JANUS HENDERSON CORPORATE DEBT INDEX

Edition 4

JULY 2023

Marketing communication

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INTRODUCTION

JANUS HENDERSON IS AN ASSET MANAGER INVESTING IN GLOBAL FIXED INCOME MARKETS ON BEHALF OF ITS CLIENTS THROUGHOUT THE WORLD FOR OVER 35 YEARS.

Formed in 2017 from the merger between Janus Capital Group and Henderson Global Investors, we are committed to adding value through active management. For us, active is more than our investment approach – it is the way we translate ideas into action, how we communicate our views and the partnerships we build in order to create the best outcomes for clients.

We take pride in what we do and care passionately about the quality of our products and the services we provide. While our investment managers have the flexibility to follow approaches best suited to their areas of expertise, overall our people come together as a team. This is reflected in our Knowledge Shared ethos, which informs the dialogue across the business and drives our commitment to empowering clients to make better investment and business decisions.

We are proud to offer a highly diversified range of products, harnessing the intellectual capital of some of the industry's most innovative and formative thinkers. Our expertise encompasses the major asset classes, we have investment teams situated around the world, and we serve individual and institutional investors globally. We have US$310.5 billion in assets under management, more than 2,000 employees and offices in 24 cities worldwide*. Headquartered in London, we are an independent asset manager that is dual-listed on the New York Stock Exchange and the Australian Securities Exchange.

What is the Janus Henderson Corporate Debt Index?

The Corporate Debt Index is a long-term study into trends in company indebtedness around the world, the investment opportunities this provides and the risks it presents. It measures the extent to which the world's largest companies are financing themselves with borrowings and how affordable and sustainable those borrowings are. It compares and contrasts trends across different industries and geographies, and in the corporate bond markets. And it showcases the latest views from our expert fund managers. (See methodology for further details)

The report aims to help readers better understand the world of fixed-income investment and the opportunities it presents.

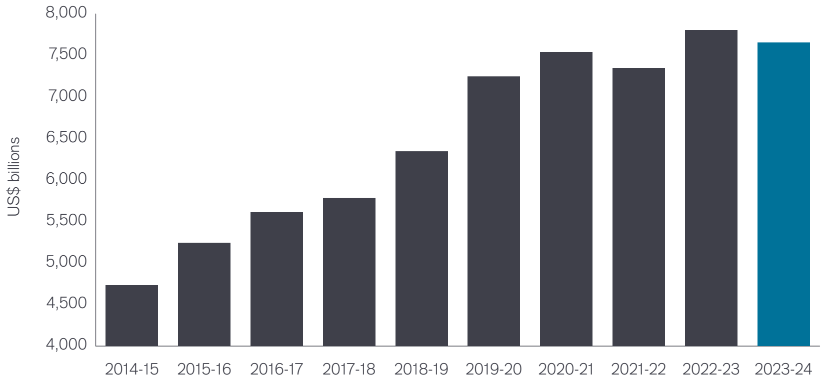
*As at 31 March 2023

Overview

Corporate debt rose to a new record in 2022/23 , but appetite to borrow is waning

Companies around the world took on $456bn[1] of net new debt in 2022/23, pushing the outstanding total up 6.2% on a constant-currency basis to $7.80 trillion. This exceeded the 2020 peak, once movements in exchange rates were taken into account. One fifth of the net-debt increase simply reflected companies such as Alphabet and Meta spending some of their vast cash mountains, however. Total debt, which excludes cash balances, inched ahead globally by just 3.0% on a constant-currency basis, around half the average pace of the last decade. Higher interest rates helped slow appetite to borrow but have not yet made a significant impact on the interest costs faced by most large companies.

COMPANY NET DEBT – GLOBAL (CONSTANT CURRENCY)



Source: Janus Henderson, June 2023. **There is no guarantee that past trends will continue, or forecasts will be realised.**

NET DEBT BY REGION (US$ BILLIONS)

Region	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
North America	$2,775	$3,025	$3,501	$3,836	$4,062	$4,001	$4,316
Emerging Markets	$586	$563	$543	$634	$541	$504	$573
Europe ex UK	$1,478	$1,600	$1,661	$1,822	$1,952	$1,799	$1,702
UK	$402	$444	$448	$482	$536	$518	$474
Japan	$468	$462	$463	$490	$600	$625	$616
Asia Pacific ex Japan	$249	$241	$189	$219	$195	$135	$122
Total	**$5,957**	**$6,336**	**$6,805**	**$7,481**	**$7,886**	**$7,583**	**$7,802**
Total @2022/23 exchange rates	**$5,609**	**$5,781**	**$6,341**	**$7,247**	**$7,538**	**$7,346**	**$7,802**

Source: Janus Henderson, June 2023

[1.] Adjusted for constant exchange rates.

Balance sheets remained strong thanks to record profits

Profitability over the last year exceeded even 2021/22's super-normal level. Global pre-tax profits (excluding financials) rose 13.6%[2] to a record $3.62 trillion, though the improvement was heavily concentrated. Nine tenths of the $433bn constant-currency increase in profit was delivered by the world's oil producers which are enjoying booming energy prices. A number of sectors, including telecoms, media and mining saw lower profits year-on-year. Higher profit boosted equity capital, and this meant the debt/equity level, an important measure of debt sustainability, held steady at 49% year-on-year, despite increased borrowing.

Cash flow declined from record levels

Cash flow, which takes into account factors like investment and working capital, did not follow profits higher in 2022/23, however, dipping by 3%[3]. Half the companies in our index generated less free cash during the period. With cash flow nevertheless hovering near historic highs, most companies opted to increase the capital they returned to shareholders during the period. According to the Janus Henderson Global Dividend Index, both dividend payments and share buybacks rose to record levels, totalling $2.1trillion[4], up from $1.7trillion the year before.

GLOBAL CORPORATE DEBT
KEY FIGURES

Key figures	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Cash & cash equivalents	$3,604	$4,114	$3,977	$3,947	$4,992	$5,468	$5,187
Equity	$10,489	$11,927	$12,664	$13,180	$13,778	$15,406	$15,940
Total assets	$30,522	$33,835	$35,560	$37,226	$40,076	$43,332	$44,055
Short-term debt	$1,832	$2,003	$2,039	$2,303	$2,387	$2,438	$2,477
Long-term debt	$7,729	$8,447	$8,742	$9,125	$10,492	$10,613	$10,512
Total debt	$9,561	$10,450	$10,782	$11,429	$12,878	$13,050	$12,988
Net debt	$5,957	$6,336	$6,805	$7,481	$7,886	$7,583	$7,802
Operating profit	$1,988	$2,331	$2,678	$2,579	$2,245	$3,404	$3,992
Interest expense	$281	$301	$325	$366	$369	$357	$366
Interest / Operating profit	14%	13%	12%	14%	16%	10%	9%
Net debt / Operating profit	300%	272%	254%	290%	351%	223%	195%
Debt / Equity	**57%**	**53%**	**54%**	**57%**	**57%**	**49%**	**49%**

Source: Janus Henderson, June 2023

2. Adjusted for constant exchange rates.

3. Source: Janus Henderson, Factset, constant exchange rates.

4. Excluding Financials for like-for-like comparison.

With dividends and share buybacks up and cash flow down, companies bridged the gap either by adding to their borrowings or running down their cash piles.

Looking ahead, higher interest rates are impacting companies with a time-lag

Time lags help explain why higher interest rates have not yet made much impact. Tighter monetary policy is transmitted more quickly through the banking system as loan rates rise, whereas in bond markets most bonds are issued at fixed rates, so companies only face higher costs when they refinance maturing ones. The amount spent on interest only rose 5.3% on a constant-currency basis in 2022/23, but there was significant regional variation. In the US, for example, where companies are more likely to finance themselves via the bond markets, the collective interest bill was flat year-on-year, while net debts continued to rise[5]. In Europe, where bank lending plays a greater role, the amount spent on finance costs rose by a sixth at constant exchange rates, and this higher cost was a factor in holding debt levels flat year-on-year[6].

CORPORATE-BOND YIELDS ARE CLOSE TO MULTI-YEAR HIGHS, OFFERING OPPORTUNITIES FOR INVESTORS.

Corporate bonds are offering exciting oppportunties for investors

The median, or typical, yield on investment-grade bonds was 4.9% in early May, up from 4.1% a year ago and 1.7% in 2021. This presents opportunities for bond investors. For issuers, higher yields only mean higher costs either when the bond matures and must be refinanced or if they choose to increase their borrowings and issue new debt.

Outlook

Debt levels set to fall as economy slows

The global economy is slowing as higher interest rates exert pressure on demand. Corporate earnings are expected to fall from their record levels as a result. Higher borrowing costs and slower economic activity mean companies will look to repay some of their debts, though there will be significant variation between different sectors and between the strongest and weakest companies. Net debt is likely to fall less than total debt as cash-rich companies continue to reduce their cash piles. Overall we expect net debt to decline by 1.9% this year, falling to $7.65 trillion.

