CHINESE SPORTSWEAR

Fake or Fabulous?

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Author:
Gillem Tulloch
gillem@gmtresearch.com

Nine out of the sixteen Chinese sportswear companies listed since 2005 have turned out to be frauds, all of them from Fujian. Their financials shared a number of characteristics which are rarely exhibited by other listed companies. The most obvious giveaway is that past frauds were more profitable than sector global leaders, such as Nike. Unfortunately, of the seven remaining companies, Anta, Xtep and 361 Degrees share these fraud-like traits, and also come from Fujian. Indeed, Anta's FY17 operating margin is the third highest ever recorded in the sector; the other nine in the top ten turned out to be frauds. SELL or AVOID all three.

Prone to fraud

There have been nine confirmed frauds in and around the Chinese sportswear sector over the past ten years; all of them from Fujian, the centre of China's corporate fraud epidemic. Only seven remain, the largest of which is Anta Sports, the world's most profitable mass-market sportswear company. China's sportswear market has become increasingly dominated by foreign brands, such as Nike, which have taken share from domestic players, in particular Xtep and 361 Degrees. Anta's domestic brand has also lost share but offset it by buying the local franchise of foreign brands such as Fila. While Xtep and 361 have reported deteriorating profitability in line with lost market share, Anta has somehow gone from strength to strength.

Telling fake from fabulous

Companies faking sales always report super-normal profitability, higher even than global leaders. This should be a fairly obvious red flag but it's always explained away with half-truths. Frauds also display large amounts of non-production assets (mainly cash), generate excess capital, record small inventories and large prepayments. The chances of these characteristics appearing in one set of financials is extremely rare, being replicated by less than 1% of all listed companies but they are shared by all of our past sportswear frauds. Unfortunately, three of our seven remaining sportswear companies have almost identical characteristics to past frauds: Anta, 361 Degrees and Xtep. It's probably no coincidence that these three also come from Fujian.

Myth busting

Anta, Xtep and 361 are somehow able to record more than double the operating margins of global leaders when charging just 25% of the price. Anta's FY17 operating margin is the third highest ever recorded by a sportswear company; the other nine highest recorded margins were all frauds. Super-normal profitability is supposedly due to superior franchise management, in-house production, a move into high-end and being China centric. None of these reasons are convincing to us. It's possible that sales are being fabricated, distribution channels stuffed, or costs held off-balance sheet.

Fake or fabulous?

Of the three companies over which we have concerns, Anta is by far the largest. It is either the world's best-run sportswear company or a fraud. Even if it's the former, we wouldn't pay 34x trailing PER for a weak brand operating in a cut-throat industry. Unfortunately, there are reasons to think Anta is more fake than fabulous: it is unusually profitable despite low selling prices; there are inconsistencies between its Fila sales in China and the royalty receipts reported by its brand-owner in Korea; and it continues to raise excess capital despite huge cash balances and free cash inflows. If we're right, there's likely 80% downside to our target price of HK$10/share. SELL either way.

Companies mentioned:

Anta Sports (2020 HK)*
361 Degrees (1361 HK)*
Xtep (1368 HK)*
Li Ning (2331 HK)
Pou Sheng (3813 HK)
Yue Yuen (551 HK)
China Dongxiang (3818 HK)
*Further attention required

A&G Screen

Watch video

Please note that the management of Anta, Xtep and 361 Degrees failed to respond to our questions for the preparation of this report

Contents

About Gillem Tulloch

Gillem Tulloch has been a financial analyst since 1994 and has been based in Asia since 1995, with spells in Singapore, Thailand, Korea and most recently Hong Kong. Over his career, Gillem has covered sectors ranging from telecoms to printing to electronics. He has achieved top industry rankings in regional polls like Asiamoney and Institutional Investor, and has appeared on Bloomberg and Business Week. Gillem has worked in research and strategy for several large sell-side institutions, including Cazenove, Nomura and CLSA, and founded the independent research company Forensic Asia before moving on to establish GMT Research.

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It's every fund manager's nightmare to discover that a holding has been targeted by a short-seller alleging fraud. Our analysis of over 80 previous fake cash flow frauds shows some recurring similarities, such as superb profitability and yet a stingy attitude towards dividends and an inability to secure debt. In this report, we discuss our scoring system that correctly identifies 73% of historic frauds but is triggered by less than 1% of all listed companies globally – except for China and Hong Kong where it is 6-7%. Our short list of 25 potential frauds (excluding A-Shares) discussed in this report includes SMC, Sino Biopharm, 51Job, Luye Pharma and others. Read more...


FAKING CASH FLOWS
And How to Spot it
10 May 2017

Prone to fraud

Identified nine likely frauds

Are all Chinese sportswear companies frauds? This might seem like an inflammatory question but it's not undeserved. To date, we have identified nine likely frauds within and around the industry (we have included some footwear companies and a men's casual clothing company), seven of which are confirmed and two are probable (currently under investigation for financial irregularities). Eight out of the nine frauds have either been delisted or suspended, as shown in Figure 1.

Figure 1: Alleged frauds in the Chinese sportswear/footwear industry

Name	Ticker	Date of IPO	Peak Mkt Cap (US$m)	Fraud?	Market Status	Date Susp./ Delist	Year of Peak Profit	Footwear (% Sales)	Apparel (% Sales)	Other (% Sales)
China Hongxing	CHHS SP	Nov 05	2,093	Conf	Susp.	Feb 2011	08	61	34	5
China Sports	CSPORT SP	Jul 07	464	Prob	Susp.	Nov 2017	08	81	19	0
Eratat Lifestyle[1]	ERAT SP	Apr 08	116	Conf	Delisted	Jan 2014	12	32	68	0
Flyke	1998 HK	Mar 10	235	Conf	Susp.	Mar 2014	11	59	38	3
Fuguiniao[1]	1819 HK	Dec 13	1,205	Prob	Susp.	Aug 2016	15	84	17	0
Fujian Nuoqi[2]	1353 HK	Jan 14	190	Conf	Susp.	Jul 2014	13	7	89	4
Goldrooster	GO8 GR	May 12	127	Conf	Delisted	Feb 2015	12	17	45	38
Ming Le Sports	ML2K GR	June 12	170	Conf	Active	na	12	60	40	0
Naibu Global	NBU LN	Apr 12	128	Conf	Delisted	Jan 2015	13	53	47	0

[1]More focused on casual footwear than sportswear; [2]Men's casualwear; Source: GMT Research, Bloomberg

Only seven sportswear companies remain

There are seven sportswear companies currently listed in Hong Kong, as shown in Figure 2; however, their business models differ. Anta, Li Ning, 361 Degrees, Xtep and China Dongxiang have developed their own brands and sell through a mixture of own-operated and franchised stores. With the exception of Li Ning, each of them manufactures a significant portion of their shoes internally although exact figures are hard to come by. Yuen Yen is one of the world's largest manufacturers of sportswear shoes while its subsidiary, Pou Sheng, is a pure retailer. Neither has their own brand. Given that over half of the sector have turned out to be frauds, how can investors be sure that these remaining companies aren't faking at least a portion of their numbers?

Figure 2: Listed sportswear/footwear companies

Name	Ticker	Date of IPO	Mkt Cap (US$m)	Footwear FY17 Sales (%)	Apparel FY17 Sales (%)	Other FY17 Sales (%)
361 Degrees	1361 HK	Jun 2009	670	45	39	17
Anta	2020 HK	Jul 2007	14,872	42	55	3
China Dongxiang	3818 HK	Oct 2007	1,006	16	49	35
Li Ning	2331 HK	Jun 2004	2,428	47	47	7
Pou Sheng[1]	3813 HK	Jun 2008	851	na	na	na
Xtep	1368 HK	Jun 2008	1,218	64	34	2
Yue Yuen[2]	551 HK	Jul 1992	4,802	67	0	33

[1]Primarily a sports retailer; [2]Sports footwear manufacturer; Source: GMT Research, Bloomberg

Chinese companies have faked revenues with alarming regularity

This is not an unreasonable question. After all, the incidence rate of companies faking the majority of their revenues in China is astonishingly high. In a recent documentary, The China Hustle, it was claimed that around 400 Chinese companies that listed in the US over the past decade turned out to be frauds. Given that there are currently around 4,300 listed Chinese companies, and 2,600 of them have come to the market over the past decade, this is a worryingly high fraud incidence rate of 13%. To be clear, when we talk about frauds in China, we're not talking about the Western version which normally involves the aggressive use of accounting policies or aggressive valuations; we're talking about the majority of revenues being made up. This is virtually unheard of outside of China.

They are not acting alone

It would be naive to think that 400 groups individually came up with an identical mechanism to defraud investors, and that the issue has suddenly gone away. It is far more likely that there are established networks operating in China, and that they have become smarter in fooling auditors and investors. We suspect only the most obvious frauds have so far been uncovered. There is a fair amount of evidence to support the view that faking revenues is endemic in some parts of the mainland. One of the country's largest financial media groups, Caixin, printed an article[1] back in 2012 on the prevalence of fraud in Fujian. One of the interviewees had this to say:

Infrastructure exists to help perpetrators

"...with help from accountants, lawyers, brokers and other financial services providers some companies have inflated business performance data to qualify for stock listings. A company with only 60 million yuan in revenue can write in its books 600 million yuan...It's ridiculous."

Watch out for companies with large cash balances ad high margins

Steve Dickinson of the law firm Harris Bricken posted an article[2] in which he comes up with three simple ways to spot frauds in China: high margins, large cash balances and VIE structures. He notes that legitimate Chinese companies do not keep large amounts of cash lying around on their balance sheets owing to low interest rates. On the difficulties of verifying cash balances in China, he has the following to say:

The missing cash represents the faked profits

*"Later investigation usually reveals that these funds were never actually deposited in the bank. That is, these **large deposit accounts are simply falsified** [our emphasis]. The odd thing is that auditors will normally verify that the accounts are real. Once the fraud has been exposed, I have asked auditors what they did to verify the account. They usually state that they **relied on reports from the management of the company**. In China, the only way to verify the authenticity of a bank account is to arrive at the bank unannounced and look at the computer screen while standing BEHIND the counter as the clerk makes an unplanned query. Virtually no bank in China will allow this, **which means that audit verifications of Chinese bank accounts are typically of no value**."*

That's a pretty scary accusation. Interestingly, he specifically highlights Fujian...

It's rare to see such high margins, especially in Fujian

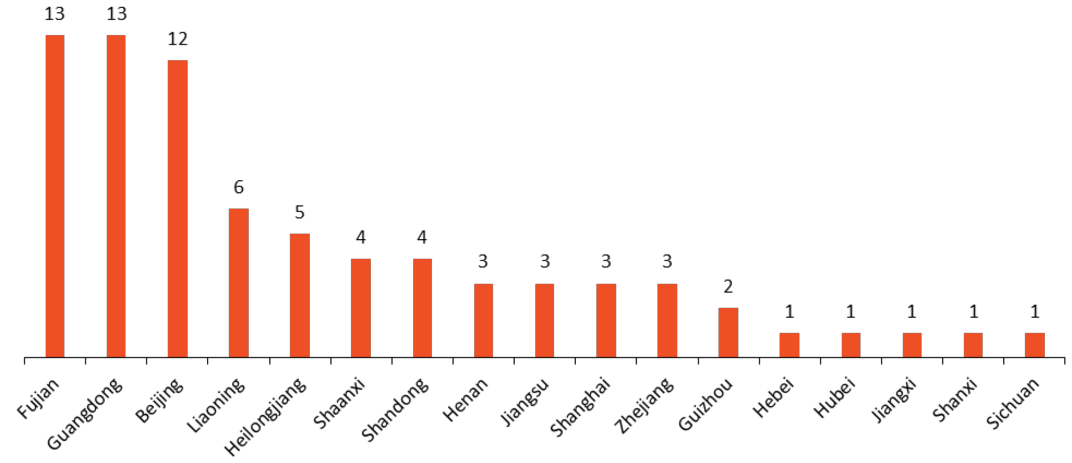
*"I often see fake companies report profit margins of 50%. China is a very difficult country in which to do business and I have never seen a legitimate Chinese company with profit margins even approaching this level, not even state owned monopoly companies. **It is certain that Chinese companies located in rural Fujian, Shaansi or Heilongjiang do not generate margins at this level** [our emphasis]. These high margins are then the explanation for why the company has so much free cash; they are so profitable they are printing money. The claim is that they have some unique product or some technical monopoly. In my experience, these claims are never true, as just a few minutes of careful thought would reveal."*

Fujian is at the epicentre of China's fraud epidemic

The Chinese province of Fujian is often mentioned in tandem with corporate fraud. Indeed, our own analysis suggests that the incidence of corporate fraud is higher in Fujian than almost any other Chinese province, especially when adjusting for population and GDP. As we pointed out in our report, CORPORATE FRAUD: Slandering Fujian? (14 Mar 2018), our analysis of 76 alleged and confirmed Chinese Fake Cash Flow Frauds (excluding Hong Kong) revealed that 13 came from Fujian, taking joint first place with Guangdong (the adjacent province), while Beijing was not far behind in third place with 12, as Figure 3 shows. While Fujian recorded 17% of all our alleged frauds, it accounts for just 3% of the country's population, 3% of its listed companies (those with a market cap exceeding US$1bn) and 4% of its GDP. You could say that it's been punching well above its weight.

[1] Shareprophets: The Industrial Scale China stock Fraud in Fujian home to Naibu, China Chaintek and Camkids revealed, 22 Sep 2014
[2] China Law Blog: Three Keys to Spotting a Fraudulent Chinese Company, 2 Feb 2016

Figure 3: Number of Alleged Fake Cash Flow Frauds by Chinese Province



Source: GMT Research

All the sportswear frauds came from Fujian

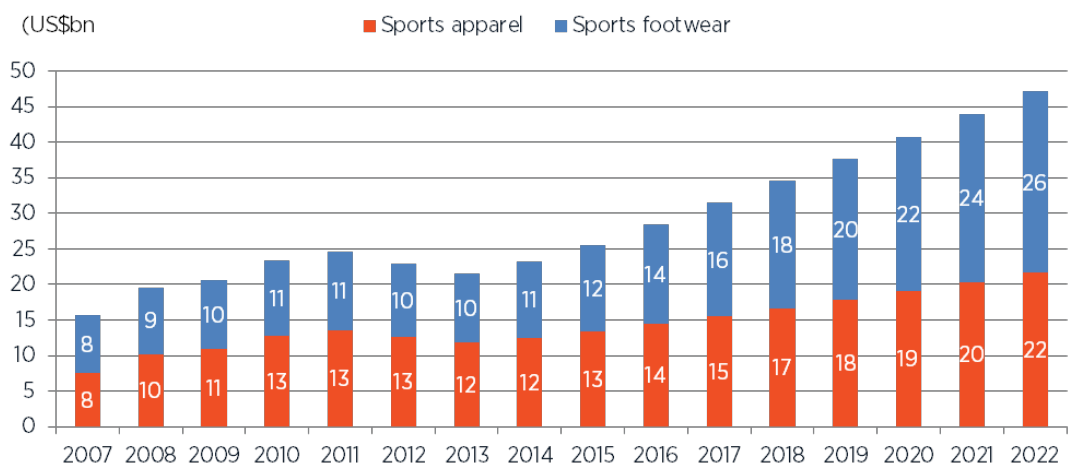
This should be of concern to investors because **every one of the nine frauds in the Chinese footwear and sportswear industries came from Fujian**, as do three of the companies currently listed (more on which ones later). Maybe this is not a total surprise given that Fujian is a major textile centre. It's unfair to regard a company as a fraud simply because it is associated with a certain province. As a result, in the rest of this report we aim to take a slightly more scientific approach in determining which companies have fraud-like traits.

The foreigners are coming

A large and fast-growing market

The Chinese sportswear market is large and fast growing. Euromonitor estimated the retail value of the market was around US$31bn in 2017, which makes it the second largest market after the US which is worth around US$110bn. However, while the US is growing at 2.5% per annum, the Chinese market is growing at 10%. Euromonitor forecasts growth of 8% per annum over the next five years, hitting a total retail value of US$47bn by 2022, as shown in Figure 4. The market is split fairly evenly between sports apparel and sports footwear, with each segment expected to achieve similar growth rates.

Figure 4: Chinese sportswear market retail sales value



Note: Historic Constant 2017 Prices, Forecast Constant 2017 Prices; Source: Euromonitor International

Government pushing sports activities

China clearly has the potential to become the world's largest sportswear market. There are around 415m millennials in China which exceeds the 350m people that make up the entire working population of the US and Western Europe combined. While rising wealth is a driver of growth, the Chinese government is actively promoting sports for national prestige and to counter rising rates of certain health problems such as obesity and diabetes.

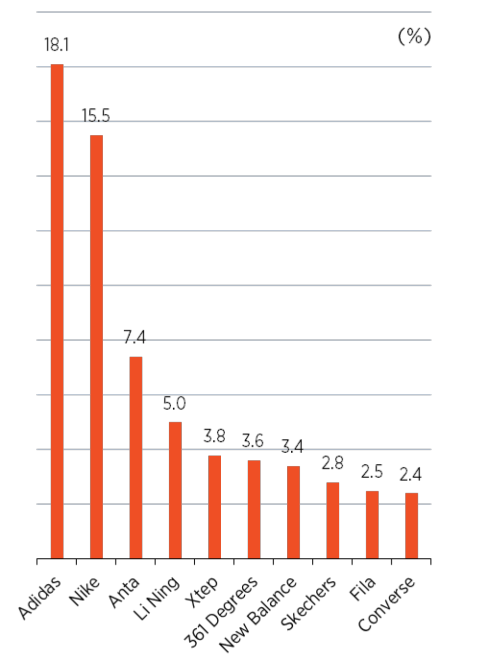
Calculating individual brand market shares is a bit tricky; especially when there are concerns that reported revenue numbers have been inflated. The market share numbers quoted by Euromonitor are based predominantly on revenues provided by the individual companies which are confirmed via channel checks and surveys. We suspect the numbers are not necessarily reliable and cannot be used to corroborate reported revenue.

We don't entirely trust the numbers

The Chinese market is dominated by foreign brands, Nike and Adidas, with shares of 18% and 16%, respectively, of retail sales value, as shown in Figure 5. Their combined share has grown by 8.5ppts over the past five years, as shown in Figure 6. Chinese brands, Anta (7.4%), Li Ning (5.0%) and Xtep (3.8%) are in third to fifth place; however, they have lost 4.2ppts of combined market share over the past five years, as shown in Figure 7. Clearly, **Chinese consumers have a growing appetite for premium foreign brands**.

