

Natixis

China Corporate Debt Monitor

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The Natixis China Corporate Debt Monitor

Our first annual report on China's corporate health

- A **deep-dive look** at the ability of the **3,000 largest Chinese listed companies** to repay, comparing them with global peers
- Dataset sliced from different perspectives to give conclusions by:
 - **Old China** (investment-driven) versus **New China** (consumption-driven)
 - Ownership structure (**State-owned** or **privately-owned**)
 - **Company size** (100 largest versus full sample)
 - 14 individual **sectors**

Key concepts for sector coverage

Coverage (by asset size)

Global 3000 Corporates

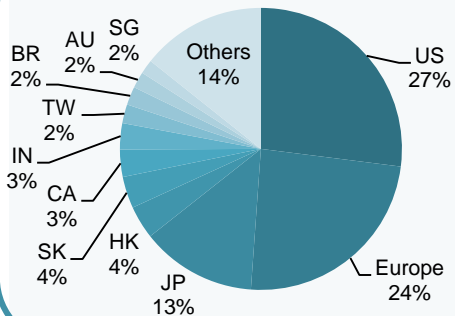
Global 100 Corporates



China 3000 Corporates

China 100 Corporates

Geographical Breakdown of Global Sample



Industry

New China

- Airlines
- Consumer
- Health Care
- ICT
- Renewable & Environment
- Semi-conductor
- Tourism

Old China

- Chemical
- Energy
- Industrial
- Infrastructure
- Materials & Metals
- Real Estate
- Utilities

New China emerging, but still early days

- China's companies **heavily weighted towards old industry sectors** (73% of assets in the sample, versus 53% for the global peer group)
- Imbalance worst among largest companies:
 - **Real estate** accounts for 25% in China versus 0.5% globally
 - **Consumer** sector accounts for ~6% in China versus ~23% globally

Chinese companies more vulnerable than global peers

- **Lower leverage** but **weaker repayment ability** – interest coverage ratio of 5x versus 8x for global peers
- **Higher funding risk** – short-term liabilities account for 86% of total liabilities versus 40% globally

Debt concentrated in large companies, especially private

- **Repayment ability lowest** among the 100 largest Chinese companies
- **Large private companies weakest**, with 25% unable to cover interest payments through earnings – primarily caused by the large weight of the heavily-indebted **real estate sector**

New China in best shape

- **Healthcare** and **travel-related** companies **less indebted** and **more profitable** than global peers
- **Airlines** also boast **better profit margins** than global peers

Overall

- **Divergence in China's corporate health set to continue** as new industry sectors grow faster than old industries
- Current **monetary and fiscal stimulus may ease the old industries' problems**, but as China rebalances, old industry revenues will never regain their original levels
- A **wholesale restructuring** of old industry sectors seems unavoidable

Key Messages

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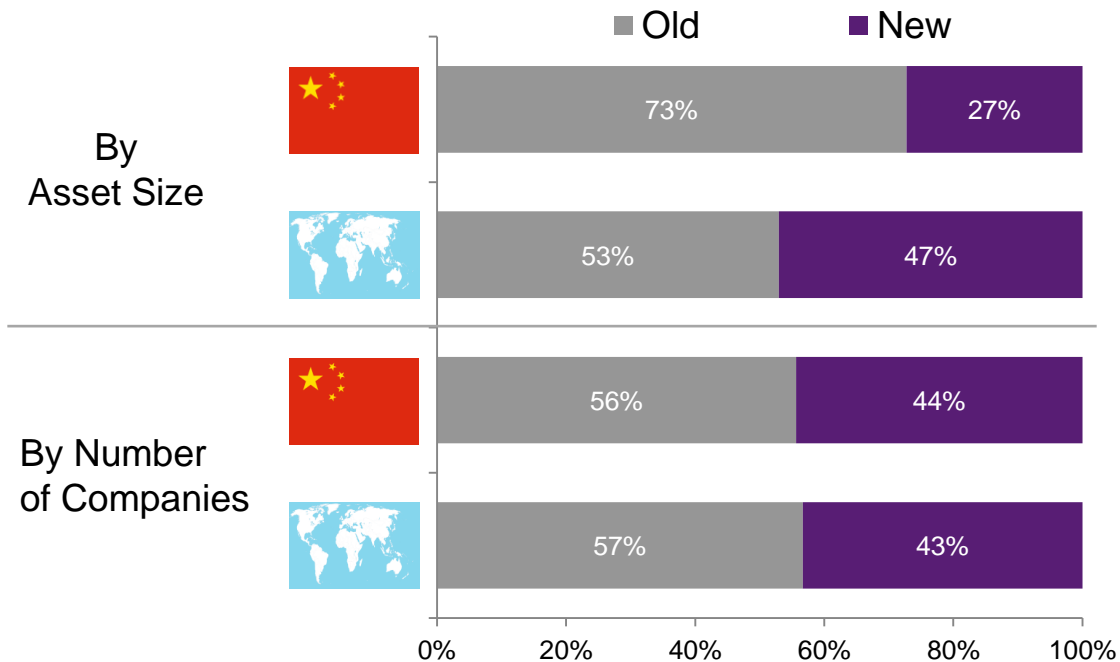
- **Zooming in: comparing all of our six indicators of financial vulnerability by sector**
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1. Natixis China Corporate Debt Monitor Quick Guide

Old and new industries: China versus the rest of the world

- By assets, China is overweight in old industries
- But in line with the global norm by number of companies

China and Global 3000 by Old and New Industries

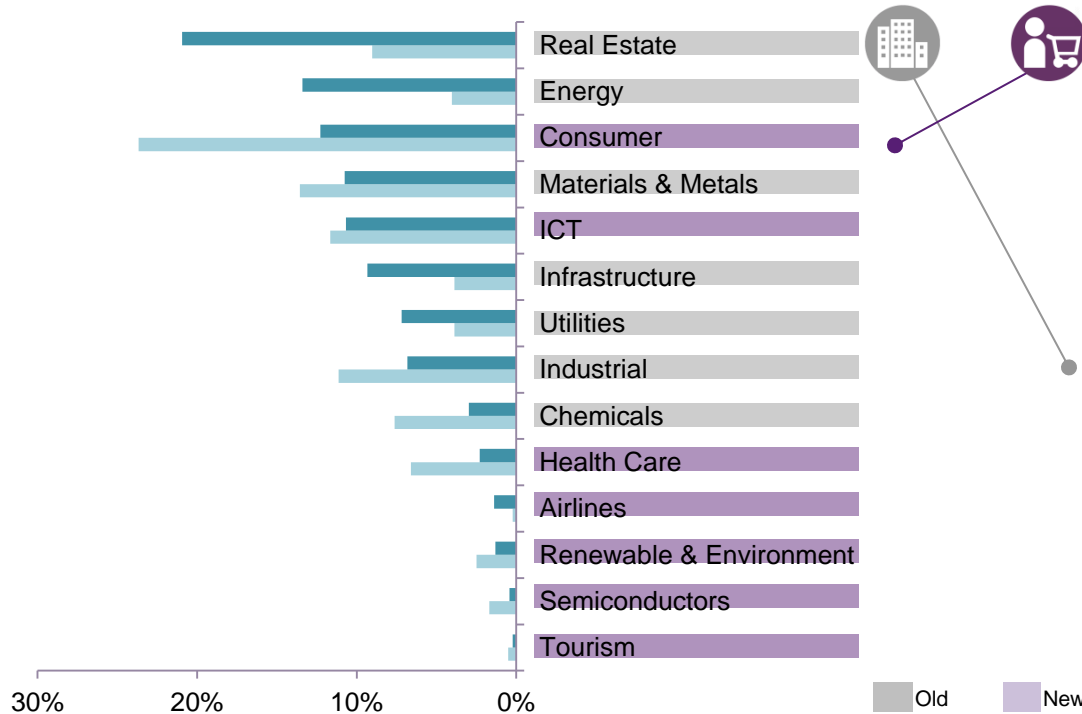


Source: Natixis estimates

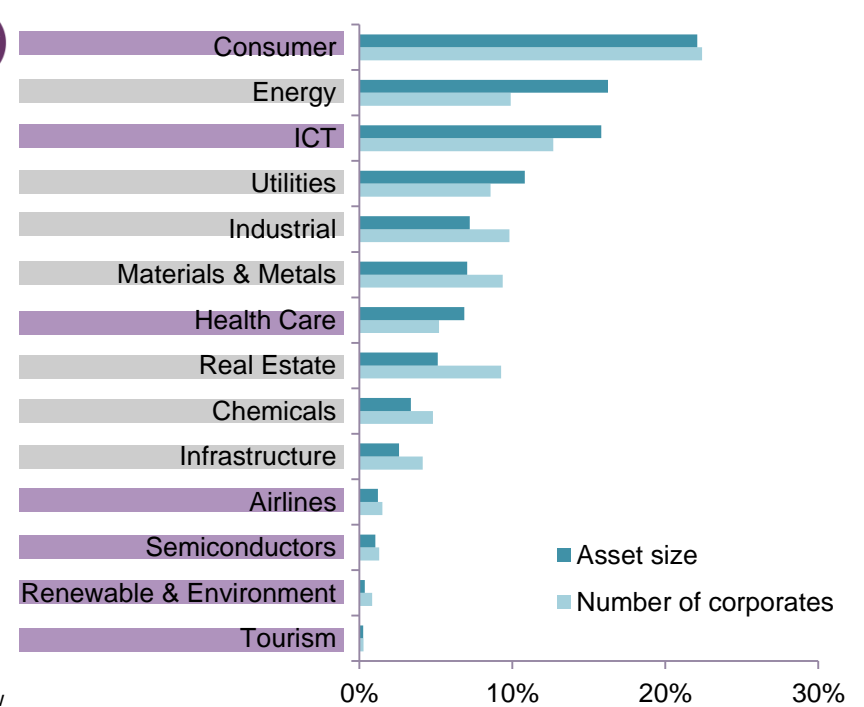
Real estate - China's dinosaurs

- The **real estate sector** has been central to China's old growth model, but it is now disproportionately large, especially in terms of assets
- **New industry sectors** such as consumer goods & services still small and quite fragmented compared to the rest of the world

