AUDITING FRAUD

Tomorrow's Scandals?

14 May 2014

In several recent corporate collapses the published accounts proved to be an illusion. One can but conclude that the level of due diligence at audit time was inadequate. To see where the next scandal might be or at least where investors should be concerned, we have cross checked audit costs, a proxy for time spent on due diligence, against companies with problematic accounts. Several well-known names such as Toshiba, China Coms Construction and Venture Manufacturing are amongst the 22 companies on our shortlist in the table below.

Author:
Robert Medd
Robert@gmtresearch.com

Email Rob for his auditing spreadsheet to scan companies in your portfolio for accounting issues.

What Should an Audit Cost?

A review of the audit costs for 8,000 companies globally showed that fees are generally between 2-10 basis points of turnover. There are some notable variances to this in Asia. Some very similar companies pay very different fees, for example Minth, a Chinese autoparts company, pays 12x the fee of its peer Fengfan. Others, such as Aboitiz Power, get accounts certified for under US$10,000. Just how thorough can that audit have been? Our analysis of past frauds in Asia, both actual and alleged, shows that their fees were usually outside this normal range.

Accounting Red Flags

One would expect that auditors would spend extra time scrutinising the accounts of those companies with material exposure to the most subjective accounting standards, and that their audit costs would reflect this. Unfortunately, a scan of 2,600 Asian companies for red flags from nine highly subjective accounting standards (Figure 9) shows that this is just not the case. Moreover, this matters to investors because companies with four or more red flags underperformed those with fewer red flags by 20% over the last three years, and that excludes the frauds. Of the 145 companies with four or more flags, it is the 22 that have extremely low auditing costs that make our shortlist.

Mining the Data

In this report, each of the nine problem areas is reviewed to see what companies come to light. In some areas the conclusions are similar. For example, Chinese companies dominate the lists of excessive receivables, inventories and prepayments. In other areas, companies are highlighted because, whilst they do not have many flags in total, they are very exposed to a single issue. Sina, for example, has extremely low depreciation rates; Incitec Pivot spends but does not grow; Taiwan High Speed has intangibles that are 15x its equity base and Starhub has a deferred tax liability that is 1.5x its equity base.

Figure 1: Asian Companies with 4 or More Red Flags and Low Auditing Costs (Detailed in Appendix IV)

Name (Ticker)	Name (Ticker)	Name (Ticker)	Name (Ticker)
Adani Power (ADANI IN)	China Shipbuild. (601989 CH)	Nisshinbo Hd (3105 JP)	Toda Corp (1860 JP)
Baoding Tianwei (600550 CH)	Cosmo Oil (5007 JP)	Olympus Corp (7733 JP)	Toshiba Corp (6502 JP)
Beijing Tian-A (600161 CH)	J Front Retailing (3086 JP)	Qinghai Salt-A (000792 CH)	Venture Corp (VMS SP)
Bhushan Steel (BHUS IN)	Jaiprakash Assoc. (JPA IN)	Taiyo Nippon (4091 JP)	YTL Power Intl. (YTLP MK)
China Com Cons (1800 HK)	Metallurgical-A (601618 CH)	Tenaga Nasional (TNB MK)	
China Rail Gr (390 HK)	Nippon Elec. Glass (5214 JP)	Tianjin Zhong. (002129 CH)	

Source: GMT Research

What Should an Audit Cost?

Fundamental investors need high quality published accounts. Unfortunately, the frauds at Longtop, Sino Forest, Olympus, Beauty China, EganaGoldpfeil, Ferrochina and Peacemark, amongst others, suggest auditors are not checking hard enough. Although investors are always on the lookout for accounting anomalies, it has been hard to measure if a company's audit was of a suitable standard.

Fundamental investors need quality audits

Accountants typically charge by the hour, so, although the final fee may be discounted and altered, the **audit cost remains, at its core, a time-driven calculation**. The fee therefore provides an indication of the amount of time spent verifying the accounts. Even so, there might be good reasons why auditing similar companies of a similar size in a similar industry might take different times, e.g. multiple factories/ countries/ subsidiaries vs. a single entity. Nonetheless, extreme fees hint at either a very brief or a very difficult audit.

Audit fees are a guide to quality

In this report, by looking into the audit costs for over 8,000 listed companies, we attempt to set out some benchmarks for audit fees. Although cost cannot be the only measure of auditing quality, it does provide a start.

We have compared fees globally

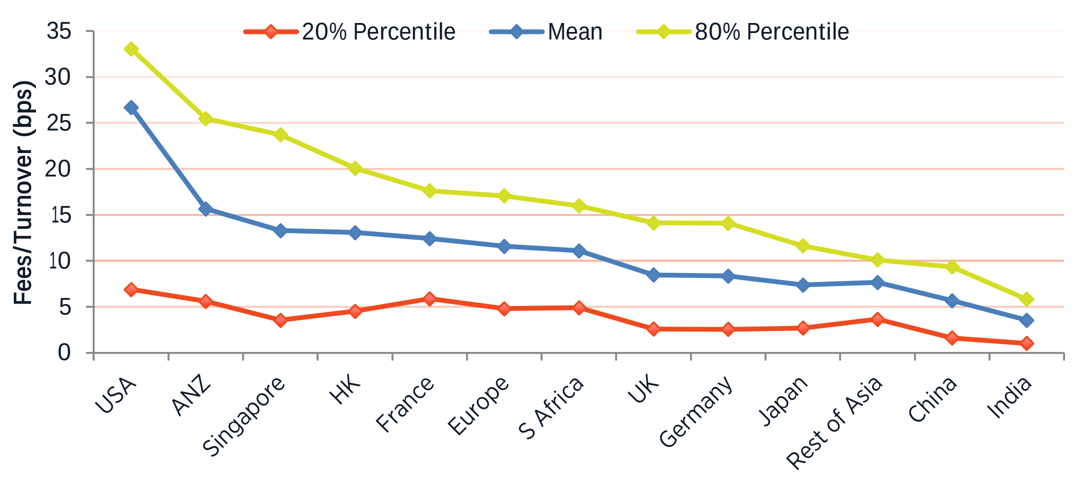
To get an idea of what is a reasonable audit fee, we calculated them as a percentage of revenue so that costs could be compared within industries around the world. We define extreme fees as being above the 80th percentile (why should an audit cost many multiples of that of a similar company in the same industry?) or below the 20th percentile (how can a proper audit be done for a fraction of the price of the competitors?). Finance and property sectors were excluded from this analysis as they are typically asset, rather than turnover, driven and will be covered in a follow-up report. Audit fees are not disclosed by listed companies in Korea, Taiwan and Thailand. So while we have checked these companies for problem accounts there is no comparison with fees.

Creating some benchmarks – but not for property or finance cos.

Fee levels vary between countries, as shown in Figure 2, and are highest in the US (7-33 basis point range) and lowest in China and India (1-6 basis point range). Some of this will be due to salary levels and, perhaps, different industry weightings, but a large part of the difference will be a result of variance in time taken. The US benchmarks may also be distorted due to the small sample size of just 70 companies. For a complete comparison of fees by country please see Appendix I.

Costs vary from country to country and industry to industry

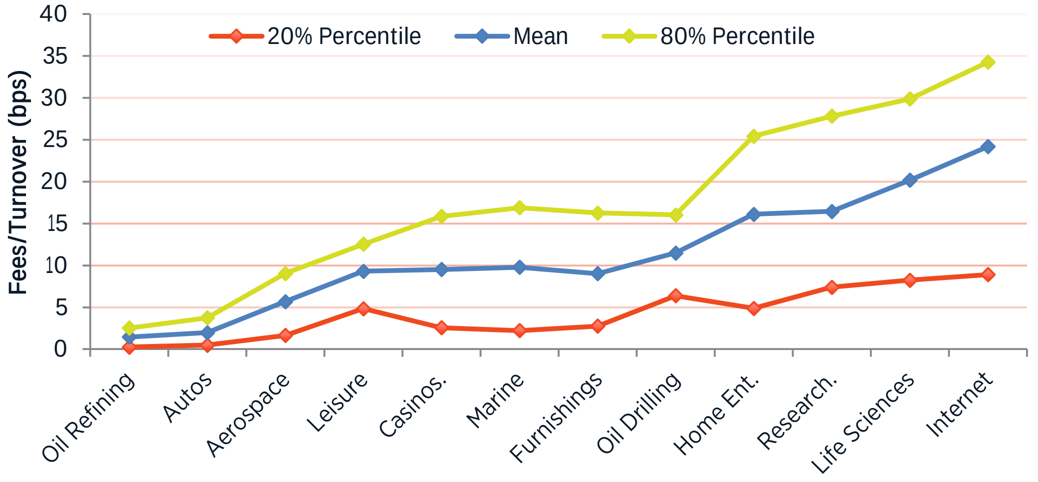
Figure 2: Auditing Fees/Turnover Around The World



Source: GMT Research

Audit costs also vary across industries, as shown in Figure 3. It is clearly quicker (and easier) to audit an oil refinery where the average audit fee is just a few basis points than an Internet software company where an audit typically costs 25bp.

Figure 3: Auditing Fees/Turnover Across Different Industries

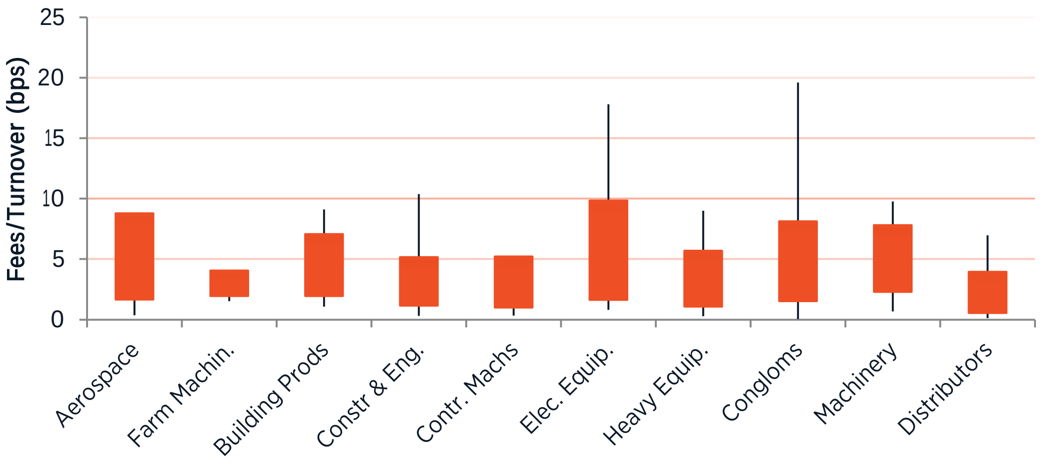


Source: GMT Research

But there are norms and exceptions

Even within our normal range, audit fees can vary by up to 4x. For example, the spread between the 20th to 80th percentiles averages between 2-10bps of turnover. For a complete comparison of auditing costs by industry, please see Appendix II. Most companies cluster within our 'normal' range for audit fees, as shown by the box in Figure 4. However, in almost every industry there are 'extreme' fees, both exceptionally high and low. One can but wonder what is so different at the companies whose fees, represented by the spikes, are so far outside the normal range.

Figure 4: Auditing Fees/Turnover Within An Industry



Source: GMT Research

These differences could have arisen for several reasons: limited disclosure - perhaps tax or corporate advice was bundled together as part of the audit fee; or it might have been due to corporate reorganization; or perhaps the company structure is just more complex than its competitors; or possibly only the parent company's fees were disclosed in the accounts. But the differences can be dramatic. For exemple, Minth Group and Fengfan are both Chinese auto-parts companies with similar turnover and yet Fengfan's audit costs are a twelth of Minth's, as shown in Figure 5. Keihin and Tokai in Japan show a similar pattern.

Extreme fees may be due to a lack of disclosure

Figure 5: Contrasting Audit Costs for Auto Parts Companies

Company	Ticker	Domicile	Turnover	Audit cost	Audit fee
Minth Group	425 HK	China	US$0.9b	US$1.0m	12 bps
Fengfan	600482 CH	China	US$0.9b	US$0.08m	1 bps
Keihin Corp	7251 JP	Japan	US$3.6bn	US$3.4m	12 bps
Tokai	6995 JP	Japan	US$2.9bn	US$0.4m	1 bps

Source: GMT Research

Similar companies but fees are 12x!

Given that businesses in Asia often have multiple interconnecting relationships, complicated holding structures, trade across different jurisdictions where the legal situation can be unclear and use offshore companies to optimise their tax, one would think fees could be quite high. Presumably, auditing such companies is fraught with difficulty. Yet for some companies that is just not the case. For example, in the Philippines and India it is possible to get the auditor to certify the accounts for less than an auditor's salary. As shown in the below table, disclosed auditing costs for Aboitiz Power in the Philippines were just over US$7,000 and Ace Hardware, a fast growing retail chain, managed to get certified off for a mere US$14,600.

In theory, Asia is complex and should be expensive

But not in reality- a US$1.4bn turnover audited for US$7,000!

Figure 6: Asia's Lowest Audit Fees

Name	Ticker	Sector	Mkt Cap (US$bn)	Turnover (US$bn)	Audit Cost ($)
Aboitiz Power	AP PM	Independent Power Producers	6.2	1.4	7,382
Aboitiz Equity	AEV PM	Industrial Conglomerates	6.9	1.7	8,268
PAL Holdings Inc	PAL PM	Airlines	3.0	1.5	11,151
Ace Hardware	ACES IJ	Home Improvement Retail	1.2	0.3	14,581
Digital China -A	000555 CH	Communications Equipment	1.7	1.2	32,288
Bharat Electron	BHE IN	Aerospace & Defence	1.5	1.0	35,584
Alliance Global	AGI PM	Industrial Conglomerates	6.7	2.1	36,798
SM Investments	SM PM	Industrial Conglomerates	12.9	5.3	46,833
Telling Telecom	000829 CH	Communications Equipment	1.2	5.2	48,432
China Tungsten-A	000657 CH	Diversified Metals & Mining	1.1	1.8	51,660
Mangalore Refine	MRPL IN	Oil & Gas Refining & Marketing	1.4	10.8	74,153

Source: GMT Research

This is particularly striking when contrasted with what companies in the same industry and with a similar level of turnover have to spend to get auditors to sign off on their accounts, as shown in Figure 7. The fees for Energy Development, another power company in the Philippines, were US$143,400, or 20x Aboitiz's for less than half the turnover. Again Cebu Air, an airline with two-thirds the turnover of PAL, pays over 5x the fees so audit costs are not low just because these companies are in the Philippines. There are similar comparisons across the rest of Asia. For example, it costs US$74,000 to audit Mangalore Refinery's US$10bn turnover, but 30x more to audit Essar's US$27bn turnover.