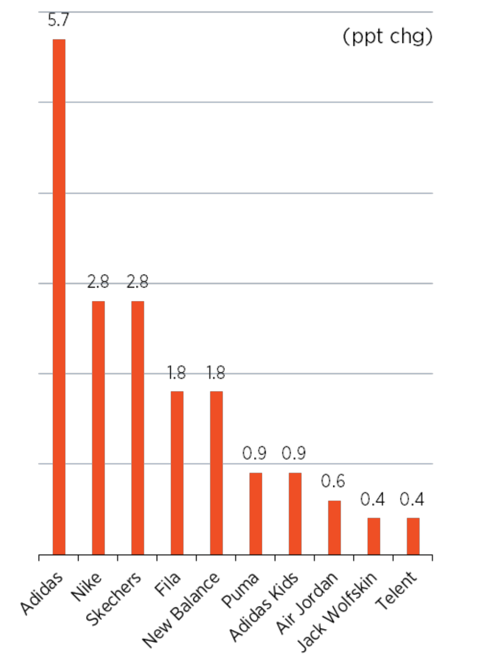
Foreign brands are eating away at local market share

Figure 5: Market share retail sales top 10 Chinese sportswear local brand names: 2017



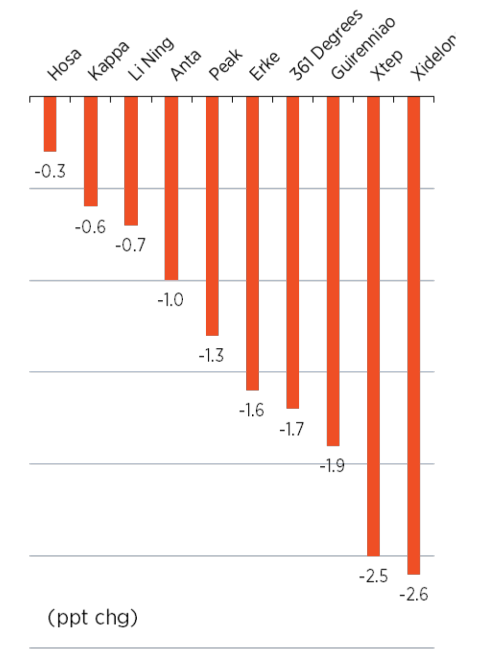
Source: Euromonitor

Figure 6: Top 10 market share gainers local brand names: 2012 to 2017



Source: Euromonitor

Figure 7: Top 10 market share losers local brand names: 2012 to 2017

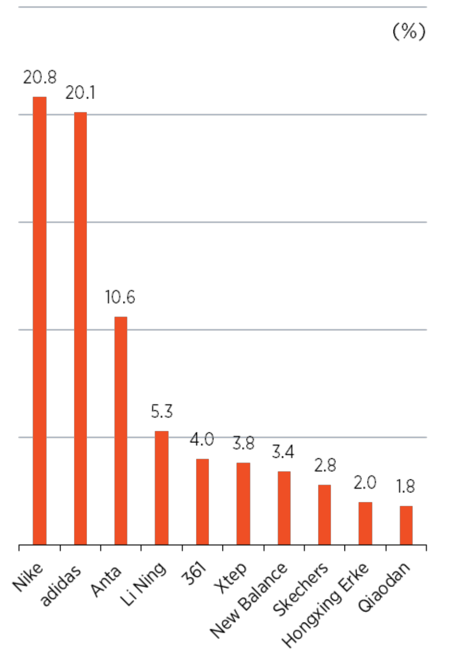


Source: Euromonitor

Market shares of individual brands is not the same as company market shares. For example, Nike owns Converse, Air Jordan and Nike Kids, while Adidas owns Reebok and Adidas Kids. Once again, these two were the largest national brand owners in China in 2017, with Nike on an estimated 21% share of retail sales value and Adidas on 20%, as shown in Figure 8. They also gained the largest market share over the past five years at 4.0ppts and 6.7ppts, respectively, as shown in Figure 9.

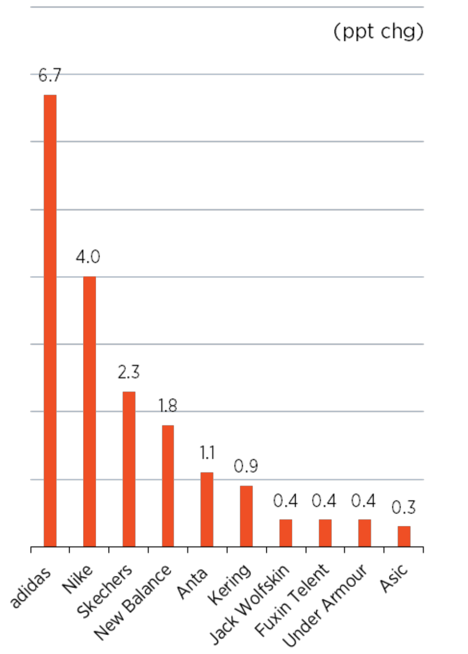
Xtep and 361 have lost considerable share

Figure 8: Market share retail sales top 10 Chinese sportswear local brand owners: 2017



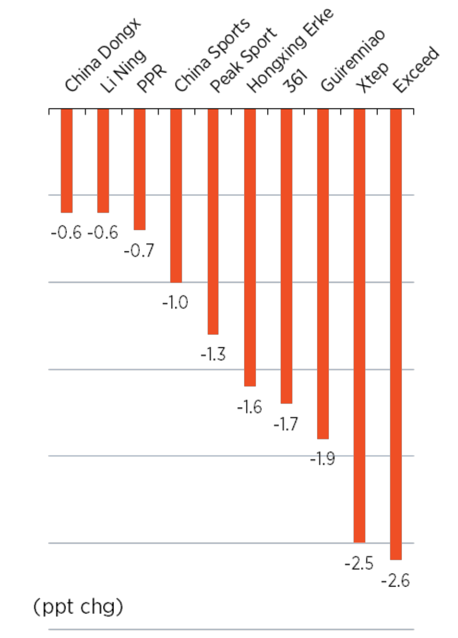
Source: Euromonitor

Figure 9: Top 10 market share gainers local brand owners: 2012 to 2017



Source: Euromonitor

Figure 10: Top 10 market share losers local brand owners: 2012 to 2017



Source: Euromonitor

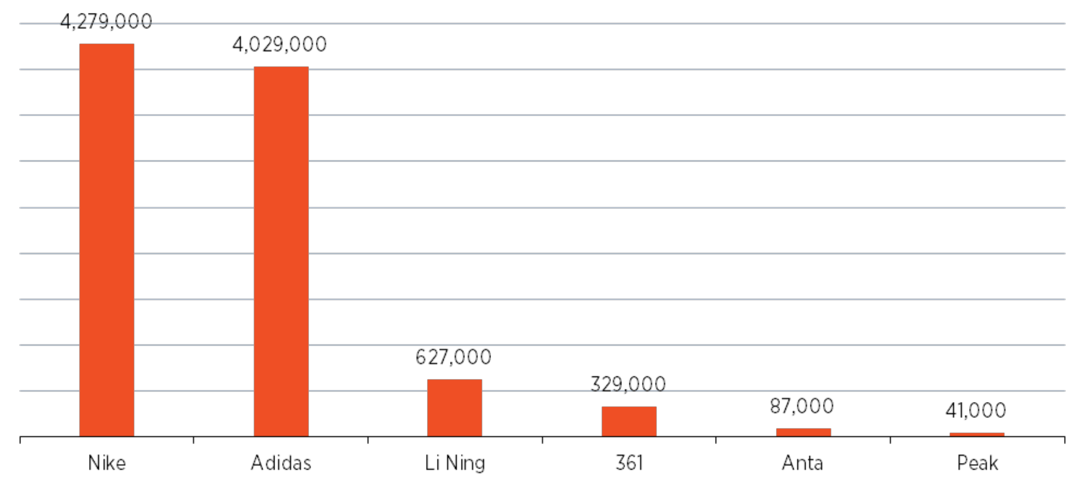
Anta has offset losses by acquiring local franchises of foreign brands

Anta acquired the Chinese franchise of Fila in 2009 which has helped offset its market share declines. Thanks to Fila's gains, Anta has grown its market share by 1.1ppts over the past five years to 11%. Li Ning has lost 0.6ppts to 5.3%. Meanwhile, 361 Degrees and Xtep have lost 1.7ppts and 2.5ppts, respectively, of market share in five years, taking them down to 4.0% and 3.8%.

Anta is not much loved

A quirky way to see how well the brands are liked in China is to monitor their number of Weibo followers, which is China's version of Twitter. This analysis was conducted by Highsnobeity[3], a media brand and production agency, in February 2018. It showed that Nike had 4.3m followers, followed by Adidas on 4.1m, a similar order to their estimated market share. Interestingly, Anta was a very distant fifth place with just 87,000 followers. This is not representative of real revenues, but it suggests that Anta's brand does not have much of a following in China. By comparison, Li Ning and 361 Degrees are well followed.

Figure 11: Chinese sportswear Weibo followers



Source: Highsnobeity

[3] Highsnobeity: China's Sportswear Industry and the Brands You Should Know, 18 Feb 2018

Anta, 361 Degrees and Xtep are all focused on the mass market. When venturing into the high-end, Chinese companies have tended to acquire the local franchise of established high-end brands, such as Fila, Descente and Kappa, as shown in Figure 12.

Local brands are focused on the mass-market, foreign brands are bought in for high-end

Figure 12: Chinese sportswear number of stores and target market

National Brand Owner	Global Brand Owner	No. of Stores YE17	Market Segment	Market Share Retail Sales (%)
361 Degrees	361 Core (incl. Kids)	5,808	Mass	4.1
Anta Sports	Anta (incl. Kids)	9,467	Mass	8.0
Anta Sports	Fila (incl. Kids)	1,086	High	2.6
Anta Sports	Descente	64	High	na
China Dongxiang	Kappa	1,487	High	0.5
Li Ning	Li Ning	6,262	Mass	5.3
Peak Sports	Peak	5,999*	Mass	1.6
Xtep	Xtep	c.6,000	Mass	3.8

*According to 2015 Annual Report; Source: Annual Reports, Euromonitor

There is a surprising divergence in price between foreign and domestic brands. The average price of the most popular shoes sold by Nike, Adidas and New Balance is currently RMB960 (US$150) according to their online Chinese stores, as shown in Figure 13; however, Chinese brands price at a significant discount of 60% to 85%. Xtep appears to be the cheapest, retailing for an average of RMB155/shoes (US$24), followed by 361 Degrees (RMB186), Anta (RMB292) and then Li Ning (RMB381). Fila sells for around RMB728/shoes which is a 24% discount to the main foreign brands but more than double the local ones.

Figure 13: Average shoe selling prices by brand in China

(Average prices in RMB)	Nike	Adidas	New Balance	Fila	Li Ning	Anta	361°	Xtep
Basketball	**1,189**	**890**	**na**	**812**	**395**	**416**	**237**	**165**
- Basketball female	na	na	na	na	283	na	na	na
- Basketball male	1,189	890	na	812	507	416	237	165
Fashion sneakers	**870**	**na**	**675**	**691**	**344**	**237**	**171**	**138**
- Fashion sneakers female	901	na	655	680	389	217	206	141
- Fashion sneakers male	839	na	695	701	299	257	136	135
Outdoor	**na**	**615**	**na**	**na**	**na**	**na**	**na**	**na**
- Outdoor female	na	611	na	na	na	na	na	na
- Outdoor male	na	619	na	na	na	na	na	na
Runner	**1,026**	**1,068**	**765**	**681**	**405**	**321**	**150**	**131**
- Runner female	973	1,071	739	724	397	311	146	125
- Runner male	1,079	1,065	791	638	413	331	154	137
Football	**1,369**	**1,244**	**1,032**	**na**	**na**	**193**	**na**	**215**
- Male football	1,369	1,244	1,032	na	na	193	na	215
Total average	**1,114**	**954**	**824**	**728**	**381**	**292**	**186**	**155**

Source: www.361sport.com, www.anta.cn, https://store.lining.com, www.nike.com/cn/zh_cn, www.xtep.com.cn, www.fila.cn, www.adidas.com.cn, www.adidas.com.cn, GMT Research

Telling fake from fabulous

Perhaps the obvious place to start testing the credibility of the Chinese sportswear companies' financials is to put them through our Fake Cash Flow model to see what turns up. This model was designed to identify companies with similar traits to past frauds. In devising it, we put 85 confirmed frauds through our Accounting & Governance Screen in order to map their financials. We then constructed a combination of flags which was able to correctly identify 73% of past frauds but was triggered by less than 1% of all companies listed globally, except for China where the incidence rate was 6-7%. When we claim that the model correctly identified past frauds, we mean that the companies triggered the maximum four flags. A further 24% of frauds raised three flags, avoiding the fourth flag by somehow being able to pay a reasonable dividend. Around 10% of all listed companies also triggered three flags.

We develop a model to check for fake cash flow frauds

Typical fraud-like characteristics include super-normal profitability (high operating margins and/or returns on production assets[4]) together with high levels of non-production assets[5] (normally cash and prepayments but sometimes receivables), low dividends and other fraud-like traits, such as a reliance on short-term debt, obscure auditors, etc, as shown in Figure 14. For more information, please refer to our report FAKING CASH FLOWS: And How to Spot it (10 May 2017).

High levels of profitability and a build-up of non-production assets were recurring

Figure 14: Summary of Fake Cash Flow model methodology

	Point Calculation	Point Calculation
High operating margin	Critical criteria: 1 point	Operating Margin >80%ile relative in industry peers
High return on production assets		Op Profit/(PPE + Inv) in the >80%ile relative to industry peers
High level of non-production assets	1 point	(Total Assets-Production Assets)/(COGS or Sales) >80%ile versus peers
Build-up of non-production assets		Increase in Non-Production Assets relative to Sales or COGS >80%ile peers
Low dividends and buybacks	1 point	Dividends and Buybacks are less than 30% profit
A relatively unknown auditor	1 point if >1	Relatively obscure auditor
Incorporation and Domicile		Different country of incorporation versus domicile
Debt structure		If Short Term Debt >75% Total Debt, or no debt at all
Sector		Operates in sector prone to fraud
Fake Cash Flow Fraud	**Max 4pts**	**A score of 3 or 4 is problematic and requires further investigation**

Source: GMT Research

To put the Chinese sportswear companies in context, we have included two other samples against which we wish to compare them: global leaders in sportswear (primarily footwear) and past frauds in the sector. Figure 15 lists the nine global leaders that we have selected, including Adidas, Asics and Nike. In general, these companies own their brands, subcontract manufacturing and sell through a mixture of own-operated and franchised stores. We think it is unlikely that many genuine companies can exceed their profitability. A brief description of each company is provided in Appendix 1.

We wished to compare existing sportswear companies to past frauds and global leaders to get perspective

Figure 15: Sportswear global leaders

Company	BBG	Mkt Cap (US$m)	Sales (US$m)	Industry classification	Sub-industry
Adidas	ADS GY	51,462	23,969	Textiles, Apparel & Luxury Goods	Apparel, Accessories & Luxury
Asics	7936 JP	3,794	3,568	Textiles, Apparel & Luxury Goods	Footwear
Columbia Sports	COLM US	5,752	2,466	Textiles, Apparel & Luxury Goods	Apparel, Accessories & Luxury
Fila Korea	081660 KS	1,447	2,239	Textiles, Apparel & Luxury Goods	Apparel, Accessories & Luxury
Nike	NKE US	109,680	34,350	Textiles, Apparel & Luxury Goods	Footwear
Puma	PUM GR	7,361	4,672	Textiles, Apparel & Luxury Goods	Footwear
Skechers	SKX US	4,664	4,164	Textiles, Apparel & Luxury Goods	Footwear
Under Armour	UAA US	6,951	4,977	Textiles, Apparel & Luxury Goods	Apparel, Accessories & Luxury
Wolverine	WWW US	2,835	2,350	Textiles, Apparel & Luxury Goods	Footwear

Source: GMT Research, Bloomberg

[4] Production assets: PP&E (less work in progress) plus inventory
[5] Non-production assets: Total Assets less PP&E, inventory, deferred tax assets and intangibles

In Figure 16, we detail the nine likely historic Chinese frauds. Most, but not all, of these companies were predominantly focused on sports footwear. More detail surrounding the alleged frauds is contained in Appendix 2.

There's a lot of frauds to choose from

Figure 16: Frauds in the Chinese sportswear industry

Name	Ticker	Date of IPO	Peak Mkt Cap (US$m)	Fraud?	Date Susp.	Industry classification	Sub-industry
China Hongxing	CHHS SP	Nov 2005	2,093	Confirmed	Feb 2011	Textiles, Apparel, etc.	Apparel, Accessories, etc.
China Sports	CSPORT SP	Jul 2007	464	Probable	Nov 2017	Textiles, Apparel, etc.	Apparel, Accessories, etc.
Eratat Lifestyle	ERAT SP	Apr 2008	116	Confirmed	Jan 2014	Specialty Retail	Apparel Retail
Flyke	1998 HK	Mar 2010	235	Confirmed	Mar 2014	Textiles, Apparel, etc	Footwear
Fuguiniao	1819 HK	Dec 2013	1,205	Probable	Aug 2016	Textiles, Apparel, etc.	Footwear
Fujian Nuoqi	1353 HK	Jan 2014	190	Confirmed	Jul 2014	Textiles, Apparel, etc.	Footwear
Goldrooster	GO8 GR	May 2012	127	Confirmed	Feb 2015	Textiles, Apparel, etc.	Apparel, Accessories, etc.
Ming Le Sports	ML2K GR	June 2012	170	Confirmed	na	Textiles, Apparel, etc.	Apparel, Accessories, etc.
Naibu Global	NBU LN	Apr 2012	128	Confirmed	Jan 2015	Textiles, Apparel, etc.	Footwear

Source: GMT Research, Bloomberg

The scores from our Fake Cash Flow model for each company are shown in Figure 17. Of our global leaders, only Columbia Sports triggers any form of alert, raising three flags. The company generates a high 36% return from its production assets, it has a high level of non-production assets (specifically cash) and no debt. It returned 41% of profit to shareholders in FY17 but could easily have given more. Still, the company does not appear to be generating excessive quantities of internal cash flow which is a common trait of frauds, and so we think it is probably fine.