China 3000 Industry Distribution (% of total)



Global 3000 Industry Distribution (% of total)



Source: Natixis estimates

Quick Guide

Vulnerability

Sector

2. Chinese companies' financial vulnerability

Focus on repayment ability

Leverage	• Total Liabilities/Common Equity
Funding Risk	• Short Term/Total Liabilities
Repayment	• EBITDA/Interest Expense
- Interest burden	• Interest Expense/Total Debt
- Tax	• Effective Tax Rate
- Profit Margin	• Net Income/Revenue

Chinese corporates have a weaker repayment ability than global peers

- Leverage only ~50% of global average, but **funding risk is double**
- **Repayment ability half global rate**, with more outliers → 16% of companies cannot service debts through earnings (versus 9% globally)

	China 3000	Global 3000
Leverage	O	X
Funding Risk	X	O
Repayment	X	O

Total Liabilities/Common Equity

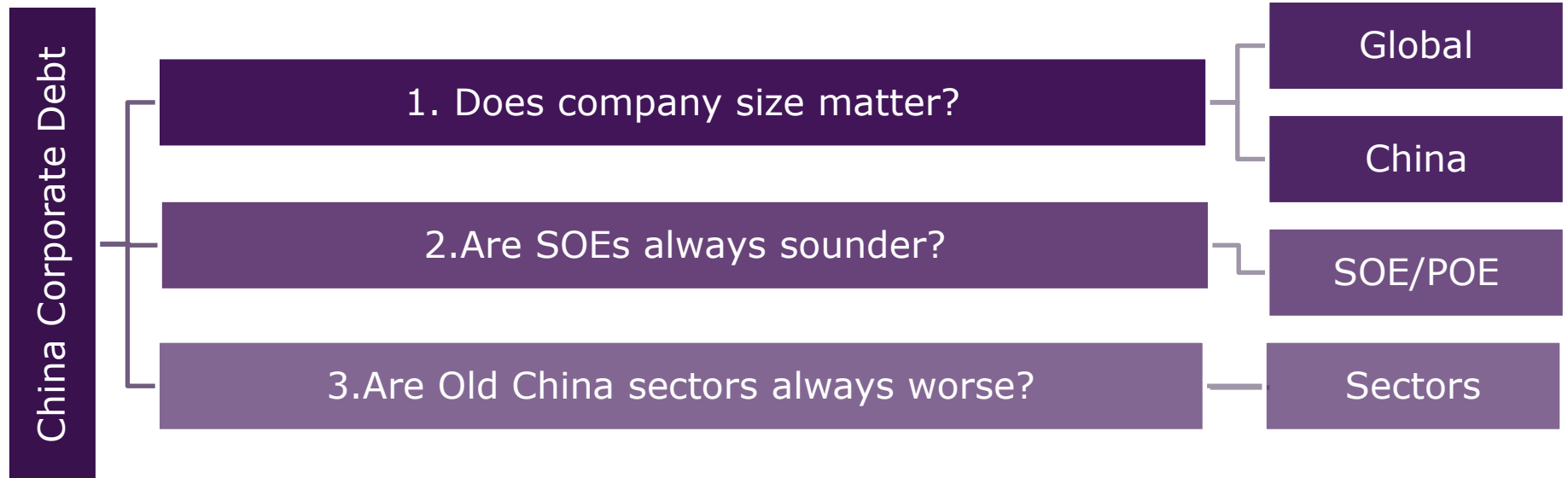
Short term/Total liabilities

EBITDA/Interest Expense

- Percentage of Corporates with ratio < 1

	China 3000	Global 3000
Total Liabilities/Common Equity	86	152
Short term/Total liabilities	86	40
EBITDA/Interest Expense	5	8
- Percentage of Corporates with ratio < 1	16	9

Source: Natixis estimates





Does company size matter?

Yes – Large is worse than small

- Chinese companies have higher funding risk and lower repayment ability than global peers
- **Large companies are much more leveraged**, although they are slightly better than average in funding risk and repayment ability

	<u>Small corporates</u>		<u>Large corporates</u>	
	China 3000	Global 3000	China 100	Global 100
Leverage	O	X	X	O
Funding Risk	X	O	X	O
Repayment	X	O	X	O




	China 3000	Global 3000	China 100	Global 100
Total Liabilities/Common Equity	86	152	261	178
Short term/Total liabilities	86	40	67	39
EBITDA/Interest Expense	5	8	4	11
- Percentage of Corporates with ratio < 1	16	9	12	2

Source: Natixis estimates

Large companies dominate old industries

- Large companies have accumulated a massive amount of assets in old industries – they are at the core of China’s overcapacity problem
- New China is emerging but still at an early stage

Table: Industry Distribution of Top 100 China and Global Corporates

	China 100	Asset	Count		Global 100	Asset	Count
	Old	77.0%	76		Old	45.7%	45
	New	23.0%	24		New	54.3%	55
	Real Estate	25.4%	30		Energy	24.3%	17
	Energy	20.3%	7		Consumer	22.6%	19
	ICT	13.9%	10		ICT	22.3%	22
	Infrastructure	12.3%	9		Utilities	11.7%	13
	Utilities	7.9%	12		Health Care	8.8%	12
	Materials & Metals	7.0%	11		Materials & Metals	4.9%	7
	Consumer	6.1%	9		Industrial	2.6%	4
	Industrial	3.6%	6		Chemicals	1.2%	2
	Airlines	2.5%	4		Semiconductors	0.6%	1
	Health Care	0.5%	1		Infrastructure	0.6%	1
	Renewable & Environment	0.4%	1		Real Estate	0.5%	1

Source: Natixis estimates

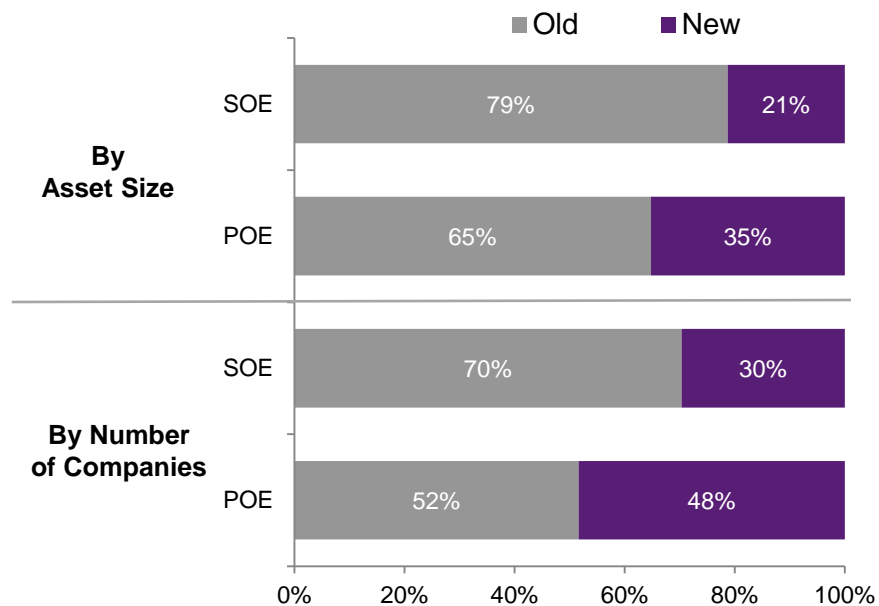


Does ownership matter?

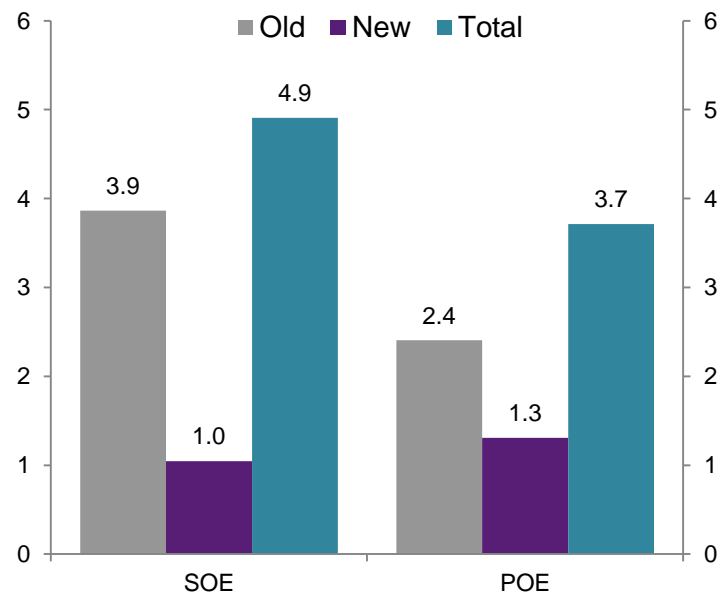
SOEs bigger and concentrated in old industries

- SOEs dominant in old industries → indicates weaker repayment capacity
- POEs have a greater presence in new industries

China SOEs and POEs by Old and New Industries



China SOEs and POEs Asset Size by Old and New Industries (USD tr)