Especially evident with same industry, same size but fees are multiples

Figure 7: Audit Fees for Figure 6's Industry Peers

Name	Ticker	Auditor	Mkt Cap (US$bn)	Turnover (US$bn)	Audit Cost ($'000s)
Energy Develop.	EDC PM	Renewable Electricity	2.4	0.6	144,000
JG Summit Hldg	JGS PM	Industrial Conglomerates	7.8	3.0	285, 000
Cebu Air Inc.	CEB PM	Airlines	0.6	0.9	54,000
Wing On Co	289 HK	Department Stores	0.8	0.2	400,000
Datang Telecom	600198 CH	Communications Equipment	1.9	1.0	130,000
Digital China	861 HK	Technology Distributors	1.1	9.5	670,000
China Aerospace	600879 CH	Aerospace & Defence	1.7	0.7	130,000
Xiamen Tungsten	600549 CH	Diversified Metals & Mining	2.8	1.5	290,000
Essar Energy	ESSR LN	Oil & Gas Refining & Marketing	1.5	27.3	2,200,000

Source: GMT Research

We suspect that extreme audit fees equate to either a lack of due diligence or a problematic audit. This is supported by a quick review of some of the recent corporate accounting frauds in Asia, as shown in Figure 8. Taking the two largest companies, one proven fraud, Olympus and one alleged, Olam, the audit fees were well outside the 20th to 80th percentile "normal" range.

Recent frauds had low fees

Figure 8: Audit Fees at Problem Companies in Asia

Company	Ticker	Turnover (US$m)	Fee (US$m)	Fee/Turnover (Bps)	Comment
Acknowledged					
Olympus	7733 JP	9,000	2.4	2.7	Low
Satyam	SCS IN	2,106	1.1	5.2	Very low for industry
Egana	48 HK	901	1.2	13	High
Peace Mark	304 HK	536	0.8	14	High
Ferrochina	FCH SP	780	0.5	1.2	Very Low
Beauty China	BCH SP	100	0.2	17	High
Alleged					
OLAM	OLAM SP	16,793	1.3	0.8	Very Low
DBA Telecom	3335 HK	969	0.1	1.3	Very Low
China Lumena	67 HK	578	0.2	3.8	Low- given size
China Green	904 HK	347	0.3	9.5	Normal
Prince Frog	1259 HK	219	0.2	9.9	Normal

Source: Bloomberg and company accounts

Improving audit quality may increase fees but this should reduce fraud and increase investor confidence. Hopefully, by removing an important element of risk, it would lower the cost of capital in Asia.

Accounting Red Flags

Ideally, accounts should show an honest and faithful representation of a company's affairs. They would avoid legalese[1] and provide clear explanations where necessary. Given that many accounting standards are reasonably simple, clear and well understood, this should be possible. However some are not as simple. In particular the standards for deferred tax liabilities, intangibles, prepaid expenses, inventory, receivables, depreciation and capitalised interest, all give management plenty of latitude for interpretative truth rather than necessarily encouraging honesty.

Some accounting standards are ripe for manipulation

For this report, we awarded companies red flags wherever the numbers for inventory, receivables, prepaid expenses, depreciation, intangibles, capitalised interest and deferred tax liabilities were material, i.e. accounted for more than 20% of earnings or equity, depending on which was relevant, as detailed in Figure 9.

Nine ratios that should worry auditors

[1] The formal and technical language of legal documents.

Figure 9: Subjective Accounting Standards and Red Flag Thresholds

Red Flags
Inventory >60 turnover days
Receivables >60 turnover days
Goodwill >20% of equity
Deferred Taxes >15% of equity
Unrealised profit >30% of equity
Prepaid Expenses >20% of equity
Capitalised Interest >20% of equity
Depreciation <75% of industry average
No revenue growth but capex > depreciation 2009 to 2013

Source: GMT Research

We scanned through the accounts of over 2,600 companies in Asia, excluding property and non-finance sectors, with a market capitalisation of greater than US$1bn. There were 145 companies that raised four or more accounting red flags. These saw their share prices underperform those with less than four red flags by 20% over the last three years, as shown in Figure 10.

Lots of problems = underperformance

Figure 10: Red Flags and stock performance

Red Flags	0	1	2	3	4	5	6	7
Performance over 3 years								
Equal weight	31%	30%	19%	23%	13%	(5%)	5%	(77%)
Cap. Weighted	7%	14%	8%	7%	(8%)	(14%)	(9%)	(77%)
No of companies	601	1039	908	418	107	23	5	1
Performance over 1 year								
Equal weight	12%	15%	17%	16%	15%	(2%)	13%	(25%)
Cap. Weighted	8%	9%	12%	10%	9%	0%	38%	(25%)
No of companies	637	1114	973	434	110	26	5	1

NB The number of companies change because not all companies were listed three years ago. Source: Bloomberg and GMT Research

Problematic accounts should result in expensive audits

One would expect that lots of red flags would not only worry investors but auditors as well, giving rise to greater due diligence and higher fees. However, one of the surprises of this study was that of the 90 companies with four red flags or more that disclose their fees, 42% had extremely low audit costs. We list these 22 companies in ascending alphabetical order in the following table. At a stretch, we could perhaps understand why the audit fees are so low at companies such as Tenaga, Adani Power and Cosmo Oil (highlighted in red). After all, how hard is it to count power stations and refineries? But surely things are more difficult for construction companies like China Rail, Toda Corp or a conglomerate as complicated as Jaiprakash Associates, never mind a retailer like J Front in Japan. Are these companies the accounting scandals of tomorrow? The full list of 145 companies with four or more red flags is displayed in Appendix IV.

But not for these companies

Figure 11: Red Flags and Low Audit Fees

Name	Ticker	Industry	Mkt Cap US$bn	Red flags	Audit Fee (Bps)
Adani Power Ltd	ADANI IN	Independent Power Producers	2.4	4	0.6
Baoding Tianwei	600550 CH	Heavy Electrical Equipment	1.0	7	1.8
Beijing Tian-A	600161 CH	Biotechnology	1.5	4	4.2
Bhushan Steel	BHUS IN	Steel	1.7	4	1.8
China Com Cons-H	1800 HK	Construction & Engineering	10.0	4	0.6
China Rail Gr-H	390 HK	Construction & Engineering	8.9	4	0.7
China Shipbuil-A	601989 CH	Machinery & Heavy Trucks	12.8	4	1.2
Cosmo Oil	5007 JP	Oil & Gas Refining & Marketing	1.6	5	0.4
J Front Retailing	3086 JP	Department Stores	3.5	4	1.8
Jaiprakash Assoc.	JPA IN	Industrial Conglomerates	2.0	5	0.9
Metallurgical-A	601618 CH	Construction & Engineering	4.8	4	1.8
Nippon Elec. Glass	5214 JP	Electronic Components	2.6	4	2.2
Nisshinbo Hd	3105 JP	Industrial Conglomerates	1.5	5	2.0
Olympus Corp	7733 JP	Health Care Equipment	10.5	4	5.3
Qinghai Salt-A	000792 CH	Fertilizers & Agricultural Chemicals	3.7	5	1.6
Taiyo Nippon	4091 JP	Industrial Gases	3.5	4	2.3
Tenaga Nasional	TNB MK	Electric Utilities	20.6	4	0.5
Tianjin Zhong.	002129 CH	Semiconductors	2.6	5	0.9
Toda Corp	1860 JP	Construction & Engineering	1.1	4	1.0
Toshiba Corp	6502 JP	Industrial Conglomerates	16.7	4	1.9
Venture Corp Ltd	VMS SP	Electronic Manufacturing Services	1.7	4	1.8
YTL Power Intl.	YTLP MK	Multi-Utilities	3.3	4	1.9

Source: GMT Research

In the rest of this report, we talk through each of the nine subjective accounting standards/interpretations and highlight companies where these become material.

Red Flag 1: Depreciation & Amortisation

Depreciation & Amortisation reflects the declining value of an asset over its useful life. Prudence would suggest using as short an accounting life as is reasonable, possibly even shorter than the asset's expected life, in case either the technology or competitive environment changes.

A flexible accounting charge

Aggressive depreciators

Depreciation rates vary dramatically across Asia. Figure 12 highlights Asia's fastest depreciators. The top three, BEC World (BEC TB), Shenzhen Zggame (300052 CH) and Gungho Online (3765 JP) are writing off intangible assets, i.e. programming, software etc. But while this seems prudent, it begs the question as to why these assets are even capitalised in the first place. How realistic can any valuation be if the asset is potentially worthless in less than two years?

Some intangibles are written down very quickly

Moreover, all of these companies are using depreciation rates at least 3x higher than their peers. Unless their competitors' balance sheets are very different, someone is using the wrong numbers. Notwithstanding their apparent conservatism, several of these companies also have extremely low audit fees suggesting the auditor has done limited due diligence including Gungho Online, Manila Water and Blue Focus, as shown in the table below.

Far faster than their competitors

Figure 12: Asia's 10 Fastest Depreciators

Short Name	Ticker	Industry	Mkt cap US$bn	Depreciation rate	Relative to industry	Audit Fee (bps)	Audit Fee Range
BEC World Pcl	BEC TB	Broadcasting	3.4	104%	10.9x	N/A	N/A
Shenzhen Zqgame	300052 CH	Home Entertainment	1.1	98%	5.3x	16	Normal
Gungho Online	3765 JP	Home Entertainment	6.2	71%	3.9x	4	Low
NWS Holdings	659 HK	Conglomerates	6.2	57%	11.8x	12	High
Manila Water	MWC PM	Water Utilities	1.2	56%	6.8x	1	Low
Shenzhen Express	600548 CH	Highways & Rail	1.2	47%	4.2x	11	High
Shenzhen Aisi-A	002416 CH	Technology Distr.	2.1	40%	3.6x	0	Low
Qunar Cayman	QUNR US	Internet Retail	3.1	38%	4.2x	N/A	N/A
Bluefocus Comm.	300058 CH	Consulting Services	3.9	38%	3.7x	3	Low
SIIC Environment	SIIC SP	Water Utilities	1.2	37%	4.5x	11	High

Source: Bloomberg and company accounts

Slow depreciators

At the other end of the spectrum, some assets are almost immortal, with 35+ year depreciation periods. Some of these estimates may be realistic, but a lot has changed in the last 30 years and will again over the next 30. Things that seemed useful even ten years ago, such as SLR cameras, telephone exchanges and department stores, are rapidly becoming obsolete. One expects utilities and other asset-based companies to have long depreciation periods but, even so, lives of over 50+ years seem optimistic.

Alternatively some companies believe in long expected asset lives…

After Figure 12, it comes as something of a surprise to see an internet company, Sina, as the second slowest depreciator (see Figure 13) with a depreciation/ amortisation rate of just 0.2%. Given that the Chinese government recently took away some of Sina's internet rights and how quickly some internet companies have risen only to disappear, the implied asset life of 400 years seems pretty optimistic. Also, while Ryman Healthcare might maintain its assets and refurbish them annually, can the same really be said for Aquila Resources? While audit fees are high for Hopewell, Sina, and Aquila, they are extremely low for Bajaj Holdings.

For an internet company and a mine?

Figure 13: Lowest Depreciation and Amortisation Rates in Asia

Short Name	Ticker	Industry	Mkt cap US$m	Deprec. Rate	Rel. to Industry	Auditing Fees (Bps)	Audit Fee Range
Hopewell Hldgs	54 HK	Conglomerates	3.0	0.2%	0.0x	32	High
Sina Corp	SINA US	Internet Software	3.2	0.2%	0.0x	25	High
Cosco Capital In	COSCO PM	Food Retail	1.7	0.3%	0.0x	N/A	N/A
Ryman Healthcare	RYM NZ	Health Care Facilities	3.5	0.4%	0.1x	7	Normal
Bajaj Holdings	BJHI IN	Multi-Sector Holdings	2.0	0.4%	0.1x	2	Low
Aquila Res Ltd	AQA AU	Steel	1.0	0.4%	0.1x	20	High
OUE Ltd	OUE SP	Hotels & Resorts	1.7	0.5%	0.1x	N/A	N/A
Oil Search Ltd	OSH AU	Oil & Gas Exp. & Prod.	12.3	0.6%	0.1x	6	Normal
EBOS Group Ltd	EBO NZ	Health Care Distrib.	1.1	0.6%	0.1x	6	Normal
Reliance Power	RPWR IN	Ind. Power Producer	3.3	0.7%	0.2x	N/A	N/A

Source: Bloomberg and company accounts

Depreciation rates covered a wide range. 141 companies (out of the 2,100) had rates below 2% and 212 had rates over 10%. Please see Appendix III for a full list of each industry's typical Depreciation and Amortisation rates.

Overall a large dispersion of depreciation rates

Red Flag 2: Capex but no Growth

Some companies appear to operate a consistent policy of under-depreciation to create the illusion of profitability and growth. The table below, (Figure 14), illustrates what might happen if a company depreciates an asset with a five year life span over ten years. This boosts profitability in the first four years but in the fifth year, the asset falls apart and management is forced to take a large one-off restructuring charge. In our below example, this charge of 500 is actually higher than all previously accumulated profits.