Global leaders score normally under our Fake Cash Flow model

Figure 17: Fake Cash Flow Scores

Company	BBG	Fiscal YE	High operating margin[1]	High return on production assets[1]	High level of non-production assets	Build-up of non-production assets[1]	Low dividends and buybacks	A relatively unknown auditor	Different incorp. and domicile	Reliance on ST debt or no debt	Sector	Fake Cash Flow Score (Out of 4)
Fabulous: Global leaders in sportswear			Critical criteria: 1pt		1pt		1pt	1pt if >1				Max 4
Adidas	ADS GY	12/2017	0	1	0	0	0	0	0	0	1	1
Asics	7936 JP	12/2017	0	0	0	0	0	0	0	0	1	0
Columbia	COLM US	12/2017	0	1	1	0	0	0	0	1	1	3
Fila Korea	081660 KS	12/2017	0	0	1	1	1	0	0	0	1	0
Nike	NKE US	05/2017	0	1	0	0	0	0	0	0	1	1
Puma	PUM GR	12/2017	0	0	0	0	1	0	0	1	1	0
Skechers	SKX US	12/2017	0	0	0	0	1	0	0	0	1	0
Under Armour	UAA US	12/2017	0	0	0	0	1	0	0	0	1	0
Wolverine	WWW US	12/2017	0	0	0	1	0	0	0	0	1	0
Fake or fab?: Chinese sportswear												
361 Degrees	1361 HK	12/2017	1	1	1	1	0	0	1	0	1	3
Anta	2020 HK	12/2017	1	1	1	1	0	0	1	1	1	3
Ch. Dongxiang	3818 HK	12/2017	0	0	1	1	0	0	1	0	1	0
Li Ning	2331 HK	12/2017	0	0	0	0	1	0	1	0	1	0
Pou Sheng	3813 HK	12/2017	0	0	0	0	1	0	1	1	1	0
Xtep	1368 HK	12/2017	0	1	1	1	0	0	1	0	1	3
Yue Yuen	551 HK	12/2017	0	0	0	0	1	0	1	0	1	0
Fake: Past frauds												
China Hongxing	CHHS SP	2008	1	1	1	1	1	1	1	0	1	4
China Sports	CSPORT SP	2008	0	1	1	0	1	1	1	1	1	4
Eratat	ERAT SP	2012	1	1	1	1	1	0	1	1	1	4
Flyke	1998 HK	2011	1	1	1	0	1	0	1	1	1	4
Fuguiniao	1819 HK	2015	1	1	1	1	0	0	0	0	1	2
Fujian Nuoqi	1353 HK	2013	1	1	1	1	1	0	0	1	1	4
Goldrooster	GO8 GR	2012	1	1	1	0	1	1	0	1	1	4
Ming Le Sports	ML2K GR	2012	1	1	1	1	1	1	0	1	1	4
Naibu	NBU LN	2013	1	1	1	0	1	1	1	1	1	4

[1]In the top quintile relative to industry peers; Source: GMT Research, Bloomberg

Perhaps unsurprisingly, eight out of the nine historic Chinese frauds triggered all four flags: returns were abnormally high, there was a build-up of non-production assets (mainly cash), low dividends and fraud-like traits (reliance on short-term debt, obscure auditor, etc.). Only Fuguiniao avoided a full four points, triggering just two. It managed to pay decent dividends (44% in FY15) and raised longer-term debt. However, the company triggered our Excess Capital red flag which is another common trait of Fake Cash Flow frauds. This suggests that it was raising an abnormally high amount of external capital relative to internal requirements. Indeed, between FY13 and FY15, the company paid dividends of RMB579m from free cash inflows of RMB945m yet raised an additional RMB1.9bn in debt and equity. That's way too much.

Eight out of nine frauds triggered all 4 red flags

Our Excess Capital model is a recent addition to our Accounting & Governance Screen (we only devised it in January 2018), but we intend to incorporate it into our Fake Cash Flow model as it is a very strong fraud indicator. Subsequent research has shown that of the 85 frauds analysed to create our Fake Cash Flow model, **around 90%[6] triggered our Excess Capital red flag**. Importantly for our analysis in this report, of the 8% of frauds from our sample that avoided triggering all four flags because they paid reasonable dividends, all triggered our Excess Capital flag. In other words, dividends were being financed with external capital. We discuss this in more detail later.

Most frauds triggered our excess capital model which is a new addition to our arsenal

So far, the results are exactly what we would expect: the global leaders score well under our Fake Cash Flow model whilst the historic frauds score poorly. However, it's not such a clear outcome for our Chinese sportswear companies. Four of the companies scored zero on our Fake Cash Flow model as they are not unusually profitable. The other three, Anta Sports, 361 Degrees and Xtep, score three out of four but only avoid triggering a full four as their pay-outs to shareholders were above our 30% threshold. However, similar to Fuguiniao, all three trigger our Excess Capital flag and a large portion of their dividends appear to have been financed from external capital. **This raises the possibility that a material portion (but not a majority) of their sales have been fabricated**.

Unfortunately, Anta, 361 Degree and Xtep look more like frauds

Spotting sportswear frauds

In the following pages, we set out the financial metrics, specifically for sportswear companies, which we think give the greatest insight into whether they might be frauds. These include components from our Fake Cash Flow model and also incorporates the Excess Capital model (for the sake of brevity we have stripped out the less important components in our Fake Cash Flow model; these are included in Appendix 3). We have also added metrics for inventories and prepayments as these appear to be common to most past frauds in this sector. The five key components are as follows:

In this report, we talk through the financial metrics of most relevance to sportswear company frauds

1. **High profitability:** Almost all frauds are enormously profitable relative to peers in terms of operating margins and/or returns on production assets.

2. **Large non-production assets:** Fake profits cannot be paid out as dividends and build-up as large non-production assets, in particular cash but also receivables or prepayments.

3. **Excess capital:** Frauds generally generate cash flows which are too high relative to requirements.

4. **Small inventories:** Inventories (which are harder to fake) at frauds are normally small relative to sales.

5. **A high level of prepaid expenses relative to inventories:** Over-sized prepayments relative to inventories are often evidence of the round-tripping process.

[6] Where the historical financials were available to conduct the analysis (4 or more years)

The first three metrics, high profitability, large non-production assets and excess capital, are common to most fake cash flow frauds. Of the 85 past frauds used as the basis of the work carried out in our earlier Faking Cash Flow report, 65% triggered all three flags compared to just 6% of all listed companies globally. If we include the last two components (small inventories and inventories relative to prepayments), the incidence rate falls to less than 1% for all listed companies globally. However, we can't conduct this latter analysis for the 85 past frauds as Bloomberg only recently started collating prepayments data (while the data for many of the frauds is up to ten years old). **Still, the important point is that this combination of flags is extremely rare**.

A rare combination of flags

It might be argued that there is a natural correlation between our metrics, for example, that high levels of profitability lead to a build-up of non-production assets, in particular cash. We have devised a correlation analysis[7] to demonstrate that this is not true, as shown in Figure 18. **There is no real correlation between companies which are highly profitable (either margins or returns) and those generating excess capital or maintaining high cash balances** (see circled boxes). As such, a balance sheet bloated with cash and other assets is not a product of high profitability, but something else, possibly fraud.

No correlation between profitability and large quantities non-production assets

Figure 18: Correlation coefficient between financial metrics

	Operating Margin	Return on Prod. Assets	Non-Prod. Assets/ Sales	Av. Cash/ Sales	Excess Capital	Inventory/ Sales	Prepay./ Inventory
Operating Margin		0.68	0.15	0.19	0.19	0.01	0.00
Return on Production Assets	0.68		(0.06)	0.01	0.17	(0.25)	0.04
Non-Production Assets/Sales	0.15	(0.06)		0.68	0.28	0.13	0.14
Av. Cash/Sales	0.19	0.01	0.68		0.32	0.07	0.10
Excess Capital	0.19	0.17	0.28	0.32		(0.05)	0.03
Inventory/Sales	0.01	(0.25)	0.13	0.07	(0.05)		(0.34)
Prepayments/Inventory	0.00	0.04	0.14	0.10	0.03	(0.34)	

Source: GMT Research

It is important to stress the enormous difference between what real companies report versus frauds: operating margins at past sportswear frauds are, on average, 3x higher than the global leaders in the sector; returns on production assets are 6x higher; cash is 3x higher; non-production assets are 3x higher; prepaid expenses are 8x higher; and excess cash flow/sales is 7x higher. The point is that **frauds report far superior profitability than even established global leaders and yet return less to shareholders than they could**. Indeed, for each of the metrics listed in Figure 19, the average recorded by past sportswear frauds is in the top quintile (or bottom quintile for inventories) relative to a wider sample of over 400 textile peers. Unfortunately, this is also true in most instances for Anta, 361 Degrees and Xtep.

Frauds appear far more profitable than real companies

Figure 19: Main fraud detection metrics

Criteria	Textiles, Apparel & Luxury Goods Industry			Average of Global Leaders	Av. or Median of Past Frauds	Fraud/ Global Leaders (x)	Anta Sports	361 Degrees	Xtep
	20th %ile	50th %ile	80th %ile						
Operating Margin (%)	2.8	7.2	14.9	7.2	20	2.8	24	17	13
Return on Production Assets (%)	4.5	14.9	33.7	24.6	137	5.6	107	44	50
Non-Production Assets/Sales (%)	23	39	67	35	90	2.6	81	176	144
Av. Cash & Equivalents/Sales (%)	3.2	10.4	24.0	14	45	3.2	50	105	73
Excess Cash Flow/Sales (%)	(0.4)	1.9	6.2	1.9	13	6.7	7	14	5
Av. Inventory/Sales (%)	13.0	19.6	29.8	19.0	6.4	0.3	13	16	14
Prepaid Expenses/Inventory (%)	1.2	3.7	10.7	11.4	91	8.0	55	81	58

Source: GMT Research

[7] Should no correlation exist, the correlation coefficient will equal zero whilst a perfect correlation is one; a moderate correlation is 0.3 whilst a strong one is 0.7

In Figure 20 we have summarised how each of the 25 companies across our three samples score according to the metrics discussed in the report. We have shaded the cells where the ratios are in line with the characteristics of past frauds. Visually, our fraud sample has a greater amount of shading than our global leaders whilst our Chinese sportswear companies have a mix.

Figure 20: Main fraud metrics for sportswear companies

Company	BBG	Fiscal Year End	Operating Margin (%)	Return on PA[1] (%)	NPA[2]/ Sales (%)	Net Flows/ Sales -5yrs (%)	Average Cash/ Sales (%)	Average Inventory/ Sales (%)	Prepaid Expenses/ Inventory (%)	Average Rec./ Sales (%)	Div. & SBB[3]/ Profit (%)	ST Debt/ Debt (%)	Fake Cash Flow Score (Out of 4)
Fabulous: Global leaders in sportswear			Main metrics							Other metrics			
Adidas	ADS GY	12/2017	9.8	38	28	0	9	17	7	11	35	12	1
Asics	7936 JP	12/2017	4.9	16	47	3	19	22	0	17	33	10	0
Columbia	COLM US	12/2017	10.7	36	49	4	27	19	13	14	41	No debt	3
Fila Korea	081660 KS	12/2017	8.6	24	27	2	6	23	4	15	4	25	0
Nike	NKE US	05/2017	12.3	47	39	1	15	15	27	10	103	9	1
Puma	PUM GR	12/2017	5.9	25	29	1	10	19	6	12	8	80	0
Skechers	SKX US	12/2017	9.2	29	31	3	18	21	7	9	0	12	0
Under Arm	UAA US	12/2017	0.6	2	29	0	6	23	22	12	0	17	0
Wolverine	WWW US	12/2017	1.0	5	34	3	18	12	16	11	51	5	0
Fake or fab? Chinese sportswear													
361 Degrees	1361 HK	12/2017	16.6	44	176	14	105	16	89	42	32	0	3
Anta	2020 HK	12/2017	23.9	107	81	7	50	13	23	11	63	100	3
China Dongx	3818 HK	12/2017	10.4	38	748	(17)	123	24	616	18	617	45	Na
Li Ning	2331 HK	12/2017	5.0	23	54	4	25	12	31	14	8	46	0
Pou Sheng	3813 HK	12/2017	4.1	13	20	(1)	3	30	15	8	27	100	0
Xtep	1368 HK	12/2017	13.0	50	144	5	73	14	80	38	66	45	3
Yue Yuen	551 HK	12/2017	6.3	16	44	1	12	18	0	13	193	35	0
Fake: Past frauds													
China Hongx	CHHS SP	12/2008	18.4	73	125	27	80	4	1,065	16	23	4	4
China Sports	CSPORT SP	12/2008	14.0	251	45	11	26	1	36	13	17	100	4
Eratat	ERAT SP	03/2012	18.3	205	90	9	28	1	36	54	8	No debt	4
Flyke	1998 HK	12/2011	18.1	148	55	5	22	4	82	26	19	100	4
Fuguiniao	1819 HK	12/2015	27.2	137	193	26	100	17	30	36	44	41	2
Fujian Nuoqi	1353 HK	12/2013	17.9	49	93	13	40	17	142	11	0	100	4
Goldrooster	GO8 GR	12/2012	20.1	1,167	51	12	27	1	171	14	0	No debt	4
Ming Le Sports	ML2K GR	12/2012	24.4	671	62	10	26	2	68	24	0	No debt	4
Naibu Global	NBU LN	12/2013	21.7	22	62	307	24	5	97	30	3	No debt	4

[1]Production Assets; [2]Non-Production Assets; [3]Share Buyback; Source: GMT Research, Bloomberg

1. Highly profitable

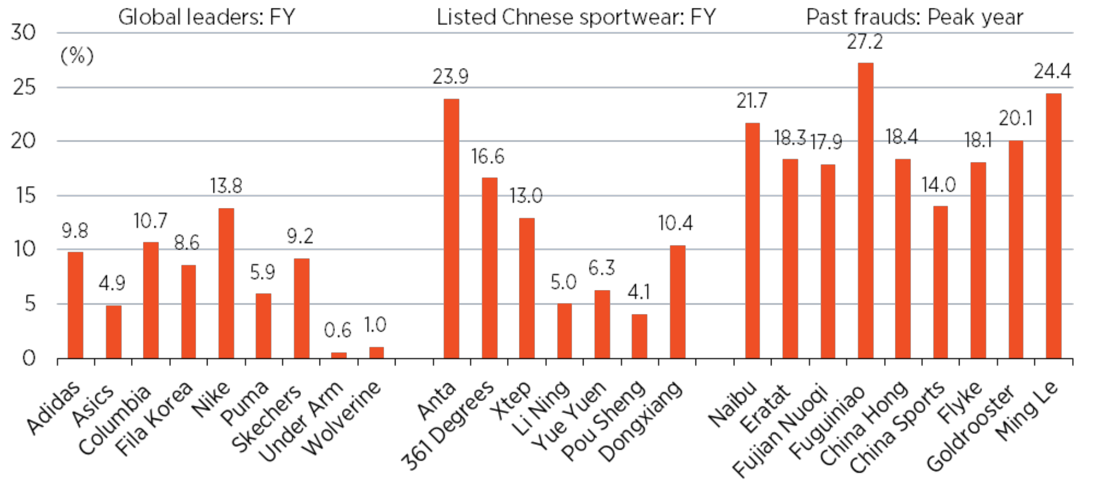
Our past research shows that 98% of past frauds are overly profitable in terms of operating margins and/or returns on production assets[8] relative to peers. The reason for this super-normal profitability likely stems from the way a fraud is constructed. In most instances, a fake cash flow fraud simply exaggerates the revenues generated from existing production assets (PP&E and inventory). Given that production assets are tangible and, therefore, relatively easy to verify, it is far harder to fake them. As a result, revenues tend to be inflated (including COGS), but not fixed costs (such as SG&A). This manifests itself in companies being overly profitable in terms of operating margins and/or returns on production assets.

Almost all frauds are highly profitable which stems from the way the fraud is committed

Companies in the textile industry group **report average operating margins of around 7%** (the top quintile is over 15%). Our global sportswear leaders were in line with this in the last financial year, as shown in Figure 21; Nike had the highest operating margin at around 14%. However, these pale in comparison to the average 20% margin reported by our past sportswear frauds at their peak profitability. Three of the currently listed Chinese sportswear companies standout as having unusually high operating margins: Anta Sports, 361 Degrees and Xtep[9]. Indeed, their margins are in the top quintile of textile peers. While we might have expected our global leaders to have superior profitability to the wider textile sample, given their strong brands, it is surprising that a bunch of Chinese sportswear companies with much weaker brands are so profitable. This raises concerns that they could be artificially boosting profitability.

Average margins should be around 7% but Xtep, 361 and Anta report 13-24%

Figure 21: Operating margins



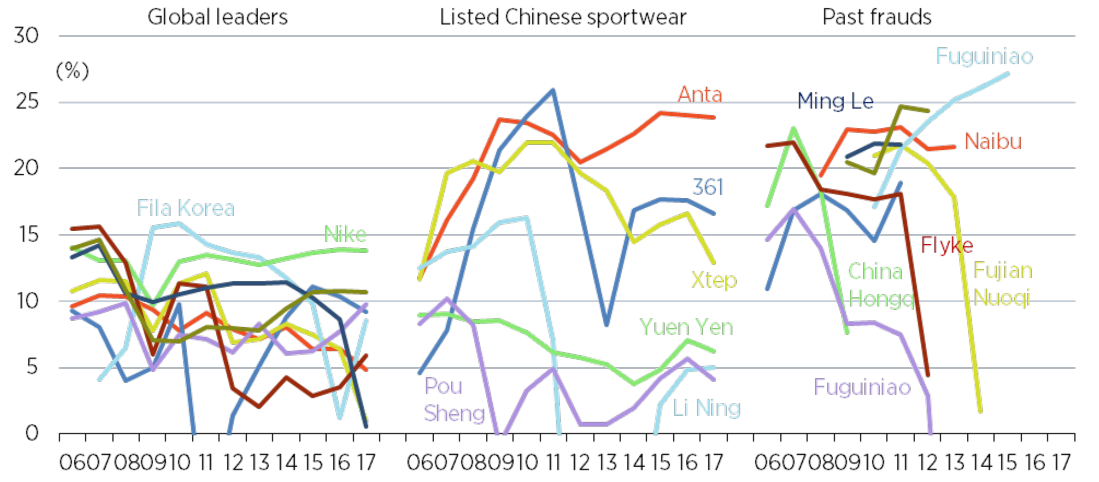
Source: GMT Research, Bloomberg

Putting these margins into a historical perspective shows just how extraordinarily high the three companies' margins are. Anta, 361 Degrees and Xtep have reported operating margins over the past decade consistently higher than those of global market leaders, as shown in Figure 22. The only companies which have ever managed to report anything approaching their levels were our historic frauds. Indeed, **Anta's 23.9% FY17 operating margin has rarely been exceeded even by the frauds**. It's worth bearing in mind that Li Ning reported super-normal margins until FY11 when its profitability collapsed. It transpired[10] that the company repurchased inventory from distributors, giving the impression that it had been channel stuffing to boost profitability.

Anta's 23.9% FY17 operating margin has rarely been exceeded

[8] Return on production assets = Operating Profit/(PP&E & Inventory)*100
[9] Normalised operating margins for Xtep before a RMB110m provision against inventories were closer to 15.1%
[10] HKEx: Estimated Results for Year 2011 and Outlook for Year 2012, 19 Jan 2012

Figure 22: Operating margins: 2006-2017

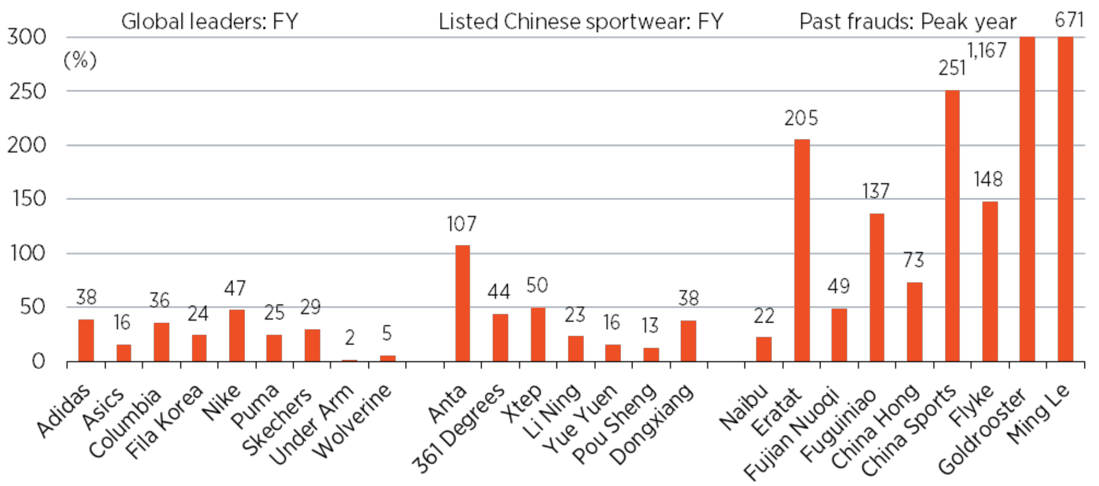


Source: GMT Research, Bloomberg

Returns on production assets: Operating Profit/ (PP&E & Inventory)

Textile companies normally report returns on production assets of around 15% (the top quintile exceeds 34%). Our global leaders averaged 25% last year. While this was high, it was nowhere near the average return of 299% reported by past frauds (dropping to 137% on a median basis). Once again, Anta, 361 and Xtep reported extremely high returns on production assets of between 44% and 107%, as shown in Figure 23, putting them in the top quintile relative to textile peers. Anta's abnormally high returns are primarily a function of its super-normal margins but also owing to a lower level of production assets. As we discuss later, this appears somewhat odd given that the company claims to have entered the capital intensive parts of the business, namely manufacturing and retailing.

