8%</i>	<i>(0.2%)</i>	<i>12.7%</i>	<i>39.4%</i>
<i>EBITDA Margin</i>	<i>13.5%</i>	<i>10.3%</i>	<i>11.8%</i>	<i>16.5%</i>	<i>12.4%</i>	<i>7.9%</i>
PE	48.9	41.9	46.5	29.5	29.5	25.7
EV/Sales	6.3	3.7	3.6	3.6	3.2	2.3
P/B	5.1	4.8	3.6	5.5	4.4	4.4
RoE	10.4%	11.4%	7.8%	18.7%	14.9%	17.2%
EV/EBITDA	46.4	35.9	30.1	21.7	25.5	28.6

(Source: Bloomberg, BitMEX Research)

# Premium Water Holdings

## Investment conclusion:

- The link to the crypto space may be too weak.

## Overview:

- Premium Water is a high-growth mineral-water delivery company in Japan, delivering water to the home and office markets.
- According to page 10 of the [COMSA whitepaper](#), the company will conduct an ICO, perhaps to raise funds to invest in business expansion. COMSA is a Japanese centralized ICO solutions company that recently conducted a token sale themselves.

## Investment case:

- It is possible that the company could raise a significant amount of funds in an ICO and there is a chance that existing shareholders may benefit from this.

## Investment risks:

- It is not clear how existing shareholders will directly benefit from the ICO, if at all.

## Valuation metrics:

Ticker	2588 JP Equity					
Stock Name	Premium Water					
Currency	US\$ m					
Year End	March					
<b>Market Cap</b>	<b>210.7</b>					
Cash	31.0					
Debt	(60.2)					
<b>EV</b>	<b>239.8</b>					
	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018E</b>
Revenue	87.1	87.6	91.9	108.8	184.5	
EBITDA	12.0	11.8	10.1	10.5	16.2	
Net Income	4.3	2.5	0.2	0.0	(11.3)	
<i>Revenue Growth</i>	<i>25.6%</i>	<i>0.6%</i>	<i>4.9%</i>	<i>18.5%</i>	<i>69.5%</i>	
<i>EBITDA Margin</i>	<i>13.8%</i>	<i>13.5%</i>	<i>10.9%</i>	<i>9.6%</i>	<i>8.8%</i>	
PE	48.5	84.4	853.5	4,972.3	(18.7)	
EV/Sales	2.8	2.7	2.6	2.2	1.3	
P/B	14.2	9.9	11.2	10.2	18.2	
RoE	29.2%	11.7%	1.3%	0.2%	(97.2%)	
EV/EBITDA	20.0	20.3	23.9	22.9	14.8	

(Source: Bloomberg, BitMEX Research)

# CME Group

## Investment conclusion:

- Crypto is not likely to be a significant earnings driver.

## Overview:

- CME Group operates an institutional derivatives exchange that deals with futures contracts and options. The instruments are related to interest rates, stock indexes, FX, and commodities.
- The company recently announced the launch of Bitcoin futures contracts.

## Investment case:

- Financial speculation appears to be one of the main activities Bitcoin is used for and the launch of a Bitcoin product could therefore lead to significant volume growth for the CME.

## Investment risks:

- The Bitcoin product is new and it is not clear whether there will be significant demand relative to the CME's other products.
- On a forward EV/EBITDA of 21.0x, the stock is already reasonably expensive.

## Valuation metrics:

Ticker	CME US					
Stock Name	CME					
Currency	US\$ bn					
Year End	December					
<b>Market Cap</b>	<b>52.0</b>					
Cash	1.7					
Debt	(2.2)					
<b>EV</b>	<b>52.5</b>					
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017E</b>
Revenue	2.9	2.9	3.1	3.3	3.6	3.6
EBITDA	1.9	1.9	2.0	2.2	2.4	2.5
Net Income	0.9	1.0	1.1	1.2	1.5	1.6
<i>Revenue Growth</i>	<i>(11.2%)</i>	<i>0.7%</i>	<i>6.0%</i>	<i>6.9%</i>	<i>8.1%</i>	<i>1.3%</i>
<i>EBITDA Margin</i>	<i>66.7%</i>	<i>63.9%</i>	<i>64.3%</i>	<i>66.6%</i>	<i>67.5%</i>	<i>68.7%</i>
PE	58.0	53.2	46.1	41.7	33.9	32.1
EV/Sales	18.0	17.9	16.9	15.8	14.6	14.4
P/B	2.4	2.5	2.5	2.5	2.6	2.6
<i>RoE</i>	<i>4.2%</i>	<i>4.6%</i>	<i>5.4%</i>	<i>6.1%</i>	<i>7.5%</i>	<i>8.0%</i>
EV/EBITDA	27.0	28.0	26.2	23.7	21.6	21.0

(Source: Bloomberg, BitMEX Research)



# CBOE

## Investment conclusion:

- Crypto is not likely to be a significant earnings driver.