Under depreciation used to create profit…

… followed by a restructuring

Figure 14: Under Depreciation Flatters Profits before a Write-off

		Year 1	Year 2	Year 3	Year 4	Year 5
Profit and loss						
	Revenue	1,000	1,000	1,000	1,000	1,000
	Profit before Dep.	130	160	180	200	200
	Depreciation	(100)	(100)	(100)	(100)	(100)
	Profit	**30**	**60**	**80**	**100**	**100**
	Exceptional write-down					**(500)**
	Tax @ 30%	(9)	(18)	(24)	(30)	-
	Earnings	**21**	**42**	**56**	**70**	**(400)**
Cash flow						
	Depreciation	100	100	100	100	100
	Capex	(200)	(200)	(200)	(200)	(200)
Balance sheet						
Asset	Fixed Asset	1000	1000	1000	1000	1000
	Depreciation	(100)	(200)	(300)	(400)	(500)
	Write off					(500)
	Net Fixed Asset	900	800	700	600	0

Source: GMT Research

Insightful investors will have noticed that even though revenues were flat, capital expenditure always exceeded depreciation. If a more appropriate depreciation rate had been used, profits would have turned into losses, as shown in Figure 15.

But "too" much capital expenditure reveals the truth

Figure 15: Reality: Capex = Depreciation and the Company Is Loss Making

		Year 1	Year 2	Year 3	Year 4	Year 5
Profit and loss						
	Revenue	1,000	1,000	1,000	1,000	1,000
	Profit before Dep.	130	160	180	200	200
	Depreciation	(200)	(200)	(200)	(200)	(200)
	Profit	**(70)**	**(40)**	**(20)**	**0**	**0**
	Exceptional write down					
	Tax @ 30%	-	-	-	-	-
	Earnings	**(70)**	**(40)**	**(20)**	**0**	**0**
Cash flow	Depreciation	200	200	200	200	200
	Capex	(200)	(200)	(200)	(200)	(200)
Balance sheet						
Asset	Fixed asset	1000	1000	1000	1000	1000
	Depreciation	(200)	(400)	(600)	(800)	(1,000)
	Write down					-
	Net fixed asset	800	600	400	200	0

Source: GMT Research

Figure 16 highlights companies in Asia in which capital expenditure is at least 3x depreciation, but which had flat revenues between 2009-2013. Beijing Jingyu could possibly be excused, given the cyclical nature of the semiconductor industry, but capital expenditure of 9x depreciation for no growth seems a little wasteful. Despite these rather poor results, the auditors at Malaysia Marine, IOI Corp and Okumura were able to audit at very low cost. We would not be surprised if these companies reported some restructuring/write-offs in the not too distant future.

Flat revenues, massive capex relative to depreciation.....

... but no questions from the auditors

Figure 16: Capex Consistently Greater Than Depreciation but No Growth

Name	Ticker	Industry	Mkt Cap US$bn	Capex/ Depn 2009- 13	Revenue Growth	Audit Fees (Bps)	Audit Fee Range
Beijing Jingyu	601908 CH	Semiconductors	1.2	9.2x	(0%)	N/A	N/A
China Dongxiang	3818 HK	Apparel & Accessories	1.0	6.0x	(23%)	32	High
GS Holdings	078930 KS	Oil & Gas Refining	4.3	5.0x	(27%)	N/A	N/A
Malaysia Marine	MMHE MK	Construction & Eng.	2.0	4.6x	(8%)	1	Low
IOI Corp Bhd	IOI MK	Agricultural Products	9.4	4.3x	(4%)	2	Low
Hyundai Dept.	069960 KS	Dep. Stores	3.0	4.3x	(13%)	N/A	N/A
Okumura Corp	1833 JP	Construction & Eng.	1.0	3.8x	(4%)	2	Low
Guangzhou Auto	2238 HK	Autos	7.1	3.5x	(22%)	N/A	N/A
Incitec Pivot	IPL AU	Div. Chemicals	4.4	3.1x	(0%)	6	Normal
Baoding Tianwei	600550 CH	Electrical Equipment	1.0	3.0x	(8%)	2	Low

Source: Bloomberg and company accounts

Perhaps even more difficult to justify is when companies have: No growth, capex exceeds depreciation and even those depreciation rates are fraction of the company's peers. We present these in Figure 17. Interestingly, seven out of the ten companies are Japanese. If growth is hard, why is capital expenditure so high? Despite their unusual depreciation practices, Nintendo, J Front, Obayashi and Nippon Glass also paid very low fees to their auditors.

Same again but now depreciation rates are below the industry peers

Figure 17: No Growth, Capex> Depreciation and Depreciation Rates below Their Peers

Name	Ticker	Industry	Mkt Cap (US$bn)	Capex/ Dep'n 09- 13	Revenue Growth 09-13	Dep'n vs Industry	Audit Fees (Bps)	Audit Fee Range
Magnum Bhd.	MAG MK	Gaming	1.3	1.7x	(3%)	0.3x	7	Normal
Okumura Corp	1833 JP	Constr.& Engineering	1.0	3.8x	(4%)	0.3x	2	Normal
Reliance Comm.	RCOM IN	Wireless Tel.	4.5	1.7x	(2%)	0.4x	5	Normal
J Front Retailing	3086 JP	Depart. Stores	3.5	1.6x	(0%)	0.4x	2	Low
Nippon Konpo	9072 JP	Trucking	1.2	1.2x	(0%)	0.4x	5	Normal
Nintendo Co	7974 JP	Home Entertainment	14.9	1.6x	(23%)	0.4x	2	Low
Obayashi Corp	1802 JP	Constr.& Engineering	4.7	2.2x	(4%)	0.4x	1	Low
Toho Co Ltd	9602 JP	Movies	3.6	1.2x	(1%)	0.5x	7	Normal
Nippon Elec. Glass	5214 JP	Elect.Components	2.6	1.7x	(4%)	0.6x	2	Low
KCC Corp	002380 KS	Building Prods	5.1	2.2x	(5%)	0.6x	N/A	N/A

Source: Bloomberg and company accounts

Red Flag 3: Intangibles

Valuation is subjective

Valuing intangibles such as goodwill, brand value and intellectual property, leaves a lot of room for discretion. Balance sheets that have material intangibles should attract auditing scrutiny given the high degree of subjectivity in such valuations. For some, such as Taiwan High Speed, Jasa Marga and Sydney Airport, intangibles represent licence or concession fees. As long as the operator obeys the terms and the concession grantor allows price increases as agreed, then a valuation based on cost that is reduced over the life of the concession seems reasonable. In some instances, goodwill has been created via a public takeover, e.g. CP All's purchase of Siam Makro, or EBOS's acquisition of the Symbion Group, so there is some market justification for the accounting premium. However, for all of the companies in Figure 18, intangibles far exceed equity, so any revaluation would have a meaningful effect on book value.

Excessive Intangibles magnify valuation risks

Figure 18: Asia's Top Ten Intangibles/Equity

Name	Ticker	Industry	Mkt Cap (US$bn)	Intangibles/ Equity	Audit Fee (Bps)	Audit Fee Range
Taiwan High Speed	2633 TT	Highways & Railtracks	1.0	15412%	N/A	N/A
Nord Anglia Ed.	NORD US	Education Services	2.0	3452%	12	N/A
CP All Pcl	CPALL TB	Food Retail	12.2	553%	N/A	N/A
Starhub Ltd	STH SP	Wireless Telecoms	5.7	460%	3	Normal
CRTG	269 HK	Highways & Railtracks	1.3	406%	5	Normal
Sydney Airport	SYD AU	Airport Services	8.6	405%	4	Normal
Astro Malaysia	ASTRO MK	Broadcasting	5.1	305%	7	Normal
EBOS Group	EBO NZ	Health Care Distributors	1.1	288%	6	Normal
Doosan Corp	000150 KS	Industrial Conglomerates	2.7	240%	N/A	N/A
Jasa Marga	JSMR IJ	Highways & Railtracks	3.5	240%	N/A	N/A

Source: Bloomberg and company accounts

Even Goodwill may not be realistic

Even Goodwill created by acquisitions, on or off market, can be misleading. If the assets turn out to be cyclical or the market for those assets changes, then the goodwill should be adjusted. The market already seems to be taking a different view of value embedded in the companies in Figure 19. Both Li & Fung and Doosan Infracore have a lot of goodwill from acquisitions that were made pre-2008 and have not always performed well. The value of that goodwill should probably be reassessed although the auditors do not seem that bothered. Only Home Inns had an expensive audit suggesting little due diligence was given to remaining companies on this list.

Figure 19: Largest Goodwill/Equity with Poor Equity Performance

Name	Ticker	Industry	Mkt Cap (US$bn)	Goodwill /Equity	Share price fall over 3 yrs.	Audit fee (Bps)	Audit Fee Range
Li & Fung	494 HK	Apparel & Accessories	12.7	127%	(40%)	3	Low
China Natl Bdg-H	3323 HK	Construction Materials	5.2	120%	(51%)	1	Low
Doosan Infracore	042670 KS	Industrial Machinery	2.5	104%	(51%)	N/A	N/A
UGL Ltd	UGL AU	Construction & Eng.	1.1	101%	(56%)	6	Normal
Doosan Heavy	034020 KS	Construction & Eng.	3.6	99%	(42%)	N/A	N/A
Worleyparsons	WOR AU	Oil & Gas Equip. & Ser.	3.8	87%	(47%)	5	Normal
Metcash Ltd	MTS AU	Food Distributors	2.3	84%	(35%)	4	Normal
Nippon Sheet Glass	5202 JP	Building Products	1.2	81%	(41%)	3	Normal
Home Inns Adr	HMIN US	Hotels & Resorts	1.4	51%	(31%)	16	High
Tata Power Co	TPWR IN	Electric Utilities	3.7	50%	(35%)	3	Normal

Source: Bloomberg and company accounts

Red Flag 4: Receivables

Extended credit terms are a weakness…

Excessive receivables suggest that either a company is selling to people that are struggling to pay, the sales force has been channel-stuffing to boost year-end revenues, or the product is not competitive enough to get normal credit terms. All of these should arouse concern, but are usually representative of poor management rather than manipulation.

…and could indicate fraud

But revenues and profits can be booked to the accounts when goods have been delivered and invoiced, but not yet actually paid for. There have also been instances in the past where invoices have been manufactured, or represented intra-company trading or were just 'early recognition' of sales that never happened.

So should raise auditors' concerns…

As such, auditors need to pay special attention when receivable days extend beyond the industry norm. Figure 20 ranks in descending order the top ten largest receivable days in Asia. The table is dominated by Chinese companies, apart from Celltrion, a small US$200m turnover Korean drug maker.

…but not always in Asia

Several companies with extensive receivables have high audit costs. But it is worrying to see very low fees at Sinovel Wind, China First and Taiyuan Heavy, given that the receivables represent such a large proportion of their equity.

Figure 20: Top Ten Receivables Days in Asia

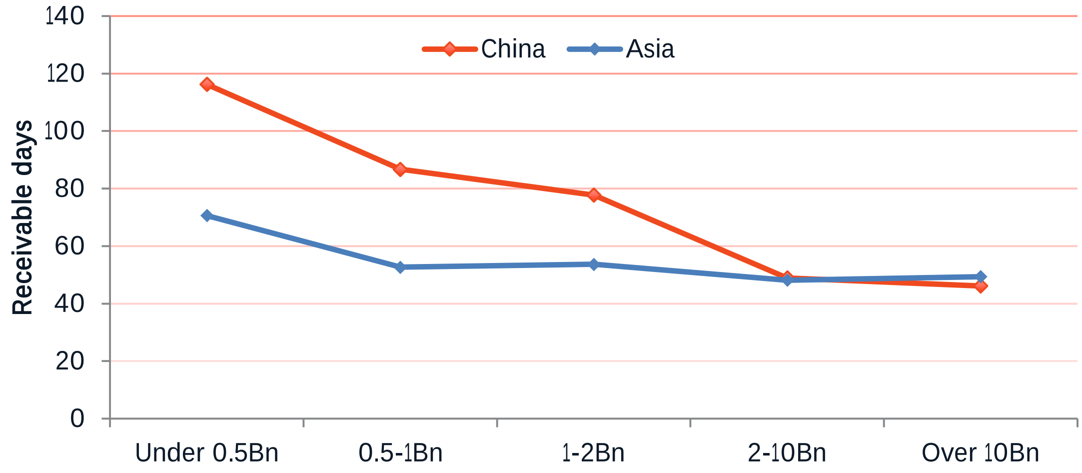
Name	Ticker	Industry	Mkt Cap US$bn	A/R days	As % of equity	Audit Fee (Bps)	Audit Fee Range
Sinovel Wind-A	601558 CH	Heavy Electrical Equip.	2.2	963	87%	2	Low
China First -A	601106 CH	Industrial Machinery	2.0	543	74%	1	Low
Tianjin Cap-A	600874 CH	Environ. & Facilities Services	1.5	476	52%	24	High
Beijing Shouha-A	002665 CH	Building Products	1.0	459	69%	4	Normal
Wuhan Guide In-A	002414 CH	Elect. Equip. & Instruments	1.5	442	18%	17	High
Celltrion Inc	068270 KS	Pharmaceuticals	4.8	438	25%		N/A
Jiangsu Zongyi-A	600770 CH	Elect. Comp. & Equip.	1.7	431	13%	24	High
Landocean Ener-A	300157 CH	Application Software	1.3	379	23%	16	High
Taiyuan Heavy-A	600169 CH	Constr. Mach. & Heavy Trucks	1.1	362	175%	1	Low
China Rongsheng	1101 HK	Constr. Mach. & Heavy Trucks	1.2	358	24%	97	High

Source: Bloomberg and company accounts

There are lots of bad payers in China…

Terms of trade in China are a lot more generous (or difficult, depending on your perspective) than elsewhere in Asia. As shown in Figure 21, smaller companies not only find it more difficult to get credit in China, they clearly also find it a lot more difficult to get paid.

Figure 21: Receivable Days Grouped by Market Capitalisation



Source: Bloomberg and company accounts

... and a few elsewhere in Asia

Given China's dominance of this category, we re-worked the screen excluding China to see if there were problems elsewhere, as shown in Figure 22. Receivables at the top ten worst offenders were around 200+ days vs. China's 400+. However, heavy equipment & industrial machinery makers appear in both tables, illustrating that neither industries are prompt payers. As in China, several of the top companies, Malaysia Marine, Bharat Heavy and Bharat Electronics have very low audit costs despite their receivables being over 200 days and 50% of their equity base.