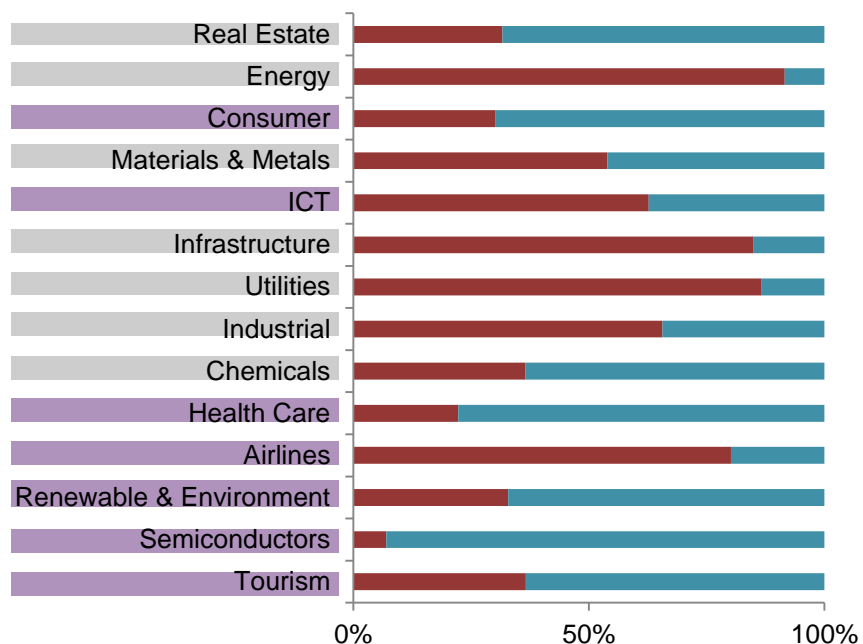
NB. USDCNY 6.201 is used as of 6/30/2015.

Source: Natixis estimates

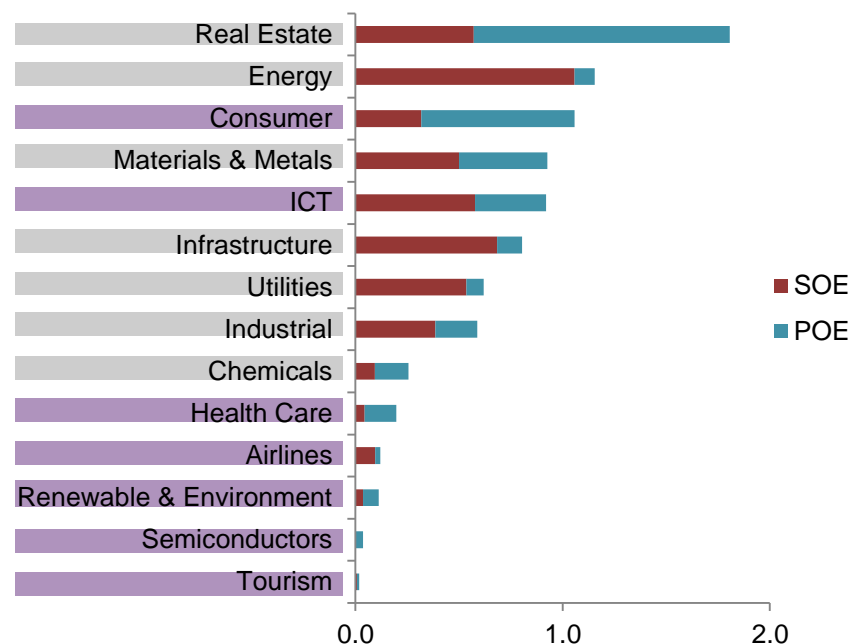
SOEs dominate old sectors but not always

- SOEs dominate old sectors except for a very important case, given its size, the **real estate sector**. Also **chemicals** are dominated by POEs
- POEs are dominant in new sectors with the notable exception of **airlines**, followed by **ICT**

Proportion of SOEs and POEs by Asset (%)



Asset size of SOEs and POEs (USD tr)



NB. USDCNY 6.201 is used as of 6/30/2015.
Source: Natixis estimates

Are POEs riskier than SOEs? Not always

- Overall, SOEs actually have more debt and a worse repayment ability than POEs
- But they can borrow longer term due to their explicit/implicit government guarantee

	SOE	POE
Leverage	X	O
Funding Risk	O	X
Repayment	X	O

- Total Liabilities/Common Equity**
Short term/Total liabilities
EBITDA/Interest Expense
- Percentage of Corporates with ratio < 1
 - Interest Expense/Total Debt
 - Effective Tax Rate
 - Profit Margin

	SOE	POE
Total Liabilities/Common Equity	139	76
Short term/Total liabilities	78	88
EBITDA/Interest Expense	4	5
- Percentage of Corporates with ratio < 1	19	15
- Interest Expense/Total Debt	5.3	5.4
- Effective Tax Rate	21	23
- Profit Margin	5	6

Source: Natixis estimates

Quick Guide

Vulnerability

Sector

But large POEs are the worst of all

- Large POEs are more leveraged than large SOEs, and 26% have an interest coverage ratio below 1 → real estate companies are the main culprits

	<u>Small corporates</u>		<u>Large corporates</u>	
	SOE	POE	SOE 100	POE 100
Leverage	X	O	O	X
Funding Risk	O	X	-	-
Repayment	X	O	O	X

Total Liabilities/Common Equity

Short term/Total liabilities

EBITDA/Interest Expense

- Percentage of Corporates with ratio < 1
- Interest Expense/Total Debt
- Effective Tax Rate
- Profit Margin

	SOE	POE	China100 SOE	China100 POE
	139	76	260	277
	78	88	67	67
	4	5	5	3
	19	15	3	26
	5.3	5.4	4.9	5.9
	21	23	23	26
	5	6	5	11

Source: Natixis estimates

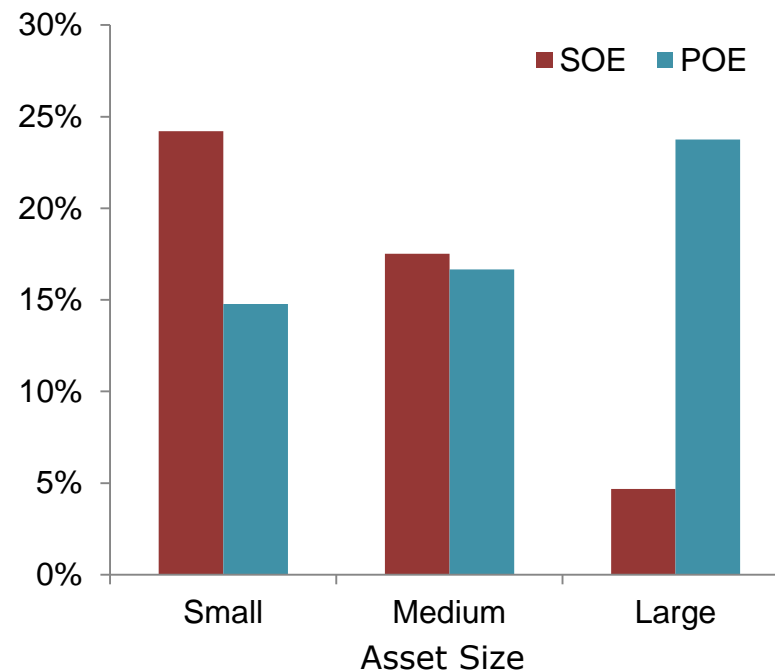
Quick Guide

Vulnerability

Sector

- The smaller the SOE, the higher the repayment risk
- The opposite is true for POEs, where larger companies are more vulnerable

Share of companies with EBITDA/Interest Expense <1



Source: Natixis estimates

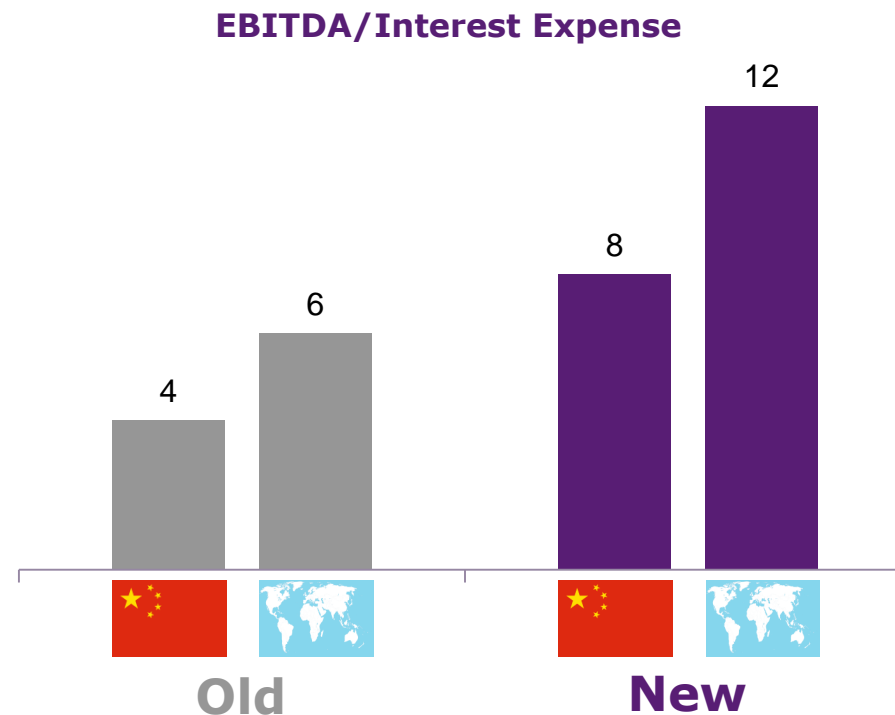
NB Small (<10bn CNY), Medium (Asset <50bn CNY and >10bn CNY), Large (Asset >= 50bn CNY)