Figure 23: Returns on production assets



Source: GMT Research, Bloomberg

2. A build-up of non-production assets

Non-production assets are comprised of cash, prepayments, receivables and other

The biggest problem faced by frauds is the concealment of fake profits. These cannot be paid out as dividends for obvious reasons and, as a result, need to be concealed as a fake asset somewhere on the balance sheet. However, some assets are easier to fake than others. For example, it is generally harder to fake production assets, such as inventories and fixed assets, as these are relatively easy for auditors to verify. As a result, frauds generally hide fake profit in non-production assets[11], such as cash, short-term investments, prepayments, related partly loans and, when desperate,

[11] Non-production assets are everything except for inventory, fixed assets and intangibles

receivables[12]. As a result, a build-up or high level of non-production assets relative to sales can be indicative of fraud.

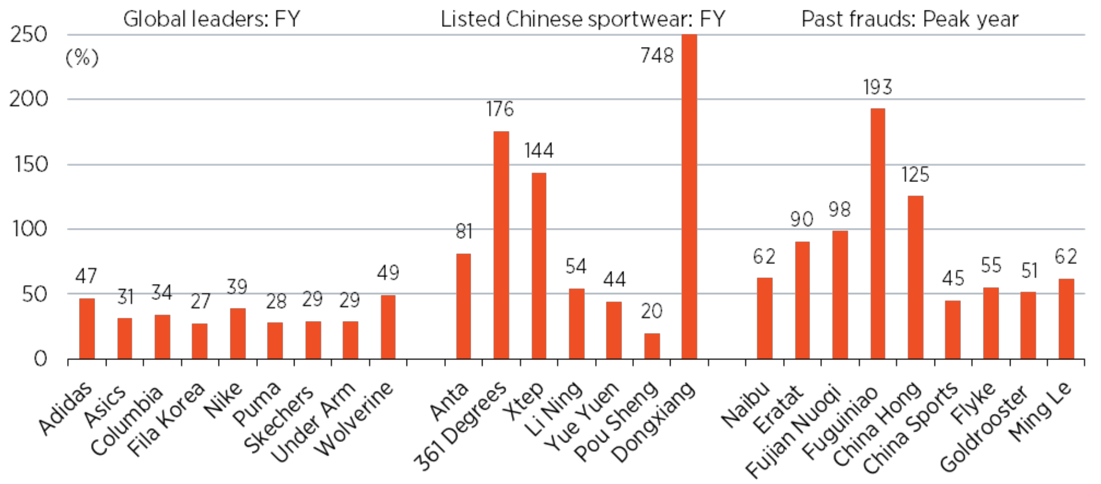
Non-production assets should be around 39% of sales

Non-production assets average 39% of sales for textile companies (the top quintile exceeds 67%). Our global leaders averaged around 35% at their most recent year-end. However, our past frauds recorded non-production assets averaging 90% of sales, as shown in Figure 24, almost three times higher than normal. Eight out of our nine historic frauds recorded non-production assets in the highest quintile relative to peers.

Anta, 361 and Xtep recorded non-production assets between 81% and 176% of sales

Anta, 361 and Xtep recorded non-production assets between 81% and 176% of sales which is well into the top quintile relative to textile peers and similar to past frauds. In each case, this was primarily cash, investments, prepayments and advances. Donqxiang also has an extremely high level of non-production assets at 748% of sales as it appears to have invested its original IPO proceeds from 2007 into the stock market. Although the company is not unusually profitable today, this high level of non-production assets might be symptomatic of faking profits in the past, in which case some of the investments might not exist.

Figure 24: Non-production assets to sales



Source: GMT Research, Bloomberg

Cash balances are the most common place to hide fake profit

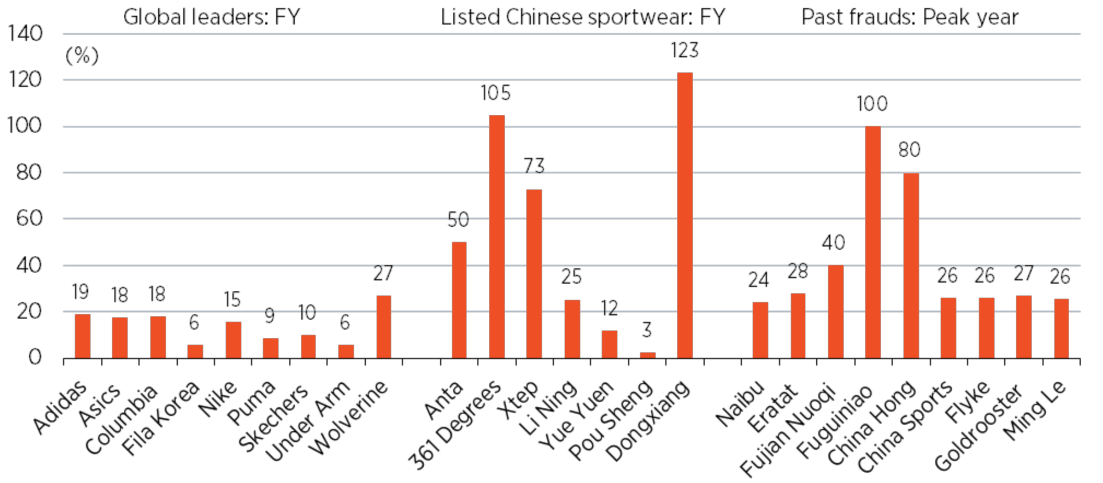
The cash balance is where frauds most commonly hide their fake profits. This is perhaps counterintuitive given that cash would seem to be the easiest asset to verify. However, as discussed earlier, it is very difficult for auditors to verify the cash balances of companies in China which makes it the obvious place to hide fake profits.

Anta, 361 and Xtep reported extremely high cash balances between 50% and 105% of sales

Companies in the textile sector **normally maintain cash balances approximating 10% of sales** (the top quintile exceeds 24%). Our global leaders were not too far off, averaging 14%; however, our past frauds all had unusually large cash balances in the highest quintile relative to peers, averaging 45% of sales. Once again, **Anta, 361 and Xtep reported extremely high cash balances between 50% and 105% of sales, similar to past frauds**, as shown in Figure 25, and well into the top quintile relative to textile peers. The relatively high cash balances of Li Ning and China Dongxiang raise the possibility that profits were faked in the past. Once again, we need to stress that our analysis indicates that there is virtually no correlation between highly profitable companies and the level of cash held on their balance sheet.

[12] Hiding fake cash flows in receivables leads to drops in operating cash flows and is easy for investors to spot

Figure 25: Average cash to sales



Source: GMT Research, Bloomberg

3. Excess cash flow

Companies faking profits normally report excess cash inflows

Companies faking their revenues normally report substantial cash inflows, even after capex, dividends, buybacks, debt repayments and acquisitions. Despite this, they typically raise additional external finance (debt and/or equity) resulting in large and rising cash balances. In reality, most frauds are likely experiencing net internal cash outflows and are reliant on external capital to continue operating or paying dividends. Excess cash inflows are a good long-term indicator of the amount of fake cash flows being generated. In our example in Figure 26, Company X generated real internal cash outflows of 500 between years 1 to 5; however, it faked cash inflows of 1,053 resulting in reported inflows of 814. The company would run out of cash in year 5, despite reporting a cash balance of 1,053. Notice how real net flows are substantially lower than those reported.

Figure 26: Abbreviated cash flow statement: An example: Company X

	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 1-5
- Real net internal cash generation (1)	(100)	(100)	(100)	(100)	(100)	(500)
- Fake internal cash flow (2)	+200	+205	+210	+216	+222	+1,053
= Reported net internal cash generation	+100	+105	+110	+116	+122	+814
- Equity (3)	+500	0	0	0	0	+500
= Net external financing	+500	0	0	0	0	+500
Real net flows (1+3)	**400**	**(100)**	**(100)**	**(100)**	**(100)**	**0**
Reported net flows (1+2+3)	**+600**	**+105**	**+110**	**+116**	**+122**	**+1,053**
Real cash balance	400	300	200	100	0	
Cumulative fake cash	200	405	615	831	1,053	
Reported cash balance	600	705	815	931	1,053	

Source: GMT Research

Real cash balances and free cash inflows are likely far lower than reported

In reality, the cash flow dynamics will look similar to Eratat Lifestyle, a confirmed fraud, shown in Figure 27. Eratat reported net cash inflows (OPCF less capex, dividends, and acquisitions) of RMB118m between FY08 and FY12. Despite this, it raised additional external finance of RMB253m over the same period, resulting in excess cash inflows of RMB372m, equal to 9% of five-year sales. This manifested itself in very high cash balances averaging 28% of FY12 sales. When the fraud was uncovered, there was only RMB73,000 of cash in the bank account, compared with the reported figure of RMB357m.

Figure 27: Abbreviated cash flow statement: Eratat Sports

(RMBm)	FY08	FY09	FY10	FY11	FY12	FY08-12
Sales	+453	+777	+899	+1,042	+1,032	+4,203
- OPCF	+9	+8	+31	+16	+147	+210
- Capex	(14)	(11)	(1)	(0)	+0	(26)
- Dividends (incl MI at subs)	(3)	(6)	(6)	(14)	(12)	(42)
- Buybacks	+0	+0	+0	+0	+0	+0
- (Acquisitions)/disposals	(24)	+0	+0	+0	+0	(24)
= Net internal cash generation	**(32)**	**(9)**	**+23**	**+1**	**+135**	**+118**
- Debt issuance, net	(50)	+0	+0	+0	+0	(50)
- Equity issuance	+71	+170	+0	+62	+0	+303
= Net external financing	**+22**	**+170**	**+0**	**+62**	**+0**	**+253**
Net surplus/(deficit)	**(11)**	**+161**	**+23**	**+63**	**+135**	**+372**
Net flows/Sales (%)	(2)	+21	+3	+6	+13	9
Reported cash	5	154	176	222	357	
Av. cash balance/sales (%)	1	10	18	19	28	
Relative to Global Sector (%ile)	7%	68%	86	87	94	

Source: GMT Research

Most companies don't allow cash to sit idly on the balance sheet

This analysis works on the assumption that companies do not, in general, allow cash to build-up on the balance sheet and that it is returned to outside providers of capital (debt and/or equity). Indeed, our analysis of 16,000 companies globally demonstrated that net cash flows were typically between 0% and 2% of sales over a five-year period. Some companies with large amounts of cash claim it is for future acquisitions. Unfortunately, this excuse has also been used by frauds, like Eratat, to explain their large cash balances.

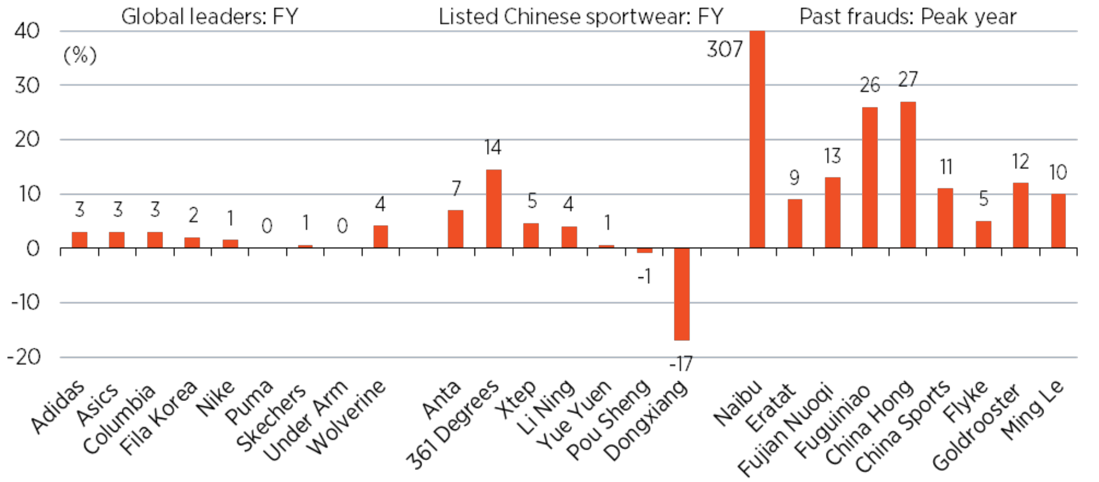
Textile companies are no different

Textile companies normally generate net cash inflows of 2% of sales (the top quintile is in excess of 6% of sales), which was in line with our global leaders for FY17, as shown in Figure 28. Meanwhile, all our past frauds reported excess cash inflows in the top quintile, averaging 48% of sales (median of 13%).

Anta and 361 reported cash inflows of 7% and 14% of sales, which is too high

Of the Chinese sportswear companies currently listed, **Anta and 361 reported cash inflows of 7% and 14% of sales, respectively, which are in the highest quintile relative to peers**. Xtep and Li Ning reported excess cash inflows of 4-5% of sales, which is at the top end of the normal range for the sector. The remaining Chinese sportswear companies were either cash flow neutral or returned capital to outside providers through debt repayments, dividends and/or share buybacks.

Figure 28: Excess cash flow to sales: 5 years



Source: GMT Research, Bloomberg

We can't verify all of Anta's cash balance…

While excess cash inflows at 4-14% of sales for some of the currently listed Chinese sportswear companies might not seem like a lot, it still suggests that a material portion of profits and cash cannot be validated. For example, Anta generated excess cash inflows of RMB3.8bn between FY12 and FY17, as shown in Figure 29. This means that we can't validate 14% of its gross profits during this period and 21% of its cash balance (we are simply comparing the excess capital generated to the gross profit or cash balance). If we stretch our analysis back to 2004 for Anta, the company has generated excess cash inflows of RMB11bn which equals 61% of outstanding cash. With such a large portion of its cash unverifiable, this might explain why the company conducted a RMB3.4bn capital increase in 1Q17, despite reporting a huge RMB7.3bn cash pile at the beginning of the year and generating free cash inflows of RMB2.6bn during it. The company's behaviour is consistent with a large proportion of its cash balances not being real.

...which is true for a number of other companies in the sector

Likewise, we are unable to verify substantial portions of gross profit and cash at the other sportswear companies, all of which have unusually high cash balances. Perhaps it explains why 361 Degrees raised RMB1.1bn of net new debt in FY16 despite having RM1.9bn in net cash at the beginning of the year and generating free cash inflows of RMB860m during it. As for Xtep, why did it raise RMB421m in debt in FY17, despite having net cash of RMB1.9bn at the beginning of the year and generating RMB450bn in free cash inflows during it? It seems odd that companies which are such amazing operational managers are such bad capital managers.

Figure 29: Excess cash analysis

	Excess Cash Flow: -5yrs (LCLm)	Excess Cash Flow/Sales -5yrs (%)	Gross Profit: -5yrs (LCLm)	Excess Cash Flow/ Gross profit (%)	Cash O/S (LCLm)	Excess Cash Flow - 5yrs/Cash (%)
Anta	3,881	7	26,952	14	18,224	21
361 Degrees	3,206	14	9,103	35	5,387	60
Xtep	1,154	5	10,507	11	4,013	29
Li Ning	1,266	4	16,386	8	2,529	50

Source: GMT Research, Bloomberg

4. Small inventories

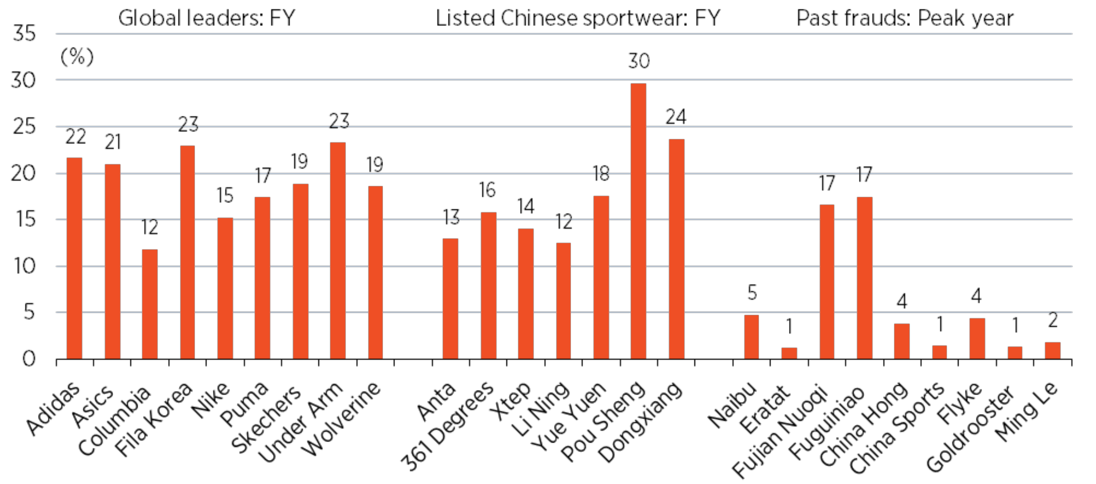
Frauds often report a low level of inventory...

If companies are faking their sales, it is likely that inventories will appear relatively small. **Inventories for textile companies average around 20% of sales** (the lowest quintile is 13%). Our global leaders average 19%, which is pretty much in line. By comparison, historic frauds reported much lower inventories at just 6% of sales on average. Six out of the nine past frauds reported inventories in the lowest quintile relative to peers. It cannot be argued that companies with high operating margins normally also have low inventories. Our analysis of 13,000 companies shows that there is no correlation between operating margins and inventories (coefficient of 0.01). As such, the tendency of frauds to have low inventories is unusual but perhaps not surprising.

...although it can vary

The low level of inventories at most of the frauds may reflect the underlying size of the real business. For example, Fujian Nuoqi reported inventory at 17% of sales in FY13, compared to just 1% at Eratat. This might suggest that Eratat was making up a far higher percentage of sales, although we have no way of knowing for sure. This is by no means a particularly strong signal given that inventories are not always consistently low. As Figure 30 shows, Anta, 361 and Xtep reported small inventories of between 13% and 16% of sales. Of these, **Anta's inventory is in the lowest quintile relative to sales** which is slightly unusual given that it also owns a larger share of its distribution network compared to 361 Degrees and Xtep. This should result in a higher level of inventory. For example, the only pure retailer in our sample, Pou Sheng, has inventories averaging 30% of sales. However, Anta claims that lower inventories are a product of a superior management system.