Figure 22: Top Ten Receivable Days excluding China

Name	Ticker	Industry	Mkt Cap (US$bn)	A/R (Days)	As % of Equity	Audit Fee (Bps)	Audit Fee Range
Celltrion Inc	068270 KS	Pharmaceuticals	4.8	438	25%	N/A	N/A
Malaysia Marine	MMHE MK	Construction & Eng.	2.0	280	86%	1	Low
Ginko Int.	8406 TT	Health Care Supplies	1.6	272	45%	N/A	N/A
Amada Co Ltd	6113 JP	Industrial Machinery	2.9	248	34%	4	Normal
Neyveli Lignite	NLC IN	Ind. Power Producers	1.9	248	29%	N/A	N/A
Bharat Heavy	BHEL IN	Heavy Electrical Equip.	7.7	223	96%	0	Low
Sankyo Co.	6417 JP	Leisure Products	3.9	208	15%	7	Normal
Ryman Healthcare	RYM NZ	Health Care Facilities	3.5	208	14%	7	Normal
Bharat Electron	BHE IN	Aerospace & Defence	1.6	200	52%	0	Low
Alstom T&D	ATD IN	Heavy Electrical Equip.	1.1	194	213%	2	Normal

Source: Bloomberg and company accounts

Red Flag 5: Prepaid Expenses

Why does a company pay in advance for goods or services? Some long lead-time industries, such as shipbuilding, understandably require deposits, but most businesses extend credit to their corporate customers. Therefore, high pre-payments should be a concern, especially since it can be fertile ground for manipulating accounts. Companies can make payments to connected parties for services that will never happen (fraud), can just pretend to have made payments to connected parties (more fraud) making the balance sheet appear stronger. Prepayments can also expose shareholders to credit risk, or just the risk that the goods paid for will never materialise. Figure 23 lists the ten companies in Asia with the highest levels of prepayments as a percentage of equity, in descending order. As with receivables, it is noticeable that the worst offenders are in China.

Why pay upfront?

It introduces credit risks or worse.

The table also includes prepayments as a percentage of sales to illustrate just how large they are relative to the company's business. It is no surprise that of the top ten companies, three are in construction. Most likely the pre-payments are to secure materials and prices at predetermined prices. But this does create a new risk, even as it eliminates others.

Double check for materiality

Quite why an electronic components company such as Dongxu, a semiconductor company like Shunfeng Photo or China Zhongwang need to advance well over six months revenue and 50% of their equity is unclear. Any failure by their suppliers to deliver would lead to significant losses. Although their audit costs all fall in the 'normal' range, we believe a more thorough audit is required in these situations. The low audit costs at Sinoma, Poly Culture, Jaiprakash and China National should really worry investors.

Some odd pre-payers

Figure 23: Ten highest Prepaid Expenses as a % of Equity

Name	Ticker	Industry	Mkt Cap (US$bn)	Pre-payment as a % equity	Pre-payment % sales	Audit fee (Bps)	Audit Fee Range
Dongxu Opto.	200413 CH	Elec. Components	2.8	193%	98%	5	Normal
Sinoma Intern.	600970 CH	Construction & Eng.	1.2	130%	27%	1	Low
Poly Culture.	3636 HK	Auctioneer	1.1	100%	27%	3	Low
CRTG	269 HK	Highways & Railtracks	1.3	82%	48%	5	Normal
China National-A	601117 CH	Construction & Eng.	4.6	81%	28%	0	Low
Jaiprakash Assoc	JPA IN	Conglomerates	2.0	71%	47%	1	Low
Shunfeng Photo.	1165 HK	Semiconductors	2.8	66%	77%	10	Normal
Larsen & Toubro	LT IN	Construction & Eng.	20.6	59%	27%	N/A	N/A
Sumco Corp	3436 JP	Semiconductor Equip.	2.0	55%	30%	5	Normal
China Zhongwang	1333 hk	Aluminium	1.7	50%	59%	3	Normal

Source: Bloomberg and company accounts

Red Flag 6: Inventory

Not only does excessive inventory tie up capital and reduce profitability, but most products have a use-by date to cover deterioration, obsolescence or fashion, and decline in value over time. A pragmatic management would either liquidate the inventory or write it down to a level that reflects the possibility of liquidation.

Excessive inventory is bad management

Inventory days were calculated using sales, rather than the traditional cost-of-goods-sold method. It is a less accurate and somewhat more generous way of measuring overstocking, but limited levels of disclosure mean it is hard to get good quality cost-of-goods data for enough companies. The longest inventory days were then cross-checked against equity to see what the impact of a write-off would be.

Inventory days are calculated using turnover

Two things stand out. Firstly, as with receivables and prepayments, nearly all of the companies with outsize inventories are in China. Secondly, many of the inventories are well over 100% of equity, so any write down would have a major impact on both profitability and book value, Figure 24.

Again there are problems in China

Several of the top ten have very low audit costs. Sinovel's sales have collapsed, and presumably clearing over two years inventory at today's run rate might mean taking substantial write-downs. How can this be properly assessed in such a brief audit? Can a clothing company with two years of inventory (Youngor), really merit a clean bill of health?

And again it does not trouble the auditors

Figure 24: Highest Inventory Days in Asia

Name	Ticker	Industry	Mkt Cap US$bn	Inventory days	As % of Equity	Audit Fee (Bps)	Audit Fee Range
Sinovel Wind	601558 CH	Electrical Equipment	2.2	790	71%	2	Low
Shenzen Over.	000069 CH	Leisure Facilities	5.4	730	193%	1	Low
Youngor Group	600177 CH	Apparel & Accessories	2.4	606	163%	1	Low
China Baoan	000009 CH	Conglomerates	2.1	530	177%	4	Normal
Shang Waigao	900912 CH	Trading Companies	4.6	525	202%	2	Low
Citychamp Dart.	600067 CH	Electrical Components	1.1	521	232%	2	Low
Hanergy Solar	566 HK	Semiconductor Equipment	4.2	389	22%	17	High
Hafei Aviation	600038 CH	Aerospace & Defence	2.4	363	183%	1	Low
Beijing Orient	002310 CH	Research Services	2.7	355	91%	3	Low
China Aerospace	600879 CH	Aerospace & Defence	1.8	353	80%	2	Low

Source: GMT Research

A note of caution. This report had intentionally excluded property companies. However, some non-property companies include 'property projects under development' within their inventory data. We have tried to strip these numbers out, but it is possible some were missed.

Beware some inventories may be distorted by property

Payments due under contract

In some accounts, inventory includes "payments due from customers under contracts in process", effectively making accounts receivable look like inventory. The size of some of these receivables are very material, as shown in Figure 25. At least the audit costs at Sound Global (976 HK) and Chinasoft (354 HK) possibly reflect this.

Or payments under contract

Figure 25: Contracts Awaiting Payment

Name	Ticker	Industry	Mkt Cap US$bn	Contracts receivable days	As % of Equity	Audit Fee (Bps)	Audit Fee Range
Vard Holdings	VARD SP	Machinery & Trucks	0.9	201	166%	1	Low
China Rongsheng	1101 HK	Machinery & Trucks	1.2	2,012	133%	97	High
Yuanda China	2789 HK	Building Products	0.6	166	115%	7	Normal
Chalieco-H	2068 HK	Construction & Eng.	1.1	120	94%	3	Normal
Nam Cheong Ltd	NCL SP	Machinery & Trucks	0.6	133	49%	3	Normal
Chinasoft Intl	354 HK	IT Consulting	0.6	121	47%	13	High
Sound Global Ltd	967 HK	Water Treatment	1.4	127	36%	14	High

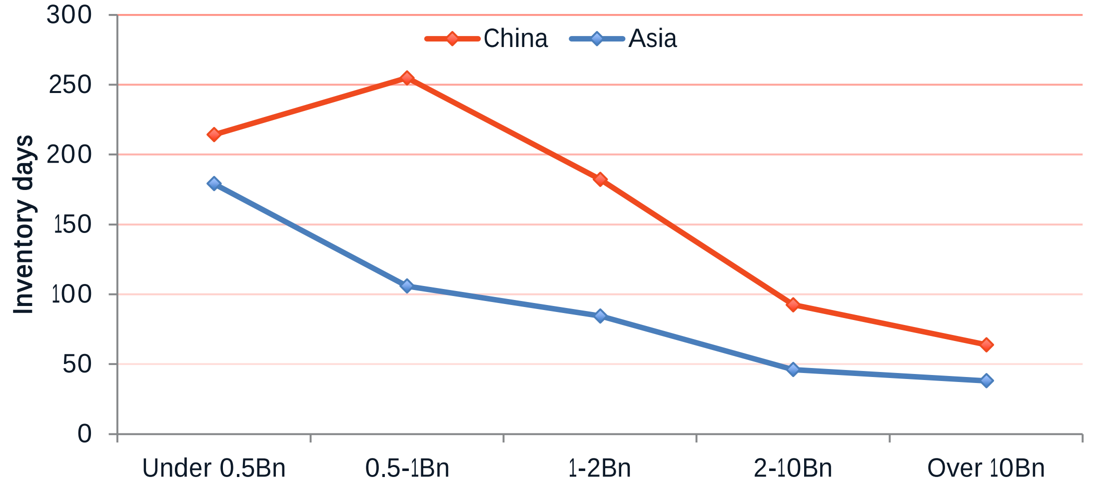
Source: GMT Research

Lots of overstocking in China

The top ten Inventory days list is, like receivables, dominated by China. Charting the inventory days by company turnover reveals just why, as shown in Figure 26. Working capital in China just requires more funding than elsewhere in Asia, particularly for the smaller companies.

Tough for SME's in China

Figure 26: Inventory Days in Asia Grouped by Market Capitalisation



Source: GMT Research

Odd that a commodity business should hold so much stock

As with receivables, the screen was re-run excluding China, as shown in Figure 27. Inventory days are much shorter and represent a smaller proportion of each company's equity. Still, we find it rather odd to see commodity businesses like Iluka Resources and Bhushan Steel with so much inventory kept on hand. Both the Indian companies, Bhushan Steel and Bharat Electronics, and SMC are also noteworthy for their low audit costs.

Figure 27: Ex China - Highest Inventory Days in Asia

Name	Ticker	Industry	Mkt Cap US$bn	Inventory days	As % of equity	Audit fee (Bps)	Audit Fee Range
Iluka Resources	ILU AU	Mining	3.4	251	34%	8	Normal
Celltrion Inc	068270 KS	Pharmaceuticals	4.8	221	13%	N/A	N/A
SMC Corp	6273 JP	Machinery	16.8	208	27%	2	Low
Yungtay Eng Co	1507 TT	Machinery	1.2	206	110%	N/A	N/A
Sumco Corp	3436 JP	Semiconductor Equip.	2.0	200	99%	5	Normal
Gudang Garam	GGRM IJ	Tobacco	9.1	199	103%	N/A	N/A
Bhushan Steel	BHUS IN	Steel	1.7	197	61%	2	Low
Godrej Industries	GDSP IN	Diversified Chemicals	1.7	195	120%	N/A	N/A
Bharat Electron	BHE IN	Aerospace & Defence	1.6	193	50%	0	Low
Scinopharm	1789 TT	Pharmaceuticals	1.9	180	26%	N/A	N/A

Source: GMT Research

Red Flag 7: Deferred Tax Liabilities

It is easy to understand why a company might have short-term deferred tax liabilities: subsidiaries with mismatched corporate year-ends, different international tax payment dates and deals creating tax liabilities that do not fit with the accounting year. But all of these should net out the following year. Long-term tax liabilities are a different matter and typically arise from three main areas:

Long term deferred tax is the difficult one

A. Governments allowing aggressive tax depreciation rates

In some jurisdictions, notably Japan, the government allows companies to accelerate the depreciation of their assets. This has the benefit of reducing corporate tax bills whilst encouraging investment. However, these companies report a slower depreciation rate to their shareholders, which translates into higher reported profits but also a higher reported tax bill. When reported tax is higher than actual tax paid, a deferred tax liability is created.

Created when Tax depreciation is faster than published rates so tax liabilities are accrued

For example, in the table below a company buys an asset and uses a five year deprecation rate in the report to shareholders. This creates a depreciation charge of $100 per annum so, all other things being equal, yearly profits are reported as $630. However, when reporting to the tax authorities the company depreciates the asset over two years. This results in a yearly depreciation charge of $250. As a result, the actual taxable net profit is $150 lower than that reported to shareholders and a deferred tax liability of $45 is accrued in the first two years of the asset life

In the example Taxable profit is lower than reported profit

Figure 28: Accelerated Depreciation: Published Accounts: What Investors See

		Year 1	Year 2	Year 3	Year 4	Year 5
Profit and loss						
	Core profit	1,000	1,000	1,000	1,000	1,000
	Depreciation	(100)	(100)	(100)	(100)	(100)
	Profit	**900**	**900**	**900**	**900**	**900**
	Tax @ 30%	(270)	(270)	(270)	(270)	(270)
	Earnings	630	630	630	630	630
Balance sheet						
Asset	Fixed Asset	500	500	500	500	500
	Depreciation	(100)	(200)	(300)	(400)	(500)
	Net Fixed Asset	400	300	200	100	0
Liability	Deferred Tax Liability	45	90	60	30	0
Asset	Effective Loan from Govt.	45	90	60	30	0

Source: GMT Research

The liability then unwinds in years 3, 4 and 5 when the tax is actually paid, as shown in Figure 29. The underlying life and profitability of the asset are unchanged but the company gets to delay some of its tax payments. Typically, Japanese companies double-depreciate for the taxman, but then under-depreciate in their public accounts.