Number of SOEs: 638, POEs: 2362



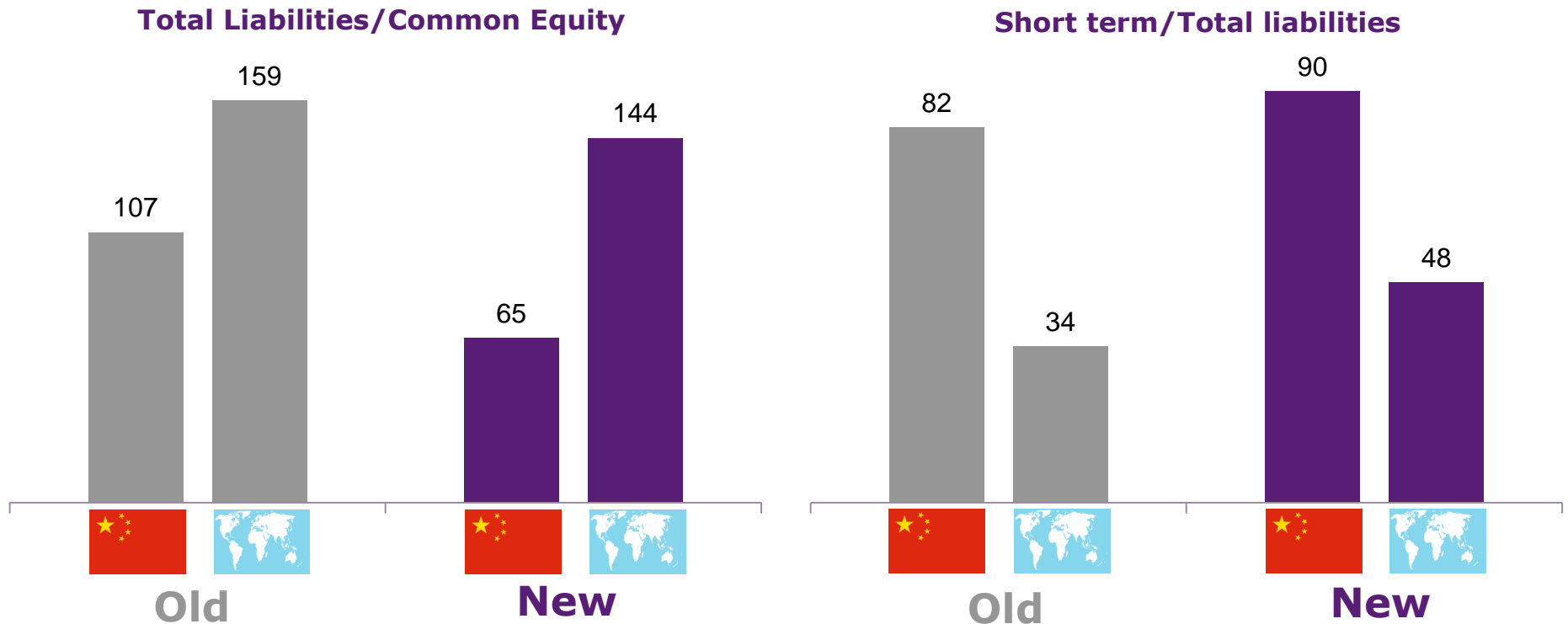
Old sectors doing worse, especially in China

- The repayment ability of Chinese old industries is weaker than global peers...
- ...and weaker than Chinese new industries











Source: Natixis estimates

- Chinese new industries less indebted than global peers...
- ...but with much shorter term funding



Source: Natixis estimates

New sectors better than old generally

	China 	Global 
Old   	<ul style="list-style-type: none">● Lower repayment ability	<ul style="list-style-type: none">● Lowest liquidity risk● But most leveraged
New   	<ul style="list-style-type: none">● Least leveraged● But highest funding risk	<ul style="list-style-type: none">● Higher repayment ability


Source: Natixis


3. Our picks: The best and worst sectors

Not all Chinese companies are financially worse than global peers

Worst Chinese sectors

 Real Estate

 Infrastructure
(Construction subsector)

 Materials & Metals +
Chemicals

 Airlines

 Tourism

Best ones

 Healthcare

Source: Natixis

Quick Guide

Vulnerability

Sector

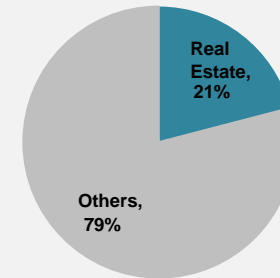
Build more homes to leave them empty?



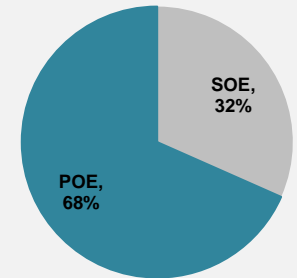
Real Estate

- **Twice as indebted as global peers**
- **One third of companies cannot cover interest expense with earnings**

Proportion in China by Assets

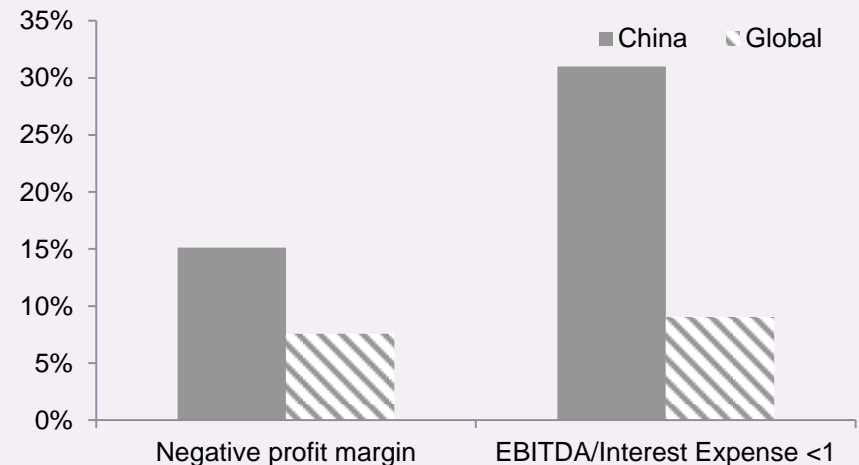


Assets by ownership



Indicator	China	Global
Total Liabilities/Common Equity	209	115
Short Term/Total Liabilities	74	30
EBITDA/Interest Expense	2	4
- Interest	6	4
- Tax	28	18
- Profit Margin	10	22

Proportion of Corporates (%)



Source: Natixis estimates

Quick Guide

Vulnerability

Sector

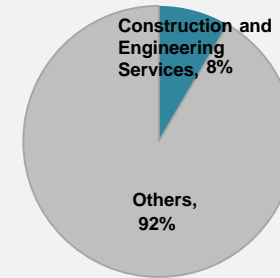
Build more highways and let toll companies eat the pie?



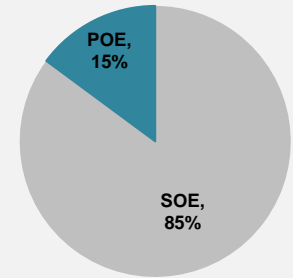
Infrastructure (the construction subsector)

- **Builders of roads and highways have lower repayment ability than global peers**
- **But they have higher profit margins thanks to lower tax rates**

Proportion in China by Assets

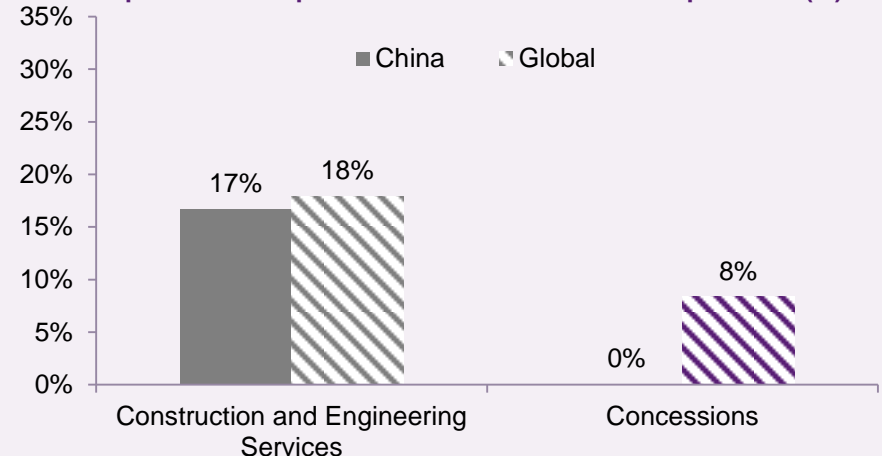


Assets by ownership



Indicator	China	Global
Total Liabilities/Common Equity	148	259
Short Term/Total Liabilities	90	61
EBITDA/Interest Expense	3	4
- Interest	5	4
- Tax	21	29
- Profit Margin	4	2

Proportion of Corporates with EBITDA/Interest Expense < 1 (%)



Source: Natixis estimates

Quick Guide

Vulnerability

Sector

Don't stop making bricks

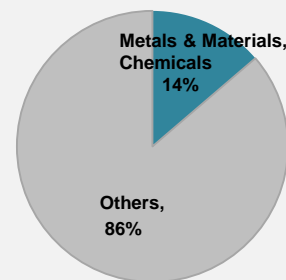
China can build to infinity, and beyond!?