Figure 30: Average inventories to sales



Source: GMT Research, Bloomberg

5. Large prepaid expenses relative to inventory

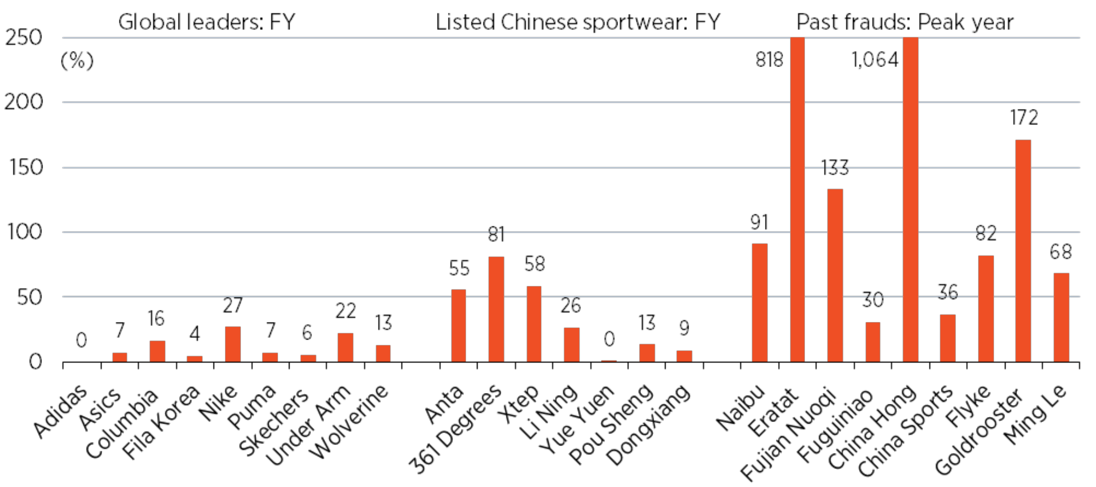
Prepayments are often evidence of round-tripping

Frauds often hide fake profits as prepayments or advances. These assets are part of the "round-tripping" process to fake revenues. After all, a paper trail is needed to fool the auditors. The process begins by sending cash to a "supplier" as a prepayment or advance. This "supplier" is actually the agent which falsifies the invoices and then wires the money back to the company in the guise of revenues with accompanying invoices. The irony is that companies need money to begin the round-tripping process that inflates sales. We understand that one round trip can cost between 4% and 8% of the nominal sales. As such, in the absence of external capital, fake cash flow frauds can collapse relatively quickly for smaller companies.

Prepayments should be a small fraction of inventories but for frauds it is very high

Prepayments to suppliers are a valid business transaction and fairly common in China. Normally, a company will provide a prepayment in advance of receiving inventory. As such, prepayments should be a fraction of inventory. For example, **where prepayments are present within the textile industry, they average 4% of inventory** (the top quintile is above 11%). For our global leaders, reported prepayments averaged 11% of inventory which is not far off. However, all our past frauds recorded prepayments in the top quintile relative to peers, averaging 270% of inventory (median of 91%). As Figure 31 shows, **Anta, 361 and Xtep recorded prepayments between 55% and 81% of inventory, well into the top quintile of textile peers, and at a similar level to many past frauds**.

Figure 31: Pre-paid expenses to inventory[13]



Source: GMT Research, Bloomberg

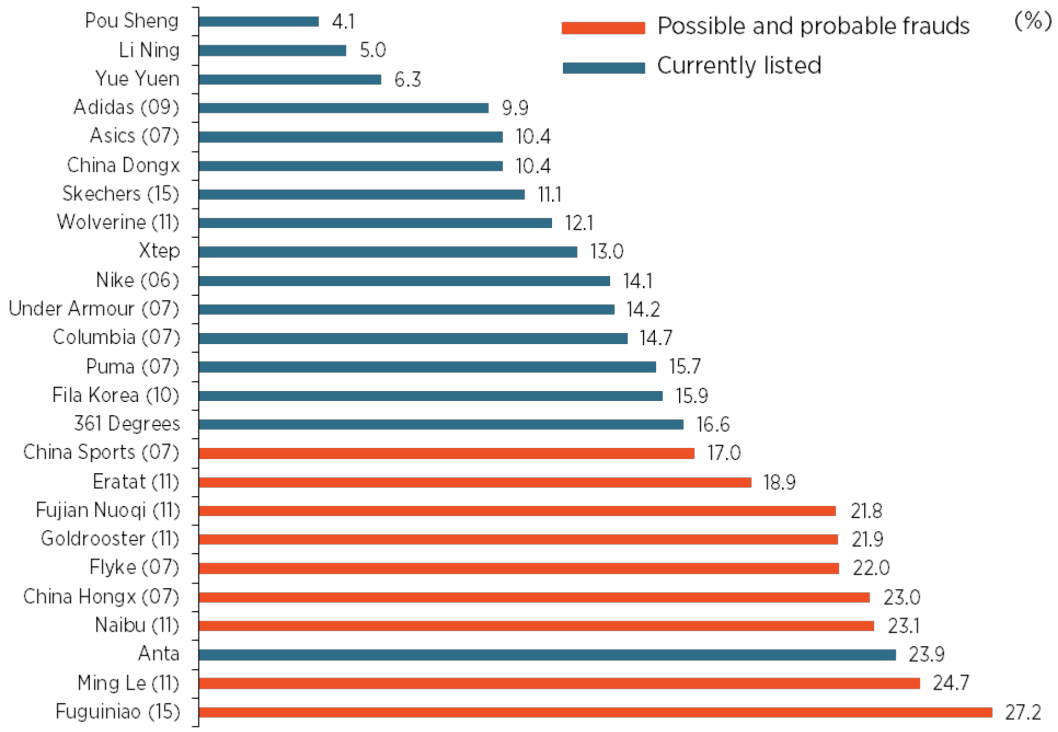
[13] Prepayments/inventory may differ from those presented in our Accounting & Governance Screen owing to classification differences

Myth busting

How can Anta Sports (and to a lesser extent Xtep and 361 Degrees) generate triple the operating margin of global leaders when charging just 25% of the price? As Figure 32 shows, only the peak historical margins of confirmed frauds have come close to Anta's FY17 operating margin of 24% (although both Xtep and 361 have exceeded it in the past). Have these companies found a magic formula that even global leaders such as Nike and Adidas have been unable to replicate?

Where does Anta's 15ppt operating margin premium to global leaders come from?

Figure 32: Peak operating margins of sportswear companies between FY06 and FY17, versus FY17 operating margins of Chinese sportswear companies



Source: GMT Research, Bloomberg

Generally, the Chinese sportswear companies provide us with four reasons for such high levels of profitability which we fail to find convincing. While these explanations mainly relate to Anta, they are often cited in part by Xtep and 361 Degrees. It's worth pointing out that we have received no response from any of the Chinese sportswear companies to our questions. The four most common reasons provided are as follows:

We're given four reasons

1. Superior inventory system: We are told that Anta's flattened sales management system and streamlined distribution structure results in a low level of inventory and is the reason it has avoided write-downs against inventory and/or provisions against receivables[14]. Actually, pretty much every Chinese sportswear company gives an almost identical explanation[15] and there is simply no way of validating this claim.

Superior inventory management…

Anta has recorded the lowest and least volatile level of provisions of the Chinese sportswear companies between FY12 and FY17, with a six-year average provision of 0.1% of sales, compared to the sector average of 0.6%, as Figure 33 shows. However, the low provisions do not explain Anta's very high operating margin, only likely boosting its margin by 0.5% a year compared to local peers. Also, the low level of provisions simply places Anta on a par with global leaders which don't generally disclose such provisions because they are immaterial.

…but provisions have only averaged 0.6bp

[14] See Pages 40-41 of Anta's FY17 Annual Report
[15] See FY17 Annual Reports: Xtep on Page 9, 361 Page 12, Li Ning Page 28

Figure 33: Provisions against receivables and inventory: Last 6 years

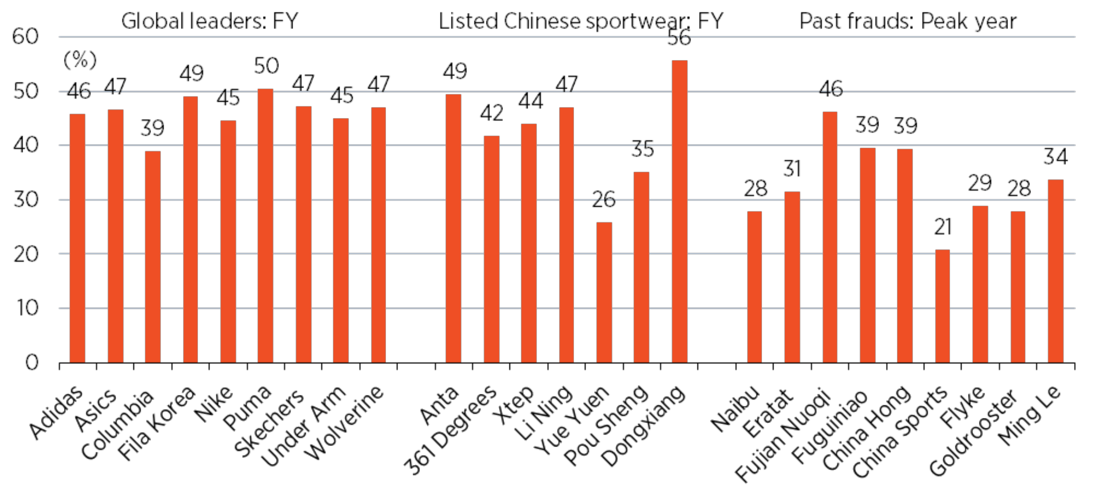
Company	Minimum provisions/write-backs (ppts of Sales)	6yr average (ppts of Sales)	Maximum provisions (ppts of Sales)
361 Degrees	(2.8)	0.1	4.2
Anta	(1.2)	0.1	1.8
China Dongxiang G	(3.3)	(0.7)	5.1
Li Ning	(9.3)	0.9	20.0
Pou Sheng	0.1	0.2	0.5
Xtep	0.6	2.4	4.2
Average ex-Anta	**(3.0)**	**0.6**	**6.8**

Source: Annual Reports, GMT Research

Gross margins suggest that inventory discounting has not been a problem of late

It's also argued that smaller inventory levels have helped Chinese sportswear companies avoid discounting older models, thereby preserving margins. Again, this is very hard to verify as the financial statements of the listed companies mainly represent wholesale, not retail sales (i.e. sales to franchised stores). A lot of the discounting is likely taking place at the retail level which is not well represented in the listed universe. However, companies with better inventory management should, in general, have higher gross margins than peers. As Figure 34 shows, gross margins of the major Chinese sportswear companies (Anta, 361, Xtep and Li Ning) are broadly in line with the global leaders, suggesting similar levels of discounting all other things being equal. As such, **there is no evidence of superior inventory management** at the major Chinese brands. Yue Yuen is a manufacturer of sports footwear (it has no brand or retail presence) while Pou Sheng is a pure retailer (it has no brands of its own) and so the comparisons are not relevant.

Figure 34: Gross margin selected sportswear companies



Source: GMT Research, Bloomberg

Anta has lowered its in-house production and actually improved its margin at the same time

2. In-house production: We are told that in-house production helps contribute to higher margins. Since FY13, Anta has actually lowered its in-house production of footwear from 49% to 38%, and of apparel from 17% to 16%. Despite this reduction, its operating margin increased by two percentage points over the same period which is contrary to its own argument. Both 361 Degrees and Xtep disclose an even higher level of in-house production than Anta (but report lower margins) at 70% and 50% of footwear, respectively, and 20% and 15% of apparel. Elsewhere, Li Ning and Pou Sheng have no in-house production while China Dongxiang does not disclose the amount.

There's no real difference in gross margins

If there was a genuine cost-saving to be had from in-house production as opposed to sub-contracting, we would see this reflected in a higher gross margin and yet this is not the case. As Figure 34 once again shows, the gross margins of the Chinese sportswear companies averaged 43% in FY17 which is broadly in line with the 46%

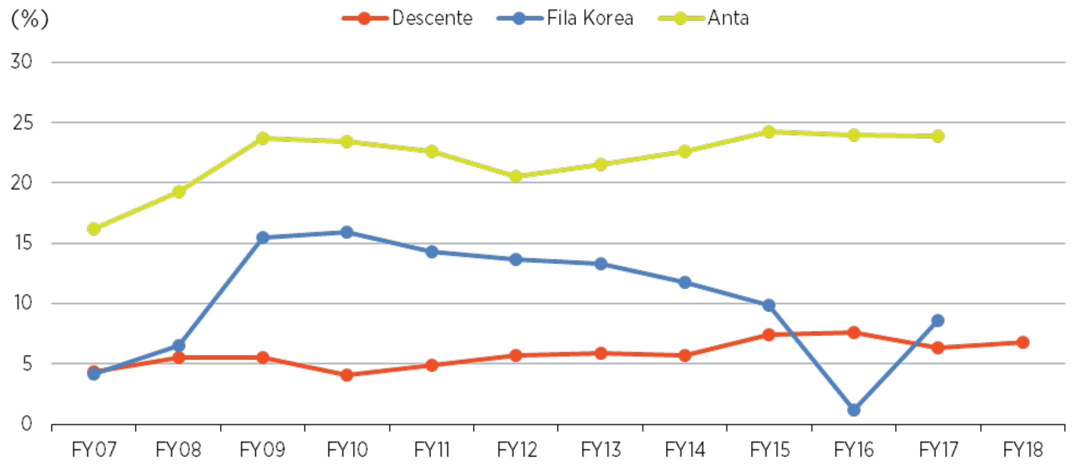
reported by global peers which outsource almost all their production. Indeed, the outsourcing industry is highly competitive which is reflected in the relatively low 26% gross margin and 6% operating reported by Yuen Yen, one of the world's largest manufacturers of sports footwear. Based on Anta's disclosure that it produced around 30% of total production in-house, it might be able to achieve savings equal to two percentage points of sales, assuming it can match Yuen Yen's operating efficiency. It seems that **the superior operating margins of the Chinese sportswear companies cannot be explained by lower manufacturing costs from in-house production**.

Apparently, Anta's move into high-end is leading to margin improvements

3. Increasing focus on high-end: Another reason cited for Anta's high margins are its move into high-end products, such as Fila in 2009 and Descente in 2016. This turns up a number of curiosities. First, the brands' parent companies are both listed (Fila Korea: 081660 KS; and Descente Japan: 8114 JP) which gives us insight into their profitability. Anta's operating margin is more than double that of both companies, as Figure 35 shows. Anta pays 4.5% royalties[16] on Fila's wholesale revenues in China and presumably something similar to Descente. Royalties would add to Anta's costs while enhancing the brand-owner's profitability as there is no cost associated with it. This should make it difficult for Anta to exceed the profitability of Descente and Fila. Apparently not so.

As an interesting side-point, Fila Korea's 1Q11 investor presentation discloses that Fila China was expected to have 1,000 stores by YE13. This target was only met by 2017, four years late. This suggests that the brand was not as successful as initially expected although it appears to have been far more profitable which seems contradictory.

Figure 35: Operating margin Anta, Descente and Fila Korea



Source: GMT Research, Bloomberg

The royalties have not kept up with reported sales

The second curiosity is the mismatch between royalty payments reported by Fila Korea for Asia, and retail revenues for Fila China reported by Euromonitor. This shows that Fila Korea's Asian royalty payments (the bulk of which are likely to be from Anta's China, Macau and Hong Kong joint venture) have not kept up with the sales numbers reported for Fila in China by Euromonitor. One possible explanation would be if Anta were inflating its reported Fila China sales numbers to Euromonitor.

According to Euromonitor, Fila China achieved retail sales of US$827m in FY17. It is unclear exactly how these are calculated but it seems to be a mixture of reported numbers from the company combined with channel checks by Euromonitor. Assuming a 50% wholesale margin and a royalty fee of 4.5%, Fila Korea should have reported royalties of at least US$19m for the whole of Asia; instead, they were just US$11m. As Figure 36 shows, there have been a few changes in the way the numbers have been

[16] Fila 2Q11 Investor Presentation, Page 7, discloses that Anta pays Fila Korea a 3% design service fee, a 1.3% global marketing contribution plus a fixed dividend of US$0.6m a year

disclosed by Fila Korea, and we have had to make a few assumptions. However, the important factor to note is that **Fila China's sales have grown by 428% since 2012, but Fila Korea's Asian royalties by just 16%. The numbers don't correlate.**

Figure 36: Estimated Fila royalty payments

Year	Fila Royalties in Asia, prior to FY17 disclosure (US$m)	Change (%)	Fila Royalties in Asia, FY17 disclosure (US$m)	Change (%)	Euromonitor Fila China Retail Est. (US$m)	Change (%)	Assumed Wholesale Value at 50% Margin (US$m)	Fila China Royalty Fee at 4.5% (US$m)
2012	9.5	na	na	na	157	+53.7	78	4
2013	9.1	(4.4%)	na	na	239	+52.8	120	5
2014	9.4	+3.1%	na	na	361	+51.2	181	8
2015	9.5	+1.0%	9.1	+1.0	535	+48.0	267	12
2016	9.9	+4.3%	9.4	+3.8	651	+21.7	325	15
2017			11.0	+16.8	827	+27.0	413	19

Source: GMT Research, Bloomberg, Company documents

Being China centric reportedly helps margins

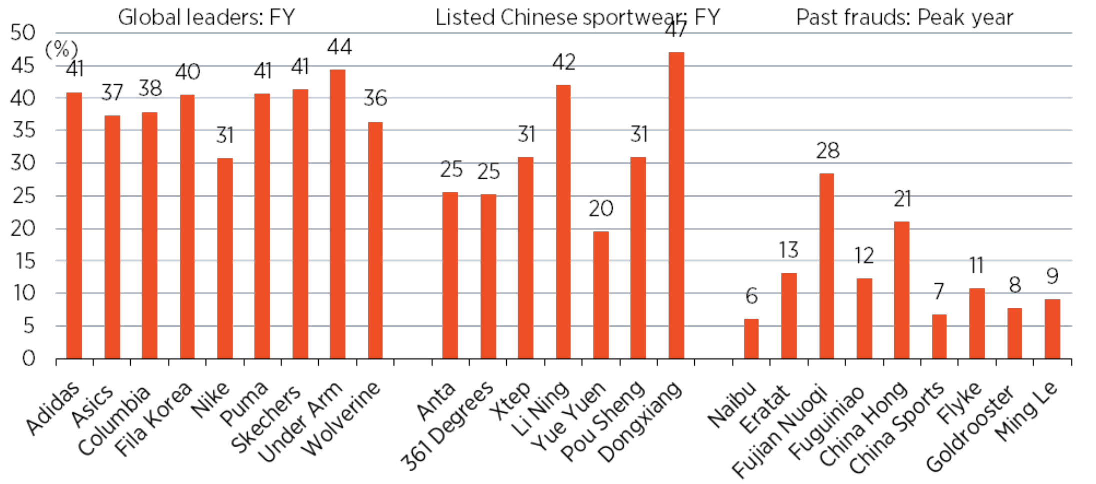
4. China centric: The final reason given for such high margins is a lack of geographic diversification. It is argued that because the Chinese sportswear companies are largely focused on China, the diseconomies of scale associated with exports are not present. We find this the least credible argument. There would appear to be little reason why the Chinese sportswear companies could not achieve similar profitability in other markets.