Reported profits catch up later

Figure 29: Accelerated Depreciation: Tax Accounts: What the Government Sees

		Year 1	Year 2	Year 3	Year 4	Year 5
Profit and loss						
	Core profit	1,000	1,000	1,000	1,000	1,000
	Depreciation	(250)	(250)	0	0	0
	Profit	**750**	**750**	**1,000**	**1,000**	**1,000**
	Tax @ 30%	(225)	(225)	(300)	(300)	(300)
	Earnings	525	525	630	700	700
Annual Deferred Tax		+45	+45	(30)	(30)	(30)
Cumulative Deferred Tax		45	90	60	30	0

Source: GMT Research

B. Asset revaluation

This is regularly used by property companies to mark property assets to market value. Revaluations improve the balance sheet and reduce gearing ratios. In Figure 30, a company revalues its assets every year and a $200 profit is booked and taxed in Years 1, 2 and 3. When the asset is sold in year 4, at the valuation used in year 3 there is no profit left to be booked. However, the tax is paid in year 4, extinguishing the accrued tax liability.

Revaluation profits also create a profit liability

Figure 30: Asset Revaluation: Published Accounts: What Investors See

		Year 1	Year 2	Year 3	Year 4
Profit and loss					
	Core profit	1,000	1,000	1,000	1,000
	Revaluation	200	200	200	0
	Profit from sale of assets				0
	Profit	**1,200**	**1,200**	**1,200**	**1,000**
	Tax@ 30%	(360)	(360)	(360)	(300)
	Earnings	840	840	840	700
Balance sheet					
Liability	Deferred tax liability	60	120	180	0
Liability	Retained earnings	140	280	420	420
Asset	Fixed assets – incr. in value by	200	400	600	0
Asset	Increase in cash	0	0	0	420

NB No profit is booked on the sale in year 4 as it has already been accrued forover the previous years.
Source: GMT Research

The tax accounts, in Figure 31, show a different picture, with no tax accrued or paid until the sale happens and the profit is crystallised.

Figure 31: Asset Revaluation: Tax Accounts: What the Government Sees

	Year 1	Year 2	Year 3	Year 4
Profit and loss				
Core profit	1,000	1,000	1,000	1,000
Profit from sale of assets				600
Profit	**1,000**	**1,000**	**1,000**	**1,600**
Tax @ 30%	(300)	(300)	(300)	(480)
Earnings	700	700	700	1,120

N.B. Taxes are paid when profits are crystallised via a transaction. Source: GMT Research

Most revaluations have some level of subjectivity over both size and timing. When such profits become a material part of a company's earnings, investors need to exercise caution, particularly given the cyclical nature of asset markets in Asia.

The subjectivity is the problem

C. Intra-group transactions

By moving assets between connected companies, businesses are able to 'create' a profit in their published accounts without any real transactions taking place. This 'profit' then requires a tax liability to be accrued. In contrast, group tax accounting means that these transactions are ignored by the tax authorities.

Yet more profits from booking rather than transactions

One way to create profits from an intra-company transaction is to transfer assets under IFRIC 12 from a group construction company to a group operating company. Aggressive managements are then able to book profits during the construction period thanks to the building contract and capitalising any losses in the concession company.

IFRIC 12 allows intragroup deals to create profits

The published accounts, Figure 32, show investors a growing profitable company in the early years at the cost of slightly lowered profits in the later years. In year 1 and 2 the group books a $300 dollar profit as the group construction company charges the group concession company for building the asset. Although the concession company has financing and running costs, these are all capitalised because the concession is

So now groups can sell to themselves and book profits

under construction. This way only the intragroup profits, and not its losses, are recognised. Once the asset is built, the $350 costs capitalised in the first two years increase the depreciation charge by $70. A relatively small cost, and spread out over several years, to pay to produce profits of $300 in the early years.

Investors get an indication of what is happening because the group has to start accruing deferred taxes of $90 on this "notional' profit. Only when the concession actually starts making money in year 4 does this start to unwind as taxes are paid.

Figure 32: Building Concession Assets: Published Accounts: What Investors See

		Year 1	Year 2	Year 3	Year 4	Year 5
Profit and loss						
	Construction profit	300	300	-	-	-
	Start-up losses	Capitalised	Capitalised			
	Concession profit			100	100	100
	Incr. depreciation			(70)	(70)	(70)
	Profit	**300**	**300**	**30**	**30**	**30**
	Accumulated losses	-	-	-	-	-
	Tax @ 30%	(90)	(90)	(9)	(9)	(9)
	Earnings	210	210	21	21	21
Cash flow						
	Cash Profit/Loss	(50)	(50)	100	100	100
	Cash Tax paid	-	-	-	(30)	(30)
	Cash flow	(50)	(50)	100	70	70
Balance sheet						
Liability	Deferred tax liability	90	180	189	168	147
Liability	Retained earnings: - construction	210	420	420	420	420
	- operation	-	-	21	42	63
Liability	Start-up costs (debt)	50	100	-	-	-
Assets	Fixed asset increase	350	700	630	560	490
Assets	Cash	-	-	-	70	140

NB Assumes concession assets are written off over 10 years. Source: GMT Research

The problem is that because there is no third party transaction, the profit is at management's discretion. What is the correct construction margin - 2/5/10/20%? Moreover, management has every incentive to front-load profits from the concession because the more projects they have, the faster profits grow. Even better, profit growth is exaggerated as the brought-forward profits will be booked over the relatively short construction period of one to three years, whereas the reduction is then be divided over the life of the asset, possibly 20-30 years. Last but not least, this early profit booking boosts both earnings and asset values, thus obscuring the company's true financial health.

Book profits now over 2 years…

…Payback later over 20 years

Both the asset revaluation and building concession assets approach beg a simple question. If the taxman does not recognise the profit and so the tax liability and, importantly, want the tax, why should investors?

Follow the taxman…

If management believes a genuine 'arm's length' profit has been made, and that this is not mere front-loading, the accounts should explain in a single clear note how the profits arose, what tax rate was used and when the tax is expected to be paid. For further clarity, profits, in both the P&L and balance sheet, could be split into realised and unrealised. Investors would also be prudent to adjust debt ratios to account for 'loans from the taxman', split profits into actual and 'hoped for', and press management as to exactly why it is necessary to produce accounts with yet-to-be-recognised profits.

…or ask for more disclosure

The scale of the deferred tax for the top four companies is amazing, as shown in Figure 33. Do Starhub, Taiwan High Speed, Vedanta and True actually make any money?

Unpaid taxes are greater than equity!!!

Figure 33: Deferred Tax Liabilities as a % of Equity in Asia

Name	Ticker	Industry	Mkt Cap US$bn	Deferred Tax/ Equity	Audit fee (Bps)	Audit Fee Range
Starhub Ltd	STH SP	Wireless Telecoms	5.7	155%	3	Normal
Taiwan High Speed	2633 TT	Highways & Railtracks	1.0	125%	N/A	N/A
Vedanta Resource	VED LN	Diversified Metals & Mining	4.2	114%	2	Low
True Corp Pcl	TRUE TB	Integrated Telecoms	3.0	100%	N/A	N/A
Sydney Airport	SYD AU	Airport Services	8.6	89%	4	Normal
Seibu Holdings	9024 JP	Industrial Conglomerates	6.0	58%	9	N/A
SP Ausnet	SPN AU	Electric Utilities	4.3	51%	15	High
MMC Corp Bhd	MMC MK	Industrial Conglomerates	2.6	46%	N/A	N/A
Kintetsu Corp	9041 JP	Railroads	6.7	42%	3	Normal
Nankai Elec Rail	9044 JP	Railroads	2.0	41%	7	Normal

Source: Bloomberg and company accounts

Red Flag 8: Unrealised Profit

If concerned about accounts being embellished, perhaps investors should be more focused on the amount of profit that deferred tax liabilities relate to, as opposed to simply comparing deferred tax liabilities to equity (as we have done earlier). For example, whilst two companies might have a similar level of deferred tax liabilities relative to their equity, if one has a tax rate of just 15% (Hong Kong), and another of 40% (Japan), the magnitude of the implied profit differs dramatically, i.e. 5.5x the deferred tax liability in Hong Kong, versus 1.5x in Japan.

The flip side of taxes is the profits that create them

The companies with the largest unrealised profits are presented in Figure 34. All of whom have material unrealised deferred tax and most are in utility type businesses where asset revaluations have been used to re-gear balance sheets, e.g. HK Electric, PCCW and Hutchison Port. Apart from Duet and Infratil, they are all in low tax jurisdictions so the multiplier for the unrealised profit is larger.

Mostly corporate finance restructurings

Figure 34: Largest Unrealised Profit as a % of Equity

Name	Ticker	Industry	Mkt Cap (US$bn)	Deferred Tax/ Equity	Unrealised Profit/ Equity	Audit fee (Bps)	Audit Fee Range
HK Electric	2638 HK	Electric Utilities	6.0	41%	231%	4	Normal
PCCW Ltd	8 HK	Integrated Telecoms	3.8	29%	164%	11	High
M1 Ltd	M1 SP	Wireless Telecoms	2.5	27%	132%	2	Low
Bayan Resources	BYAN IJ	Coal	2.3	40%	121%	N/A	N/A
Golden Agri-Reso	GGR SP	Agricultural Products	6.2	22%	105%	2	Low
Hutchison Port	HPHT SP	Marine Ports	5.9	19%	91%	10	Normal
Smrt Corp Ltd	MRT SP	Railroads	1.5	19%	91%	5	Normal
Duet Group	DUE AU	Multi-Utilities	2.6	39%	91%	19	High
Infratil Ltd	IFT NZ	Electric Utilities	1.1	38%	90%	9	High
Sk C&C Co Ltd	034730 KS	IT Consulting	6.8	26%	82%	N/A	N/A

Source: Bloomberg and company accounts

There are also several companies for whom the deferred tax is not meaningful but the implied unrealised profit is a substantial percentage of book value, as shown in Figure 35. Do Singapore Airlines, Smartone and Indofood Agri make any money from their core businesses or do they "create value" by revaluing their assets all the time? All three also have very low audit costs but would perhaps be joined by others on this list if they disclosed the fees they paid.

For these companies unrealised profits are almost all of the book value

Figure 35: Largest Unrealised Profit as a % of Equity but With Deferred Tax under 15%

Name	Ticker	Industry	Mkt Cap (US$bn)	Deferred Tax/ Equity	Unrealised Profit/ Equity	Audit fee (Bps)	Audit Fee Range
Singapore Airline	SIA SP	Airlines	9.7	15%	73%	1	Low
Smartone Tel.	315 HK	Wireless Telecoms	1.1	12%	69%	2	Low
Indofood Agri Re.	IFAR SP	Packaged Foods	1.2	14%	68%	1	Low
Yulon Nissan	2227 TT	Automobiles	3.8	14%	68%	N/A	N/A
Eternal Chemical	1717 TT	Commodity Chemicals	1.0	14%	66%	N/A	N/A
Taiwan Fertilizer	1722 TT	Agricultural Chemicals	2.0	13%	64%	N/A	N/A
Nan Kang Rubber	2101 TT	Tires & Rubber	1.0	12%	60%	N/A	N/A
First Pacific	142 HK	Multi-Sector Holdings	4.7	10%	59%	6	Normal
Ptt Expl & Prod	PTTEP TB	Oil & Gas Exp.& Prod.	19.6	14%	57%	N/A	N/A
Thai Union Froze	TUF TB	Packaged Foods	2.5	14%	56%	N/A	N/A

Source: Bloomberg and company accounts

Red Flag 9: Capitalised Interest

Capitalised interest is designed to help match revenues and costs. Adding the financing costs to the value of the asset during a 'start up' period reduces the burden on earnings and strengthens the balance sheet as the asset value increases.

Moving costs to match revenues

Capitalising costs this way creates flexibility. Money is fungible, so if a company has several projects under way, the allocation of interest costs is at management's discretion. However, anything that puts off cost recognition heightens the risk of forecasting error and a possible write-down in the future. Moreover while the published accounts may capitalise the interest costs, the tax accounts do not have to do the same, possibly creating another deferred tax liability.

Gives management flexibility but increases risks

As with all the other methods discussed, there is nothing intrinsically wrong with capitalising interest - it is the materiality that matters. To get a sense of which companies are affected, the screens were run three times.

We ran 3 screens

Figure 36 lists companies ranked by the impact on profits if interest costs were not capitalised. Earnings fall by over half for all of them while EBITDA coverage of the capitalised interest costs looks pretty low for Qinghai Salt, China Railway and Yunnan Yuntian. Almost all of them have very low audit fees.

1) Largest impact

Figure 36: Largest Earnings Impact from Capitalising Interest

Name	Ticker	Industry	Mkt Cap US$bn	Capitalised interest/ EBITDA	Earnings effect w/o capitalising	Audit Fee (Bps)	Audit Fee Range
Qinghai Salt-A	000792 CH	Agricultural Chemicals	3.7	46%	(95%)	1.6	Low
China Railway	600528 CH	Construction & Eng.	1.1	30%	(91%)	0.3	Low
Rongsheng Pet.	002493 CH	Commodity Chemicals	1.4	20%	(79%)	0.6	Low
Hindalco Inds.	HNDL IN	Aluminium	4.9	28%	(72%)	4.4	Normal
Aluminum Corp	2600 HK	Aluminium	6.3	10%	(65%)	1.5	Low
China Coal En.	1898 HK	Coal	8.3	18%	(58%)	0.1	Low
Meihua Holding	600873 CH	Packaged Foods	2.6	17%	(58%)	1.0	Low
Yunnan Yuntian	600096 CH	Agricultural Chemicals	1.5	31%	(57%)	0.2	Low
China Rail Gr-H	390 HK	Construction & Eng.	8.9	21%	(53%)	0.7	Low
Inner Mongolia-B	900936 CH	Mining	1.1	12%	(50%)	0.9	Low

Source: Bloomberg and company accounts

But possibly at greater risk of misleading investors are those companies for whom capitalisation of interest turns a loss into a profit, as shown in Figure 37. At Hareon Solar and Huaxin Cement capitalised interest also accounts for over 100% of EBITDA. Yet again the auditors do not seem too worried.