## Overview:

- CBOE operates an institutional financial-options-trading platform. The main instruments are related to FX and stock indexes.
- The company recently announced the launch of Bitcoin futures contracts.

## Investment case:

- Similar to the CME, financial speculation appears to be one of the main activities Bitcoin is used for, and the launch of a Bitcoin product could therefore lead to significant volume growth for CBOE.

## Investment risks:

- The Bitcoin product is new and it is not clear whether there will be significant demand relative to CBOE's other products.
- On a forward EV/EBITDA of 24.4x, the stock is already reasonably expensive.

## Valuation metrics:

Ticker	CBOE US Equity					
Stock Name	CBOE					
Currency	US\$ bn					
Year End	December					
<b>Market Cap</b>	<b>14.5</b>					
Cash	0.1					
Debt	(1.3)					
<b>EV</b>	<b>15.7</b>					
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017E</b>
Revenue	0.5	0.6	0.6	0.6	0.7	1.0
EBITDA	0.3	0.3	0.4	0.4	0.3	0.6
Net Income	0.2	0.2	0.2	0.2	0.2	0.4
<i>Revenue Growth</i>	<i>0.8%</i>	<i>11.7%</i>	<i>7.9%</i>	<i>2.8%</i>	<i>3.5%</i>	<i>53.2%</i>
<i>EBITDA Margin</i>	<i>53.8%</i>	<i>56.0%</i>	<i>57.3%</i>	<i>57.7%</i>	<i>51.9%</i>	<i>63.8%</i>
PE	92.0	82.3	76.3	70.6	78.0	39.3
EV/Sales	30.6	27.4	25.4	24.7	23.8	15.6
P/B	60.6	50.9	57.9	55.8	43.8	43.8
RoE	65.8%	61.9%	75.9%	79.0%	56.1%	111.4%
EV/EBITDA	56.8	48.9	44.3	42.8	45.9	24.4

(Source: Bloomberg, BitMEX Research)

# SBI Holdings

## Investment conclusion:

- A partnership with “fake Satoshi”, Craig Wright, is a significant concern. We do not recommend investing in SBI.

## Overview:

- SBI Holdings is a Japanese financial company whose main business is the domestic online stock-trading platform. SBI can be considered a peer to GMO.
- SBI holdings appears enthusiastic about the crypto space. The company has a crypto fund, with investments in Ripple, R3, Orb, Coinplug, Wirex, Veem, and bitFlyer ([source](#)).
- SBI plans to make further investments, including into Bitcoin mining. SBI also has a blockchain consulting business, including advising on ICOs.

## Investment case:

- SBI Holdings offers broad exposure to many areas in the space.

## Investment risks:

- SBI recently [announced](#) a strategic partnership with nChain, the company run by Wright, known inside the Bitcoin community as the “fake Satoshi”. This may indicate that SBI has limited knowledge about the crypto space or that the company may be wasting shareholder funds, by partnering with Wright.
- SBI also appears to lack focus in its blockchain strategy.

## Valuation metrics:

Ticker	8473 JP					
Stock Name	SBI					
Currency	US\$ m					
Year End	March					
<b>Market Cap</b>	<b>4,359.4</b>					
Cash	4,434.8					
Debt	(3,969.1)					
<b>EV</b>	<b>3,893.8</b>					
	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018E</b>
Revenue	1,857.4	2,324.8	2,240.2	2,182.1	2,423.0	
EBITDA	286.1	530.6	698.3	551.8	503.8	507.2
Net Income	38.8	214.1	418.0	284.4	300.2	293.4
<i>Revenue Growth</i>	<i>2.9%</i>	<i>25.2%</i>	<i>(3.6%)</i>	<i>(2.6%)</i>	<i>11.0%</i>	
<i>EBITDA Margin</i>	<i>15.4%</i>	<i>22.8%</i>	<i>31.2%</i>	<i>25.3%</i>	<i>20.8%</i>	
PE	112.5	20.4	10.4	15.3	14.5	14.9
EV/Sales	2.1	1.7	1.7	1.8	1.6	
P/B	1.1	1.2	1.2	1.2	1.2	1.2
RoE	1.0%	5.7%	11.6%	7.6%	8.0%	7.9%
EV/EBITDA	13.6	7.3	5.6	7.1	7.7	7.7