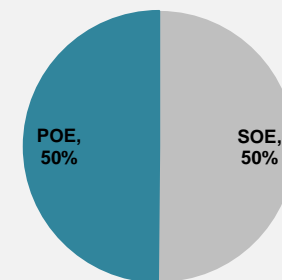
Materials and Metals + Chemicals

- One fifth of Materials & Metals companies have problems repaying interest
- Similar story for Chemicals

Proportion in China by Assets



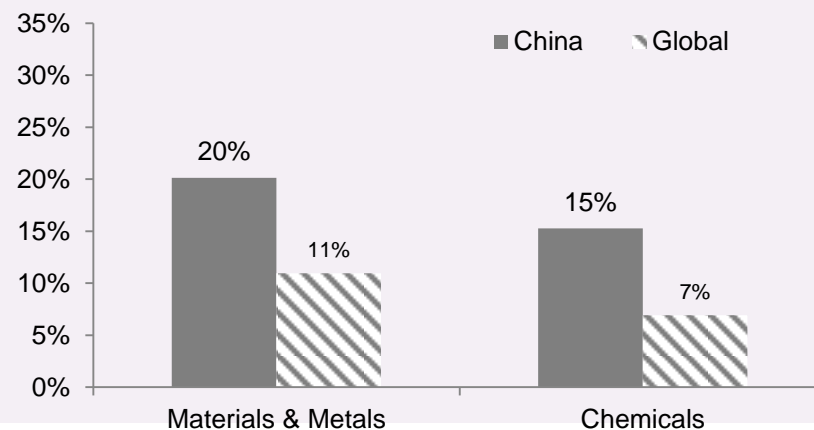
Assets by ownership



Combined statistics for the two sectors

Indicator	China	Global
Total Liabilities/Common Equity	93	132
Short Term/Total Liabilities	86	41
EBITDA/Interest Expense	4	9
- Interest	6	4
- Tax	19	28
- Profit Margin	3	4

Proportion of Corporates with EBITDA/Interest Expense < 1 (%)



Source: Natixis estimates

Let's travel!

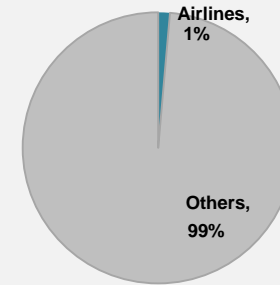
More and more planes... with full seats!



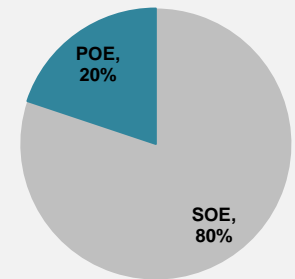
Airlines

- Chinese airlines clearly more profitable than global peers
- Many zombies at global level: 30% of airlines globally have a negative profit margin

Proportion in China by Assets

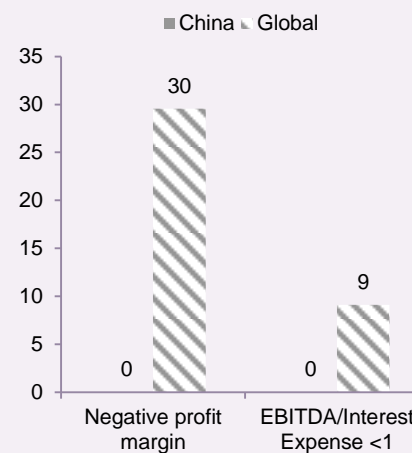


Assets by ownership

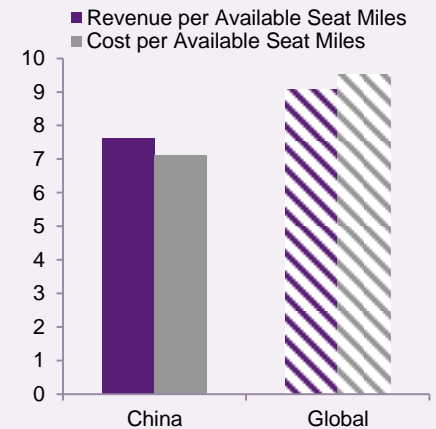


Indicator	China	Global
Total Liabilities/Common Equity	294	269
Short Term/Total Liabilities	39	43
EBITDA/Interest Expense	8	9
- Interest	3	4
- Tax	23	22
- Profit Margin	8	4

Proportion of Corporates (%)



Revenue and Cost Indicators (USD cents)



Source: Natixis estimates

Quick Guide

Vulnerability

Sector

Fancy a vacation?

The demand is there



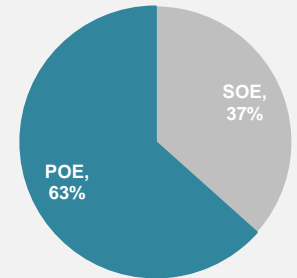
Tourism

- Although generally sound, Chinese tourism companies still suffer from higher interest and tax burdens than global peers.
- But they are still profitable, and VAT reform should give corporates in this sector more leeway
- Some clear zombies, especially in China

Proportion in China by Assets

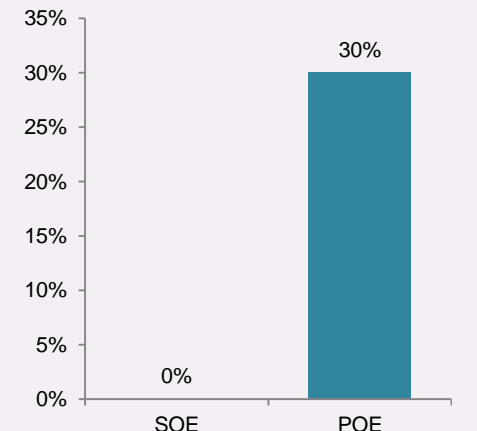
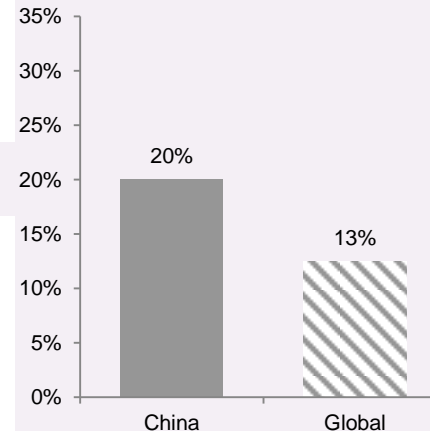


Assets by ownership



Indicator	China	Global
Total Liabilities/Common Equity	60	317
Short Term/Total Liabilities	65	66
EBITDA/Interest Expense	9	10
- Interest	5	3
- Tax	26	16
- Profit Margin	4	2

Proportion of Corporates with EBITDA/Interest Expense < 1 (%)

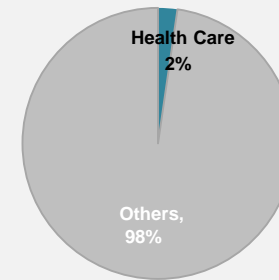


Source: Natixis estimates

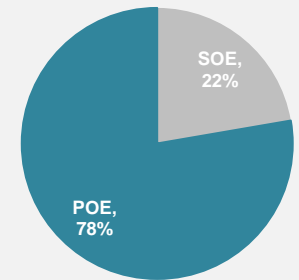
Health Care

- Corporates in the healthcare sector have a strong repayment ability, even more so that global peers
- Also very profitable

Proportion in China by Assets

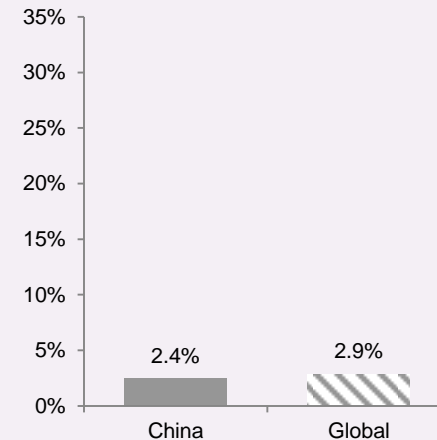


Assets by ownership



Indicator	China	Global
Total Liabilities/Common Equity	49	117
Short Term/Total Liabilities	86	38
EBITDA/Interest Expense	10.6	10.5
- Interest	5	4
- Tax	16	28
- Profit Margin	12	8

Proportion of Corporates with EBITDA/Interest Expense < 1 (%)



Source: Natixis estimates

Zombies concentrated in old sectors... But a few also in new ones

Percentage of firms with negative profit margin

Sector	China	Global	CH-GL
Airlines	0%	30%	-30%
Infrastructure	11%	25%	-14%
Energy	29%	39%	-10%
Utilities	4%	13%	-9%
Renewable & Environment	20%	25%	-5%
Tourism	20%	25%	-5%
Industrial	10%	13%	-3%
ICT	14%	16%	-2%
Health Care	7%	7%	-1%
Semiconductors	8%	8%	0%
Materials & Metals	29%	27%	2%
Consumer	13%	8%	5%
Real Estate	15%	8%	8%
Chemicals	24%	8%	17%

Source: Natixis estimates

Percentage of firms with EBITDA/interest expense <1

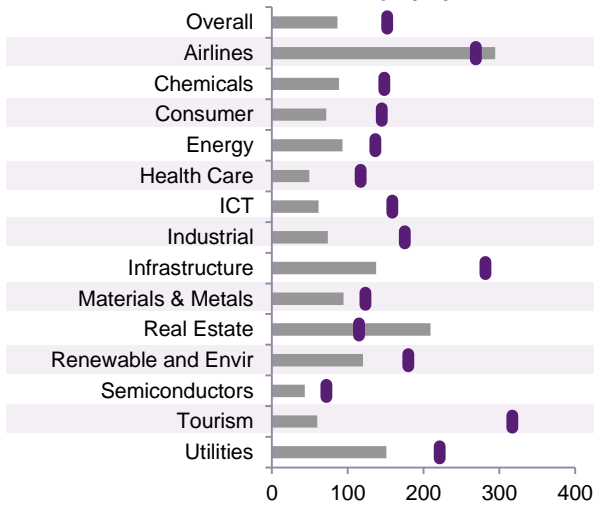
Sector	China	Global	CH-GL
Airlines	0%	9%	-9%
Utilities	3%	9%	-5%
Infrastructure	14%	17%	-3%
Renewable & Environment	11%	13%	-2%
Energy	19%	20%	-1%
Semiconductors	8%	8%	0%
Health Care	7%	4%	3%
Industrial	13%	6%	6%
Tourism	20%	13%	8%
Chemicals	15%	7%	8%
Materials & Metals	20%	11%	9%
ICT	19%	8%	10%
Consumer	14%	4%	11%
Real Estate	31%	9%	22%