2) Loss makers turned profitable

Figure 37: Loss-Makers before Capitalising Interest

Name	Ticker	Industry	Mkt Cap (US$m)	Capitalised interest/ EBITDA	Earnings effect w/o capitalising	Audit Fee (Bps)	Audit Fee Range
Hareon Solar	600401 CH	Semiconductors	1.3	100%	Turns to loss	2	Low
Huaxin Cement	900933 CH	Const. Materials	1.6	100%	Turns to loss	2	Normal
North China Ph.	600812 CH	Pharmaceuticals	1.2	43%	Turns to loss	2	Low
Jointo Energy	000600 CH	Independent Power	1.6	32%	Turns to loss	1	Low
CESC Ltd	CESC IN	Electric Utilities	1.0	30%	Turns to loss	N/A	N/A
Metallurgical-A	601618 CH	Construction & Eng.	4.8	26%	Turns to loss	2	Low
Tianjin Zhong-A	002129 CH	Semiconductors	2.6	25%	Turns to loss	1	Low
Henan Shenhuo	000933 CH	Coal	1.1	21%	Turns to loss	0	Low
Samsung Fine	004000 KS	Div. Chemicals	1.0	16%	Turns to loss	N/A	N/A
United Labs.	3933 HK	Pharmaceuticals	1.1	15%	Turns to loss	5	Normal

Source: Bloomberg and company accounts

3) Large losses made smaller

Less misleading, but probably the worst from an investors' perspective, are those companies that are loss-making even after capitalising interest. Losses would look even worse if they were unable to capitalise their financing costs, as shown in Figure 38. We hope that China Shipping, CRTG, Beijing Shougang, Daewoo E&C, Hyundai Merchant and Baoding Tianwei are all on good terms with their financiers, because interest costs cannot be financed from cash flow. Despite this, most have extremely low audit fees.

Figure 38: Loss makers, Before and After Capitalising Interest

Name	Ticker	Industry	Mkt Cap (US$bn)	Capitalised interest/ EBITDA	Earnings effect w/o capitalising	Audit fee (Bps)	Audit Fee Range
China Shipping	2866 HK	Marine	3.6	100%	Loss making	2	Low
CRTG	269 HK	Railtracks	1.3	100%	Loss making	5	Normal
Beijing Shougang	000959 CH	Steel	1.3	100%	Loss making	1	Low
Daewoo E & C	047040 KS	Const. & Eng.	3.1	100%	Loss making	N/A	N/A
Hyundai Merchant	011200 KS	Marine	1.7	100%	Loss making	N/A	N/A
Baoding Tianwei	600550 CH	Electrical Equip.	1.0	100%	Loss making	2	Low
Malaysian Airline	MAS MK	Airlines	1.1	57%	Loss making	1	Low
China Shipping	1138 HK	Marine	2.1	28%	Loss making	1	Low
Gansu Jiu Steel	600307 CH	Steel	2.1	20%	Loss making	0	Low
Virgin Australia	VAH AU	Airlines	1.3	16%	Loss making	5	High

Source: Bloomberg and company accounts

Conclusion

Extreme fees should raise concern

Firstly, assuming that the managements of most companies are honest and most auditors do an acceptable job, the "normal" range of fees within an industry should represent a fair cost of auditing. Sadly, auditing costs are not a simple panacea but they offer investors a glimpse as to how management treats the construction and disclosure of a company's public accounts. Therefore fees outside the range should worry investors.

So should multiple flags and 'normal' fees

Secondly, although auditors cannot be expected to find and prevent all fraud, it is not unreasonable to expect a comprehensive audit, particularly when the accounts have obvious problems. The poor performance of companies with multiple red flags shows that investors recognise warning signs, so it is surprising that many of these companies' auditors did not raise their levels of due diligence. So while investors should be concerned when they see companies with lots of problems and low auditing costs, even companies with multiple red flags whose costs are in the normal range, as shown in Appendix IV should attract investor scrutiny.

Investing on the back of extreme audits is a leap of faith

Anyone investing in companies who pay less than the normal range is taking a leap of faith that either the internal systems are superb and/or that management is transparent and honest. Conversely, investing in companies that pay a lot more than normal ignores the possibility that the auditor has seen something but been persuaded to overlook it.

APPENDIX I: AUDIT FEES BY COUNTRY

Region	Region	Market	Min.	20th percentile	80th percentile	Max	No of companies
Developed	Asia	Australia	0.4	6.2	30	147	313
Developed	Asia	Japan	0.1	3.0	13	116	1,832
Developed	Asia	NZ	0.1	4.4	14	55	46
Developed	Asia	Singapore	0.1	3.5	25	70	192
Developed	Asia	HK	0.0	2.1	16	116	429
Emerging	Asia	China	0.0	1.9	11	124	2,135
Emerging	Asia	India	0.1	1.9	10	52	383
Emerging	Asia	Indonesia	1.1	1.1	8	28	6
Emerging	Asia	Korea	18.8	18.8	19	12	1
Emerging	Asia	Malaysia	0.0	2.7	15	34	259
Emerging	Asia	Macao	8.7	11.0	15	25	3
Emerging	Asia	Mongolia	7.5	7.5	7	12	1
Emerging	Asia	PNG	1.6	3.1	8	18	2
Emerging	Asia	Philippines	0.6	3.4	13	43	61
Emerging	Asia	Sri Lanka	0.5	2.2	17	17	34
Emerging	Asia	Taiwan	3.6	9.8	30	10	4
Developed	Europe	UK	0.0	2.1	15	118	482
Developed	Europe	France	0.1	3.3	15	264	144
Developed	Europe	Germany	0.3	2.3	15	70	197
Developed	Europe	Austria	0.4	2.9	8	38	20
Developed	Europe	Denmark	0.3	2.6	14	47	53
Developed	Europe	Portugal	0.7	1.7	8	18	8
Developed	Europe	Belgium	0.6	3.9	19	28	19
Developed	Europe	Spain	0.2	2.2	11	51	24
Developed	Europe	Greece	1.6	2.3	5	85	5
Developed	Europe	Holland	0.1	2.5	13	23	32
Developed	Europe	Ireland	0.5	2.5	17	45	23
Developed	Europe	Faroe Isles	1.9	2.0	2	17	2
Developed	Europe	Italy	3.5	3.8	9	22	3
Developed	Europe	Jersey	2.7	3.1	4	22	2
Developed	Europe	Luxembourg	2.3	3.9	16	69	8
Developed	Europe	Norway	0.0	1.7	19	182	79
Developed	Europe	Sweden	0.3	2.5	15	62	127
Developed	Europe	Switzerland	0.4	3.1	16	132	56
Developed	Europe	Finland	0.5	1.7	19	31	57
Americas	N. America	Canada	0.0	2.9	9	216	15
Americas	N. America	US	0.3	2.6	14	278	86
Emerging	Latam	Argentina	13.5	13.5	14	5	1
Emerging	LATAM	Brazil	5.8	5.8	6	3	1
Emerging	LATAM	Chile	0.6	5.9	22	10	2
Emerging	LATAM	Panama	4.3	5.8	10	36	2
Emerging	LATAM	Colombia	0.7	0.7	1	13	1
Emerging	LATAM	Peru	10.5	10.5	11	25	1
Emerging	MEA	Egypt	6.4	6.4	6	14	1
Emerging	MEA	Israel	1.0	2.5	11	956	15
Emerging	MEA	Russia	1.1	1.6	12	44	3
Emerging	MEA	South Africa	0.4	2.0	16	78	114
Emerging	MEA	Kenya	0.6	0.8	3	10	3
Emerging	MEA	Nigeria	1.0	1.3	2	19	2
Emerging	MEA	UAE	1.2	1.4	37	12	3
Developed	Tax	Bermuda	2.0	4.3	15	19	3
Developed	Tax	Guernsey	8.8	9.8	13	6	2
Developed	Tax	Isle of Man	1.9	2.5	18	19	3
Developed	Tax	Malta	2.0	3.4	14	41	7

Source: Bloomberg and company accounts

APPENDIX II: AUDIT FEES BY INDUSTRY

Grouping	Industry	Min.	20th percentile	80th percentile	Max	No of Co's
Automobiles	Auto Parts & Equipment	0.47	2.1	10	24	157
	Automobile Manufacturers	0.14	0.4	4	6	38
	Motorcycle Manufacturers	0.53	0.6	5	20	9
	Tires & Rubber	0.69	1.0	4	13	18
Capital Goods	Aerospace & Defence	0.01	1.4	10	18	33
	Building Products	1.08	2.2	15	6	89
	Construction & Engineering	0.31	1.7	10	40	263
	Construction Machinery & Trucks	0.34	1.4	12	83	101
	Electrical Components & Equipment	0.33	2.3	13	97	147
	Heavy Electrical Equipment	0.28	2.0	10	35	54
	Industrial Conglomerates	0.05	2.0	13	36	67
	Industrial Machinery	0.68	3.0	13	59	303
	Trading Companies & Distributors	0.11	0.8	12	70	149
Commercial Services	Commercial Printing	1.46	3.8	13	26	23
	Diversified Support Services	0.91	4.6	22	132	39
	Environmental & Facilities Services	2.02	3.6	20	46	39
	Human Resource & Employment	0.83	3.4	20	97	36
	Office Services & Supplies	2.61	4.1	17	30	26
	Research & Consulting Services	2.63	7.0	29	37	38
	Security & Alarm Services	1.12	1.7	14	18	9
Consumer Durables	Apparel, Accessories & Luxury Goods	0.23	3.1	16	65	102
	Consumer Electronics	0.33	1.3	11	26	34
	Footwear	0.13	2.6	13	36	17
	Home Furnishings	0.25	2.6	19	22	20
	Homebuilding	0.85	2.0	14	29	48
	Household Appliances	0.31	1.4	10	25	42
	Housewares & Specialties	1.32	3.9	18	22	14
	Leisure Products	1.22	4.4	14	111	48
	Textiles	0.99	2.1	13	49	69
Consumer Services	Casinos & Gaming	0.56	2.4	18	51	45
	Education Services	0.35	8.4	36	118	19
	Hotels, Resorts & Cruise Lines	0.45	4.2	36	79	76
	Leisure Facilities	0.69	7.3	16	33	29
	Restaurants	1.58	3.8	16	48	77
	Specialized Consumer Services	1.03	3.6	36	118	17
Energy	Coal & Consumable Fuels	0.06	0.6	26	43	48
	Integrated Oil & Gas	0.24	0.3	4	6	9
	Oil & Gas Drilling	2.96	5.5	17	24	13
	Oil & Gas Equipment & Services	0.91	4.0	19	90	80
	Oil & Gas Exploration & Production	0.52	4.9	30	216	57
	Oil & Gas Refining & Marketing	0.04	0.1	3	10	38
	Oil & Gas Storage & Transportation	0.07	0.7	33	182	26
Staples Retailing	Drug Retail	0.33	1.3	5	19	21
	Food Distributors	0.34	0.9	6	27	25
	Food Retail	0.09	0.8	4	12	65
	Hypermarkets & Super Centres	0.49	0.7	3	10	15
Food, Drinks & Tobacco	Agricultural Products	0.39	1.8	12	80	79
	Brewers	1.07	1.9	8	14	26
	Distillers & Vintners	0.28	1.2	12	66	32
	Packaged Foods & Meats	0.26	1.7	12	47	257
	Soft Drinks	0.75	1.8	13	61	15
	Tobacco	0.12	1.2	6	7	9
Health Care	Health Care Distributors	0.70	0.9	10	42	30
	Health Care Equipment	1.94	6.2	28	116	50

Grouping	Industry	Min.	20th percentile	80th percentile	Max	No of Co's
	Health Care Facilities	1.88	4.3	19	120	28
	Health Care Services	2.71	4.7	17	18	16
	Health Care Supplies	1.33	2.6	22	25	24
	Health Care Technology	1.65	6.5	17	43	9
Household Products	Household Products	1.24	3.4	9	22	20
	Personal Products	1.60	3.6	16	77	40
Materials	Aluminium	0.57	1.1	7	42	31
	Commodity Chemicals	0.05	1.5	10	27	164
	Construction Materials	0.50	1.6	11	33	79
	Diversified Chemicals	1.30	2.2	11	15	39
	Diversified Metals & Mining	0.09	1.3	12	80	90
	Fertilizers & Agricultural Chemicals	0.24	0.9	9	17	55
	Forest Products	0.25	2.5	14	36	19
	Gold	0.30	4.8	24	36	32
	Industrial Gases	2.31	3.1	9	12	5
	Metal & Glass Containers	1.45	2.5	13	24	29
	Paper Packaging	0.27	2.9	14	24	26
	Paper Products	0.64	1.8	8	13	44
	Precious Metals & Minerals	0.83	2.5	18	62	13
	Specialty Chemicals	0.65	2.4	14	49	112
	Steel	0.10	0.7	8	61	136
Media	Advertising	1.80	5.7	39	119	41
	Broadcasting	0.40	2.8	15	28	28
	Cable & Satellite	1.38	3.8	15	19	15
	Movies & Entertainment	0.71	5.6	23	41	32
	Publishing	2.87	5.7	19	28	54
Pharmaceuticals etc.	Biotechnology	3.55	4.9	25	72	20
	Life Sciences Tools & Services	2.97	7.9	30	50	16
	Pharmaceuticals	0.46	2.0	13	128	195
Retailing	Apparel Retail	0.88	3.1	13	45	54
	Automotive Retail	0.34	1.0	6	21	33
	Catalogue Retail	1.46	1.6	9	20	12
	Computer & Electronics Retail	0.79	1.0	7	43	23
	Department Stores	0.51	1.2	12	63	71
	Distributors	0.12	1.2	11	58	49
	General Merchandise Stores	0.60	1.0	7	11	21
	Home Improvement Retail	0.42	1.2	7	15	18
	Home furnishing Retail	1.14	2.1	8	32	13
	Internet Retail	0.57	4.1	28	31	11
	Specialty Stores	1.35	2.7	13	25	37
Semiconductor	Semiconductor Equipment	1.14	4.2	20	58	35
	Semiconductors	0.94	3.3	13	81	69
Software & Services	Application Software	1.76	6.5	28	133	61
	Data Processing & Outsourced Services	3.99	6.0	29	49	23
	Home Entertainment Software	1.65	4.6	29	51	17
	Internet Software & Services	1.71	7.2	46	124	58
	It Consulting & Other Services	1.05	3.4	16	44	110
	Systems Software	3.79	6.5	26	52	26
Technology Hardware	Communications Equipment	0.09	2.6	19	956	72
	Electronic Components	1.15	3.1	14	30	109
	Electronic Equipment & Instruments	0.00	3.8	21	52	102
	Electronic Manufacturing Services	1.72	2.3	11	43	10
	Technology Distributors	0.37	1.7	10	21	50
Telecomms	Alternative Carriers	2.83	5.2	28	57	19
	Integrated Services	1.16	2.6	13	48	40
	Wireless Telecommunications	0.09	1.4	7	23	25
Transportation	Air Freight & Logistics	0.42	2.0	18	30	46