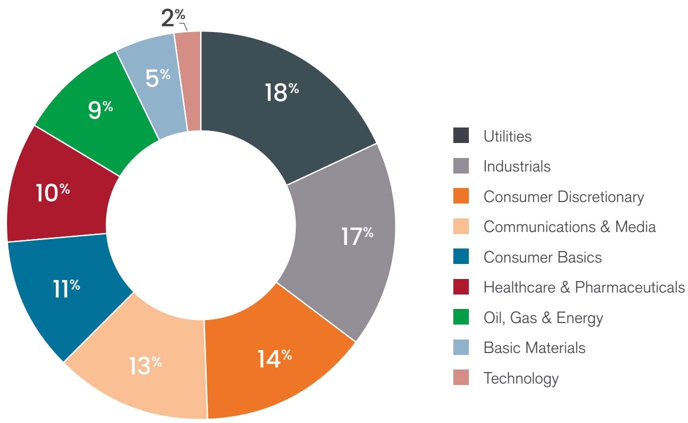
[5] The rise in net debt in the US was also boosted by cash-rich companies running down cash piles, meaning an opportunity cost in foregone interest income but no increase in interest expense.

[6] At constant FX.

INDUSTRY PATTERNS

A company's sector exerts the biggest influence on its chosen mix of equity and debt finance and on how this mix changes over time as the business grows and matures. Macroeconomic stability is also important because it reduces the risks for borrowers and lenders, while cultural attitudes to debt and access to capital markets play a role too. Beyond these geographical factors, the same sector patterns emerge everywhere. Shareholders in companies with more stable, predictable cash flows and a strong asset base are often content to borrow heavily in order to minimise equity finance and thereby exploit the value created by gearing effects. Utilities are the classic example. By contrast, companies that are heavily exposed to the economic cycle, such as those in building materials or mining, must be prudent so that a downturn does not see them unable to service their debts. Of course, some companies get into difficulty if they borrow too much – property company China Evergrande has imploded for just this reason – but having too much cash is a big problem for shareholders too. Alphabet's $84bn net cash pile accounts for around six percent of the company's value and exerts a drag on returns to shareholders who might prefer to use that capital more productively themselves.

2022/23 NET DEBT BY INDUSTRY (US$ BILLIONS)



Source: Janus Henderson, June 2023

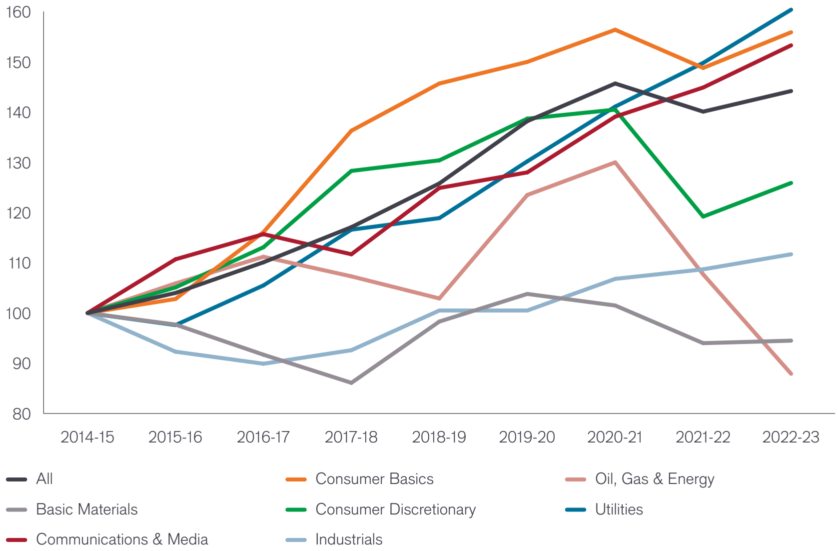
Utilities comfortably made the largest contribution to the increase in global corporate borrowing in 2022/23. Between them utility-company debts rose by $135bn on a constant-currency basis, an increase of 10.8%, significantly faster than the global average. This was more than a quarter of the increase in global net debt, much greater than the sector's one-sixth share of the total stock outstanding. Three quarters of utility companies in our index saw borrowing rise. For most utilities, profitability was strong, but cash flow was negative once heavy investment spending and dividends were taken into account. For example, Endesa in Spain spent five times as much on investment as it earned in operating cash flow. Endesa, along with most of its peers, is filling the gap with additional borrowing. By far the biggest jump in utility debt came from EDF which is making severe losses owing to government-mandated energy-price controls and is in the process of being nationalised.

UTILITIES COMFORTABLY MADE THE LARGEST CONTRIBUTION TO THE INCREASE IN GLOBAL CORPORATE BORROWING IN 2022/23.

Media companies made the second-largest contribution to the global increase in net debt. Warner Bros Discovery bought Warner Media from AT&T, borrowing heavily in the process, while Alphabet and Meta drew down on their significant cash piles to fund very large share buybacks as well as capital investment. Half of the remaining companies in the sector added to their borrowings too. In the software sector, Microsoft halved its net cash pile to fund dividends, share repurchases and investment.

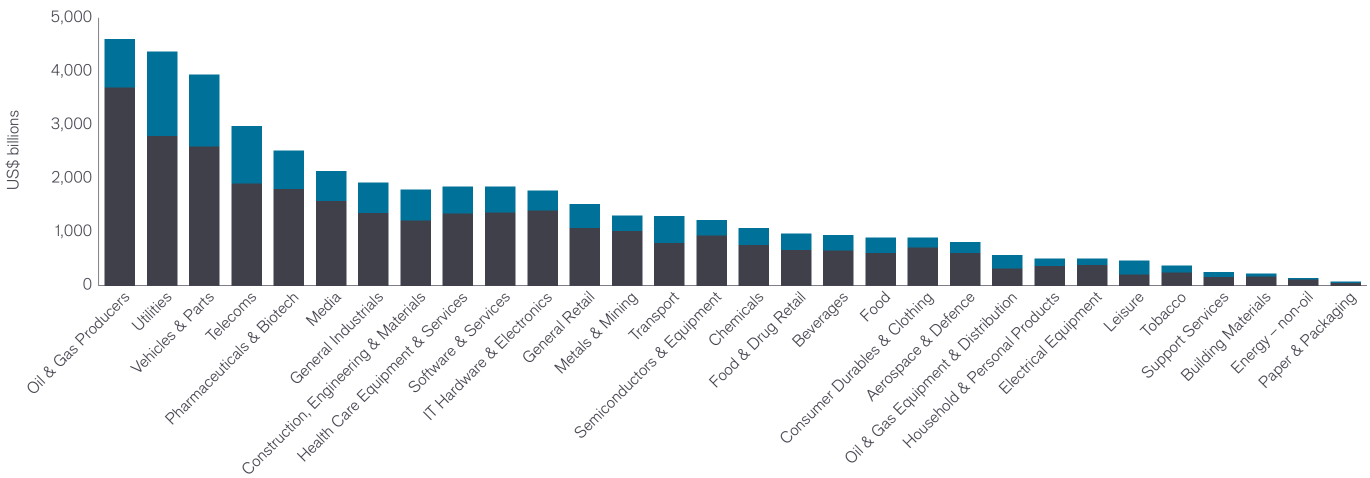
Construction and engineering groups, especially in China and Hong Kong have made the third-largest contribution to growth in corporate net debts over the last year. China State Construction Engineering accounted for one quarter of the sector's increase as expanding working capital needs ate into its cash flow; the group hiked its dividend sharply too.

NET DEBT BY INDUSTRY
INDEXED



Source: Janus Henderson, June 2023

ASSETS, WITH PROPORTION FUNDED BY DEBT
2022/23



Source: Janus Henderson, June 2023

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INDUSTRY PATTERNS (CONTINUED)

With investment spending running far ahead of cash flow, Amazon single-handedly contributed almost one tenth of the increase in net global corporate debt in 2022/23 and almost as much as all the other retailers in our index combined. Its $48.6bn increase was comfortably the biggest jump in debt of any company globally.

Despite a few companies making a very large impact, rising indebtedness was broadly spread. Across the 933 companies in our index, almost three fifths (56%) increased their borrowing or held it steady in 2022/23, up from a little over two fifths in each of the previous two years.

Some sectors saw their borrowings fall. The biggest of these were oil producers – for the second year running. Free cash flow has surged in the sector, totalling over $500bn in the last two years (three times as much as the previous five years combined). Oil-producer net debts fell by $130bn last year, significantly less than 2021/22 (despite sharply higher income) reflecting record share buybacks and dividends as they funnelled surplus capital back to shareholders. They now have lower debts than at any time since at least 2014/15 when our data history begins. Non-oil energy companies are also benefitting from high prices and saw their borrowings fall as a result.

Elsewhere, pharmaceuticals, vehicles, beverages and defence groups are among the eight sectors to have repaid debt over the last year. The biggest single reduction in borrowing came at AT&T as the flipside of the Warner Bros Discovery deal.