Lower operating expenses

Anta, Xtep and 361 Degrees appear to have achieved superior operating margins, through significantly lower operating expenses.

Anta, Xtep and 361 Degrees appear to have achieved superior operating margins partly though lower cost of goods sold, but primarily through significantly lower operating expenses. As Figure 37 shows, the average operating expenses of these three companies is just 27% of sales, compared to 39% for our global leaders.

Figure 37: Operating expenses/sales (%)



Note: We stripped out gains on sales of investments for Dongxiang; Source: GMT Research, Bloomberg

Difficult to conduct a cost analysis given limited disclosure

An analysis of the major cost components across sportswear companies is not entirely satisfactory. For a start, there is almost no cost disclosure for our global leaders which are mainly listed in the US. Meanwhile, disclosure at Chinese peers is poor and inconsistent. The most important missing component is that we are unable to distinguish between sales to distributors versus own-stores, apart from Li Ning which discloses both sales and store breakdowns. This is significant as companies sell to distributors on a wholesale basis which could be as much as a 50% discount to retail, thereby making margin comparisons difficult. For example, 75% of Li Ning's stores are franchises which account for 61% of its total store sales. The sales value to its own stores is almost double those to distributors. Li Ning discloses that it operates 25% of its stores while we would roughly estimate that (based on rental expenses as a percentage of sales) it is 10%-15% for Anta and less than 5% for Xtep and 361 Degrees.

The costs breakdown shown in Figure 38 reveals that Anta receives huge government subsidies relative to peers at 2.6% of FY17 sales, although it is not exactly clear what these relate to. These increased by 60% YoY to RMB439m (US$70m). Still, this only explains away a fraction of its higher margin. The main margin gains compared to Li Ning would appear to come from lower transport, logistics, trade fair commissions and other (which are presumably included in "other" for Anta). However, beyond this, it's difficult to draw any conclusions.

Seems to be an absence of transport, logistics and trade fair commissions for Anta

Figure 38: Major expenses/sales (%)

(Expressed as a % of sales)	Anta	361 Degrees	Xtep	Li Ning	Yue Yuen	Pou Sheng	China Dongx
COGS	50.6	58.2	56.1	52.9	74.2	65.0	43.8
R&D	2.9	3.4	2.8	1.9	2.3	0.0	2.6
A&P	10.6	9.8	12.9	11.1	na	na	25.9
D&A	1.5	2.3	1.3	4.2	3.3	2.3	1.7
Government subsidies	(2.6)	(0.8)	(1.6)	(0.4)	na	na	(1.0)
Provisions	0.1	na	4.2	(0.3)	0.1	0.5	(3.3)
Operating lease rentals	5.4	0.2	0.3	9.3	4.3	12.7	2.0
Transportation and logistics	na	2.2	na	3.6	na	na	5.2
Commission and trade fair	na	na	na	1.8	na	na	na
Other	7.7	8.1	11.0	9.4	9.3	15.5	12.6
Operating profit	23.9	16.6	13.0	6.4	6.6	4.0	10.4
Franchises stores/total (%)	na	na	na	75	na	38	65

Source: GMT Research, Bloomberg, Company documents

What's going on?

Many companies reporting super-normal profits claim that they have some unique product or technical monopoly which often turns out to be nonsense. In our opinion, it is inconceivable that Anta, Xtep and 361 Degrees are able to achieve such high levels of profitability in a well-established and competitive industry. We think it is highly likely that either sales are being faked or that losses are being held outside of the listed company.

The explanations don't really stack up

Faking profits: Unfortunately, information from past frauds sheds limited light on how scams were executed. Investigative reports conducted following a fraud's collapse are there to verify the financial statements, not to speculate on how a fraud was committed. However, given the common financial traits displayed by frauds it's very likely that similar methods were used. In each instance, frauds reported super-high margins and unusually large cash balances in the run up to their demise. As discussed earlier, there is no perceivable correlation between these metrics across 13,000 listed companies, but they are a recurring feature of past frauds. When the frauds finally implode, without exception it is discovered that sales have been artificially inflated and the cash is not there. While the promoters of the fraud have most likely stolen some of the cash proceeds, the cash balances never likely entirely existed in the first place and represented the amount of profits that had been made up. In other words, the cash balances had been faked which is a common recurring feature in China.

Anta, Xtep and 361 Degrees have traits in common with companies faking their sales…

In the worst case scenario, Anta, 361 Degrees and Xtep might be making up a portion of their sales which explains their super-high margins and unusually large cash balances. However, Anta and Xtep maintain dividend pay-outs of around 65% (361 Degrees 35%) which suggests that a good portion of their profits are real. It is, therefore possible that they are using more than one technique to inflate profits.

…however, high dividends suggest that a large portion of the business is real

Off-balance sheet losses: Past frauds don't seem to have relied entirely on faking profits. After all, some of these companies had real products that exist to this day, such as China Hongxing's "Erke" brand. Before imploding, many of our past frauds

The franchise model is prone to profit manipulatiion

have written-down receivables or bought back obsolete inventory which suggests that the franchise model had been used to manipulate profits. Indeed, large provisions and write-downs remain a common feature of today's listed sportswear companies, as shown by numbers provided in Figure 33. The size and regular recurrence of these provisions are a peculiarly Chinese phenomenon, and not one that we see elsewhere. **It is particularly odd that sportswear companies buy-back obsolete inventory from franchises even though no such commitment has been disclosed in their financials**. We suspect that Chinese sportswear companies inflate or deflate sales when it serves their purposes.

Limited disclosure just where we need it

Sportswear companies rely on the franchise model to sell their products. As discussed earlier, neither Anta, Xtep nor 361 Degrees disclose the number of their franchised or multi-distribution stores although Li Ning, Pou Sheng and China Dongxiang do, as shown in Figure 39. It is slightly disconcerting that the three sportswear companies we have the greatest concerns over offer the least disclosure exactly in the area that we need it most.

It seems that the franchises are really under the listco's control

Unfortunately, the franchise model creates an opaque relationship that is open to abuse. For example, in Xtep's FY17 Annual Report (Page 24) the company claims that "**we make most of the retail decisions**, while the distributors make most of the capital investments on those stores they directly operate". Indeed, the Chairman spells it out (Page 9) by saying that "we have **effective supervision over the entire retail channel**". Effective control without the need to consolidate gives the sportswear companies significant scope to profit shift between the listed and unlisted vehicles, especially if the franchises are operated by undisclosed related parties which is possible.

Figure 39: Chines sportswear stores: YE17

Company	Franchised stores	Own-stores	Total stores	Franchised/Total Stores (%)	Operating Lease Rentals/Sales (%)
Anta	Na	na	**10,983**	85-90[1]	5.4
361 Degrees	Na	na	**6,988**	>95[1]	0.2
Xtep	Na	na	**6,000**	>95[1]	0.3
Li Ning	4,721	1,541	**6,262**	75	9.3
Pou Sheng	3,313	5,465	**8,778**	38	12.7
China Dongxiang G	972	515	**1,487**	65	2.0

[1]Estimate. Source: GMT Research, Company documents

Surely, franchises should be consolidated?

We believe that this exclusive franchise model means that **distributors should probably be consolidated**. After all, consolidation is based on control and not share ownership, similar to VIE structures. Indeed, within Xtep's Summary of Significant Accounting Policies in its FY17 Annual Report (Page 106) it states that revenue is recognised "when the significant risks and rewards of ownership have been transferred to the buyer, **provided that the Group maintains neither managerial involvement to the degree usually associated with ownership, nor effective control over the goods sold**". This would seem to contradict management's discussion and analysis.

Some manufacturing or distribution businesses might be held off-balance sheet…

In addition to running franchises at a loss, it is possible that certain manufacturing or distribution facilities are kept off-balance sheet and run at a loss. We have seen this elsewhere in the listed Chinese universe. For example, express delivery company ZTO (ZTO US) fails to consolidate a third of its trucking fleet, even though it majority-owns it[17]. Anta, 361 Degrees and Xtep all disclose that they possess manufacturing facilities.

[17] For more information, please read our report ZTO EXPRESS (ZTO US): SELL: Damaged Goods, 22 Feb 2017

Running losses off-balance sheet is not indefinitely sustainable without injecting new capital. It is possible that cash at the listed company is being pledged as collateral for undisclosed loans that are being used to subsidise off-balance sheet losses. This might explain why the sportswear companies maintain such persistently large cash balances and seem to raise external capital when it is not needed. For example, Anta raised RMB3.4bn equity in March 2017 despite a cash balance of RMB7.3bn at the beginning of the year and free cash inflows of RMB2.6bn during it. Meanwhile, Xtep raised debt by RMB0.4bn during FY17, despite having net cash of RMB1.9bn at the beginning of the year and generating free cash inflows of RMB0.45bn during it.

...this might be financed through off-balance sheet loans guaranteed against cash

It is not unheard of for companies to guarantee the loans of outside parties. One of our prior sportswear frauds, Fujian Nuoqi (1353 HK), guaranteed loans of RMB454m to parties outside of the listed company.[18] Perhaps a better known example is the Olympus (7733 JP) fraud which was uncovered in 2011. Management used Olympus' deposits as collateral for undisclosed loans which were then used to buy financial products with enormous losses from Olympus at book value.[19]

This method has been used before

In summary, Anta, Xtep and 361 are either the most efficient sportswear companies that the world has encountered, or something more sinister is afoot. Anta is a particular puzzle. After all, the company generates a return on production assets (operating profit/PPE plus inventory) in excess of 100%, the highest of any sportswear company globally, as Figure 23 earlier in the report shows. This is odd given that it has entered into the two most capital-intensive parts of the business, own-store operation and manufacturing. While this should give it a slightly higher share of the value chain, it is normally reflected in lower returns on production assets. Not so for Anta. However, keeping certain assets off-balance sheet would not explain the excess capital generation or the large cash balances; this is most likely explained by generating fake sales.

Are these the most efficient sportswear companies that the world has encountered?

[18] HKEx: Announcement, 19 Aug 2014
[19] Olympus Investigation Report Page 20, 6 Dec 2011

Fake or fabulous?

The investment argument for Chinese sportswear companies, and Anta in particular, appears fairly compelling at face value. China is the world's second largest sportswear market and one of the fastest growing, driven by rising consumer spending. Rising Chinese nationalism and the government's desire to foster national champions suggests that Anta is well positioned to outgrow the market. Apart from Li Ning, it's the only large cap investment option given a market capitalisation of around US$16bn (the others are less than US$1.5bn) and is well-liked by the sellside with 31 buy recommendations, 8 holds and just one lonely sell. Growth expectations remain attractive and have been raised slightly over the past three months. Bloomberg's 2019 EPS forecasts imply a 20% three-year compound growth rate, placing Anta on 24x PER, the lower end of the valuation range relative to global peers. Adidas trades on 21x 2019 PER whilst Nike is on 28x, as shown in Figure 40. What could possibly go wrong?

Anta is the only practical investment in this space and is quite pricey

Figure 40: Sportswear company valuations 12 June 2018

Company	BBG	Fiscal YE	Mkt Cap (US$m)	Price (LCL)	PER 12MT (x)	B'Est PER 18E (x)	B'Est PER 19E (x)	NDtE (%)	Sales CAGR 16-19 (%)	EPS CAGR 16-19 (%)
Global leaders										
Asics	7936 JP	12/2017	3,217	1,779	37.8	24.8	22.2	(10)	+2	(1)
Skechers	SKX US	12/2017	4,660	29.10	15.2	13.8	11.6	(34)	+14	+17
Wolverine	WWW US	12/2017	3,420	36.09	20.4	17.4	15.8	32	(2)	+36
Fila Korea	081660 KS	12/2017	1,834	32,500	21.7	18.5	16.8	82	+41	(30)
Nike	NKE US	05/2017	119,738	74.29	32.3	31.6	27.7	(19)	+6	+7
Adidas	ADS GY	12/2017	48,297	197	27.8	24.0	20.5	(10)	+8	+23
Puma	PUM GR	12/2017	8,627	487	47.4	37.3	28.8	(24)	+11	+59
Under Armour	UAA US	12/2017	10,220	24.00	126.3	136.4	81.6	30	+4	(13)
Columbia Sports	COLM US	12/2017	6,484	92.62	28.4	27.7	24.7	(46)	+6	+11
Chinese sportswear										
361 Degrees	1361 HK	12/2017	680	2.58	9.5	8.2	7.6	(48)	+6	+12
Anta	2020 HK	12/2017	16,593	48.50	33.9	28.5	23.6	(64)	+23	+21
China Dongxiang	3818 HK	12/2017	1,133	1.51	8.5	9.1	8.8	(12)	+2	(4)
Li Ning	2331 HK	12/2017	2,690	9.66	36.8	26.8	20.6	(48)	+13	+10
Pou Sheng	3813 HK	12/2017	967	1.42	13.9	13.9	10.7	34	+14	+0
Xtep	1368 HK	12/2017	1,690	5.92	26.0	17.9	15.8	(41)	+4	+9
Yue Yuen	551 HK	12/2017	4,823	23.1	9.3	10.6	10.2	19	+5	(4)

Source: Bloomberg

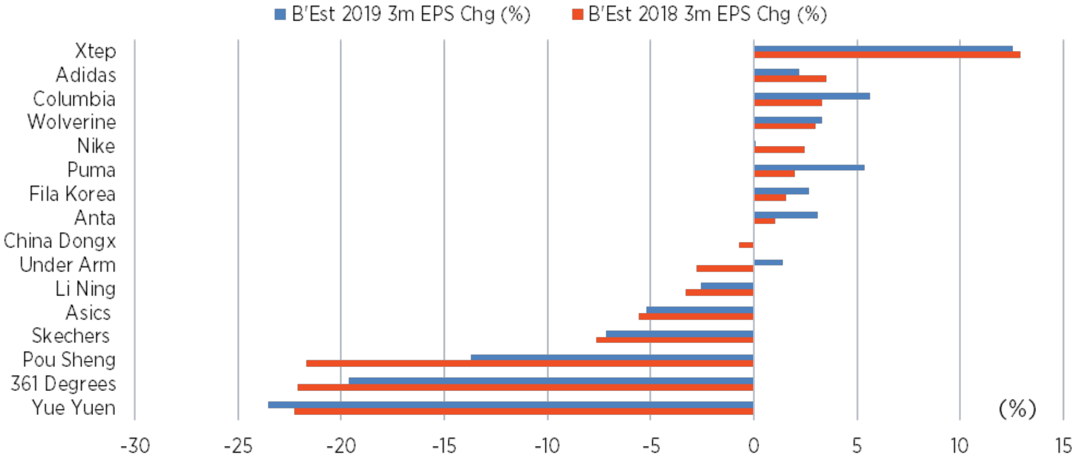
Let's forget our concerns about the credibility of Anta's financials for now. To meet these numbers, the company must perform flawlessly. Its operating margin, which is already far higher than that achieved by global leaders, must be maintained in arguably the world's most price sensitive economy. History suggests that returns such as these are not sustainable. With material EPS downgrades being recorded by competitors such as Asics, Skechers, 361 Degrees and Pou Sheng, as shown in Figure 41, it's possible some form of price discounting is taking place. Given that Anta does not seem to have a particularly strong brand, it's hard to see how it cannot follow suit. The company has its work cut out.

We are seeing profit downgrades from peers

And then, of course, there's the credibility of its financials. The nine historic sportswear frauds highlighted in this report had almost identical financial traits to each other, such as high operating margins, large cash balances, the generation of excess capital, small inventories and large prepayments. The likelihood of this combination of financial metrics is less than 1% of all listed companies. Extraordinarily, the frauds' profitability far exceeded that of the global sportswear leaders. They also had one other common feature: **they all came from Fujian**, the epicentre of China's corporate fraud epidemic.

The financials are difficult to believe

Figure 41: Change in EPS expectations for sportswear companies



Source: Bloomberg

Anta, Xtep and 361 Degrees, have financial statements with very similar characteristics to past frauds

Three of our seven Chinese sportswear companies, Anta, Xtep and 361 Degrees, have financial statements with very similar characteristics to past frauds. The chance of this being a coincidence seem remote. Similar to past frauds, their profitability far outstrips that of global peers. None of the reasons given for their high profitability is convincing. Again, they share one common feature: **they all come from Fujian**. The remaining four sportswear companies have normal financial statements and do not come from Fujian. What are the odds of that?

There are real businesses at the core of these companies

We're not doubting that there are real businesses at the core of each of these companies but we are concerned that sales may have been inflated by 10-20%, or even more. Assuming that Anta fabricated 10% of sales and gross profit in FY17, this would simply bring its operating margin down to 21%, still inexplicably higher than Nike's 14%. Owing to the leveraging effect, profits and free cash flows would be around 20% lower but the company would still be able to sustain its dividend.

If we're right, Anta faces a substantial de-rating

If our fears are founded, Anta is worth considerably less than today's value, possibly as little as HK$10/share, 80% below its current share price. We derive this by assuming that Anta's 70% dividend pay-out ratio is a proxy for real earnings, even though it may have been financed with external capital such as the recent equity increase. We then place its shares on 10x trailing PER, a 70% multiple de-rating to reflect greater market scepticism, and come up with a value of HK$9.50/share.

Catalysts are elusive

Coming up with some clear catalysts is difficult. There is always the risk that we are wrong and Anta is actually in the process of revolutionising mass-market sportswear, turning it from a low return business into a high return one. On the other hand, if a material portion of sales and profits have been fabricated, this has likely been the case for a number of years. Why should Anta's long-standing auditor, KPMG, suddenly find fault with its financials after ten years?

Either fake or fabulous

Unfortunately, there are no easy answers. Still, we felt compelled to write this report given that the sector has such a high incidence rate of fraud and that past frauds had such distinctive financials which were so similar to Anta, Xtep and 361 Degrees. So, there you have it, the choice is very simple: Anta Sports is either the world's best-run sportswear company or it's a fraud. Either way, we wouldn't be paying 34x trailing PER.

Summary write-ups of other sportswear companies as follows:

The good and the bad

There are currently seven listed sportswear manufacturers, of which three display financial traits consistent with frauds: Anta Sports, 361 Degrees and Xtep. The financials of Li Ning and China Dongxiang have in the past displayed characteristics similar to frauds. Meanwhile, Yue Yuen and Pou Sheng look relatively clean. Download their latest annual reports and a print-out of our Accounting & Governance Screen from Figure 42. Comments on each company follow…

Many of the current sportswear companies have traits similar to past frauds

Figure 42: Financial details of Chinese sportswear companies

Company	BBG	Download Annual Report	Download A&G Screen
Anta	2020 HK	12/2017	Link
361 Degrees	1361 HK	12/2017	Link
Xtep	1368 HK	12/2017	Link
Li Ning	2331 HK	12/2017	Link
Yue Yuen	551 HK	12/2017	Link
Pou Sheng	3813 HK	12/2017	Link
China Dongxiang G	3818 HK	12/2017	Link

Source: Company filiings, GMT Research

Pou Sheng (3813 HK): Recent accounting irregularities

Pou Sheng is a multi-brand distributor which retails sports footwear, apparel and accessories. It has 8,778 stores across China, of which 38% were franchisees. The company is owned by sportswear manufacturer, Yue Yuen, which embarked on a failed attempt to take it private earlier this year.

