Getting to the bottom of – the bottom line

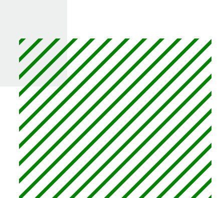
A look at where S&P 500 margins are headed

Tarik Aeta , CFA
Vice President,
Fundamental Equities,
TD Asset Management Inc.

When it comes to investing in public equities, a key factor when evaluating a stock is the level and the future path of profit margins or simply "margins". At the level of individual companies, the path of margins has major implications on the prospect for earnings growth and can drive major shifts in valuations if it is seen to be improving or deteriorating. Investors also look at margins at a broader equity market level, by aggregating the outlook across a range of companies, to assist in making asset allocation decisions. **So, how exactly do we define and measure margins?**

At a glance

- The S&P 500 experienced significant margin expansion over the last 30 years driven by operating gains, as well as lower interest & taxes.
- Over the next decade, margins are expected to be flat to modestly higher. Headwinds will include greater employee bargaining power, and higher interest costs as long-term debt is refinanced, while tailwinds will include continued growth of the Technology sector, and productivity gains from AI & robotics.
- From an investment perspective, industries with strong pricing power are best positioned going forward, allowing them to post margin gains regardless of the macro environment.



Accounting 101

To set the foundation for this article, we can first look to Accounting 101 and the three key margins on the income statement: **Gross Margin, Earnings Before Interest & Taxes (EBIT) Margins (a.k.a. Operating Margins), and Net Income Margin.**

- **Gross Margin** measures what is left over after covering **only direct costs** of providing the good or service.
- **EBIT Margin** measures what is left over after covering **both direct & indirect costs** of providing the good or service.
- **Net Income Margin** measures what is left over after covering **all costs**, including interest and taxes.

It's important to look at each margin line on the income statement, as each one gives insight into what is impacting corporate profitability. For instance, Gross Margins can give us insights on how changes in input costs, such as commodities or labour, is impacting margins. EBIT Margins can give us insights on whether a company is becoming more efficient when it comes to overhead corporate costs and marketing spending. And Net Income Margins will capture the impact of changing tax rates and interest rates.

Why are margins important?

There are three drivers of total shareholder returns (TSR) for an investor in a stock. Using a simplified formula, over the long-run:

> **Total Shareholder Returns (TSR) =**
> **Earnings Growth + Changes in Valuations (i.e., P/E Multiple) + Dividends Paid**

When we take a deeper dive, Earnings Growth can be split into two components, Sales Growth and changes in Net Income Margins:

> **Total Shareholder Returns (TSR) =**
> **(Sales Growth + Margin Expansion/Contraction) + Changes in Valuations (i.e. P/E Multiple) + Dividends Paid**

In the very long-run, looking out a decade or longer, the historical data clearly demonstrates that revenue growth is more important than margins in driving earnings growth. However, over the short-to-medium term, looking out on a 1-to-5-year horizon, changes in margins can be quite impactful on earnings and deserve careful scrutiny.

With this knowledge in hand, let's dig deeper into corporate margins, where have they been, and where they may go.