Source: Natixis estimates

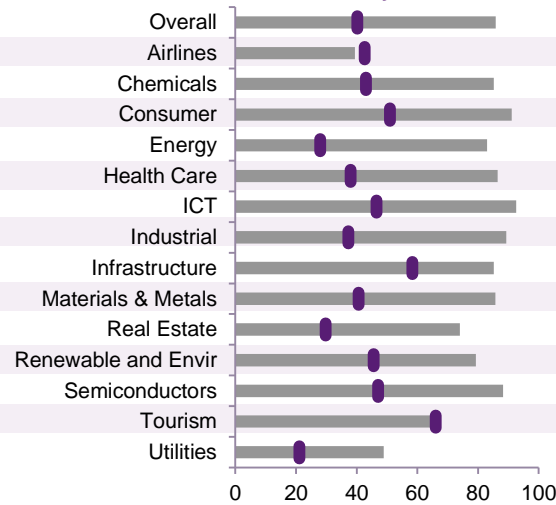
4. Appendices

Zooming in: Comparing all of our six indicators of financial vulnerability by sector - China versus Global

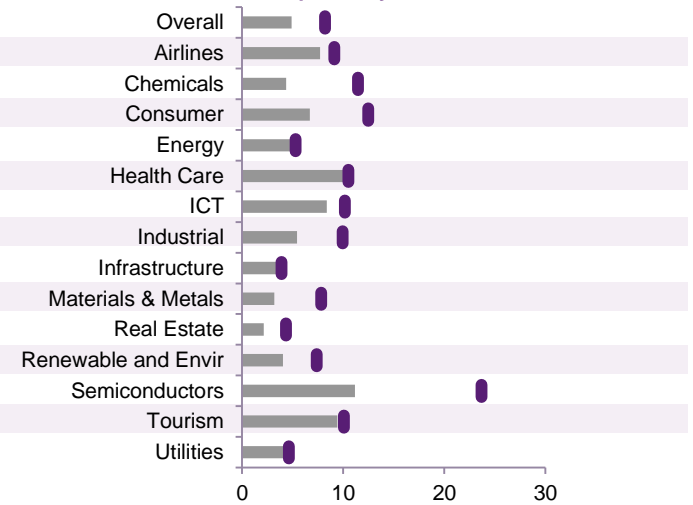
Total Liabilities/Common Equity by Sector



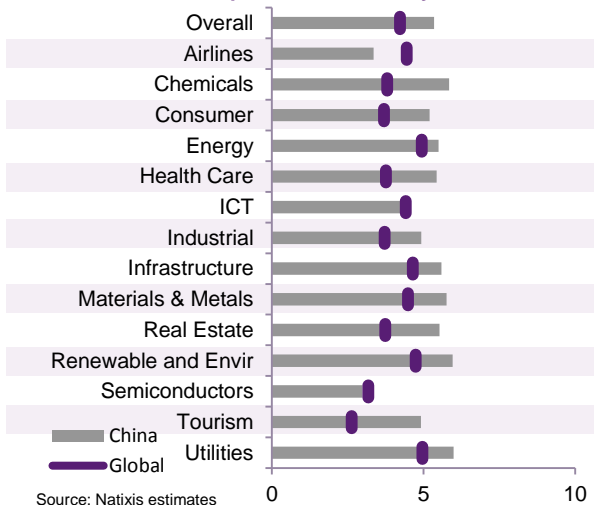
Short Term/Total Liabilities by Sector



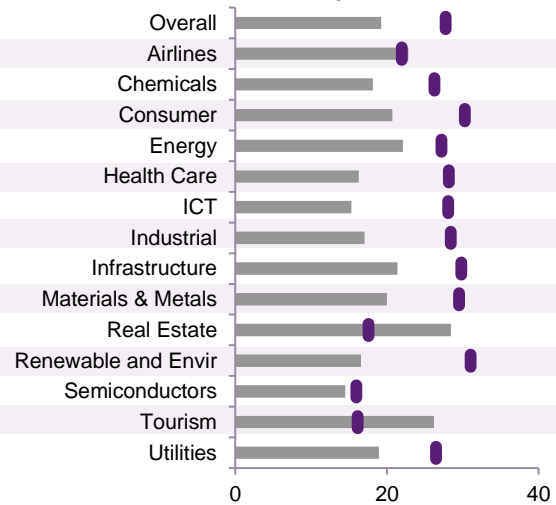
EBITDA/Interest Expense by Sector



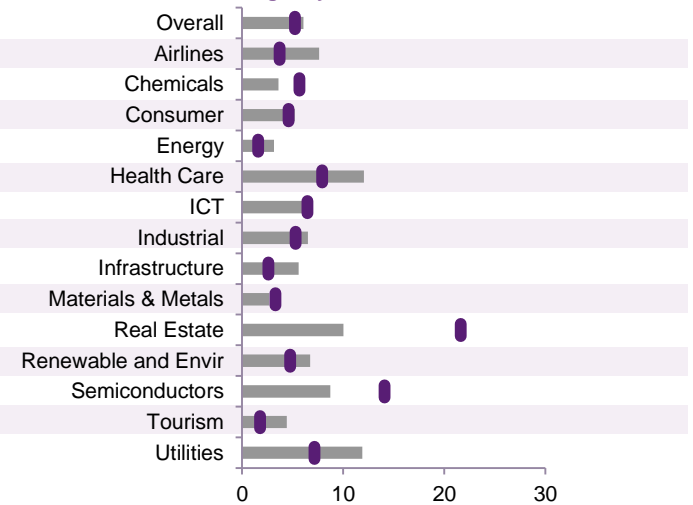
Interest Expense/Total Debt by Sector



Effective Tax Rate by Sector



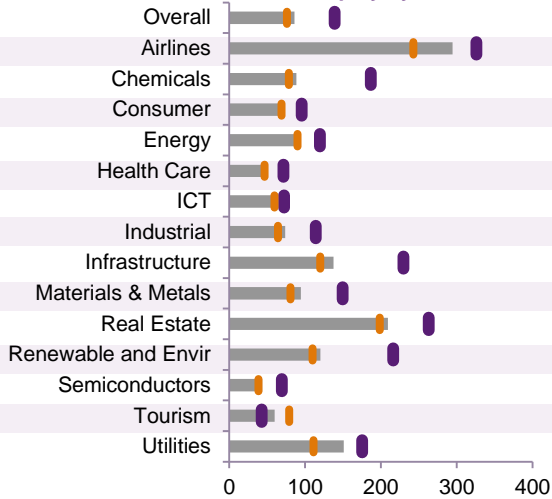
Profit Margin by Sector



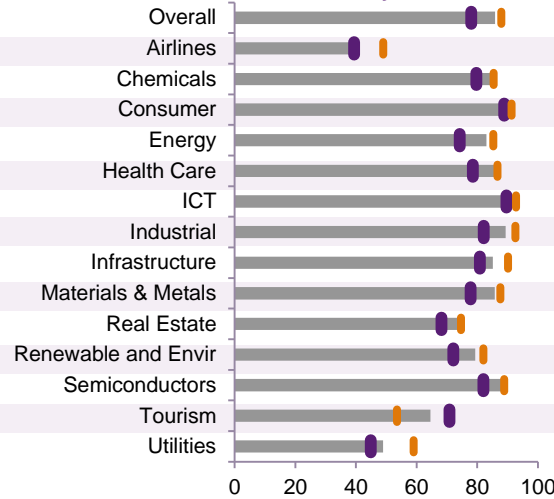
Source: Natixis estimates

Zooming in: Comparing all of our six indicators of financial vulnerability by sector - SOEs versus POEs

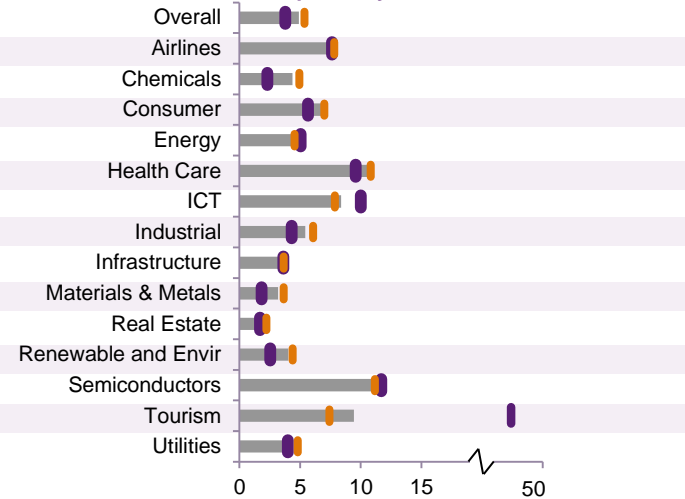
Total Liabilities/Common Equity by Sector