NET DEBT BY INDUSTRY
(US$ BILLIONS – SELECTED YEARS)

Industry	2014-15	2019-20	2020-21	2021-22	2022-23	2022-23 Change	2022-23 Change Constant-Currency
Basic Materials	$430	$446	$437	$404	$407	0.6%	3.6%
Communications & Media	$675	$864	$939	$978	$1,034	5.8%	8.8%
Consumer Basics	$557	$836	$872	$829	$869	4.8%	7.9%
Consumer Discretionary	$888	$1,232	$1,248	$1,059	$1,119	5.7%	10.6%
Healthcare & Pharmaceuticals	$285	$775	$842	$836	$804	-3.8%	-2.4%
Industrials	$1,204	$1,210	$1,285	$1,308	$1,344	2.8%	7.5%
Oil, Gas & Energy	$790	$975	$1,026	$850	$694	-18.4%	-16.3%
Technology	-$283	$14	$15	$21	$141	585.8%	400.5%
Utilities	$867	$1,129	$1,223	$1,298	$1,390	7.1%	10.8%
ALL	**$5,412**	**$7,481**	**$7,886**	**$7,583**	**$7,802**	**2.9%**	**6.2%**

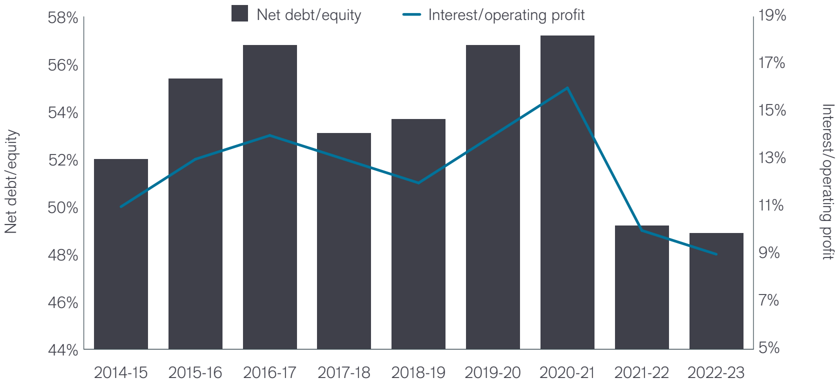
Source: Janus Henderson, June 2023

DEBT SERVICING & SUSTAINABILITY

The world's largest companies are only just beginning to feel the effects of higher interest rates. Indeed, low financing costs have proved slightly stickier than we thought likely in our report a year ago. This has particularly been the case in the US where the 2022/23 interest bill fell year-on-year, despite significantly higher borrowing. This is partly because a quarter of the increase in US net debt resulted from cash-rich companies reducing their cash piles, but it is also down to how companies here borrow. Large US companies are better able to access capital markets and issue bonds at fixed rates so there is a time lag until bonds mature and are refinanced at higher prevailing rates before companies start paying more for their borrowings. Where bank finance is a larger share of the financing mix, such as in Europe, higher rates have been passed on much quicker. The amount European firms spent on interest jumped by 18% year-on-year on a constant currency basis, despite debt levels being only slightly higher.

The super-normal level of profits companies have enjoyed over the last couple of years – global operating profits were 50% higher between 2021 and 2023 than the average from 2017 to 2020 – means that interest expenses are consuming a record low share of profits – just 9.2% over the last year, compared to an average 13.1% over the previous eight years. This is changing. Profits are now under pressure and interest costs are rising.

DEBT SUSTAINABILITY



Source: Janus Henderson, June 2023

THE WORLD'S LARGEST COMPANIES ARE ONLY JUST BEGINNING TO FEEL THE EFFECTS OF HIGHER INTEREST RATES. BUT PROFITS ARE NOW UNDER PRESSURE AND INTEREST COSTS ARE RISING.

DEBT SERVICING & SUSTAINABILITY (CONTINUED)

Investors use the net debt/equity ratio to evaluate a company's financial risk, determine its ability to repay debt, and compare it to its peers or industry benchmarks. It measures reliance on borrowed funds versus funds provided by shareholders. Despite rising borrowing in 2022/23, the global net debt/equity ratio held steady sat 49% - below the average for the last decade. It fell especially sharply in the booming energy industry where record profits have bolstered equity capital. It was also lower for mining companies which take a conservative approach to borrowing in a volatile industry, and among healthcare firms, vehicle manufacturers and beverages producers. Without the debt-reduction contribution from the oil sector, the global net debt/equity ratio would have risen 1.5 percentage points year-on-year, however.

From a geographical perspective, the US and China saw the net debt/equity ratio rise, but it fell in the UK, Japan and in most large markets in Europe.

Higher interest costs will consume a significantly greater portion of profits over the next couple of years, more like the 2020 peak (which was driven by lockdown-suppressed profits not higher interest rates) than the 2022 low. There will be some casualties who have borrowed too much, but at the overall market level, corporate indebtedness is well covered by assets and underpinned by comfortable levels of equity.

DEBT SUSTAINABILITY
BY INDUSTRY (%)

Sector	2022/23 Debt/Equity Ratio	2022/23 % of operating profit spent on interest
Technology	7%	4.9%
Basic Materials	32%	7.0%
Healthcare & Pharmaceuticals	47%	9.1%
Consumer Basics	66%	9.8%
Oil, Gas & Energy	31%	5.5%
Utilities	145%	38.9%
Communications & Media	53%	13.9%
Industrials	65%	12.2%
Consumer Discretionary	49%	7.1%
All	**49%**	**9.2%**

Source: Janus Henderson, June 2023

TOP COMPANIES

LARGEST BORROWERS – US$ BILLIONS

Rank	Company	2018-19	Company	2019-20	Company	2020-21
1	AT&T Inc.	$193	Volkswagen AG	$199	Volkswagen AG	$207
2	Volkswagen AG	$185	AT&T Inc.	$176	AT&T Inc.	$173
3	Mercedes-Benz Group AG	$141	Mercedes-Benz Group AG	$151	Deutsche Telekom AG	$152
4	Verizon Communications Inc.	$130	Verizon Communications Inc.	$129	Mercedes-Benz Group AG	$143
5	Toyota Motor Corp.	$128	Toyota Motor Corp.	$129	Toyota Motor Corp.	$141
6	Ford Motor Company	$120	Ford Motor Company	$122	Verizon Communications Inc.	$127
7	Comcast Corporation	$108	Bayerische Motoren Werke AG	$114	Ford Motor Company	$113
8	Anheuser-Busch InBev SA/NV	$103	Comcast Corporation	$104	Bayerische Motoren Werke AG	$111
9	CVS Health Corporation	$88	Anheuser-Busch InBev SA/NV	$96	Comcast Corporation	$102
10	Bayerische Motoren Werke AG	$86	Deutsche Telekom AG	$87	Charter Communications, Inc.	$83
Top 10		**$1,283**		**$1,307**		**$1,352**
% of global top 900 net debt		**19%**		**17%**		**17%**
11	Deutsche Telekom AG	$86	CVS Health Corporation	$81	Anheuser-Busch InBev SA/NV	$83
12	Charter Communications, Inc.	$79	Petroleo Brasileiro SA	$79	General Motors Company	$79
13	General Motors Company	$76	Shell Plc	$78	AbbVie, Inc.	$79
14	General Electric Company	$75	General Motors Company	$78	Shell Plc	$76
15	Telefonica SA	$72	Charter Communications, Inc.	$77	CVS Health Corporation	$74
16	Petroleo Brasileiro SA	$69	PetroChina Company Limited	$76	Exxon Mobil Corporation	$69
17	PetroChina Company Limited	$69	Telefonica SA	$67	Enel SpA	$68
18	Nissan Motor Co., Ltd.	$61	Duke Energy Corporation	$62	Duke Energy Corporation	$64
19	Duke Energy Corporation	$59	Nissan Motor Co., Ltd.	$60	Petroleo Brasileiro SA	$63
20	Walmart Inc.	$57	International Business Machines Corporation	$59	Walmart Inc.	$63
Next 10		**$703**		**$718**		**$718**
Top 20		**$1,986**		**$2,025**		**$2,070**
% of global top 900 net debt		**29%**		**27%**		**26%**

Source: Janus Henderson, June 2023

MOST CASH-RICH COMPANIES – US$ BILLIONS

Rank	Company	2018-19	Company	2019-20	Company	2020-21
1	Apple Inc.	$123	Alphabet Inc.	$104	Alphabet Inc.	$109
2	Alphabet Inc.	$95	Apple Inc.	$98	Samsung Electronics Co., Ltd.	$96
3	Samsung Electronics Co., Ltd.	$77	Samsung Electronics Co., Ltd.	$78	Apple Inc.	$70
4	China Mobile Limited	$48	China Mobile Limited	$48	China Mobile Limited	$57
5	Microsoft Corporation	$33	Microsoft Corporation	$47	Microsoft Corporation	$54
6	Meta Platforms Inc.	$31	Meta Platforms Inc.	$44	Meta Platforms Inc.	$51
7	Cisco Systems, Inc.	$21	Gree Electric Appliances, Inc. of Zhuhai	$14	Alibaba Group Holding Limited	$32
8	Taiwan Semiconductor Manufacturing Co., Ltd.	$16	Sony Group Corporation	$13	PDD Holdings Inc.	$19
9	Kweichow Moutai Co., Ltd.	$15	Taiwan Semiconductor Manufacturing Co., Ltd.	$13	JD.com, Inc.	$18
10	Gree Electric Appliances, Inc. of Zhuhai	$14	Alibaba Group Holding Limited	$10	Hon Hai Precision Industry Co., Ltd.	$17
Top 10		**$473**		**$469**		**$522**