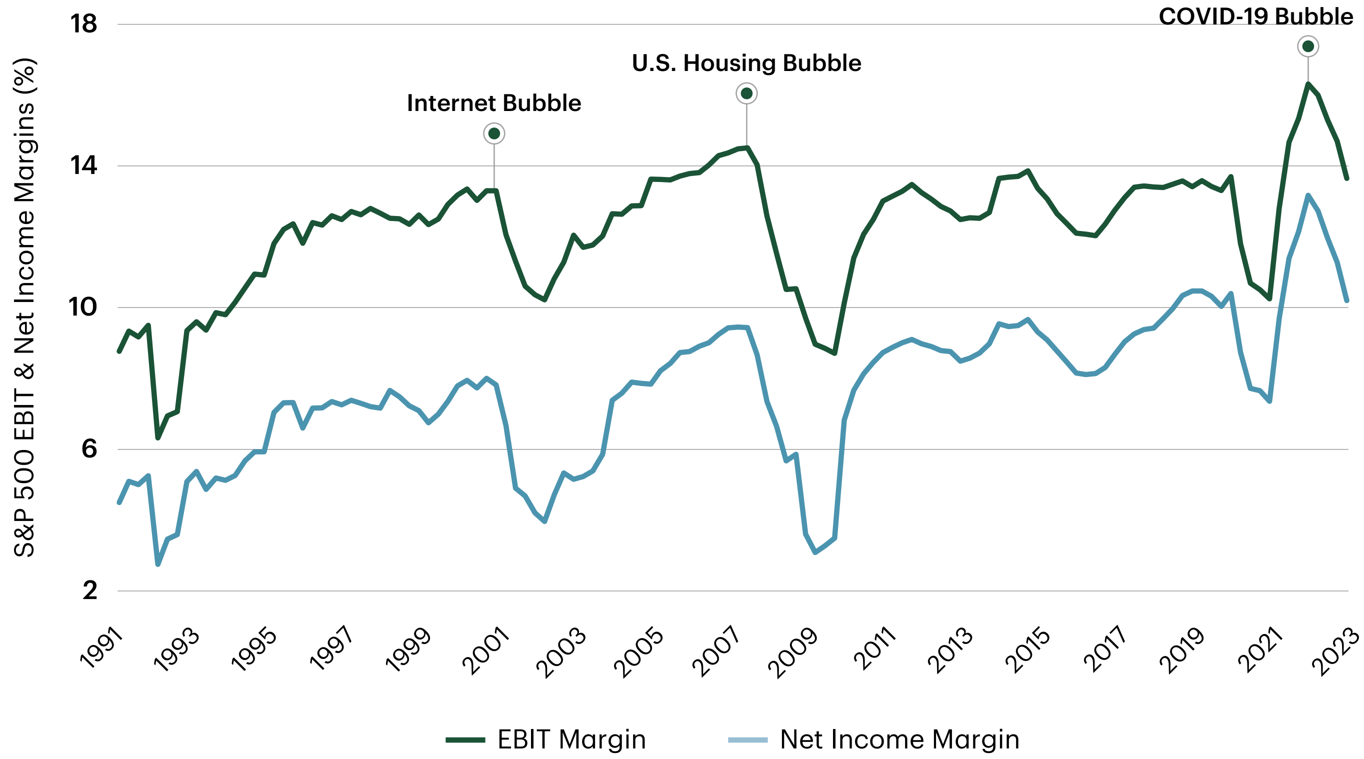
Profitability

Where are margins today and where have they been?

Over the last three decades we have witnessed margins expand for the S&P 500 Index, driven by both operating gains (businesses have become more efficient in generating sales into profits), as well as non-operating gains (driven by lower taxes and interest costs). While margins have increased over the long-run, they are typically pro-cyclical and move up and down with the economic cycle. This is driven by operating and financial leverage, to rising and declining sales.

Over the last three decades we've seen margins expand for the S&P 500

While cyclical in the short-run, margins have expanded over the long-run



Source: Bloomberg Finance L.P., TD Asset Management Inc.

What were the key drivers of this expansion?

There have been five key drivers of higher margins over the last 30 years: a growing mix of S&P 500 profits being generated by the Technology sector, growth in corporate concentration across several industries, globalization which has led to lower bargaining power of labour, lower effective tax rates and declining interest rates.

At the Operating (EBIT) level, the Technology sector has driven the majority of the gains in margins and has been the biggest positive tailwind to S&P 500 margins over the last 30 years. The sector has posted significant margin gains since the launch of the Apple iPhone back in 2007, combined with the growth in social media which the iPhone enabled, and growth in semiconductor demand needed to power all these smartphones. This has resulted in Technology sector EBIT margins growing to ~24% vs. ~12% for non-Technology companies in the S&P 500[1]. Not only are the Technology sector margins higher than the S&P 500, but the sector has also grown revenues faster which has made Technology's higher margin earnings stream an ever-bigger part of the S&P 500 Index over time.

What has driven corporate margins higher?

The S&P 500 has benefited from numerous tailwinds over the last 3 decades

Tailwinds	Rationale
Technology Sector Mix Impact	• Since 2010, this factor has been the biggest tailwind to S&P 500 margins. • Launch of the iPhone, online advertising, social media, and the semiconductors to power this growth have been to important drivers.
Growth in Corporate Concentration	• Growing corporate concentration since the 1950's. • Scale benefits, technology barriers, and lax antirust have contributed to consolidation.
Globalization / Lower Bargaining Power of Labour	• China's entry in the World Trade Organization in 2001, put significant pressure on U.S. and developed market manufacturing employment driving lower real wages. • Excess labour supply post-Global Financial Crisis (GFC), limited wage growth for much of the past decade.
Lower Effective Tax Rates	• Growing international S&P 500 revenues, has allowed for creative tax arbitrage. • Tax rates declined further following the passage of the Tax Cuts and Jobs Act (2018).
Lower Interest Rates	• Declining interest rates since the 1980's has been a tailwind to Corporate America. • While interest rates have risen recently, long-term debt will take many years to reprice.