Grouping	Industry	Min.	20th percentile	80th percentile	Max	No of Co's
	Airlines	0.07	0.8	3	14	33
	Airport Services	0.69	2.0	8	15	16
	Highways & Railtracks	0.87	2.8	10	15	27
	Marine	0.95	1.7	18	85	53
	Marine Ports & Services	0.35	1.6	11	39	45
	Railroads	0.58	2.2	7	18	27
	Trucking	1.26	2.4	9	41	45
Utilities	Electric Utilities	0.35	0.9	8	68	47
	Gas Utilities	0.24	0.7	11	39	32
	Independent Power Producers & Energy Traders	0.05	0.8	11	75	48
	Multi-Utilities	1.66	1.9	15	43	17
	Renewable Electricity	0.79	2.9	48	135	18
	Water Utilities	1.03	3.1	16	66	31

Source: Bloomberg and company accounts

APPENDIX III: INDUSTRY DEPRECIATION RATES IN ASIA

Sector	Industry	No of Companies	Total Mkt cap US$m	Min	Average	Max
Automobiles	Auto Parts & Equipment	89	218,883	2.5%	6%	13%
	Automobile Manufacturers	42	633,526	1.4%	6%	14%
	Motorcycle Manufacturers	8	26,256	3.5%	7%	25%
	Tires & Rubber	21	70,554	3.5%	5%	7%
Capital Goods	Aerospace & Defence	17	45,784	2.8%	5%	9%
	Building Products	35	71,546	1.2%	4%	11%
	Construction & Engineering	122	257,854	0.1%	5%	22%
	Construction Machinery & Heavy Trucks	62	179,677	2.2%	5%	10%
	Electrical Components & Equipment	86	137,415	2.4%	6%	16%
	Heavy Electrical Equipment	34	82,708	2.1%	6%	11%
	Industrial Conglomerates	57	352,716	0.2%	5%	57%
	Industrial Machinery	148	290,990	1.9%	5%	50%
	Trading Companies & Distributors	63	204,998	1.8%	6%	51%
Commercial Services	Commercial Printing	8	17,564	3.9%	6%	10%
	Diversified Support Services	10	27,391	4.1%	6%	11%
	Environmental & Facilities Services	18	27,513	1.5%	7%	14%
	Human Resource & Employment Services	6	11,238	1.8%	8%	16%
	Office Services & Supplies	8	7,012	2.8%	6%	18%
	Research & Consulting Services	10	16,857	2.8%	10%	38%
	Security & Alarm Services	5	20,110	5.5%	7%	11%
Consumer Durables & Apparel	Apparel, Accessories & Luxury Goods	53	112,275	2.1%	7%	30%
	Consumer Electronics	27	104,994	3.0%	8%	33%
	Footwear	12	24,230	4.3%	7%	15%
	Home Furnishings	8	8,535	1.8%	5%	9%
	Homebuilding	11	26,159	3.3%	4%	6%
	Household Appliances	29	78,294	2.6%	6%	14%
	Housewares & Specialties	3	2,900	5.4%	5%	6%
	Leisure Products	23	47,937	2.5%	5%	11%
	Textiles	29	32,833	1.7%	5%	8%
Consumer Services	Casinos & Gaming	34	271,126	0.8%	6%	16%
	Education Services	8	16,822	1.0%	4%	10%
	Hotels, Resorts & Cruise Lines	44	70,997	0.5%	5%	35%
	Leisure Facilities	11	29,212	1.3%	4%	8%
	Restaurants	30	34,046	0.3%	8%	20%
	Specialized Consumer Services	6	7,929	1.0%	5%	10%
Energy	Coal & Consumable Fuels	48	160,480	2.4%	6%	19%
	Integrated Oil & Gas	7	368,886	2.4%	4%	6%
	Oil & Gas Drilling	5	18,082	4.1%	7%	11%
	Oil & Gas Equipment & Services	30	47,940	2.9%	6%	11%
	Oil & Gas Exploration & Production	30	282,924	0.1%	5%	95%
	Oil & Gas Refining & Marketing	33	179,712	1.5%	4%	7%
	Oil & Gas Storage & Transportation	15	18,973	2.3%	5%	14%
Food & Staples Retailing	Drug Retail	10	18,343	4.6%	7%	8%
	Food Distributors	6	10,898	2.8%	5%	13%
	Food Retail	26	149,589	0.3%	7%	19%
	Hypermarkets & Super Centres	14	100,011	2.9%	7%	14%
Food Beverage & Tobacco	Agricultural Products	44	105,857	2.1%	5%	9%
	Brewers	13	56,018	2.0%	5%	8%
	Distillers & Vintners	23	94,837	2.0%	4%	10%
	Packaged Foods & Meats	152	342,239	1.3%	5%	13%
	Soft Drinks	9	29,380	3.0%	5%	9%
	Tobacco	11	170,142	4.3%	6%	8%

Sector	Industry	No of Companies	Total Mkt cap US$m	Min	Average	Max
Health Care Equipment & Services	Health Care Distributors	21	43,095	0.6%	6%	18%
	Health Care Equipment	27	57,725	2.8%	6%	15%
	Health Care Facilities	22	47,152	0.1%	4%	14%
	Health Care Services	10	17,151	2.1%	10%	22%
	Health Care Supplies	15	19,923	2.0%	5%	8%
	Health Care Technology	2	6,097	5.2%	11%	17%
Household & Personal Products	Household Products	13	67,025	1.9%	5%	8%
	Personal Products	32	90,543	1.7%	5%	18%
Materials	Aluminium	24	46,397	2.3%	5%	9%
	Commodity Chemicals	101	241,826	1.1%	5%	9%
	Construction Materials	68	170,909	1.3%	4%	8%
	Diversified Chemicals	23	49,872	2.6%	4%	7%
	Diversified Metals & Mining	74	423,247	0.0%	6%	28%
	Fertilizers & Agricultural Chemicals	37	40,554	0.9%	5%	9%
	Forest Products	7	6,688	3.6%	6%	11%
	Gold	15	31,072	2.4%	10%	26%
	Industrial Gases	4	8,918	3.7%	4%	5%
	Metal & Glass Containers	11	13,844	3.3%	5%	7%
	Paper Packaging	11	22,701	3.1%	5%	6%
	Paper Products	14	23,000	1.3%	3%	6%
	Precious Metals & Minerals	5	3,426	3.3%	5%	9%
	Specialty Chemicals	52	115,598	2.2%	4%	8%
	Steel	83	243,166	0.4%	4%	28%
Media	Advertising	16	38,211	1.5%	11%	24%
	Broadcasting	31	59,981	1.1%	10%	104%
	Cable & Satellite	16	24,212	3.9%	9%	15%
	Movies & Entertainment	20	26,916	1.5%	8%	24%
	Publishing	22	35,326	1.4%	8%	38%
Pharmaceuticals, & Science	Biotechnology	31	70,300	0.1%	6%	20%
	Life Sciences Tools & Services	3	6,055	4.7%	6%	9%
	Pharmaceuticals	186	474,614	1.7%	5%	12%
Retailing	Apparel Retail	18	67,297	1.8%	10%	35%
	Automotive Retail	19	32,053	2.4%	8%	33%
	Catalogue Retail	7	8,764	4.5%	9%	17%
	Computer & Electronics Retail	13	28,735	2.0%	8%	17%
	Department Stores	50	77,673	0.5%	5%	33%
	Distributors	22	38,926	1.4%	6%	12%
	General Merchandise Stores	15	23,498	2.6%	6%	11%
	Home Improvement Retail	7	10,055	2.9%	5%	11%
	Home furnishing Retail	1	5,282	4.0%	4%	4%
	Internet Retail	12	42,767	1.1%	9%	38%
	Specialty Stores	14	34,060	1.5%	9%	20%
Semiconductors & Equipment	Semiconductor Equipment	22	46,670	1.3%	6%	11%
	Semiconductors	82	493,297	3.2%	8%	22%
Software & Services	Application Software	39	57,677	2.8%	11%	29%
	Data Processing & Outsourced Services	10	16,324	4.0%	10%	19%
	Home Entertainment Software	21	54,653	4.2%	20%	98%
	Internet Software & Services	53	336,606	0.2%	14%	32%
	It Consulting & Other Services	50	232,231	0.3%	9%	43%
	Systems Software	13	19,926	2.8%	10%	26%
Technology Hardware & Equipment	Communications Equipment	47	54,462	1.6%	9%	107%
	Electronic Components	91	223,042	1.2%	7%	26%

Sector	Industry	No of Companies	Total Mkt cap US$m	Min	Average	Max
	Electronic Equipment & Instruments	54	149,289	3.2%	6%	17%
	Electronic Manufacturing Services	8	48,367	3.1%	7%	12%
	Technology Distributors	12	13,324	2.6%	11%	40%
Telecommunications	Alternative Carriers	9	11,551	2.8%	7%	15%
	Integrated Telecommunication Services	27	341,725	3.6%	7%	11%
	Wireless Telecommunication Services	31	599,123	3.5%	10%	32%
Transportation	Air Freight & Logistics	22	42,750	2.8%	5%	18%
	Airlines	25	75,705	1.1%	6%	10%
	Airport Services	15	47,112	1.9%	4%	6%
	Highways & Railtracks	30	48,603	0.5%	12%	90%
	Marine	33	58,661	2.9%	4%	12%
	Marine Ports & Services	29	82,326	1.7%	4%	7%
	Railroads	26	180,123	1.8%	3%	23%
	Trucking	18	28,001	2.2%	6%	14%
Utilities	Electric Utilities	37	197,389	1.8%	3%	21%
	Gas Utilities	30	139,224	1.6%	4%	9%
	Independent Power Producers & Energy Traders	49	147,009	0.7%	4%	17%
	Multi-Utilities	5	21,421	2.7%	3%	4%
	Renewable Electricity	10	40,499	1.3%	3%	4%
	Water Utilities	20	37,741	2.9%	11%	56%

Source: Bloomberg and company accounts

APPENDIX IV: COMPANIES IN ASIA WITH A MARKET CAPITALISATION>US$1BN WITH MORE THAN 4 ACCOUNTING RED FLAGS, IN DESCENDING ORDER OF RED FLAGS

Name	Ticker	Company vs Industry	Capex/ Depr'n (x)	Goodwill/ Equity (%)	Intang /Equity (%)	Inv. (Days)	Prepay./ Equity (%)	A/R (Days)	Cap. Int/ Earnings (%)	Deferred Tax/Equity (%)	Unrealised Profit/Equity (%)	Total Red Flags	Audit Fee
Baoding Tianwei	600550 CH	1.9x	3.0x	21%	767%	147		174	Loss making	18%	53%	**7**	Low
Ebos Group Ltd	EBO NZ	0.1x		237%	288%	112		145		16%	37%	**6**	Normal
Green Cross Hold	005250 KS	0.6x	3.2x	2%	7%	109		97		15%	49%	**6**	N/A
Hindalco Inds	HNDL IN	0.7x		34%	47%	65		41	(72%)	17%	40%	**6**	Normal
Hitachi Maxell	6810 JP	0.1x	N/A		100%	64		78		100%	100%	**6**	High
Mmc Corp Bhd	MMC MK	0.6x	1.2x	28%	101%	24		117		46%	137%	**6**	N/A
Sinopoly Battery	729 HK	2.1x	N/A		194%	824	33%	363		48%	274%	**6**	N/A
Autohome Inc-Adr	ATHM US	0.1x	N/A	97%	100%			95		28%	85%	5	N/A
Beijing Cap Co-A	600008 CH	0.4x	N/A	5%	85%	225	27%	122		1%	2%	5	Normal
Beijing Jingyu-A	601908 CH	0.4x	9.2x	3%	3%	337		235	(2%)	0%	0%	5	N/A
China Fishery	CFG SP	2.7x	N/A	8%	113%	65	13%	93		27%	154%	5	High
China Rongsheng	1101 HK	0.6x	N/A			2,441	47%	358	Loss making			5	High
Chorus Ltd	CNU NZ	0.7x	N/A		25%			80		30%	71%	5	Normal
Cosmo Oil Co	5007 JP	0.6x	1.3x	2%	22%	57		33		21%	35%	5	Low
Dongxu Optoelc-B	200413 CH	0.3x	N/A			80	193%	273	(23%)			5	Normal
Guizhou Chanzh-A	600112 CH	0.4x	N/A	1%	17%	139	32%	210	Turns to loss	4%	11%	5	Normal
Hankyu Hanshin H	9042 JP	0.6x	1.7x	6%	10%	68		40		30%	48%	5	Normal
Hubei Bothwin -A	000760 CH	0.4x	N/A	21%	21%	134		176	Turns to loss	1%	2%	5	N/A
Infratil Ltd	IFT NZ	0.6x		24%	33%			68		38%	90%	5	High
Interpark Corp	035080 KS	0.6x		40%	129%	9		84		18%	56%	5	N/A
Irico Display-A	600707 CH	0.2x	24.4x			194		200	Turns to loss			5	N/A
Jaiprakash Assoc	JPA IN	0.4x			76%	47	71%	40		18%	41%	5	Low
Kintetsu Corp	9041 JP	0.6x	1.4x	0%	9%	72		18		42%	68%	5	Normal
Maoye Intl Hldgs	848 HK	0.5x		11%	11%	83	20%	5	(33%)	10%	30%	5	High
Mighty River Pow	MRP NZ	0.5x	1.8x	0%	2%	6		65		30%	70%	5	High
Nisshinbo Hd	3105 JP	0.6x		11%	21%	64		93		16%	27%	5	Low
North Mining Sha	433 HK	0.9x			72%	241	4%	92		18%	103%	5	N/A
Qinghai Salt-A	000792 CH	0.4x		0%	3%	115	25%	115	(95%)			5	Low
Seiko Holdings C	8050 JP	0.6x		24%	41%	78		54		23%	38%	5	Normal
Shang Indus Hldg	363 HK	3.2x	N/A		43%	231		30	(24%)	16%	48%	5	Normal
Slater & Gordon	SGH AU	0.8x		27%	31%	371		80		22%	52%	5	High
Taiyuan Coal G-A	000968 CH	0.4x	5.2x		38%	46		108	Turns to loss			5	Normal
Tech Pro Technol	3823 HK	1.1x	N/A	50%	139%	290	9%	738		22%	127%	5	N/A
Tianjin Zhong-A	002129 CH	0.7x		6%	6%	135	24%	112	Turns to loss	0%	0%	5	Low
Treasury Wine Es	TWE AU	0.6x	1.1x	1%	34%	157		92		10%	24%	5	High
Zhongyuan Spec-A	002423 CH	0.7x	3.0x			105		117	Turns to loss	0%	0%	5	Low
Adani Power Ltd	ADANI IN	0.6x	N/A	0%		84		41		25%	59%	4	Low