Source: Janus Henderson, June 2023

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TOP COMPANIES (CONTINUED)

LARGEST BORROWERS – US$ BILLIONS (continued)

Rank	Company	2021-22	Company	2022-23
1	Toyota Motor Corp.	$186	Verizon Communications Inc.	$172
2	Volkswagen AG	$185	Toyota Motor Corp.	$167
3	AT&T Inc.	$182	Volkswagen AG	$164
4	Verizon Communications Inc.	$174	AT&T Inc.	$154
5	Deutsche Telekom AG	$153	Deutsche Telekom AG	$153
6	Mercedes-Benz Group AG	$109	Comcast Corporation Class A	$102
7	Comcast Corporation Class A	$98	Charter Communications, Inc.	$98
8	Bayerische Motoren Werke AG	$96	Ford Motor Company	$96
9	Charter Communications, Inc.	$92	Mercedes-Benz Group AG	$94
10	Ford Motor Company	$90	Amazon.com, Inc.	$85
Top 10		**$1,366**		**$1,287**
% of global top 900 net debt		**18%**		**16%**
11	General Motors Company	$79	Enel SpA	$84
12	Enel SpA	$78	General Motors Company	$82
13	Anheuser-Busch InBev SA/NV	$76	Bayerische Motoren Werke AG	$76
14	Duke Energy Corporation	$68	Duke Energy Corporation	$76
15	AbbVie, Inc.	$68	Electricite de France SA	$70
16	Nippon Telegraph and Telephone Corporation	$67	Anheuser-Busch InBev SA/NV	$70
17	Hyundai Motor Company	$65	Hyundai Motor Company	$64
18	Vodafone Group Plc	$62	NextEra Energy, Inc.	$64
19	CVS Health Corporation	$60	UnitedHealth Group Incorporated	$62
20	Enbridge Inc.	$60	Vodafone Group Plc	$60
Next 10		**$683**		**$709**
Top 20		**$2,048**		**$1,996**
% of global top 900 net debt		**27%**		**26%**

Source: Janus Henderson, June 2023

MOST CASH-RICH COMPANIES – US$ BILLIONS (continued)

Rank	Company	2021-22	Company	2022-23
1	Alphabet Inc.	$111	Alphabet Inc.	$84
2	Samsung Electronics Co., Ltd.	$89	Samsung Electronics Co., Ltd.	$83
3	China Mobile Limited	$77	China Mobile Limited	$68
4	Apple Inc.	$54	Alibaba Group Holding Limited	$49
5	Alibaba Group Holding Limited	$51	Apple Inc.	$37
6	Microsoft Corporation	$48	PDD Holdings Inc.	$28
7	Meta Platforms Inc.	$34	Microsoft Corporation	$26
8	JD.com, Inc.	$25	Stellantis N.V.	$25
9	PDD Holdings Inc.	$22	JD.com, Inc.	$23
10	Stellantis N.V.	$20	Taiwan Semiconductor Manufacturing Co., Ltd.	$22
Top 10		**$531**		**$445**

Source: Janus Henderson, June 2023

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BOND MARKETS

The higher level of interest rates around the world has pushed down the market value of corporate bonds. This happens because coupons on bonds, the amount of interest paid on the original borrowed amount, are fixed, so when prevailing interest rates go up, the value of a bond must fall to keep the bond and its coupon in equilibrium with market conditions. In early May, the market value of investment grade bonds in the Bank of America/ICE index[7] was 9% lower than the face value[8]; high-yield bonds (which are less credit-worthy) had a value 13% below the face value. Two years ago, the market value of investment grade and high-yield bonds was 9% and 3% respectively *above* face value.

The median, or typical, yield on investment-grade bonds was 4.9% in early May, up from 4.1% a year ago and 1.7% in 2021. For issuers, higher yields only mean higher costs either when the bond matures and must be refinanced or if they choose to increase their borrowings and issue new debt. For the life of the bond, they are protected from the higher rates. We can see this when looking at company results – the cost of interest has not yet fully reflected higher market interest rates.

The collective face value of investment grade and high yield corporate bonds in issue held broadly steady year-on-year at $10.6 trillion as issuance offset price falls. Notably, the high-yield segment shrank by a tenth. One quarter of $178bn reduction reflected bonds being promoted to the investment-grade segment, but the rest reflected difficulties less creditworthy issuers have had in the last year accessing the capital markets. The investment grade segment expanded by $165bn.

THE MARKET VALUE OF CORPORATE BONDS IS NOW BELOW FACE VALUE AS YIELDS HAVE RISEN TO REFLECT HIGHER MARKET INTEREST RATES. COMPANIES WILL ONLY FACE THE HIGHER RATES WHEN THEY REFINANCE THEIR BONDS.

[7.] Excluding Financials

[8.] The value of the principal borrowed and which will be repaid when the bond matures

OUTLOOK & VIEWPOINT

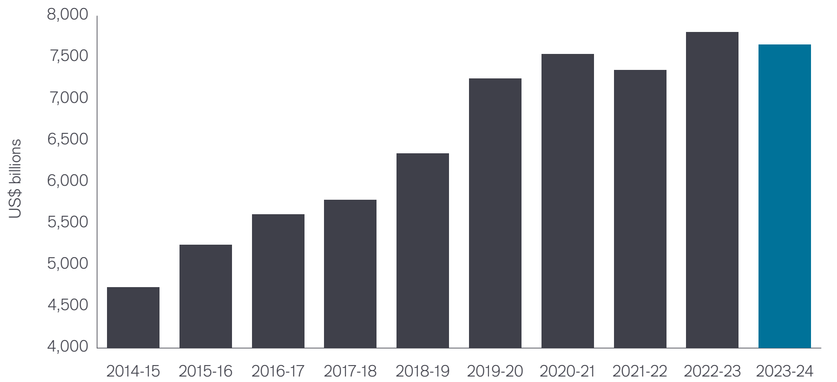
BY MICHAEL KEOUGH AND JAMES BRIGGS, PORTFOLIO MANAGERS

The resilient global economy and extraordinarily high levels of profitability companies have enjoyed in the last two years reflect vast sums of government deficit spending and central bank liquidity stimulating the global economy during the pandemic. Our recent Sovereign Debt Index lays bare the severe impact this has had on government finances, but it has left company balance sheets in very good shape.

The same stimulus, along with the impact of the war in Ukraine, has been very inflationary. Central banks spent 2022 belatedly raising rates to put the inflation genie back in its bottle. This hit financial markets in 2022, including corporate bond prices, but the global economy continues to perform better than most anticipated. Nevertheless, falling inflation means the medicine is working and the rate-tightening cycle is therefore nearing the end in most parts of the world, though places like the UK still have some way to go. The big question now is how long will it take before higher rates begin to generate higher unemployment, lower demand and therefore lower corporate profits? And how variable will the time lags be between different sectors and different parts of the world? In addition to the global central bank tightening cycle, one risk we are closely monitoring is the impact of the banking sector operating in a more conservative manner and preserving liquidity following the failure of several large banks. We expect them to lend less which will lead to tighter financial conditions and a drag on economic growth through the rest of 2023. As a result, investors must be prepared to navigate a wide range of economic and market outcomes.

For companies considering how to shape their balance sheets, higher rates have certainly begun to cool appetite for borrowing, but they have not yet taken a large bite out of profits. This is because profits have been high, and because many companies, especially those that borrow mainly on the bond markets, will only gradually feel the effects – only about $1 in $7 of bonds in issue needs refinancing each year. Higher interest costs will continue to flow through to corporations for the foreseeable future, however.

COMPANY NET DEBT – GLOBAL (CONSTANT CURRENCY)



Source: Janus Henderson, June 2023. **There is no guarantee that past trends will continue, or forecasts will be realised.**

RECORD COMPANY PROFITABILITY COMPANIES REFLECTS VAST SUMS OF GOVERNMENT DEFICIT SPENDING AND CENTRAL BANK LIQUIDITY STIMULATING THE GLOBAL ECONOMY DURING THE PANDEMIC.

While the sharp increase of interest rates proved to be sharp headwind for returns in 2022, that pain has come with a silver lining. Most obviously, higher interest rates mean 'income' is back as a theme. For corporate bond investors all this presents real opportunities. The yield of a bond at the point of purchase is an important return driver and investors can now lock into meaningful levels of income for the first time in years. Not only that, but when market interest rates fall to reflect lower inflation and a slowing economy, bond prices rise, generating capital gains too. We expect central banks to begin a rate cutting cycle in 2024 and lower yields will follow. Investors can capitalize on the opportunity in high quality corporate bonds as they are providing both income and diversification, characteristics that were elusive in the past few years.