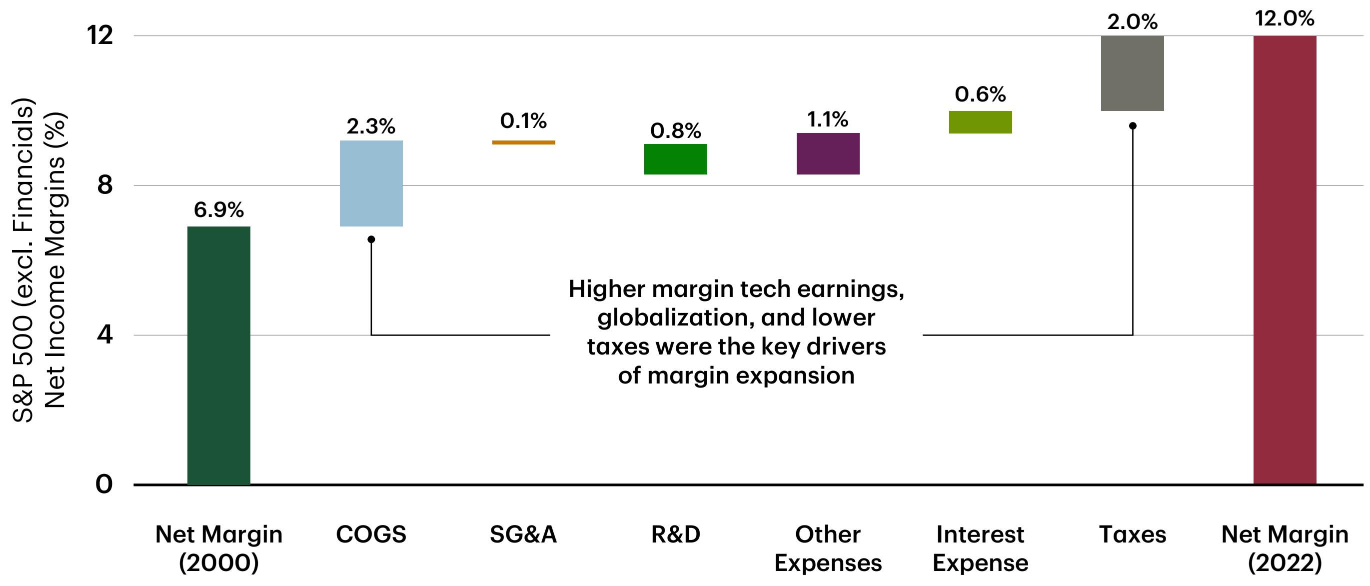
Source: TD Asset Management Inc.

[1] Bloomberg Finance L.P., August 2023.

At the Net Income level, we saw two additional drivers on top of the operating gains posted by the Technology sector. First has been a decline in the statutory U.S. Corporate Tax Rate from 53% in 1969, all the way down to 21% following the Trump tax cuts in 2018. And second, lower interest costs have been another key tailwind to corporate margins in recent decades, with interest costs declining from 50% of pre-tax profits at the peak in the 1980's to just 16% at the end of 2022[2].

How much was each driver responsible for margin expansion?

Decomposition of margin gains from 2000 to 2022



Source: Bank of America, TD Asset Management Inc.

All-in, thanks to these operating and non-operating gains, the S&P 500 Index saw net income margins expand from 7% at the turn of the century, to 12% in 2022[3].

[2] U.S. Bureau of Economic Analysis, October 2022.

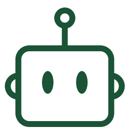
[3] Bank of America, May 2023.

Will corporate margins continue to post gains in the years ahead?

Now that we have a solid understanding of where we've come from, the more important question is what the future has in store and whether the S&P 500 Index can continue to post margin gains in the years ahead.

Before we get into some of the factors that support stronger margins, we should discuss a few of the headwinds to corporate margins in the years ahead. These include higher bargaining power of labour, higher normalized interest rates, risk of higher corporate taxes, and headwinds from deglobalization & decarbonization.