Name	Ticker	Company vs Industry	Capex/ Depr'n (x)	Goodwill/ Equity (%)	Intang /Equity (%)	Inv. (Days)	Prepay./ Equity (%)	A/R (Days)	Cap. Int/ Earnings (%)	Deferred Tax/Equity (%)	Unrealised Profit/Equity (%)	Total Red Flags	Audit Fee
Adaro Energy Tbk	ADRO IJ	0.6x		34%	34%	11		34		24%	72%	4	N/A
Amada Co Ltd	6113 JP	0.7x	1.3x	1%	2%	161		248		0%	0%	4	Normal
Asia Aviation	AAV TB	0.2x		46%	122%	1		5		17%	68%	4	N/A
Astro Malaysia	ASTRO MK	2.0x	N/A	174%	305%	2		76		20%	59%	4	Normal
Beijing Tian-A	600161 CH	0.4x			1%	176		70	(22%)			4	Low
Bhushan Steel	BHUS IN	0.6x				197		83		15%	35%	4	Low
Celltrion Inc	068270 KS	0.7x	N/A		46%	221		438				4	N/A
Cesc Ltd	CESC IN	0.4x		43%	45%	21		78	Turns to loss	1%	1%	4	N/A
China All Access	633 HK	0.2x	N/A	23%	48%	25		162		9%	49%	4	Normal
China Com Cons-H	1800 HK	1.5x		0%	57%	111		75	(24%)	3%	9%	4	Low
China Huiyuan	1886 HK	0.8x		2%	55%	107		96	(30%)	0%	0%	4	High
China Rail Gr-H	390 HK	1.5x	N/A	1%	39%	103		93	(53%)	1%	3%	4	Low
China Shipbuil-A	601989 CH	0.7x	N/A		13%	200		153	(16%)	1%	4%	4	Low
China-Kinwa-A	600110 CH	0.7x	N/A	2%	5%	79		108	Turns to loss	0%	1%	4	Normal
Chinavision Medi	1060 HK	0.2x	N/A	25%	73%	1		203		8%	45%	4	High
Citic Pacific	267 HK	0.5x		1%	21%	74		30	(33%)	4%	13%	4	Normal
Cj Cheil	097950 KS	0.7x		13%	61%	34		46		22%	71%	4	N/A
Colowide Co Ltd	7616 JP	0.7x		218%	288%	7		7		21%	34%	4	High
Computershare Lt	CPU AU	0.6x		152%	199%	2		54		17%	40%	4	High
Coromandel Inter	CRIN IN	0.5x		21%	22%	90		111		11%	25%	4	N/A
Dongfeng Motor-H	489 HK	0.2x	N/A	3%	6%	102	17%	144	(0%)	0%	1%	4	High
Doosan Corp	000150 KS	0.6x		162%	240%	43		90		10%	31%	4	N/A
Duet Group	DUE AU	0.4x		59%	157%	8		21		39%	91%	4	High
E Ink Holdings	8069 TT	0.6x	N/A	26%	38%	62		68				4	N/A
Elec-Tech Inte-A	002005 CH	0.5x	N/A	0%	11%	115		166	(32%)	0%	0%	4	Normal
Envestra Ltd	ENV AU	0.5x			72%			60		23%	54%	4	Normal
Fortescue Metals	FMG AU	0.7x			1%	44		8	(20%)	15%	36%	4	Low
Furukawa Co Ltd	5715 JP	0.4x		0%		70		52		21%	34%	4	Normal
Global Mediacom	BMTR IJ	0.7x	N/A	32%	32%	139		114		0%	0%	4	N/A
Guangdong Guan-A	600433 CH	0.4x				92		93	(10%)			4	Normal
Guangzhou Ship-A	600685 CH	0.9x	2.3x			145	42%	60		0%	1%	4	Normal
Hanergy Solar Gr	566 HK	0.2x		50%	58%	389	13%	258		2%	12%	4	High
Hanjin Heavy	097230 KS	0.6x				87		164		14%	46%	4	N/A
Hanson Internati	MYRX IJ	0.3x	N/A			185	26%	83				4	N/A
Harbin Electric	1133 HK	1.0x	1.7x		2%	273	45%	293		0%	0%	4	Low
Hebei Changsha-A	300255 CH	0.7x	N/A	0%	5%	195	29%	72		0%	1%	4	N/A
Huabao Internati	336 HK	0.6x		37%	40%	70		94		1%	5%	4	High
Hutchison China	HCM LN	1.1x	1.0x	12%	34%	201		352		4%	11%	4	N/A
Hutchison Port-U	HPHT SP	0.9x	N/A	65%	77%	5		74		19%	91%	4	Normal
Hyflux Ltd	HYF SP	0.4x			170%	90		64		1%	5%	4	High
Hyundai Mipo Doc	010620 KS	0.7x	1.4x	9%	11%	23		109		11%	34%	4	N/A
Ijm Plantations	IJMP MK	0.6x	6.6x			76		14		11%	34%	4	Normal

Name	Ticker	Company vs Industry	Capex/ Depr'n (x)	Goodwill/ Equity (%)	Intang /Equity (%)	Inv. (Days)	Prepay./ Equity (%)	A/R (Days)	Cap. Int/ Earnings (%)	Deferred Tax/Equity (%)	Unrealised Profit/Equity (%)	Total Red Flags	Audit Fee
Invocare Ltd	IVC AU	0.7x		83%	88%	20		30		17%	40%	4	High
J Front Retailin	3086 JP	0.3x	1.6x	1%	12%	9		21		29%	47%	4	Low
Jinlong Mach-A	300032 CH	0.7x		0%		121		131	(37%)			4	High
Keihan Electric	9045 JP	0.4x			5%	101		29		29%	47%	4	Normal
Kiswire Ltd	002240 KS	1.6x	1.8x		1%	68		91		12%	38%	4	N/A
Komori Corp	6349 JP	0.6x	1.1x		2%	133		114		1%	2%	4	High
Kureha Corp	4023 JP	0.7x	1.6x		2%	71		77		3%	5%	4	Normal
Landing Internat	582 HK	0.9x	1.3x	30%	58%	121		128		2%	13%	4	N/A
Larsen & Toubro	LT IN	0.7x		6%	50%	25	59%	113		4%	9%	4	N/A
Lingkaran Trans	LTK MK	0.3x						66		59%	176%	4	Low
M1 Ltd	M1 SP	0.5x		3%	22%	11		52		27%	132%	4	Normal
Maruichi Stl Tub	5463 JP	0.7x	1.4x	0%	1%	66		90		1%	1%	4	Normal
Mesoblast Ltd	MSB AU	0.0x	N/A	20%	87%					23%	54%	4	N/A
Metallurgical-A	601618 CH	1.1x	N/A	1%	21%	91		118	Turns to loss	1%	4%	4	Low
Mitsubishi Corp	8058 JP	0.6x	2.4x	1%	4%	74		168		6%	10%	4	Normal
Mitsumi Elec Co	6767 JP	0.6x	0.9x		1%	70		83		1%	2%	4	Normal
Nagase & Co Ltd	8012 JP	0.7x	1.3x	13%	24%	28		107		4%	7%	4	Normal
New Britain Palm	NBPO LN	1.2x			6%	126		83		34%	101%	4	High
Newcrest Mining	NCM AU	0.3x		4%	6%	91		6		16%	38%	4	Normal
Nippon Elec Glas	5214 JP	0.6x	1.7x		1%	83		64				4	Low
Nippon Sheet Gla	5202 JP	0.7x		81%	139%	71		71		6%	10%	4	Normal
Nissin Electric	6641 JP	0.6x	1.1x	0%	2%	99		155				4	Normal
Okaya & Co Ltd	7485 JP	0.7x			1%	20		90		21%	34%	4	Low
Olympus Corp	7733 JP	1.3x		71%	117%	49		71		19%	31%	4	Low
Pipavav Defence	PIPV IN	0.5x	N/A	0%	1%	23	41%	126		15%	34%	4	Normal
Pku Healthcare-A	000788 CH	0.5x	N/A		2%	77		113	(80%)	0%	0%	4	N/A
Reliance Communi	RCOM IN	0.4x	1.7x	15%	92%	9		74		4%	9%	4	Normal
Rexlot Holdings	555 HK	0.6x	N/A	38%	42%	26	34%	188		2%	14%	4	High
Shanghai Zhenh-B	900947 CH	0.9x	1.3x			95		61	(91%)	0%	1%	4	N/A
Shinsegae Co Ltd	004170 KS	0.5x	2.7x	8%	10%	36		16		22%	70%	4	N/A
Sichuan Lut-A	000912 CH	0.5x	N/A	1%	2%	62	65%	46	Turns to loss			4	Normal
Sk C&C Co Ltd	034730 KS	0.8x	1.1x	1%	5%	13		77		26%	82%	4	N/A
Sojitz Corp	2768 JP	1.0x	1.0x	12%	31%	61		106		4%	7%	4	N/A
Sotetsu Holdings	9003 JP	0.6x	1.7x	3%	10%	47		18		34%	56%	4	High
Sp Ausnet	SPN AU	0.5x		2%	64%	11		28		51%	120%	4	High
Starhub Ltd	STH SP	0.7x		266%	460%	7		19		155%	756%	4	Normal
Suzlon Energy	SUEL IN	0.8x	N/A	857%	958%	103		53		62%	144%	4	Normal
Sydney Airport	SYD AU	0.6x		35%	405%			25		89%	207%	4	Normal
Tainan Spinning	1440 TT	0.3x				66		29		15%	75%	4	N/A
Taiwan High Spee	2633 TT	0.3x	N/A		15,412%	29		4		125%	611%	4	N/A
Taiyo Nippon San	4091 JP	0.9x	1.3x	21%	30%	30		95		17%	27%	4	Low
Tatung Co Ltd	2371 TT	0.6x	N/A	1%	7%	71		51		23%	111%	4	N/A

Name	Ticker	Company vs Industry	Capex/ Depr'n (x)	Goodwill/ Equity (%)	Intang /Equity (%)	Inv. (Days)	Prepay./ Equity (%)	A/R (Days)	Cap. Int/ Earnings (%)	Deferred Tax/Equity (%)	Unrealised Profit/Equity (%)	Total Red Flags	Audit Fee
Tenaga Nasional	TNB MK	0.6x				28		60		18%	55%	4	Low
Thai Union Froze	TUF TB	0.6x		32%	105%	119		44		14%	56%	4	N/A
Toda Corp	1860 JP	0.4x		0%	2%	33		120		26%	42%	4	Low
Tokuyama Corp	4043 JP	0.7x	1.3x	0%	4%	71		92		3%	4%	4	Low
Tokyo Dome Corp	9681 JP	0.4x	1.1x		1%	6		10		41%	68%	4	Normal
Tongyu Heavy-A	300185 CH	0.6x	N/A	0%		172		186	(67%)	0%	1%	4	Normal
Toshiba Corp	6502 JP	0.9x	1.1x	53%	89%	63		86				4	Low
Toyobo Co Ltd	3101 JP	0.5x		0%	1%	76		80		18%	29%	4	Normal
Transurban Group	TCL AU	0.3x		8%	239%			11		19%	43%	4	High
True Corp Pcl	TRUE TB	1.3x		279%	987%	23		131		100%	401%	4	N/A
Ulvac Inc	6728 JP	0.7x	1.1x	0%	13%	98		132		4%	6%	4	Normal
United Energy Gp	467 HK	2.8x			100%	23		91		15%	88%	4	Normal
United Engineers	UEM SP	1.0x		0%	5%	120		104	(15%)	7%	33%	4	Normal
United Envirotec	UENV SP	0.3x		1%	33%	1	24%	196		2%	12%	4	High
United Spirits	UNSP IN	0.5x		109%	122%	86		83				4	N/A
Vector Ltd	VCT NZ	0.4x		70%	73%	2		42		23%	55%	4	Normal
Venture Corp Ltd	VMS SP	0.5x		35%	38%	83		82		1%	3%	4	Low
Walvax Biotech-A	300142 CH	0.4x	N/A	9%	28%	124	4%	305		7%	22%	4	High
Xiangxue Pharm-A	300147 CH	0.6x	N/A	26%	26%	66		110				4	N/A
Xinjiang Gold-A	002202 CH	0.4x		2%	5%	90		236	(32%)	0%	1%	4	Normal
Xp Power Ltd	XPP LN	0.7x		50%	62%	116		83		3%	14%	4	High
Youngone Holding	009970 KS	0.7x			1%	54		60		21%	65%	4	N/A
Ytl Corp Bhd	YTL MK	0.7x		36%	71%	16		53		19%	57%	4	Normal
Ytl Power Intl	YTLP MK	0.6x		67%	67%	12		37		22%	66%	4	Low

Source: GMT Research