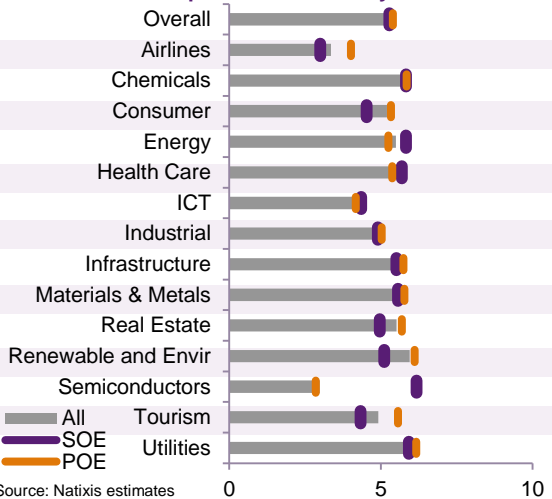
Short Term/Total Liabilities by Sector



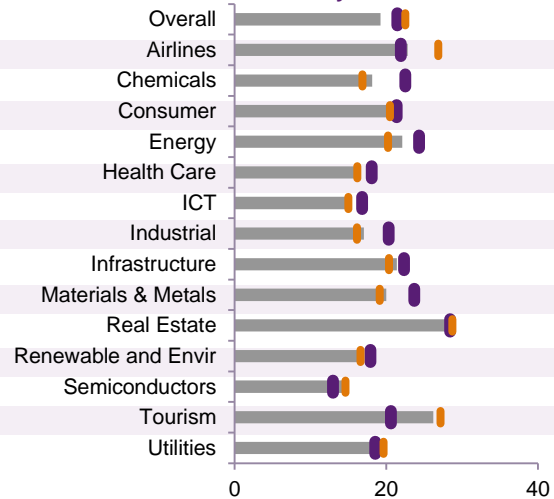
EBITDA/Interest Expense by Sector



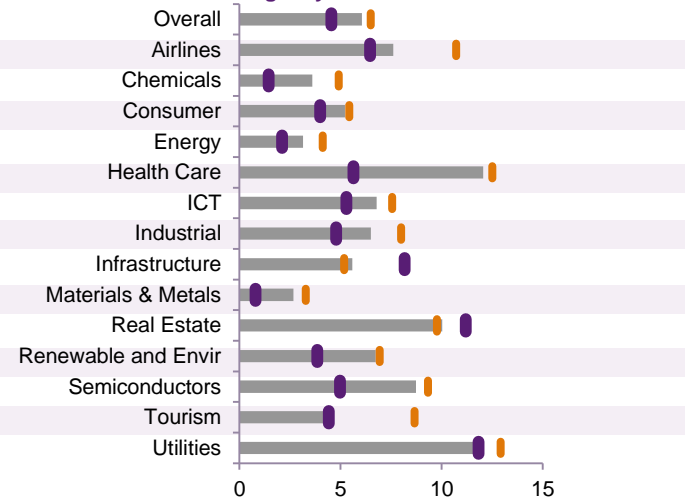
Interest Expense/Total Debt by Sector



Effective Tax Rate by Sector



Profit Margin by Sector



Source: Natixis estimates

From worst to best financial soundness: Sector ranking compared to Chinese average

Ratio of the value of respective sector over China average.

China/China average Respective sectorial ratio	Simple average of indicators relative to China average (>1 indicates the sector is worse)	Leverage	Funding Gap	Repayment	Interest	Tax	Profit Margin
		Total Liabilities/ Common Equity	Short Term/ Total Liabilities	EBITDA/ Interest Expense	Interest Expense/ Total Debt	Effective Tax Rate	Net Income/ Revenue
Real Estate	1.5	2.4	0.9	2.3	1.0	1.5	0.6
Materials & Metals	1.3	1.1	1.0	1.5	1.1	1.0	2.3
Infrastructure	1.2	1.6	1.0	1.4	1.0	1.1	1.1
Energy	1.2	1.1	1.0	1.0	1.0	1.1	1.9
Airlines	1.2	3.4	0.5	0.6	0.6	1.2	0.8
Chemicals	1.1	1.0	1.0	1.1	1.1	0.9	1.7
Renewable and Envir	1.1	1.4	0.9	1.2	1.1	0.9	0.9
Utilities	1.0	1.8	0.6	1.1	1.1	1.0	0.5
Consumer	1.0	0.8	1.1	0.7	1.0	1.1	1.2
Tourism	0.9	0.7	0.8	0.5	0.9	1.4	1.4
Industrial	0.9	0.9	1.0	0.9	0.9	0.9	0.9
ICT	0.8	0.7	1.1	0.6	0.8	0.8	0.9
Health Care	0.7	0.6	1.0	0.5	1.0	0.8	0.5
Semiconductors	0.7	0.5	1.0	0.4	0.6	0.8	0.7

Source: Natixis estimates

From worst to best financial soundness: Sector ranking compared to global average

Ratio of the value of China over Global of respective sector.

China/Global Respective sectorial ratio	Simple average of indicators relative to Global (>1 indicates China is worse)	Leverage	Funding Gap	Repayment	Interest	Tax	Profit Margin
		Total Liabilities/ Common Equity	Short Term/ Total Liabilities	EBITDA/ Interest Expense	Interest Expense/ Total Debt	Effective Tax Rate	Net Income/ Revenue
Real Estate	1.8	1.8	2.5	2.0	1.5	0.7	2.2
Chemicals	1.6	0.6	2.0	2.6	1.5	1.0	1.6
Materials & Metals	1.4	0.8	2.1	2.5	1.3	0.7	1.2
Renewable and Envir	1.3	0.7	1.7	1.8	1.3	1.6	0.7
Semiconductors	1.3	0.6	1.9	2.1	0.9	0.5	1.6
Utilities	1.2	0.7	2.3	1.1	1.2	1.6	0.6
Industrial	1.2	0.4	2.4	1.8	1.3	0.5	0.8
Consumer	1.2	0.5	1.8	1.9	1.4	0.7	0.9
Energy	1.2	0.7	3.0	1.1	1.1	0.7	0.5
Health Care	1.1	0.4	2.3	1.0	1.4	0.8	0.7
ICT	1.0	0.4	2.0	1.2	1.0	0.6	1.0
Airlines	0.9	1.1	0.9	1.2	0.8	1.0	0.5
Tourism	0.9	0.2	1.0	1.1	1.9	0.9	0.4
Infrastructure	0.9	0.5	1.5	1.1	1.2	0.6	0.5

Source: Natixis estimates

Sample Selection	Listed companies	a) China: Chinese companies listed domestically and internationally b) Global: Ex-China companies
	Selection is based on asset size	a) 3000 companies are collected for China and Global respectively, forming China 3000 and Global 3000 b) Top 100 companies by assets in China and Global forms China 100 and Global 100
	Financial sector is excluded	The business nature makes it not comparable to other sectors and beyond the scope of the report
	Filtering	Companies which do not have complete data set of the indicators are not included to avoid distortion
Indicators	Median is used for analysis	
	Leverage	Total Liabilities/Common Equity
	Funding Risk	Short Term/Total Liabilities
	Repayment	EBITDA/Interest Expense
	Interest	Interest Expense/Total Debt
	Tax	Effective Tax Rate
	Profit Margin	Trailing 12M Net Income divided by Trailing 12M Net Sales
Data	Bloomberg, CEIC, DataStream, Natixis estimates	

New China



Airlines

Only airlines companies. Aircraft manufacturing excluded



Consumer

Agriculture, Automotive, Entertainment, Food & Beverages, Garment, Sporting Goods, Toys, Retails



Health Care

Biotech, Medical Devices, Health Care Services & Facilities, Pharma, Life Science Equipment



Information Communication and Technology (ICT)

Internet Media, Publishing & Broadcasting, Software, Communications Equipment, Telecom, Electronics & Components, EMS/ODM



Renewable and Environment

e.g. New Energy, Biofuels, Waste Management, Pollution Control Equipment



Semiconductors

Semiconductor Devices and Manufacturing



Tourism

Leisure & Travel Services, Cruise Lines

Old China



Chemicals

Basic & Diversified Chemicals, Agricultural Chemicals, Distribution



Energy

Coal, Oil & Gas, Electrical Power Equipment



Industrial

Aerospace & Defense, Logistics, Machinery, Transports Equipment



Infrastructure

Construction & Engineering Services, Concession



Materials & Metals

Iron & Steel, Rubber & Plastic, Base Metals, Paper, Cement & Aggregates, Precious Metal



Real Estate

Real Estate Owners & Developers, Homebuilders, Building Maintenance Services



Utilities

Power Generation, Utility Networks

Industry sample: China and Global 100 largest companies

China

Rank of Assets	Name	Ticker
Airlines		
36	Air China Ltd	601111 CH
41	China Southern Airlines Co Ltd	1055 HK
44	China Eastern Airlines Corp Ltd	670 HK
67	Hainan Airlines Co Ltd	900945 CH
Consumer		
17	SAIC Motor Corp Ltd	600104 CH
29	Alibaba Group Holding Ltd	BABA US
40	SDIC Essence Holdings Co Ltd	600061 CH
51	Dongfeng Motor Group Co Ltd	489 HK
55	Midea Group Co Ltd	000333 CH
58	China Resources Beer Holdings Company Ltd	291 HK
75	BAIC Motor Corp Ltd	1958 HK
87	Xiamen C & D Inc	600153 CH
97	Byd Co Ltd	1211 HK
61	Sinopharm Group Co Ltd	1099 HK
Information and communications technology (ICT)		
3	China Mobile Ltd	941 HK
10	China Telecom Corp Ltd	728 HK
12	China United Network Communications Ltd	600050 CH
16	China Unicom Hong Kong Ltd	762 HK
35	Tencent Holdings Ltd	700 HK
48	Lenovo Group Ltd	992 HK
57	BOE Technology Group Co Ltd	200725 CH
68	Baidu Inc	BIDU US
70	ZTE Corp	000063 CH
78	TCL Corp	000100 CH
Energy		
1	PetroChina Co Ltd	857 HK
2	China Petroleum & Chemical Corp	386 HK
7	CNOOC Ltd	883 HK
11	China Shenhua Energy Co Ltd	1088 HK
30	China Coal Energy Co Ltd	1898 HK
52	Shanghai Electric Group Co Ltd	601727 CH
62	Yanzhou Coal Mining Co Ltd	1171 HK
Industrial		
26	CRRC Corp Ltd	601766 CH
38	China Shipbuilding Industry Co Ltd	601989 CH
53	China COSCO Holdings Co Ltd	1919 HK