There are several small headwinds, offset by meaningful upside from productivity

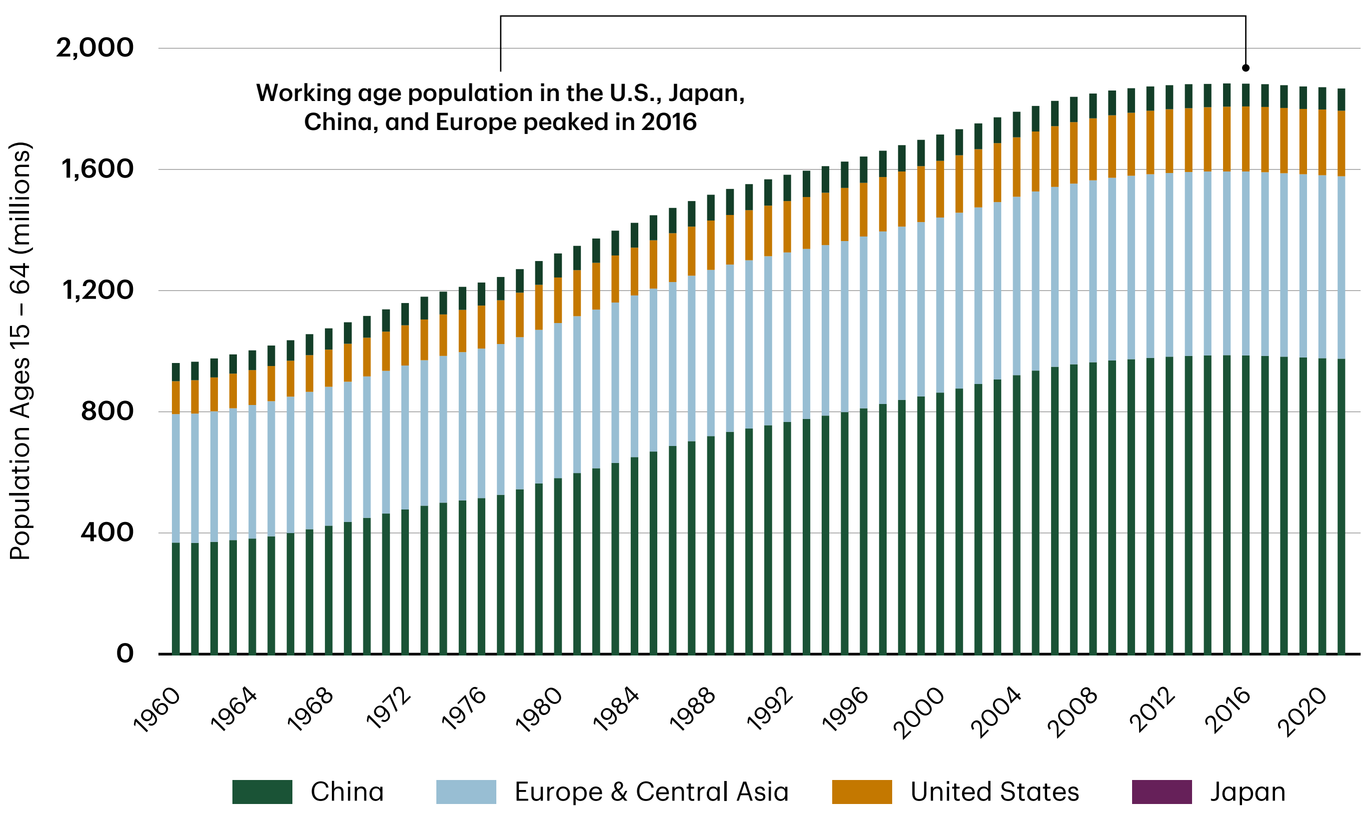
	Headwinds/Tailwinds	Rationale
	Higher Bargaining Power of Labour	• Aging global population in the U.S., Europe, and Asia will pressure labour supply, and drive higher real wage growth globally vs. the post-GFC era. • Corporates with strong pricing power will be better suited to pass along costs.
	Higher Normalized Interest Rates	• While we may be nearing a cyclical peak in interest rates, normalized interest rates are likely to be higher going forward as we exit the zero interest rate policy (ZIRP) regime post-GFC. • Long-term corporate debt will take a while to reset to these higher rates.
	Deglobalization/ Carbon Transition	• Driving resiliency in supply chains will come at the cost of lower efficiency, driving higher prices (for consumers) and lower margins (for corporates). • Declining cost of wind, solar, and EVs will limit the impact from decarbonization.
	Flat to Higher Tax Rates	• Interest costs estimated to grow from 8% to 24% of U.S. federal outlays by 2052. • Entitlement spending for Healthcare and Social Security driven by aging population.
	Tech will be a smaller mix tailwind	• Tech will continue to be positive for growth and margins (but to lesser extent). • Important growth verticals including online adverting and smartphones are maturing.
	**Growth in AI & Robotics**	• AI has the potential to drive both cost saving (by increasing efficiency per employee), and drive higher revenues (e.g. better targeting consumers in sales & marketing). • In less competitive industries, corporates can retain the margin benefits from AI.