THE COMING END TO THE RATE-HIKE CYCLE PRESENTS A LOT OF OPPORTUNITIES FOR BOND INVESTORS.

INCOME IS BACK AS A THEME – BOND INVESTORS CAN NOW LOCK INTO MEANINGFUL LEVELS OF INCOME FOR THE FIRST TIME IN YEARS.

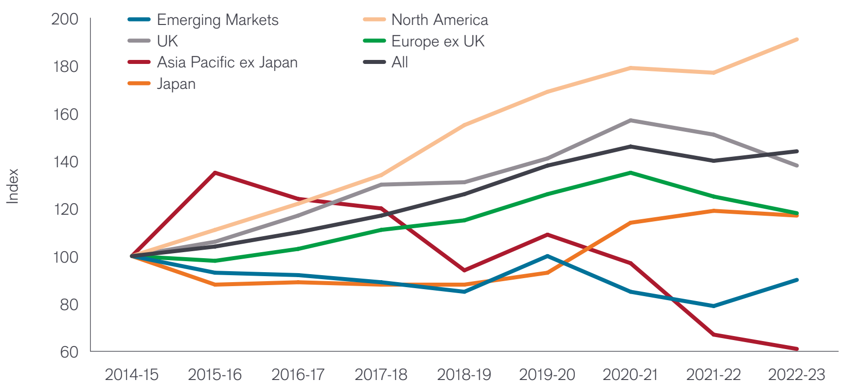
The second factor to drive corporate bond returns is the perception of risk – if a company's fundamentals (eg growth or balance sheet strength) are improving, then it becomes cheaper for it to borrow relative to the wider market and its bonds will outperform the market. The reverse is also true – weakening fundamentals mean relative underperformance for a company's bonds. A slowing or even shrinking economy will hit the creditworthiness of some borrowers more than others. This phase of the credit cycle is therefore one where sector and security selection are very important. Under these conditions, we prefer to focus on high quality companies, including those with strong balance sheets, steady free cash flow, and resilient fundamentals.

In short, the exact path for the global economy and corporate earnings may be unclear, but the end of the rate-hike cycle and the return of income mean there is a lot for corporate bond investors to be constructive about.

* the amount of interest paid on the original borrowed amount.

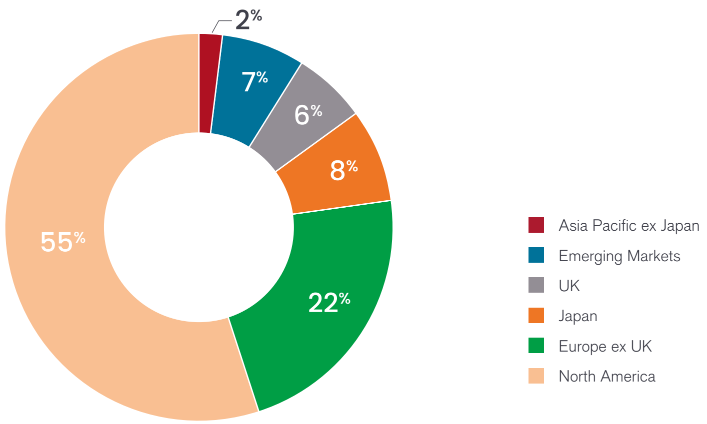
REGIONS AND COUNTRIES

NET DEBT INDEXED



Source: Janus Henderson, June 2023

2022/23 NET DEBT



Source: Janus Henderson, June 2023

North America

United States

The 8.7% increase in US corporate net debt in 2022/23 was faster than the global average and took the total to a record $3.66 trillion. The $319bn increase contributed two thirds of the global rise, much more than US companies' 48% share of outstanding borrowing. Five companies – Amazon, Warner Bros Discovery, Alphabet, Microsoft and Meta – accounted for half the increase in US corporate net debt, supplementing their cash flow either by reducing their cash piles or by taking on new debt in order to fund investments, acquisitions, dividends and share buybacks. 59% of US companies took on more debt over the last year compared to 54% outside the US. Alphabet, Apple and Microsoft remain among the world's ten most cash-rich companies today.

With a net debt/equity ratio of 67%, US companies rely more heavily on borrowing than those in most comparable countries. Germany's ratio is higher, reflecting its heavy-industrial base, while utilities and telecoms largely account for Spain's higher level. Eight US companies in ten have net debt on the balance sheet compared to six in ten outside the US.

NET DEBT BY REGION (US$ BILLIONS – SELECTED YEARS)

Region	2014-15	2019-20	2020-21	2021-22	2022-23	2022-23 Change	2022-23 Change Constant-Currency
North America	$2,265	$3,501	$3,836	$4,062	$4,001	7.9%	8.4%
Emerging Markets	$636	$543	$634	$541	$504	13.5%	19.5%
Europe ex UK	$1,441	$1,661	$1,822	$1,952	$1,799	-5.4%	0.1%
UK	$342	$448	$482	$536	$518	-8.5%	-2.3%
Japan	$526	$463	$490	$600	$625	-1.5%	8.3%
Asia Pacific ex Japan	$201	$189	$219	$195	$135	-10.0%	-8.8%
All	**$5,412**	**$6,805**	**$7,481**	**$7,886**	**$7,583**	**2.9%**	**6.2%**

Source: Janus Henderson, June 2023

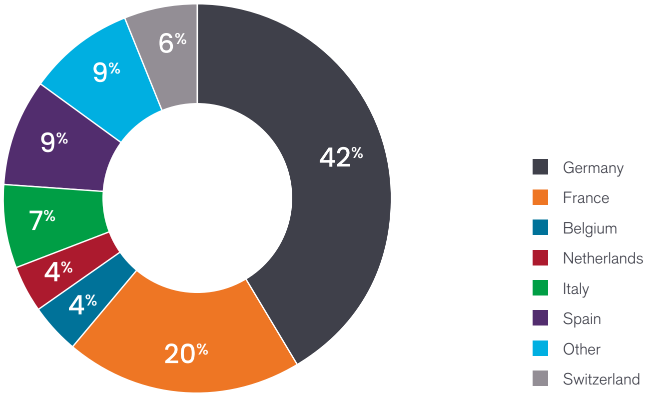
Canada
Canada's corporate net debt/equity ratio is 74%, higher than the US and the global average owing to a large weighting of indebted retail, communications and media companies. Borrowing rose slower than the global average in 2022/23, up 4.3% on a constant-currency basis.

Europe ex UK

France
French companies owe a net $333bn, the sixth largest total in the world. They took on just 1.2% more borrowing on a constant-currency basis in 2022/23, with only one third (36%) adding to their outstanding loans. Doubtless, higher interest rates deterred new borrowing. The cost of financing French corporate debt was 19.9% higher in 2022/23 as rising interest rates bit into corporate profits. Nevertheless, profitability remained close to 2021/22's exceptional levels, boosting equity capital despite strong dividends and share buybacks in France. The collective French net debt/equity ratio fell to 42.7% as a result, well below the global average.

Germany
Germany's companies account for the second largest share of global net debt after the USA, thanks to much of German industry being capital intensive in nature. At 84.6%, Germany's net debt/equity ratio is second only to Spain's among major economies. Borrowing fell 2.0% on a constant-currency basis to $708bn in 2022/23, driven principally by the auto sector, utilities and healthcare. Rate rises meant interest costs rose 13.8% at constant exchange rates. Less than half the German companies in our index took on more borrowing during that period.

2022/23 NET DEBT
EUROPE EX UK



Source: Janus Henderson, June 2023

Switzerland
Swiss corporate debt jumped by $17bn on a constant-currency basis, to a record $104bn, an increase of 20.0%. Nestle, which accounts for half the debt of Swiss companies in our index, saw its borrowings rise $16.5bn[9] to fund generous share buybacks, a large dividend, a surge in inventories and ongoing investment. Two thirds of Swiss companies in our index took on more borrowing in 2022/23.

Italy
Italian corporate borrowing fell 2.7% on a constant-currency basis. Enel Spa, the utility that accounts for the lion's share of debts among Italian companies in our index, borrowed to fund capex and dividends, but most others either reduced their borrowings or held them steady.

References made to individual securities do not constitute a recommendation to buy, sell or hold any security, investment strategy or market sector, and should not be assumed to be profitable. Janus Henderson Investors, its affiliated advisor, or its employees, may have a position in the securities mentioned.

Unless otherwise stated all data is sourced by Janus Henderson Investors as of 1 June 2023. Nothing in this document should be construed as advice.

Past performance does not predict future returns. International investing involves certain risks and increased volatility. These risks include currency fluctuations, economic or financial instability, lack of timely or reliable financial information or unfavourable political or legal developments.

The value of an investment and the income from it can fall as well as rise and you may not get back the amount initially invested.

[9] Constant currency

REGIONS AND COUNTRIES (CONTINUED)

Spain

Spanish utilities are also borrowing heavily to fund capex, though overall Spanish corporate debt rose just 2.1% on a constant-currency basis and the majority of companies in our index reduced their debts. The largest decline came from Telefonica, whose strong cash flow and reduced capital expenditure left room to repay debt. Iberdrola overtook Telefonica as the Spanish company with the highest net debt.