A multi-brand distributor, not a brand originator

Pou Sheng's profitability peaked in FY07, the year before its IPO. The company came to the market in June 2008 and analysts were likely using FY07 financials from which to price the IPO. This was not a success with the share price falling 75% in the six months thereafter. This gives the impression that financials were spiced up for the IPO, which is not unusual. Either that, or the timing was fortuitous. More recently, Pou Sheng was embroiled in an accounting scandal[20] whereby the company's CFO was sacked for attempting to inflate sales.

Had been embroiled in a recent accounting scandal

Yuen Yen (551 HK): Relatively clean

Yuen Yen is one of the world's largest manufacturers of sportswear; customers include the likes of Nike, Adidas, Asics, Puma and Under Armour (all of which are included in our global leaders' sample). Since Bloomberg's records began in 1996, the company's profitability has appeared normal (its IPO was in 1992); after all, textile manufacturing is competitive. While Yuen Yen itself is a manufacturer and not a retailer (although its subsidiary Pou Sheng is), an average operating margin of 6.4% over the past decade demonstrates the maximum likely benefit from bringing manufacturing in-house (the margin upside will be lower as on buyer's COGS not their revenue).

One of the world's largest sportswear manufacturers

Li Ning (2331 HK): Perhaps inflated sales pre-2011

Li Ning is China's fourth largest domestic sportswear brand with a 5.3% brand-ownership share of sportswear retail sales in 2017. Over the past five years it has lost just 0.6 percentage points of market share, meaning that is has outperformed most domestic peers. The company has 6,226 stores across China, 75% of which were franchised. In FY07, it generated 47% of sales from footwear, 47% from apparel and 6% from equipment and others.

China's fourth largest domestic sportswear brand

From FY03 (the year before its IPO) until FY10, Li Ning consistently triggered our Fake Cash Flow model due to super-normal profitability. Operating margins were above 15% and returns on production assets exceeded 80%. In 2011, profitability collapsed when the company repurchased inventory from distributors. This may have been due

Had some issued in FY11

[20] GMT Research: MANIPULATING PROFIT: Pou Sheng: Risks lie to the downside, 12 Jan 2017

to poor inventory management, attempts to cleanse the financials of fake cash flow or past channel-stuffing. Li Ning has always generated surplus cash flows, although not overly large, and run large cash balances which are signs of faking revenues; however, if this is the case, it is likely to a lesser extent than many others. Since this adjustment, Li Ning has never managed to report margins above single digits.

China Dongxiang (3818 HK): Evidence of profit inflation pre-2011

China's 22nd largest sportswear brand

China Dongxiang operates the Italian sportswear brand, Kappa, in China. This was a hugely popular sports brand over ten years ago and the source of the phenomenon "kappa slapper" (probably best to do a google search for appropriate pictures). The company's market share of Chinese sportswear retail sales peaked at 4.1% in 2009 but fell to just 0.5% by 2017 (source: Euromonitor), putting it in 22nd place. Dongxiang has 1,487 stores across China of which 65% are franchisees (source: 2017 Annual Report).

Was fabulously profitable until FY11

Dongxiang listed in FY07, raising RMB5bn despite having no debt and virtually no capex requirements. It triggered our Fake Cash Flow alters from FY06 (the year before its 2007 IPO) to FY10. This was owing to its unusually high profitability with operating margins typically above 35% and returns on production assets in the hundreds of percent. This was one of the most profitable companies in any sector globally. Profitability collapsed in FY11 owing to RMB1.4bn of inventory repurchases which suggests that the company had poor inventory management, was channel-stuffing or faking cash flows. It has never fully recovered, with operating margins rising to 10% in FY17.

Invested the IPO proceeds in financial investments

In the past ten years, the company has generated RMB6.3bn in operating cash flows and paid out RMB6.6bn in dividends. This doesn't appear strange until you consider that it's really just paid out its IPO proceeds plus a little more. Indeed, over the past three years dividends seem to have been partly financed by raising RMB0.5bn of debt. Even today, cash balances are extremely high at more than 1x sales. Ironically, the company invested the IPO proceeds in financial investments which appear to have done rather well and have been re-distributed to shareholders over recent years.

361 Degrees (1361 HK): Evidence of profit inflation

Fifth largest sportswear brand in China

361 Degrees is the fifth largest sportswear brand in China with a 4.0% market share of sportswear retail sales in 2017. The company has a distribution network of 6,988 stores which we assume are mainly franchisees or distributors given that operating lease rentals are equal to just 0.2% of sales.

Had some inventory issues in FY13

361 Degrees generated 45% of sales from footwear, 39% from apparel and 17% from equipment and other. The company consistently triggered Fake Cash Flow alerts between FY06 and FY17 (IPO in 2009) owing to its super-normal profitability, except for FY13. In that year, it appears to have gone through an inventory adjustment, although we are not aware if it bought obsolete inventory from distributors. Operating margins recovered to 17% in FY17 but were still considerably lower than the 26% peak recorded in FY11.

Has consistently raised excess capital

Despite generating surplus internal cash flows of RMB3.5bn (free cash flow less dividends and acquisitions) between FY10 and FY17, and possessing large cash balances, the company also raised RMB3.9bn of external finance during this period. As a result, already large cash balances continued to rise, even after dividends, averaging 105% of sales by YE17. 361 Degrees has financial traits similar to past frauds and we consider it high risk.

Xtep (1368 HK): Evidence of profit manipulation

China sixth largest sportswear brand

Xtep is the sixth largest sportswear brand in China with a 3.8% market share of sportswear retail sales in 2017. It has been one of the biggest market share losers, having ceded 1.7 percentage points over the past five years. The company has a distribution network of around 6,000 stores which we assume are mainly franchisees or distributors given that operating lease rentals are equal to just 0.3% of sales.

Paid a healthy dividend but raising too much external capital

Xtep triggered our Fake Cash Flow alert each year from FY07 to FY17 owing to its super-normal profitability. The company has paid out close to 60% of profits since its 2008 IPO; however, dividends could have been financed almost entirely with external capital. It has paid RMB3.7bn in dividends since FY08 whilst raising RMB3.6bn in debt and equity. On top of this, the company has reported free cash inflows of RMB5.0bn which should have been more than adequate to finance the dividends. As a result, its large cash balances have continued to rise and at RMB4bn now equal to more than 70% of sales.

A problematic set of financials

Similar to other sportswear companies, Xtep has had some distribution issues; in FY17 it recognised a RMB121m loss on the buyback of inventory, recognised a further RMB26m provision against inventories and provided RMB67m against receivables. Meanwhile, in FY16, it provided RMB222m against receivables. This has resulted in operating margins falling from a peak of 22% in FY11, down to 13% in FY17, although they are forecast to rebound to 17% this year. Curiously, receivable days have worsened for seven consecutive years, rising from around 40 in FY10, to 140 in FY17. There has also been a significant increase in payables and the discounting of RMB1.3bn of receivables gives the impression that the company is struggling to generate operating cash inflows despite reported profitability. Xtep has financial traits similar to past frauds and we consider it high risk.

ANTA SPORTS (2020 HK)

SELL: Too good to be true?

12 June 2018

Author:
Gillem Tulloch
gillem@gmtresearch.com

Price:
HK$48.4/share

Market Cap:
US$16.6bn

3M Av. Traded Value:
US$26m/day

Is Anta too good to be true? Operating margins and returns on production assets are almost double those of peers but similar to past frauds. Excuses for its profitability can be easily refuted or are impossible to verify. The company continues to raise more capital than it needs, again similar to past frauds. While a sizeable dividend confirms the existence of much of the business despite raising excess capital, it's possible that some portion of sales are being fabricated, distribution channels stuffed, or costs held off-balance sheet. Whether Anta is fake or fabulous, on 24x 2019 PER, it's priced to perfection. SELL.

Super-normal returns

Anta recorded a 24% operating margin in FY17, which is the third highest ever achieved by a mass-market sportswear company. The other nine of the ten highest margins were all recorded by frauds. By comparison, our global leaders could only muster 7.2% on average. Anta has pursued vertical integration into the relatively capital-intensive parts of the business, including store-ownership and manufacturing. In theory, this should lead to higher margins but lower returns. While higher margins are self-evident, returns on production assets of 107% in FY17 were higher than all global peers and Chinese counterparts but in line with past frauds.

Why so profitable?

The company attributes its super-normal profitability to four factors, including better inventory management, in-house production, increased focus on high-end and being China centric. If true, this could lead to some margin enhancement but it does not explain the extent of Anta's 15 percentage point operating margin advantage. We also believe these claims can be easily refuted or cannot be validated.

Royalty fee curiosity

Anta pays a 4.5% royalty fee on Fila sales and presumably something similar on Descente. This should be a drag on Anta's profitability but apparently not. Even high-end brands such as Fila Korea can only generate an operating margin of 9% and Descente 6%. Furthermore, Fila China's sales have grown by 428% since 2012, but Fila Korea's Asian royalties by just 16%. The numbers don't match.

Raising excess capital

Why would a company with such spectacular operating metrics be so poor at capital management? Despite enormous cash balances averaging 53% of sales at the beginning of FY17, and free cash inflows of 16% of sales during the year, Anta raised RMB3.4bn in new equity, citing acquisition opportunities. Indeed, Anta has paid out RMB11bn in dividends since listing in 2007 but has raised RMB6.9bn in external capital despite free cash inflows of RMB15bn. It's possible that some portion of sales are being fabricated, distribution channels stuffed, or costs held off-balance sheet.

Priced to perfection

Anta trades on 24x 2019 PER assuming 20% compound EPS growth. This implies that it will maintain the world's highest sportswear margins for a few more years to come. In the real world, competition eats away excess returns, especially for mass-market operators. If it's more fake than fab, then there's possibly 80% downside to HK$10/share. Either way, its shares are expensive. SELL.

Appendix 1: Global leaders

We have included nine large global sportswear companies to get an idea of the financial of market leaders. It is unlikely that local sportswear companies will be able to surpass the profitability of these leading brands. Download their latest annual reports and a print-out of our Accounting & Governance Screen from Figure 43. A brief description of each company follows.

Figure 43: Financial details of global leaders

Company	BBG	Download Annual Report	Download A&G Screen
Adidas	ADS GY	12/2017	Link
Asics	7936 JP	12/2017	Link
Columbia Sports	COLM US	12/2017	Link
Fila Korea	081660 KS	12/2017	Link
Nike	NKE US	05/2017	Link
Puma	PUM GR	12/2017	Link
Skechers	SKX US	12/2017	Link
Under Armour	UAA US	12/2017	Link
Wolverine	WWW US	12/2017	Link

Source: Company filiings, GMT Research

Adidas (ADS GY)

Adidas manufactures sports shoes and sports equipment. The Company produces products that include footwear, sports apparel, and golf clubs and balls. Adidas sells its products worldwide. Footwear accounts for 58% of sales, apparel 37% and equipment 8%.

Asics (7936 JP)

Asics manufactures general sporting goods and equipment. The Company's products, such as athletic shoes and sportswear, are distributed in the United States, Europe, Australia, and Asia. Footwear accounts for 83% of sales, apparel 12% and equipment 5%.

Columbia Sports (COLM US)

Columbia Sportswear designs, manufactures, markets, and distributes active outdoor apparel. The Company's products include outerwear, sportswear, rugged footwear, and related accessories. Columbia's products are sold to specialty and department store retailers in the US and other countries. Footwear accounts for 22% of sales while apparel and equipment accounts for 78%.

Fila Korea (081660 KS)

Fila Korea imports and wholesales a variety of textile and apparel products. The Company's products include men's, women's, and children's activewear, sportswear, undergarment, and footwear. No relevant sales breakdown is given.

Nike (NKE US)

Nike designs, develops, and markets athletic footwear, apparel, equipment, and accessory products for men, women, and children. The Company sells its products worldwide to retail stores, through its own stores, subsidiaries, and distributors. Footwear accounts for 83% of sales, apparel 12% and equipment 5%.

Puma (PUM GR)

Puma SE designs, manufactures, and sells sporting goods and branded apparel. The Company produces running, tennis, training, and basketball shoes and other products. Puma operates Santa Monica concept stores and sells its products worldwide through subsidiaries, distributors, and direct sales. Footwear accounts for 45% of sales, apparel 38% and equipment 16%.

Skechers (SKX US)

Skechers designs and markets branded contemporary casual, active, rugged, and lifestyle footwear for men, women, and children. The Company sells its products to department stores and specialty retailers. Skechers also sells its products internationally through distributors and directly to consumers through its own retail stores. No relevant sales breakdown is given.

Under Armour (UAA US)

Under Armour develops, markets, and distributes branded performance products for men, women, and youth. The Company designs and sells a broad offering of apparel and accessories made of synthetic microfibers. Footwear accounts for 20% of sales, apparel 67% and equipment 9%.

Wolverine (WWW US)

Wolverine World Wide manufactures and markets branded footwear and performance leathers. The Company's products include shoes, slippers, occupational and safety footwear, and performance outdoor footwear, among others. Footwear accounts for 100% of sales.

Appendix 2: Past frauds

We have collated details on nine frauds, although we have suspicions over a few others which we have omitted for legal reasons. It has been difficult to collate any information on how the fraud was committed given that management often simply disappear, never to be heard of again. In each instance, there was evidence of a real underlying business although massively exaggerated for reported purposes. In Figure 44 we have included links to the annual report at the year of their peak profitability along with a print-out of the Accounting & Governance Screen. We have focused on the year of peak profitability as this is when they were likely faking the greatest quantity of sales. Sometimes it seems that management wish to unwind the fraud in which case they report poor profitability for a number of years. This often coincides with an attempt to take the company private at a much-discounted price.

Figure 44: Financial details of alleged frauds

Company	Ticker	Download Annual Report	Download A&G Screen
China Hongxing Sports	CHHS SP	FY08	Link
China Sports	CSPORT SP	FY08	Link
Eratat Lifestyle	ERAT SP	FY12	Link
Flyke	1998 HK	FY11	Link
Fuguiniao	1819 HK	FY15	Link
Fujian Nuoqi	1353 HK	FY13	Link
Goldrooster	GO8 GR	FY12	Link
Ming Le Sport	ML2K GR	FY12	Link
Naibu Global	NBU LN	FY13	Link

Source: Company filiings, GMT Research

China Hongxing Sports (CHHS SP, Suspended): Confirmed fraud

Chairman and Executive Director: Wu Rongguang

China Hongxing Sports designed, manufactured and marketed athletic shoes in China under the Erke brand. In FY08, the company reported that it had 3,824 stores; footwear accounted for 61% of sales, apparel 34% and accessories 5%. It listed in Singapore in 2005, raising an initial RMB176m. It then raised a further RMB481m in FY06 through convertible preference shares and RMB2.4bn in FY07 through an international offering. The company appeared to be hugely profitable whilst it was raising capital from FY05 to FY08, triggering a full 4 points under our Fake Cash Flow model; however, profitability faltered in FY09 owing to a sharp deterioration in sales and then the company reported substantial losses in FY10. Indeed, although gross profit fell 10% in FY10, selling and distribution expenses rose 318%, which appears counter-intuitive. Either this was the one of worst marketing campaigns ever, or a way of extracting cash out of the company. Giving credence to our theory, the company's external auditors, Ernst & Young (the internal auditors were Foo Kon Tan Grant Thornton), encountered difficulties in verifying the cash balances, receivables, payables and other expenses for the finalisation of the FY10 audit[21]. This led to its shares being suspended from February 2011 onwards. A subsequent special auditor's report concluded that China Hongxing had overstated its cash and bank balances by RMB1.15bn in FY10 while payments were made without board approval at two key subsidiaries.

We think that the company was faking sales in order to raise external capital, and subsequent losses were a way of reversing fake profits and real cash out of the financials. In September 2017, the company's former chief executive Denis Wu Rongzhao made an RMB100m offer to acquire the company's businesses[22], which has since been accepted. China Hongxing Sport is, arguably, a good example of the profit inflation and subsequent deflation of a fraud.

[21] Chona Hongxing Sports: FY10 financial statements
[22] Singapore Straits Times: Ex-CEO of China Hongxing Sports makes $20.5m offer to buy its operating subsidiaries, 21 Sep 2017

China Sports (CSPORT SP, Suspended): Probable fraud

Chairman and CEO: Lin Shaoxiong

China Sports designed, manufactured, and sold branded sports fashion footwear and apparel products in China under the Yeli brand. In FY08, footwear accounted for 81% of sales, and apparel and accessories 19%. It listed in Singapore in 2007, raising RMB417m. Profit peaked in FY08, before steadily declining over the next five years, finally resulting in losses by FY13. In November 2013, Foo Kon Tan Grant Thornton resigned[23] as auditor (claiming that there were no disagreements) and RT (an obscure auditor) was appointed. Another warning sign was the rotation of CFOs with Ang Suk Ching resigning in July 2014, citing pregnancy complications, and then Alex Hund just four months later for better career opportunities. In April 2015, RT issued[24] a going concern disclaimer for FY14 financials citing concerns over receivables and payables. Financials were also qualified for FY15.

The company triggered all four red flags under our Fake Cash Flow model from FY07 through to FY11. The company reported a number of one-off charges which suggested it had been overly aggressive in past revenue recognition, including a RMB252m subsidy to distributors in FY13 and a RMB481m impairment against receivables in FY15. The company has been suspended since November 2017 when it announced[25] that it was facing a lawsuit for failing to pay a fee of S$50,000 for corporate advisory work, despite being in a net cash position with RMB159m in the bank. We suspect that the company faked sales and profits between FY07-FY11 in order to raise capital which has since been siphoned off.

Eratat Lifestyle (ERAT SP, Delisted): Confirmed fraud

Executive Chairman and CEO: Lin Jiancheng

Eratat Lifestyle designed, manufactured and distributed lifestyle fashion footwear. In FY12, it had 800 speciality stores from which footwear accounted for 32% of sales and apparel 68%. It listed in Singapore in April 2008. The first warning sign came in June 2013 when the company issued a RMB134m corporate bond under the pretext of making future acquisitions. This appeared odd given that the company's financial position was very strong with reported free cash inflows and cash of RMB545m (end-March). A further warning sign came on November 13th when the company released disappointing 3Q13 results, with sales and profits falling 5% and 31% YoY, respectively. Then, on the 29th January 2014, the company surprised the market by announcing[26] that it had defaulted on the RMB4.2m interest expense for its recently issued corporate bond. The audit committee also raised concerns over the validity of the company's RMB640m cash balance and suspended the company's CEO, Mr Lin. In May 2014, the company then announced[27] that cash balances were only RMB73,321. It is now being wound up.

Eratat triggered a full four points under our Fake Cash Flow model from FY09 through to 3Q13, owing to higher operating margins (typically above 20%), large quantities of non-production assets (receivables and cash), low dividends (<10%), no debt and a mid-sized auditor (Moore Stephens).