Source: TD Asset Management Inc.

Out of these headwinds, one for the most significant is higher bargaining power of labour, driven by a declining working age population across many countries. In fact, when you aggregate the major global industrialized economies including the U.S., China, Europe, and Japan, working age population peaked in 2016 and has entered a slow gradual decline. This dynamic will likely drive stronger wage growth in the years ahead vs. what we observed in the post global financial crisis era, a dynamic we've clearly seen in the past year with union negotiations, and ultimately drive flat-to-higher labour share of income following declines since the early 1970's. With wages being the largest input cost in the economy, at 44% of GDP, and estimated at ~35% S&P 500 Index sales, higher wages can put short-term pressure on corporate margins.

Global working age population growth is quickly decelerating (and declining in major economies)

Across the major economies of the U.S., China, EU, and Japan, the working age population entered decline in 2016



Source: OECD, TD Asset Management Inc. Data as of December 31, 2021.

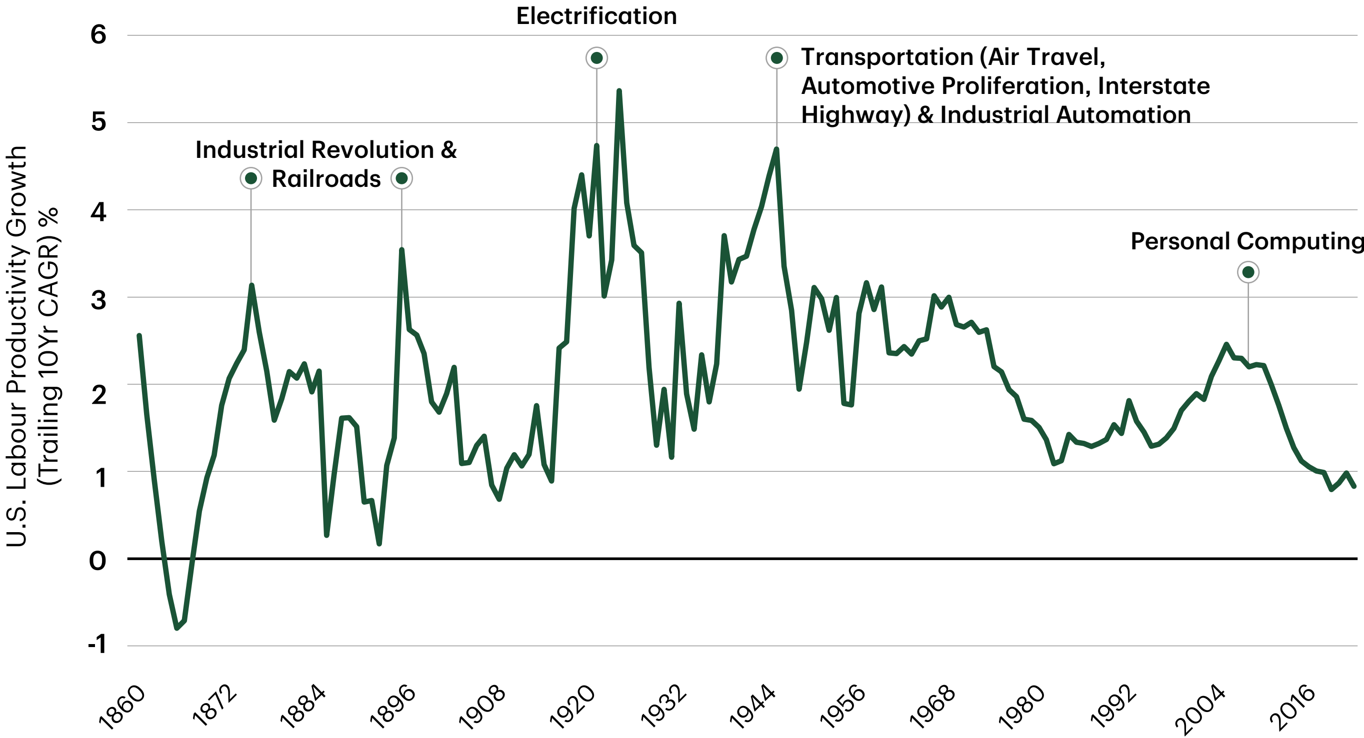
Another headwind to margins will be higher interest costs as corporate debt matures and resets at higher interest rates. The average coupon rate for S&P 500 Investment Grade Bonds is currently 3.8%. That said, the current yield to maturity on that debt was 5.6% as of the end of August[4]. This suggests that interest costs for U.S. corporates is set to rise by 47% as debt is refinanced. This equals a 6.3% hit to earnings per share (EPS) over time. However, this will be a slow process, given that U.S. corporate bonds have termed out their debt in recent years, with a current average duration of 11 years.