Belgium

We have very few Belgian companies in the index so the 6.9% decline in net debt was heavily influenced by Anheuser-Busch Inbev which enjoyed strong cash flow and reduced its investment spending and so repaid debt during the year. The other two companies in the index increased borrowing slightly.

Netherlands

Three quarters of Dutch companies in our index reduced their borrowings, taking the $59.6bn net total down 2.5% for the year on a constant-currency basis. Interest costs nevertheless rose 9% reflecting rising rates. Luxembourgish steelmaker ArcelorMittal listed in Holland reduced debt the most. Its profits were down sharply in the year but it controlled its working capital and spent less on share buybacks meaning that cash flow was strong. The biggest increase in borrowing came from loss-making Philips.

Denmark

Danish corporate debt rose strongly in the year mainly due to Coloplast's acquisition of Atos Medical, losses and investment spending by Vestas Wind and very large dividends and share buybacks by Moller Maersk.

Sweden

Every Swedish company in our index except one raised its borrowing or reduced its cash pile in 2022, taking the net total up 47.8% on a constant-currency basis. Interest expenses in tandem. Volvo made the biggest contribution to the increase as it borrowed to finance strong customer demand while Ericsson borrowed to fund the acquisition of US cloud communications firm Vonage.

Norway

Booming cash flow at oil group Equinor meant a sharp drop in Norwegian corporate net debt.

UK

UK net corporate debt fell 1.8% on a constant-currency basis in 2022/23, with 44% of the companies in our index reporting lower borrowing. The biggest contribution to the fall came from oil producers Shell and BP which have been enjoying exceptionally large cash flow, despite record share buybacks and rebounding dividends. Most mining companies, however, saw net debt rise as cash flow came under pressure from lower commodity prices; for example, Rio Tinto paid a dividend twice as large as its free-cash flow.

A strong performance on profit and lower debt meant the UK's corporate net debt/equity ratio fell to 57%, its lowest since 2018 and was lower in more than half of the sectors represented in our index.

Asia Pacific ex Japan

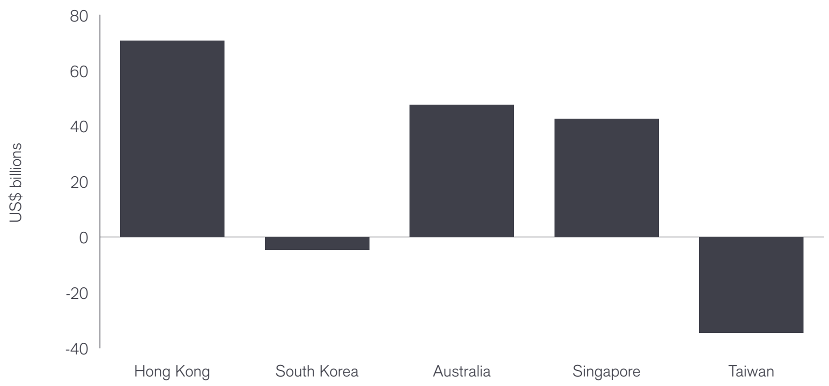
Australia

More than half the companies in our index in Australia repaid borrowings in 2022[10], with the oil sector making the largest reductions in its debts. Net debt fell by one sixth on a constant-currency basis (-18.0%). At the end of Australia's financial year which included the tail end of the mining boom, the mining sector had net cash on the balance sheet for the first time since at least 2014[11]. By the end of December, interim results showed the sector once more back in the red as dividends from BHP and Fortescue, though cut significantly, exceeded their cash flow for the period. These two cyclical sectors typically do not sustain very large borrowing, especially mining companies. Their large size in the Australian market means Australia's corporate net debt/equity ratio of 29% is well below international peers.

Hong Kong

Net debt fell in Hong Kong for the second year running, down 6.2% on a constant-currency basis to its lowest since at least 2014/2015. Strong cash flow from shipping company Cosco and from oil producer CNOOC were the biggest contributors to the decline, though more companies (57%) added to their borrowing than reduced it. Hong Kong's collective corporate net debt/equity ratio of just 8.6% is one of the lowest in the world. Interest costs are starting to tick up in Hong Kong, however. At $13.5bn in 2022/23 they were at their highest since at least 2014/2015.

2022/23 NET DEBT
ASIA PACIFIC EX JAPAN



Source: Janus Henderson, June 2023

NET DEBT FELL IN HONG KONG FOR THE SECOND YEAR RUNNING, DOWN 6.2% ON A CONSTANT-CURRENCY BASIS TO ITS LOWEST SINCE AT LEAST 2014/2015.

Taiwan

Nine of the 13 Taiwanese companies in our index have net cash on their balance sheets, of which two thirds is owned by Taiwanese Semiconductor. This company contributed most to the 24.4% constant-currency increase in Taiwan's corporate net cash position in 2022/23, along with shipping company Evergreen Marine that has benefited from global supply-chain disruption during the pandemic.

Singapore

A reduction in the cash position of consumer internet company Sea Limited thanks to ongoing losses and capital expenditure, was the biggest driver of rising corporate debt in Singapore, among the very few companies we have in the index.

10. Many companies in Australia have June year-ends, so the data for Australia is older than for most other parts of the world.

11. Rio Tinto is included in the UK portion of our index.

REGIONS AND COUNTRIES (CONTINUED)

Japan

55% of Japanese companies have taken on additional borrowing, taking the net total up 8.3% on a constant-currency basis. The biggest increase came from Sony, accounting for a little over half the rise in Japan. The company tied up capital in inventory in the gaming business and spent on new content assets too. Cultural factors mean Japan has the lowest net debt/equity ratio among major industrialised nations.

Emerging Markets

China

Profits from Chinese companies fell in 2022/23, reflecting the economic disruption of the zero-Covid policy until its abandonment in January. Debts rose by a third on a constant-currency basis, concentrated in a few companies. China Petroleum & Chemical was the biggest contributor to the increase. As a downstream operator, it suffered margin contraction owing to high oil prices and distributed a large dividend declared on the previous year's profits. A squeeze on cash flow affected China State Construction Engineering among a number of other large companies. Petrochina's upstream bias meant it saw a big fall in its borrowings.

Brazil

The contrast between the booming oil sector and the contracting mining sector was evident in Brazil. Petrobras ensured overall net debt fell 6.6% at constant exchange rates , but at Vale, dividends and share buybacks significantly exceeded free cash flow, pushing borrowing higher as a result.

Mexico

The 8.6% constant-currency increase in Mexican net corporate debt was driven mainly by brewer FEMSA which borrowed to make a number of acquisitions and fund capital investment, but every company bar one increased borrowing in the year.

PROFITS FROM CHINESE COMPANIES FELL IN 2022/23, REFLECTING THE ECONOMIC DISRUPTION OF THE ZERO-COVID POLICY UNTIL ITS ABANDONMENT IN JANUARY. DEBTS ROSE BY A THIRD ON A CONSTANT-CURRENCY BASIS, CONCENTRATED IN A FEW COMPANIES.

APPENDICES

NET DEBT BY INDUSTRY IN USD BILLIONS AT CURRENT EXCHANGE RATES – SELECTED YEARS

Industry	2014-15	2020-21	2021-22	2022-23	2022-23 Change	2022-23 Change Constant-Currency
Basic Materials	$430	$437	$404	$407	0.6%	3.6%
Communications & Media	$675	$939	$978	$1,034	5.8%	8.8%
Consumer Basics	$557	$872	$829	$869	4.8%	7.9%
Consumer Discretionary	$888	$1,248	$1,059	$1,119	5.7%	10.6%
Healthcare & Pharmaceuticals	$285	$842	$836	$804	-3.8%	-2.4%
Industrials	$1,204	$1,285	$1,308	$1,344	2.8%	7.5%
Oil, Gas & Energy	$790	$1,026	$850	$694	-18.4%	-16.3%
Technology	-$283	$15	$21	$141	585.8%	400.5%
Utilities	$867	$1,223	$1,298	$1,390	7.1%	10.8%
ALL	**$5,412**	**$7,886**	**$7,583**	**$7,802**	**2.9%**	**6.2%**