Flyke International (1998 HK): Fraud

Chairman and CEO: Lin Wenjian

Flyke International was principally engaged in the design, production and sale of footwear, apparel and accessories. It listed in March 2010, raising RMB320m despite generating free cash inflows and a strong balance sheet with net debt to equity of just 12%. In FY11, the company generated 35% of its sales from Flyke footwear, 38% from Flyke apparel, 24% from its export ODM business while shoe soles accounted for 3%. It had 2,160 stores by the end of that year. Flyke produced all of its footwear in-house from 12 production lines while apparel was outsourced.

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[23] SGX: Proposed change of auditor, 15 Nov 2013
[24] SGX: Auditor's comments of Accounts, 14 Apr 2015
[25] SGX: Statutory demand from RHT Corporation Advisory, 18 Dec 2017
[26] SGX: Default on bond interest, 29 Jan 2014
[27] SGX: Update, 30 May 2014

Trouble started when the company issued a profit warning[28] in March 2013 relating to financial performance in 2H12, and a further warning[29] in July which saw the company report a loss in 1H13. In March 2014, the company ordered the suspension of its shares following Shinewing's inability to complete its audit given inconsistent information provided by the company regarding its suppliers. Shinewing went on to resign[30] in January 2015 following a disagreement over fees. A limited forensic report[31] was issued in January 2015 although there had been difficulty in getting hold of the relevant documents owing to a high turnover of staff.

Flyke triggered a full four points under our Fake Cash Flow model in FY11, owing to high operating margins (around 18%), large quantities of non-production assets (receivables and cash), low dividends (<20%) and a reliance on short-term debt.

Fuguiniao (1819 HK, Suspended): Probable fraud

Chairman and Executive Director: Lam Wo Ping

Chief Financial Officer: Chan Wai Shing

Shoe manufacturer and retailer Fuguiniao listed in Hong Kong in 2013. In FY15, the company reported that it had 2,960 retail outlets through 60 distributors across China (of which 255 outlets were directly operated and the rest were franchises). Footwear accounted for 84% of sales and accessories 16%. In August 2016, the company announced[32] that it needed more time to finalise interim results; shortly thereafter, it asked[33] for its shares to be suspended. In late September, the company disclosed[34] that in the preparation of 1H16 results, it had discovered that the company "might have provided certain guarantee for related/connected party(ies)". The board then appears to have fired its independent directors, replaced its Hong Kong auditor (KMPG with Elite Partners)[35] and then attempted (but failed) to take the company private[36]. After the establishment of an internal review under the auspices of Pan-China in August 2017, the consultant disclosed in March 2018 that it wished to issue a disclaimer with regards to certain assets, including deposits, receivables and other financial assets[37]. This suggests that the company had been engaged in faking its past revenues which had been parked in these assets.

The company triggered three out of four red flags under our Fake Cash Flow model in FY13 and FY14. The only reason it did not raise all four red flags is because it paid out more than 40% of profits as dividends. Most frauds are unable to pay dividends because revenues and cash balances have been faked. However, Fuguiniao's dividends of RMB579m between FY13 and FY15 appear to have been financed through RMB985m of new debt issuance and RMB906m of new equity. As a result, the company triggered our Excess Capital red flag. This is raised when companies generate too much external capital relative to requirements. Between FY10 and FY15, the company generated RMB2.6bn in surplus capital, equating to 26% of sales of over the period, in the highest 97th percentile relative to industry peers. This is, once again, a common trait of frauds. The company was audited by KPMG.

Fujian Nuoqi (1353 HK, Suspended): Confirmed fraud

Chairman and CEO: Ding Hui

Fujian Nuoqi was a men's casual wear apparel manufacturer and distributer focused on third- and fourth-tier cities. In FY13, the company claimed to have 249 self-operated retain points and 241 franchises. Apparel accounted for 89% of sales, footwear 7% and accessories 4%. It listed in Hong Kong in January 2014, raising RMB254m. Just six months later, in July, the company disclosed to the Hong Kong

[28] HKEx: Profit Warning, 8 Feb 2013
[29] HKEx: Profit Warning, 17 July 2013
[30] HKEx: Resignation of Aaditor, 12 Jan 2015
[31] HKEx: Forensic Investigation, 28 Jan 2015
[32] HKEx: Postponement of board meeting, 26 Aug 2016
[33] HKEx; Postponement of board meeting, delay of interim result, suspension of trading, 31 Aug 2016
[34] HKEx: Announcement, 22 Sep 2016
[35] HKEx: Proposed removal of independent directors and change of auditor, 22 Nov 2016
[36] HKEx: General mandate to repurchase A-shares, 12 May 2017
[37] HKEx: Update on progress of fulfilment of resumption conditions, 20 Mar 2018

Exchange[38] that it was unable to contact or reach the company's Chairman and Chief Executive, Mr Deng. A week later, the company then disclosed[39] that cash of around RMB230m (US$33m) appeared to have been transferred under the orders of Mr Deng; basically, all the money from the IPO. To make matters worse, the Board disclosed[40] in August that it had discovered that the company had apparently guaranteed loans of RMB454m provided to parties not within the group. By FY16, the company's sales had pretty much trended down to zero suggesting that it had been largely a scam.

Fujian Nuoqi triggered all four points under our Fake Cash Flow model from FY11 through to FY13, its last full set of published financials. An 18% operating margin in FY13 was in the 95th highest percentile relative to peers while cash balances were large at 40% of sales even before the proceeds of the IPO were received. Despite unusually high profitability and no debt, dividends were never paid. EY was its auditor.

Goldrooster (GO8 GR): Fraud

Chairman: Wenwen Li

Goldrooster was an operator of a sports fashion brand specializing in apparel, footwear and accessories for the Chinese market. In FY12, 19% of sales were from footwear, 76% from apparel and 9% accessories. The company listed in Germany in May 2012, raising EUR3m. After making it last filing in November 2013 for 1H13 results, the company appears to have stopped reporting and was delisted[41] in February 2015. The company triggered our Fake Cash Flow model between FY09 and FY12. There is virtually no information available.

Ming Le Sports (ML2K GR): Fraud

Chairman: Siliang Ding

CFO: Alan Chun Kiat Tan

Ming Le Sports was a sportswear manufacturing company. In FY12, 60% of sales came from footwear and 40% from apparel through 26 distributors and 3,700 retail outlets in China. The company listed in Germany in June 2012, raising EUR6m. Management appear to have gone missing sometime in late 2013. The company triggered our Fake Cash Flow model between FY11 and FY12. There is virtually no information available.

Naibu Global (NBU LN, Delisted): Confirmed fraud

Chairman/Founder: Huoyan Lin

CFO: Li Zhen

Naibu Global was a shoe and apparel manufacturer in China focused on second to-fourth-tier cities. In FY13, footwear accounted for 53% of sales and apparel 47%. The company listed on London's Alternative Investment Market (AIM) in 2012, rising RMB54m. the company claimed to be China's 10th largest sportswear brand with 3,040 stores nationwide. In November 2014, it issued[42] a profit warning owing to a sales slowdown and over-stocking. This was followed shortly by the resignation[43] of the company's CFO, Zhen Li, on the 2nd of January 2015 and the suspension[44] of its shares on the 9th. In February, the non-executive directors disclosed[45] that they were having difficulty in contacting Mr. Lin Huoyan, the Chairman, and Mr. Lin Congdeng, executive Director. It appears that management went missing having misappropriated some £150m of shareholders' funds[46].

The company triggered a full four points under our Fake Cash Flow model from FY11 through to 1H14, owing to high operating margins (typically above 20%), large quantities of non-production assets (receivables and cash), low dividends (<5%), no debt and an obscure auditor (Crowe Clark Whitehill). In addition, its gross margin was unusually stable with a volatility of just 2.9%, in the lowest 19th percentile relative to industry peers.

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38 HKEx: Holding Announcement, 25 Jul 2014
39 HKEx: Holding Announcement, 31Jul 2014
40 HKEx: Announcement, 19 Aug 2014
41 Seeking Alpha: Notable Comments On US-Listed Chinese Nanocaps, 28 Feb 2016
42 FE Investigate: Trading update, 24 Nov 2014
43 FE Investigate: Directorate change, 2 Jan 2015
44 FE Investigate: Suspension of trading in the company's shares, 9 Jan 2015
45 FE Investigate: Update, 18 Feb 2015
46 Evening Standard: Court case looms over Naibu's missing bosses, 22 Jun 2017

Appendix 3: Fraud-like characteristics

In addition to the six major fraud indicators which we have identified above, there are a further five lesser ones:

1. Textiles industry prone to fraud: Our past research shows that **84% of our past frauds took place in just 25% of industries**, the textiles industry being one of them. We suspect that this is due to the close and opaque relationship between a company, its distributors and franchisees. This creates ample opportunities to channel stuff, shift profits or round-trip. Given that around half of the Chinese sportswear companies ever listed turned out to be frauds, investors should treat the rest with caution.

2. Big-4 auditor no reason for comfort in Asia: Each of the listed sportswear companies is audited by a Big-4 auditor, as shown in Figure 45; however, we attached no importance to this. Much has been made of the relationship between obscure auditors and the likelihood of fraud, although our research suggests it is not as pronounced as some of the other criteria mentioned above. Our past work demonstrated that around **50% of past frauds used less well-known auditors**, defined as those auditing fewer than 40 listed companies, compared to 22% of normal companies globally. Interestingly, US listed Chinese frauds were more likely to use an obscure auditor (61%) than those listed in Hong Kong[47] (19%) or Singapore (20%). We wonder if this is because auditing standards are so low in Asia that there's simply no need to bother with smaller auditors.

Figure 45: Auditors of the Chinese sportswear companies

Name	Ticker	Year	Auditor	Comment
Anta	2020 HK	FY17	KPMG	Well-known auditor
361 Degrees	1361 HK	FY18	KPMG	Well-known auditor
Xtep	1368 HK	FY19	Ernst & Young	Well-known auditor
Li Ning	2331 HK	FY20	PWC	Well-known auditor
Yue Yuen	551 HK	FY21	Deloitte Touche Tohmatsu	Well-known auditor
Pou Sheng	3813 HK	FY22	Deloitte Touche Tohmatsu	Well-known auditor
China Dongxiang	3818 HK	FY23	PWC	Well-known auditor

Source: GMT Research

3. A lack of dividends despite free cash inflows: Our past research demonstrated that **around 90% of past frauds had a dividend pay-out ratio below 25%, and 71% paid no dividends at all**. The ability of a fraud to pay dividends depends on the amount of internal capital that it is really generating plus the external capital that it has managed to raise. It also depends on the extraction process. Most frauds will raise external capital and the founders will then disappear with the proceeds (such as Naibu Global, Eratat and Fujian Nuoqi); however, some frauds will raise external capital and then pay most of it out as dividends over subsequent years. The fraud will often be unwound by reporting a sharp deterioration in operating performance. With any luck, the share price will fall enabling the founder to take the company private thereby closing out the fraud. We suspect that this is the case for Fuguiniao, Peak Sports and China Hongxing Sports.

Our global leaders returned amounts averaging 31% of profits in the latest financial year, which is not overly generous but, then again, they were not raising excessive amounts of external capital. Meanwhile, our frauds returned just 16% on average, although Fuguiniao managed to return 44% in FY15.

Anta, 361 and Xtep have maintained high pay-out ratios of between 32% and 63% of normalised profit, as shown in Figure 46. However, these companies have been raising excess capital which creates a concern that dividends have been partly financed with external capital. Since listing in FY07, Anta has paid RMB10.8bn in dividends. Free cash

[47] China Accounting Blog: The failure of HKICPA regulation, 12 June 2014

inflows have totalled RMB15bn over this period which is more than ample to fund dividends. Despite this, the company has raised RMB6.9bn in equity, most recently raising RMB3.4bn in March 2017.

Figure 46: Dividends and Buybacks of the Chinese sportswear companies

Name	Ticker	Year	Div + Buyback/ Normalised Profit (%)	Net Flows/Sales -5yrs (%)
Anta	2020 HK	12/2017	63	7
361 Degrees	1361 HK	12/2017	32	14
Xtep	1368 HK	12/2017	66	5
Li Ning	2331 HK	12/2017	8	4
Yue Yuen	551 HK	12/2017	193*	1
Pou Sheng	3813 HK	12/2017	27	(1)
China Dongxiang	3818 HK	12/2017	617**	(17)

*Paid a special cash dividend during the year; **Donqxiang recognised substantial gains from available-for-sale investments which are not included in normalised profits; Source: GMT Research

It's a similar story with 361 and Xtep. Since 361's FY09 IPO, the company has generated RMB5.4bn in free cash inflows but has gone on to raise RMB3.9bn externally (RMB2.2bn from debt and RMB1.7bn from equity). This was more than enough to finance dividends of RMB1.9bn over the same period. As for Xtep, the company has generated RMB5.0bn free cash inflows since its FY09 IPO, which should have been more than enough to cover dividends of RMB3.7bn since then. However, it has gone on to raise RMB3.6bn externally (RMB1.6bn debt and RMB2.0bn equity).

4. Reliance on short term debt or no debt at all: Our past research demonstrated that **67% of confirmed frauds either had short term-debt in excess of 75% of total debt, or no debt at all**. We suspect that frauds are unable to get hold of long-term debt financing as there are few assets against which it can be secured. Also, having bankers conduct due diligence creates a risk that the fraud will be uncovered. Indeed, seven of our nine sportswear frauds had no debt or were 100% reliant on short term debt. Only Fuguiniao and China Hongxing Sports appear to have fooled creditors. Meanwhile, for our global leaders short-term debt averaged just 21% of total debt. Only Columbia Sports had no debt.

Of the three current sportswear companies which cause us the most concern, Anta has virtually no debt at all while 361 and Xtep have managed to secure significant quantities of long term debt, as shown in Figure 47. Given the free cash inflows reported by these two latter companies, it is surprising that they have any debt at all. Whilst it might make sense to raise debt in this low interest environment, it does not make sense to raise debt AND hoard cash.

Figure 47: Debt composition

Name	Ticker	Year	ST Debt/Debt (%)	Debt/Sales (%)
Anta	2020 HK	12/2017	100	1
361 Degrees	1361 HK	12/2017	0	50
Xtep	1368 HK	12/2017	45	36
Li Ning	2331 HK	12/2017	46	1
Yue Yuen	551 HK	12/2017	35	22
Pou Sheng	3813 HK	12/2017	100	14
China Dongxiang G	3818 HK	12/2017	45	37

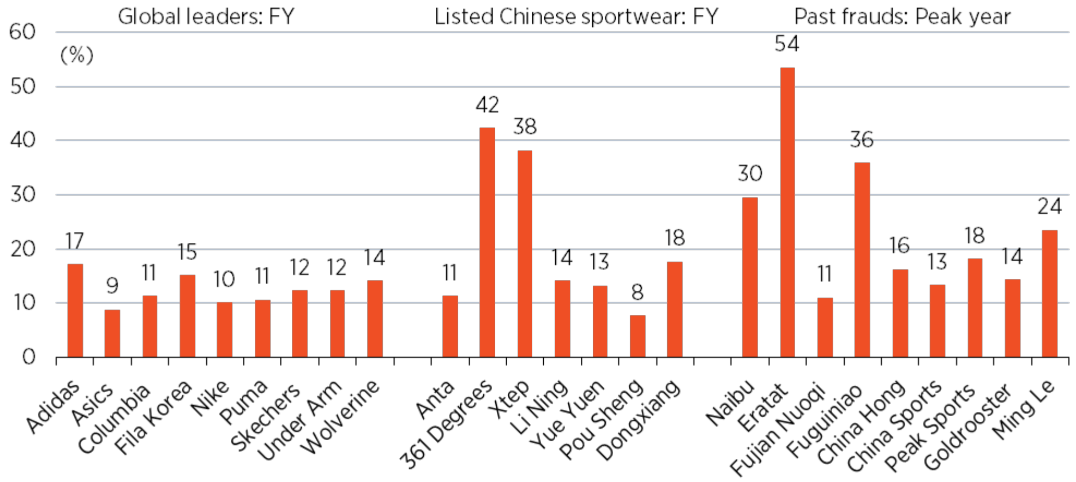
Source: GMT Research, Bloomberg

5. Large receivables not a clear indicator: Contrary to popular belief, receivables are not the preferred place to hide fake cash flow. They not only require a complicated paper trail but the auditors will attempt to verify some of the balances with counterparties. As such, it's risky. Also, ballooning receivables will translate into a drop in operating cash flow that might lead to awkward questions and undermine the investment argument.

That being said, we sometimes see receivables balloon in the latter stages of a fake cash flow. We're not sure why this is but if we were to hazard a guess we think it's a way of purging the balance sheet of fake cash flows. When a company is faking revenues, it tends to report free cash inflows which build up as fake cash balances. In order to purge those cash balances of the fake cash, it needs to report free cash outflows which result in falling cash balances. This can be done by reporting rising receivables which leads to a drop in operating cash flow and translates into free cash outflows. The company will then make a one-off provision against the receivables in order to complete the cleansing process. This was likely the case with China Sports which reported deteriorating receivables from 2010 to 2015, accompanied by substantial provisions.

Receivables in the textile industry average 12% of sales (the top quintile exceed 20%) whilst our global leaders reported 13% last year. Our frauds, meanwhile, reported receivables averaging 24% of sales in their peak year, although there was a wide disparity of 11% to 54%, as shown in Figure 48. Of the nine frauds, just four reported receivables in the top quintile relative to peers. Of the listed Chinese sportswear companies, 341 Degrees and Xtep have the largest receivables, while the latter has reported significant deterioration over the past few years. Indeed, Xtep has begun to take provisions against past sales and receivables which suggests it is beginning to purge its financials.

Figure 48: Average receivables to sales



Source: GMT Research, Bloomberg

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What we do

GMT Research provides independent insight into markets, sectors and companies throughout Asia. Our unique method of mining a comprehensive collection of corporate financial statements for key data allows us to evaluate the financial health of a company, sectors and the market at large. We also investigate the application of accounting standards by companies and sectors, shedding light on the quality of reported profits. Armed with this information, we help investment professionals navigate the financial landscape.

Gillem Tulloch has been a financial analyst since 1994 and has been based in Asia since 1995, with spells in Singapore, Thailand, Korea and most recently Hong Kong. Over his career, Gillem has covered sectors ranging from telecoms to printing to electronics. He has achieved top industry rankings in regional polls like Asiamoney and Institutional Investor, and has appeared on Bloomberg and Business Week. Gillem has worked in research and strategy for several large sell-side institutions, including Cazenove, Nomura and CLSA, and founded the independent research company Forensic Asia before moving on to establish GMT Research.

Nigel Stevenson worked for eight years in investment banking at Dresdner Kleinwort Wasserstein in London, primarily advising on equity offerings and M&A transactions, both in the UK and internationally. He subsequently spent seven years as an equity research analyst at Veritas Asset Management, where he was a member of the global equities team, primarily focusing on the industrials sector. Nigel is a graduate of Cambridge University and a qualified barrister. He has a Masters in Finance from London Business School, awarded with distinction, and is a CFA charterholder.

Mark Webb is a research analyst and chartered accountant. He has been based in Asia for 21 years, writing research on transport, logistic and industrial conglomerate companies since 1997. Mark has worked for HSBC in equity research in Hong Kong and Singapore, and at PricewaterhouseCoopers in London and Hong Kong.

9th Fl., 30 Hollywood Road, Central, Hong Kong.
Tel: +852 3707 3140 www.gmtresearch.com