And finally, another risk to margins that is more difficult to quantify, or time is the risk from higher corporate taxes. This is being driven by the fact that the U.S. government is currently generating some of the largest peacetime deficits on record, at ~8% of GDP in the most recent quarter, in what is a period of economic stability. With ~70% of U.S. government spending going toward automatic entitlement programs including Medicare, Medicaid, and Social Security[5], which are politically difficult to cut back, there will likely be growing pressure to find new revenue sources such as higher corporate taxes.

Some good news

It's not all negative. There are tailwinds that support future margin expansion including continued growth of the Technology sector, in addition to the rise of artificial intelligence (AI) and robotics which can drive productivity gains across a range of sectors.

Bursts in productivity growth have historically been driven by new technologies



Source: Long-Term Productivity Database, Bergeaud, Cette and Lecat. Data as of December 31, 2022.

[4] S&P Dow Jones Indices, August 2023

[5] Congressional Budget Office, May 2023

The growing proliferation of AI and robotics are important developments because together they hold the promise of reinvigorating productivity growth. Real long-term per-capita economic growth, driven largely by gains in productivity, is crucial to improving the standard of living across the world. Furthermore, productivity growth can help partially offset a range of headwinds ranging from aging demographics, high consumer and government debt, and other pressures.

While U.S. productivity has grown in the past decade at the slowest pace since the industrial revolution, this is likely to reverse in the years ahead as adoption of AI and robotics grows. Across history, technological breakthroughs, including the industrial revolution, railroads, electrification, industrial automation, and personal computing, have all been associated with large gains in productivity. While it is still debatable how large the impact from AI will be, either way, productivity growth is likely to be higher over the next decade, than it has been over the past decade.

While AI is currently more talk than reality in our day-to-day lives, in the decade ahead the technology is set to mature and increasingly make an impact across a range of industries. This is being made possible by two drivers: the declining cost and growing availability of computing power thanks to the semiconductor industry, and growing software investments in the application layer which is needed before businesses can begin implementing AI in industries ranging from Healthcare to Consumer applications, and more.

In a survey of Sector Analysts on TD Asset Management Inc.'s (TDAM) Fundamental Equities Team, the team believes that AI will be positive for 75% of the S&P 500. In addition, 59% of the S&P 500 is expected to see revenue tailwinds, and 60% of the S&P 500 is expected to post cost savings through the implementation of AI. Industries that are best positioned to benefit include Pharma & Biotech, Automotive, Semiconductors, Media, Software, Broadline Retailers.

TDAM Analyst Survey: All-in, AI is expected to be positive for the S&P 500

	S&P 500	
Key Questions Asked Per S&P 500 Industry	**% of Industries**	**% of Market Cap**
Is AI a tailwind to revenues?	38	59
Is AI a tailwind to reduce costs	49	60
Is AI a potential threat to industry revenues?	26	20
Is AI a potential threat to industry costs?	14	34
Is AI all-in positive for EBIT margins?	48	69
Is AI all-in positive for your industry?	56	75
Total AI Impact?	**Positive for both revenues and costs**	

Biggest Winners: Beneficiaries include Pharma & Biotech, Automotive, Semiconductors, Media, Software, Broadline Retailers

Most at Risk: Office REITs, IT Services, Medical Devices

Source: TD Asset Management Inc.