Source: Janus Henderson, June 2023

NET DEBT BY SECTOR IN USD BILLIONS AT CURRENT EXCHANGE RATES – SELECTED YEARS

Industry	Sector	2014-15	2020-21	2021-22	2022-23	2022-23 Change	2022-23 Change Constant-Currency
Basic Materials	Metals & Mining	$287	$193	$155	$148	-4.5%	-1.3%
	Chemicals	$95	$205	$212	$214	1.3%	5.0%
	Building Materials	$20	$20	$22	$21	-7.2%	-9.6%
	Paper & Packaging	$16	$18	$17	$20	17.3%	17.8%
Communications & Media	Media	$23	$91	$80	$176	121.8%	114.9%
	Telecoms	$652	$844	$896	$855	-4.5%	-1.2%
Consumer Basics	Food & Drug Retail	$177	$235	$209	$227	8.4%	11.5%
	Food	$112	$205	$213	$230	7.7%	9.5%
	Household & Personal Products	$58	$80	$94	$106	12.5%	17.0%
	Beverages	$144	$233	$206	$194	-5.8%	-4.2%
	Tobacco	$67	$119	$107	$113	5.6%	13.4%
Consumer Discretionary	General Retail	$98	$64	$41	$118	188.6%	166.3%
	Consumer Durables & Clothing	$36	$22	-$5	$33	-752.8%	-1007.9%
	Vehicles & Parts	$666	$980	$860	$793	-7.8%	-2.1%
	Leisure	$88	$182	$162	$174	7.1%	8.4%
Healthcare & Pharmaceuticals	Pharmaceuticals & Biotech	$109	$472	$435	$398	-8.6%	-6.9%
	Health Care Equipment & Services	$175	$370	$401	$407	1.3%	2.5%
Industrials	Aerospace & Defence	$35	$137	$131	$127	-3.2%	-3.0%
	General Industrials	$601	$401	$405	$390	-3.7%	2.3%
	Transport	$223	$341	$343	$340	-0.9%	4.0%
	Construction, Engineering & Materials	$229	$311	$321	$366	14.0%	19.8%
	Support Services	$44	$65	$69	$72	5.5%	7.3%
	Electrical Equipment	$22	$20	$36	$44	22.6%	25.1%
Oil, Gas & Energy	Oil & Gas Producers	$610	$772	$599	$456	-23.9%	-22.2%
	Oil & Gas Equipment & Distribution	$158	$234	$237	$235	-0.9%	2.3%
	Energy - non-oil	$22	$20	$14	$2	-81.9%	-80.3%
Technology	IT Hardware & Electronics	-$225	-$144	-$132	-$82	-38.2%	-34.3%
	Software & Services	-$26	$102	$100	$161	60.5%	61.2%
	Semiconductors & Equipment	-$32	$57	$53	$61	16.8%	16.4%
Utilities	Utilities	$867	$1,223	$1,298	$1,390	7.1%	10.8%

Source: Janus Henderson, June 2023

NET DEBT BY REGION IN USD BILLIONS AT CURRENT EXCHANGE RATES – SELECTED YEARS

Region	2014-15	2020-21	2021-22	2022-23	2022-23 Change	2022-23 Change Constant-Currency
North America	$2,265	$4,062	$4,001	$4,316	7.9%	8.4%
Emerging Markets	$636	$541	$504	$573	13.5%	19.5%
Europe ex UK	$1,441	$1,952	$1,799	$1,702	-5.4%	0.1%
UK	$342	$536	$518	$474	-8.5%	-2.3%
Japan	$526	$600	$625	$616	-1.5%	8.3%
Asia Pacific ex Japan	$201	$195	$135	$122	-10.0%	-8.8%
ALL	**$5,412**	**$7,886**	**$7,583**	**$7,802**	**2.9%**	**6.2%**

Source: Janus Henderson, June 2023

NET DEBT BY COUNTRY IN USD BILLIONS AT CURRENT EXCHANGE RATES – SELECTED YEARS

Region	Country	2014-15	2020-21	2021-22	2022-23	2022-23 Change	2022-23 Change Constant-Currency
Asia Pacific ex Japan	Hong Kong	$94	$141	$77	$71	-8.2%	-6.2%
	Australia	$79	$76	$62	$48	-22.8%	-18.0%
	Singapore	$25	$32	$37	$43	13.6%	13.8%
	South Korea	$5	-$27	-$10	-$5	-54.5%	-51.5%
	Taiwan	-$2	-$27	-$31	-$34	12.1%	24.4%
Emerging Markets	China	$285	$164	$175	$210	19.9%	35.0%
	India	$94	$181	$161	$160	-0.2%	3.5%
	Brazil	$143	$72	$55	$55	-1.4%	-6.6%
	South Africa	$5	$2	$5	$8	48.6%	51.0%
	Indonesia	$5	$5	$3	$2	-6.7%	1.9%
	Mexico	$58	$54	$44	$50	14.0%	8.6%
	United Arab Emirates	$2	$0	-$1	$4	-424.7%	-424.7%
	Thailand	$16	$31	$44	$49	9.8%	14.0%
	Colombia	$12	$12	$19	$20	5.1%	25.0%
	Philippines	$4	$8	$8	$5	-35.9%	-30.0%
	Malaysia	-$3	-$2	-$3	-$1	-67.1%	-65.3%
	Chile	$8	$12	$12	$14	16.6%	16.6%
	Czech Republic	$6	$4	-$18	-$5	-72.8%	-72.0%
	Argentina	$0	-$2	$0	$0	-241.3%	-241.3%
Europe ex UK	Switzerland	$45	$101	$87	$104	18.6%	20.0%
	France	$286	$395	$348	$333	-4.5%	1.2%
	Germany	$514	$839	$773	$708	-8.4%	-2.0%
	Belgium	$45	$83	$75	$70	-6.9%	-6.9%
	Netherlands	$64	$70	$64	$60	-7.1%	-2.5%
	Denmark	$55	$15	$16	$19	19.0%	25.0%
	Spain	$171	$167	$162	$156	-3.9%	2.1%
	Italy	$129	$129	$131	$121	-7.7%	-2.7%
	Norway	$26	$39	$16	$1	-95.0%	-94.6%
	Sweden	$35	$38	$35	$45	28.9%	47.8%
	Finland	$4	$6	$5	$4	-28.6%	-24.2%
	Ireland	$34	$36	$58	$54	-7.1%	-6.8%
	Austria	$11	$17	$13	$9	-30.8%	-26.5%
	Israel	-$1	-$2	-$2	-$2	-3.3%	-3.3%
	Portugal	$27	$25	$23	$26	14.3%	21.4%
Japan	Japan	$526	$600	$625	$616	-1.5%	8.3%
North America	United States	$2,031	$3,733	$3,658	$3,977	8.7%	8.7%
	Canada	$238	$335	$356	$350	-1.7%	4.3%
UK	United Kingdom	$335	$523	$498	$458	-8.1%	-1.8%

Source: Janus Henderson, June 2023

APPENDICES (CONTINUED)

DEBT/EQUITY RATIO BY INDUSTRY %

Industry	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Basic Materials	36%	37%	42%	40%	33%	32%
Communications & Media	53%	53%	51%	51%	49%	53%
Consumer Basics	68%	71%	70%	70%	63%	66%
Consumer Discretionary	79%	73%	75%	67%	48%	49%
Healthcare & Pharmaceuticals	47%	53%	57%	56%	50%	47%
Industrials	74%	76%	72%	73%	65%	65%
Oil, Gas & Energy	42%	39%	47%	56%	41%	31%
Technology	-14%	-10%	1%	1%	1%	7%
Utilities	127%	126%	129%	134%	136%	145%
ALL	**53%**	**54%**	**57%**	**57%**	**49%**	**49%**

Source: Janus Henderson, June 2023

DEBT/EQUITY RATIO BY SECTOR %

Industry	Sector	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Basic Materials	Metals & Mining	44%	39%	41%	39%	28%	25%
	Chemicals	27%	35%	47%	49%	45%	44%
	Building Materials	32%	40%	31%	20%	21%	19%
	Paper & Packaging	92%	82%	81%	70%	60%	70%
Communications & Media	Media	6%	12%	14%	11%	8%	18%
	Telecoms	85%	82%	81%	86%	88%	89%
Consumer Basics	Food & Drug Retail	84%	82%	80%	97%	83%	85%
	Food	54%	66%	65%	60%	58%	63%
	Household & Personal Products	45%	45%	41%	37%	45%	53%
	Beverages	73%	69%	71%	71%	57%	52%
	Tobacco	96%	101%	105%	103%	90%	94%
Consumer Discretionary	General Retail	66%	37%	18%	16%	8%	23%
	Consumer Durables & Clothing	4%	1%	8%	8%	-2%	9%
	Vehicles & Parts	93%	92%	98%	89%	67%	59%
	Leisure	133%	177%	243%	243%	191%	241%
Healthcare & Pharmaceuticals	Pharmaceuticals & Biotech	33%	38%	49%	53%	43%	37%
	Health Care Equipment & Services	72%	74%	68%	60%	61%	62%
Industrials	Aerospace & Defence	54%	85%	98%	84%	71%	67%
	General Industrials	78%	73%	64%	69%	64%	59%
	Transport	81%	89%	87%	97%	80%	80%
	Construction, Engineering & Materials	84%	84%	85%	81%	74%	81%
	Support Services	74%	71%	73%	79%	73%	76%
	Electrical Equipment	12%	18%	18%	13%	20%	23%
Oil, Gas & Energy	Oil & Gas Producers	34%	32%	40%	47%	32%	22%
	Oil & Gas Equipment & Distribution	106%	100%	108%	131%	130%	128%
	Energy - non-oil	62%	46%	43%	65%	36%	5%
Technology	IT Hardware & Electronics	-29%	-27%	-21%	-21%	-18%	-11%
	Software & Services	0%	1%	16%	17%	15%	23%
	Semiconductors & Equipment	-2%	4%	15%	12%	9%	9%
Utilities	Utilities	127%	126%	129%	134%	136%	145%
ALL		**56%**	**53%**	**55%**	**58%**	**58%**	**53%**