Rank of Assets	Name	Ticker
74	Weichai Power Co Ltd	2338 HK
85	Daqin Railway Co Ltd	601006 CH
92	Shanghai International Port Group Co Ltd	600018 CH
Infrastructure		
5	China Railway Group Ltd	390 HK
6	China Communications Construction Co Ltd	1800 HK
8	China Railway Construction Corp Ltd	1186 HK
19	Power Construction Corp of China Ltd	601669 CH
23	Metallurgical Corp of China Ltd	601618 CH
32	China National Nuclear Power Co Ltd	601985 CH
34	China Energy Engineering Corp Ltd	3996 HK
69	Shanghai Construction Group Co Ltd	600170 CH
90	Zoomlion Heavy Industry Science and Technology Co Ltd	000157 CH
Materials & Metals		
20	Fosun International Ltd	656 HK
22	China National Building Material Co Ltd	3323 HK
33	Baoshan Iron & Steel Co Ltd	600019 CH
39	Aluminum Corp of China Ltd	2600 HK
49	Hebei Iron & Steel Co Ltd	000709 CH
59	Inner Mongolia BaoTou Steel Union Co Ltd	600010 CH
72	BBMG Corp	2009 HK
84	Anhui Conch Cement Co Ltd	914 HK
86	China National Materials Co Ltd	1893 HK
93	Wuhan Iron & Steel Co Ltd	600005 CH
96	China International Marine Containers Group Co Ltd	000039 CH
98	China Hongqiao Group Ltd	1378 HK
100	Shaanxi Coal Industry Co Ltd	601225 CH
Real Estate		
4	China State Construction Engineering Corp Ltd	601668 CH
9	Dalian Wanda Commercial Properties Co Ltd	3699 HK
13	Evergrande Real Estate Group Ltd	3333 HK
14	China Vanke Co Ltd	2202 HK
15	Greenland Holdings Corp Ltd	600606 CH
18	Poly Real Estate Group Co Ltd	600048 CH
21	China Overseas Land & Investment Ltd	688 HK
24	China Resources Land Ltd	1109 HK
28	Country Garden Holdings Co Ltd	2007 HK
45	Guangzhou R&F Properties Co Ltd	2777 HK
47	Longfor Properties Co Ltd	960 HK

Rank of Assets	Name	Ticker
50	Gree Electric Appliances Inc of Zhuhai	000651 CH
56	Greentown China Holdings Ltd	3900 HK
60	China Fortune Land Development Co Ltd	600340 CH
63	Gemdale Corp	600383 CH
64	Sino-Ocean Land Holdings Ltd	3377 HK
66	Agile Property Holdings Ltd	3383 HK
71	China Jinmao Holdings Group Ltd	817 HK
73	Hopson Development Holdings Ltd	754 HK
77	Shui On Land Ltd	272 HK
79	Beijing Capital Development Co Ltd	600376 CH
80	Poly Property Group Co Ltd	119 HK
81	Shanghai Industrial Holdings Ltd	363 HK
83	Sunac China Holdings Ltd	1918 HK
89	Oceanwide Holdings Co Ltd	000046 CH
91	Yuexiu Property Co Ltd	123 HK
95	Shenzhen Overseas Chinese Town Co Ltd	000069 CH
99	Jinke Properties Group Co Ltd	000656 CH
76	China Gezhouba Group Co Ltd	600068 CH
Utilities		
25	Datang International Power Generation Co Ltd	991 HK
27	Huaneng Power International Inc	902 HK
31	GD Power Development Co.	600795 CH
37	CGN Power Co Ltd	1816 HK
42	Huadian Power International Corp Ltd	600027 CH
43	China Resources Power Holdings Co Ltd	836 HK
46	SDIC Power Holdings Co Ltd	600886 CH
54	China Yangtze Power Co Ltd	600900 CH
65	China Longyuan Power Group Corp Ltd	916 HK
82	Zhejiang Zheneng Electric Power Co Ltd	600023 CH
88	Beijing Enterprises Holdings Ltd	392 HK
94	Kunlun Energy Co Ltd	135 HK

Global

Rank of Assets	Name	Ticker	Country of Risk
Consumer			
2	Volkswagen AG	VOW GR	DE
3	Toyota Motor Corp	7203 JP	JP
12	Daimler AG	DAI GR	DE
14	Ford Motor Co	F US	US
17	Wal-Mart Stores Inc	WMT US	US
18	General Motors Co	GM US	US
19	Bayerische Motoren Werke AG	BMW GR	DE
29	Honda Motor Co Ltd	7267 JP	JP
31	Nissan Motor Co Ltd	7201 JP	JP
36	Hyundai Motor Co	005380 KS	KR
37	CK Hutchison Holdings Ltd	1 HK	HK
39	Mitsubishi Corp	8058 JP	JP
40	Anheuser-Busch InBev SA/NV	ABI BB	BE
45	Procter & Gamble Co/The	PG US	US
47	Nestle SA	NESN VX	CH
65	Renault SA	RNO FP	FR
70	CVS Health Corp	CVS US	US
73	Coca-Cola Co/The	KO US	US
99	PepsiCo Inc	PEP US	US
100	Walgreens Boots Alliance Inc	WBA US	US
Health Care			
26	Pfizer Inc	PFE US	US
38	Allergan plc	AGN US	US
43	Johnson & Johnson	JNJ US	US
44	Novartis AG	NOVN VX	CH
55	UnitedHealth Group Inc	UNH US	US
56	Sanofi	SAN FP	FR
63	Medtronic PLC	MDT US	US
64	Merck & Co Inc	MRK US	US
84	Bayer AG	BAYN GR	DE
88	GlaxoSmithKline PLC	GSK LN	GB
94	Roche Holding AG	ROG VX	CH
97	Amgen Inc	AMGN US	US
Information and communications technology (ICT)			
4	AT&T Inc	T US	US
8	Apple Inc	AAPL US	US
11	Verizon Communications Inc	VZ US	US
16	Samsung Electronics Co Ltd	005930 KS	KR

Rank of Assets	Name	Ticker	Country of Risk
20	Vodafone Group PLC	VOD LN	GB
21	Microsoft Corp	MSFT US	US
23	SoftBank Group Corp	9984 JP	JP
25	Nippon Telegraph & Telephone C	9432 JP	JP
27	Comcast Corp	CMCSA US	US
28	Deutsche Telekom AG	DTE GR	DE
32	Alphabet Inc	GOOGL US	US
35	Sony Corp	6758 JP	JP
42	Telefonica SA	TEF SM	ES
54	Cisco Systems Inc	CSCO US	US
57	International Business Machine	IBM US	US
61	Oracle Corp	ORCL US	US
72	Walt Disney Co/The	DIS US	US
81	SK Holdings Co Ltd	034730 KS	KR
83	Telecom Italia SpA/Milano	TIT IM	IT
85	Sprint Corp	S US	US
95	America Movil SAB de CV	AMXL MM	MX
96	Hon Hai Precision Industry Co	2317 TT	TW
Semiconductor			
62	Intel Corp	INTC US	US
Chemicals			
75	Saudi Basic Industries Corp	SABIC AB	SA
91	BASF SE	BAS GR	DE
Energy			
1	General Electric Co	GE US	US
5	Royal Dutch Shell PLC	RDSA LN	NL
6	Exxon Mobil Corp	XOM US	US
9	BP PLC	BP/ LN	GB
10	Gazprom PAO	GAZP RM	RU
13	Petroleo Brasileiro SA	PETR4 BZ	BR
15	TOTAL SA	FP FP	FR
33	Eni SpA	ENI IM	IT
34	Rosneft OAO	ROSN RM	RU
41	Siemens AG	SIE GR	DE
58	Statoil ASA	STL NO	NO
59	Lukoil PJSC	LKOH RM	RU
60	Hitachi Ltd	6501 JP	JP
67	ConocoPhillips	COP US	US

Rank of Assets	Name	Ticker	Country of Risk
78	Kinder Morgan Inc/DE	KMI US	US
82	Reliance Industries Ltd	RIL IN	IN
93	ITOCHU Corp	8001 JP	JP
Industrial			
51	Airbus Group SE	AIR FP	FR
69	Boeing Co/The	BA US	US
74	United Technologies Corp	UTX US	US
98	Sumitomo Corp	8053 JP	JP
Infrastructure			
89	Caterpillar Inc	CAT US	US
Materials & Metals			
46	Glencore PLC	GLEN LN	CH
50	BHP Billiton Ltd	BHP AU	AU
66	Mitsui & Co Ltd	8031 JP	JP
71	Rio Tinto PLC	RIO LN	GB
76	Vale SA	VALE5 BZ	BR
87	LafargeHolcim Ltd	LHN VX	CH
92	ArcelorMittal	MT NA	LU
Real Estate			
86	Sun Hung Kai Properties Ltd	16 HK	HK
Utilities			
7	Electricite de France SA	EDF FP	FR
22	Enel SpA	ENEL IM	IT
24	Engie SA	ENGI FP	FR
30	Korea Electric Power Corp	015760 KS	KR
48	E.ON SE	EOAN GR	DE
49	Duke Energy Corp	DUK US	US
52	Tokyo Electric Power Co Holdin	9501 JP	JP
53	Iberdrola SA	IBE SM	ES
68	Exelon Corp	EXC US	US
77	RWE AG	RWE GR	DE
79	National Grid PLC	NG/ LN	GB
80	NextEra Energy Inc	NEE US	US
90	Southern Co/The	SO US	US

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