Beyond AI, which can drive productivity growth in white collar employment, the other large opportunity is productivity growth in blue collar employment, through the growing proliferation of robotics. Over the past decade we've seen the countries with rapidly aging populations are also those that are most quickly adopting industrial robots. Chinese investments in industrial robots have grown 10x fold over the past decade, and in the Rest of the World grew 70%[6]. The combination of robotics and AI are certain to help blunt the impact of an aging global population over the long-run.

[6] International Federation of Robotics, August 2023

Investment Implications: Which sectors are best set to thrive?

Given everything we have discussed in terms of both headwinds and tailwinds, which sectors are set to thrive and post margin gains, relative to the S&P 500 in the years ahead?

To help answer this question, we ran a survey across Sector Analysts on TDAM's Fundamental Equities Team. The survey asked each analyst to score every name they cover regarding business model strength, the medium outlook for margins, and the potential impact from AI.

Which S&P 500 sectors will see the greatest Net Income Margin expansion over the next 5-years?

Tech, Comm Services, Consumer Discretionary, and Healthcare to grow margins the most

Overweight ↑ / Underweight ↓	Sector	Outlook
Overweight	**Information Technology**	With technology expected to post the strongest sales growth in the S&P 500, the sector will benefit from positive operating leverage, with little burden from higher interest rates.
	Healthcare	COVID-19 Pandemic headwinds are bottoming. Plus, Biopharma R&D productivity is the greatest predictor of sector returns over the long-run, AI holds the potential to improve R&D productivity.
	Consumer Discretionary	Amazon and Tesla to continue to drive operating leverage from scale. In addition, over the long-run the sector well positioned to drive labour saving via AI.
	Communication Services	Communication Services, which is dominated by Alphabet and Meta, is expected to see sales growth modestly ahead of the S&P 500, in addition to cost cutting tailwinds.
	Industrials	Industrial margins should see modest upside from growing capital goods demand for mega-project, and improving demand driving positive operating leverage at transports.
	Utilities	Margins are not the most relevant metrics (vs. regulated ROE rates). Margins will be pressured by higher rates, offset by lower input costs, and flat to higher ROE allowances.
	Financials	Financials are currently seeing strong net interest margin compression, will likely see additional pressure from credit, but looking out 3 years the worst will be behind us.
	Consumer Staples	Consumer Staples has exhibited strong pricing power over the last two years as inflationary pressures were past through. This will be hard to repeat going forward.
	Energy	With the global economy slowing, demand for energy will slow, while OPEC continues to curtail supply, all-in a recipe for rangebound energy prices over the medium horizon.
	Materials	China's structural growth rate decelerating as the population ages, urbanization has mostly run its course, and demand for commodities will grow slowly pressuring prices.
Underweight	**Real Estate**	Real Estate net income margins will be pressured as borrowing resets at higher rates, and operating costs increase faster than rents reset higher.

Source: TD Asset Management Inc.

Overall, Information Technology, Healthcare, Consumer Discretionary, and Communication Services, are best positioned to post margin gains in the years ahead. For all four, this is being driven by positive operating leverage on strong sales growth over the medium-term, and to a lesser extent upside from cost savings. Importantly, these sectors are also well positioned to take advantage of AI later in the decade.

Digging a bit deeper into these sectors, Healthcare is very attractive. In the short-term, the sector is set to return to revenue growth in 2024, after losing significant revenues from the COVID-19 Pandemic and as vaccine and testing sales declined. In the medium-term, the sector will benefit from the growth of new verticals such as obesity and cancer drugs, and over the longer-term, can see significant upside from AI in drug discovery by materially improving R&D productivity, which will drive higher returns on invested capital.

Closing Thoughts

All-in, over the next decade, margins are expected to be flat to modestly higher. Headwinds will include greater employee bargaining power and higher interest costs as long-term debt is refinanced, while tailwinds will include continued growth of the Technology sector, and productivity gains from AI & robotics.

Given the difficulty in forecasting the path of interest rates, corporate taxes, and the speed of AI adoption, the most sensible strategy for investors is to stick with a basket of high-quality companies. High-quality companies, with pricing power, strong margins, strong free cash flow generation, and with the ability to reinvest cashflow into projects with attractive returns, are the most attractive. Firms with these qualities are ultimately best positioned to outperform, regardless of what the macro environment throws at them. ■

Expansion

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