Source: Janus Henderson, June 2023

DEBT/EQUITY RATIO BY REGION %

Region	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
North America	64%	69%	72%	74%	64%	67.1%
Emerging Markets	40%	36%	40%	30%	24%	27%
Europe ex UK	67%	68%	73%	76%	64%	58%
UK	58%	57%	61%	70%	62%	57%
Japan	37%	33%	34%	41%	40%	38%
Asia Pacific ex Japan	17%	13%	14%	11%	7%	6%
ALL	**53%**	**54%**	**57%**	**57%**	**49%**	**49%**

Source: Janus Henderson, June 2023

APPENDICES (CONTINUED)

DEBT/EQUITY RATIO BY COUNTRY %

Region	Country	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Asia Pacific ex Japan	Hong Kong	31%	21%	22%	20%	10%	9%
	Australia	55%	49%	52%	64%	45%	29%
	Singapore	44%	59%	53%	45%	49%	57%
	South Korea	-2%	-6%	-2%	-5%	-2%	-1%
	Taiwan	-8%	-7%	-6%	-12%	-12%	-13%
Emerging Markets	China	27%	24%	27%	14%	13%	15%
	India	52%	61%	66%	72%	52%	48%
	Brazil	76%	64%	64%	58%	41%	38%
	South Africa	25%	-2%	4%	6%	11%	20%
	Indonesia	26%	39%	41%	29%	13%	12%
	Mexico	91%	87%	97%	86%	60%	63%
	United Arab Emirates	6%	-5%	-4%	0%	-8%	22%
	Thailand	32%	22%	37%	54%	77%	82%
	Colombia	73%	50%	55%	80%	115%	114%
	Philippines	87%	85%	86%	91%	93%	86%
	Malaysia	-23%	-33%	-32%	-31%	-36%	-11%
	Chile	50%	71%	55%	62%	50%	55%
	Czech Republic	45%	33%	41%	36%	-239%	-42%
Europe ex UK	Switzerland	23%	27%	31%	35%	28%	36%
	France	43%	43%	54%	54%	45%	43%
	Germany	102%	104%	112%	119%	98%	85%
	Belgium	131%	142%	111%	105%	93%	81%
	Netherlands	47%	43%	50%	51%	42%	38%
	Denmark	85%	71%	25%	19%	17%	17%
	Spain	119%	116%	115%	119%	109%	98%
	Italy	76%	76%	76%	89%	74%	59%
	Norway	49%	40%	62%	80%	29%	1%
	Sweden	45%	47%	45%	44%	38%	50%
	Finland	-9%	4%	5%	11%	9%	7%
	Ireland	114%	118%	109%	98%	126%	113%
	Austria	49%	47%	49%	82%	61%	35%
	Israel	-37%	-44%	-44%	-49%	-52%	-56%
	Portugal	109%	108%	118%	106%	98%	120%
Japan	Japan	37%	33%	34%	41%	40%	38%
North America	United States	62%	69%	71%	74%	64%	67%
	Canada	81%	78%	78%	81%	75%	74%

Source: Janus Henderson, June 2023

METHODOLOGY

Janus Henderson analysed balance-sheet data from the most recent individual company annual reports and from Factset to build the picture of overall company indebtedness over the last ten years. Most companies in the index (85%) had year-ends between December and March. Separately it used market data from a variety of sources, including company announcements, Bloomberg, ICE and others, to consider the role corporate bond markets play in company funding.

Bond markets: We have analysed market data for bonds worth over $100m, with at least a year to run, and with fixed interest rates. These account for approximately seven tenths of the total market.

Janus Henderson converted all the data to USD, using spot exchange rates on the balance sheet date for balance sheet items, and average annual exchange rates for income and expense items.

Janus Henderson excluded all financial and real estate companies from the analysis, as financial-company debt serves a different purpose to industrial companies.

There are 933 companies in the index. These correspond to the non-financial companies in the Janus Henderson Global Dividend Index which tracks the largest 1,200 companies in the world by market capitalisation.

JANUS HENDERSON EXCLUDED ALL FINANCIAL AND REAL ESTATE COMPANIES FROM THE ANALYSIS, AS FINANCIAL-COMPANY DEBT SERVES A DIFFERENT PURPOSE TO INDUSTRIAL COMPANIES.

GLOSSARY

BEAR MARKET – A financial market in which the prices of securities are falling. A generally accepted definition is a fall of 20% or more in an index over at least a two-month period. The opposite of a bull market.

BOND – A bond is a parcel of debt. By buying a bond, investors give money to a borrower, usually for a fixed term and for a fixed rate of interest. Bonds can be bought and sold on financial markets, and the value changes over time with varying market conditions.

CYCLICAL INDUSTRY – The revenues and profits of an industry rise and fall over the course of an economic cycle.

EQUITY – The amount of money left over for shareholders if all of a company's assets were liquidated and its assets sold off.

GEARING – The ratio of debt to equity finance on the balance sheet – not to the market value of the shares; also called leverage.

LEVERAGE – The ratio of debt to equity finance on the balance sheet – not to the market value of the shares; also called gearing.

NET DEBT – All borrowings minus any cash or cash equivalents.

RUNNING YIELD – The interest paid on a bond divided by its current market value.

VOLATILITY – Rapid, unpredictable, changeability.

YIELD TO MATURITY – The interest paid on a bond divided by its current market value, taking account of the capital gain or loss that will occur when the bond matures and is repaid.

WHY DEBT IN MODERATION IS A GOOD THING

This section summarises a chapter from our previous editions. We repeat it here an aide-memoire on the function debt plays in funding companies, supporting economic growth and providing investment opportunities for investors.

Debt is helpful for companies

Companies need capital to invest. Often, this capital comes from cash flow, but if the need for capital is greater than a company's internal resources, it may also need to issue new shares (equity finance) or borrow either from banks or by issuing bonds that are traded on financial markets. Debt plays a valuable role in a well-functioning economy, and in well managed companies.

As a rule, equity finance is more expensive than debt. Debt is cheaper partly because interest expense is tax deductible, so debt is a tax-efficient way to finance investment. But more importantly, lenders face less risk of loss than shareholders and so provide finance more cheaply – in the event of a company winding up, lenders get their money back before shareholders do; moreover, shareholder dividends are only paid after interest on debts has been settled. For shareholders, the upside is the potential for capital gains and growing income. For lenders the value comes from the greater certainty of returns. Shareholders therefore expect a higher return than lenders.

Shareholders welcome the use of an appropriate level of debt as it has the potential to multiply their gains, though it also multiplies any losses. Why issue shares and spread the profits over more shareholders if capital can be raised more cheaply by borrowing? Most companies therefore use a mix of equity and debt finance. The relationship between the two is called gearing or leverage. Big cash deposits might seem attractive, but they simply dilute returns and so are often a source of conflict with shareholders.

But what is an appropriate level of debt for a company? This is primarily influenced by geography and the industry concerned. Asset-rich companies with secure cash flows in economically and politically stable parts of the world are able to maintain higher debt levels than those in highly cyclical industries, those with limited tangible assets and those in less developed parts of the world. Cultural factors also play a role, as does the prevailing inflation and interest-rate environment.

WHY DEBT IN MODERATION IS A GOOD THING (CONTINUED)

And debt provides opportunities for investors

Debt isn't just good for companies. It also provides opportunities for investors. Corporate bonds typically offer higher rates of interest than savings accounts or government bonds, while still offering greater certainty of returns than investing in shares.

Corporate bonds are typically riskier than equivalent government bonds, but the huge diversity of bonds in issue means investors can select the risk profile that suits them and for a term that matches their preferred investment horizon. Investors can use them in different ways. If they buy them at issue and hold them to maturity (the primary market), the return is fixed in advance for most kinds of bond, providing certainty subject only to default risk. Or they can buy and sell bonds on the so-called secondary market – if interest rates fall or a credit rating improves, bond prices rise, bringing the possibility of capital gains. If rates rise or credit ratings get downgraded, prices fall.

All these features can make bonds a very valuable addition to an investor's portfolio. And of course, adding corporate bonds to a portfolio brings the significant benefits of diversification. This is often achieved in multi-asset funds, or investors can add corporate bond funds to complement their existing holdings.

ALL THESE FEATURES CAN MAKE BONDS A VERY VALUABLE ADDITION TO AN INVESTOR'S PORTFOLIO. ADDITIONALLY, ADDING CORPORATE BONDS TO A PORTFOLIO BRINGS THE SIGNIFICANT BENEFITS OF DIVERSIFICATION. THIS IS OFTEN ACHIEVED IN MULTI-ASSET FUNDS, OR INVESTORS CAN ADD CORPORATE BOND FUNDS TO COMPLEMENT THEIR EXISTING HOLDINGS.

FOR MORE INFORMATION, PLEASE VISIT **JANUSHENDERSON.COM**

Janus Henderson INVESTORS

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