(Source: Bloomberg, BitMEX Research)

## Other listed crypto-related names

Ticker	Name	Market cap (MM USD)	2017 YTD return (USD)	Description	Blockchain pure play
<b>Japan</b>					
<a href="#">4751 JP</a>	Cyberagent	4,814	50.0%	Operates a media website, Ameba, and provides an advertising agency, foreign-exchange-trading website, and PC and mobile content. Potentially preparing for its own cryptocurrency exchange.	No
<a href="#">3774 JP</a>	Internet Initiative Japan	841	16.2%	Provides Internet connection services for businesses. Preparing Bitcoin services.	No
<a href="#">6172 JP</a>	Metaps	365	(24.6%)	Develops advertising platforms for smart phones. Potentially preparing for its own cryptocurrency exchange.	No
<a href="#">3825 JP</a>	Remixpoint	322	359.9%	An electricity retail business, energy-saving consulting, and used-car business. BITPoint Exchange business.	No
<a href="#">2315 JP</a>	CAICA	231	(7.7%)	Provides information-systems solution services for financial and telecommunication industries. Issues a cryptocurrency "Caica".	No
<a href="#">3696 JP</a>	Ceres	216	34.8%	Provides Internet marketing services. Operates CoinTip service.	No
<a href="#">3853 JP</a>	Infoteria	177	47.6%	Provides software development based on XML. Issues a cryptocurrency "Zen".	No
<a href="#">8732 JP</a>	Money Partners	133	(18.0%)	Provides foreign-exchange transactions. Alliance with the Kraken exchange.	No
<a href="#">3807 JP</a>	Fisco	125	22.4%	Provides financial information. Exchange and deal with MonaCoin.	No

8704 JP	Traders Holdings	120	(8.7%)	Provides financial services through Internet and call centers. Quoinex exchange business.	No
3121 JP	MBK	102	36.7%	Provides loans and investments services for firms and real estates in Japan and China. Invested in BTCBOX exchange	No
3808 JP	OKWave	43	36.6%	Q&A community website OKWave. Potentially preparing for its own cryptocurrency exchange.	No
<b>Taiwan</b>					
2377 TT	Micro-Star	2,058	5.6%	Also known as MSi. Manufactures and markets motherboards, graphics cards, and other computer peripherals.	No
2376 TT	Gigabyte Tech	1,102	28.8%	Manufactures and markets computer motherboards	No
3515 TT	AsRock	296	100.6%	Develops, designs, and retails motherboards	No
2399 TT	BioStar Micro	84	70.5%	Manufactures and markets computer motherboards and interface cards	No
6150 TT	TUL Corp	68	312.3%	Develops, manufactures, and markets graphics cards, multimedia products, and interface cards	No
<b>United States</b>					
NVDA US	Nvidia	116,085	80.2%	Designs, develops, and markets graphics processors and related software.	No
AMD US	AMD	9,928	(9.3%)	Manufactures semiconductor products.	No



GBTC US	Bitcoin Investment Trust	5,139	2,383.0%	Trust invested exclusively in Bitcoin.	Yes
RIOT US	Riot Blockchain	275	732.7%	Buys cryptocurrency and blockchain businesses, and supports blockchain-technology companies.	Yes
SSC US	Seven Starts Cloud Group	262	241.5%	Provides artificial-intelligence, blockchain and fintech-powered digital-finance solutions	No
MGTI US	MGT Capital	204	475.3%	Operates a portfolio of cybersecurity technologies.	Yes
DPW US	Digital Power	103	686.4%	Designs, develops, manufactures, and markets switching power supplies for sale to manufacturers of computers and other electronic equipment.	No
<b>Canada</b>					
HIVE CN	Hive Blockchain	636	n/a	Operates as a cryptocurrency-mining firm.	Yes
BTL CN	BTL Group	197	991.7%	Develops blockchain technologies.	Yes
CODE CN	360 Blockchain	33	600.0%	Invests in blockchain-based technology.	Yes
<b>Australia</b>					
DCC AU	Digitalx	106	495.7%	ICO advisory and blockchain consulting services	Yes

(Source: Bloomberg, BitMEX Research)

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