

Peak Profit Margins? A Global Perspective

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In *Peak Profit Margins? A US Perspective*, we discussed the secular rise in US profit margins and our view that many of the forces that have driven those margin increases should not be extrapolated forward. Without that consistent expansion of margins, US equities would be 40% lower than they are today. Margins have been rising for 25 years, and when we look at market pricing, it appears to us that the market is extrapolating further margin gains.

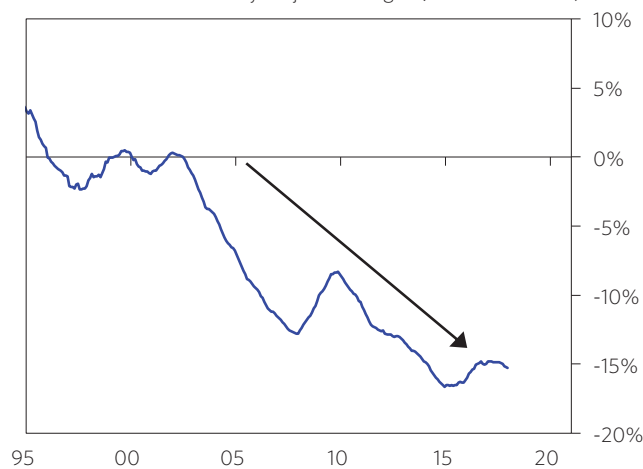
The long-term valuation of US equities hinges heavily on what happens to margins going forward: if margin gains can be extrapolated, then valuations look reasonable; if margins stagnate, then valuations are a bit expensive but not terrible; if margins revert toward historical averages, then US equities are highly overvalued. In today's research paper, we will share some perspectives on the margin picture in global equities and some thoughts on the clues offered by the differences across equity markets. While this picture is one of many influences we consider when forming our tactical views, it is of paramount importance for strategic investors relying on longer-term equity returns.

When we expand the margin analysis globally, we see that many of the forces that supported US profit margins over the past two decades have similarly buoyed profit margins across most other developed economies. Corporations around the world simultaneously benefited from the broad-based decline in labor's

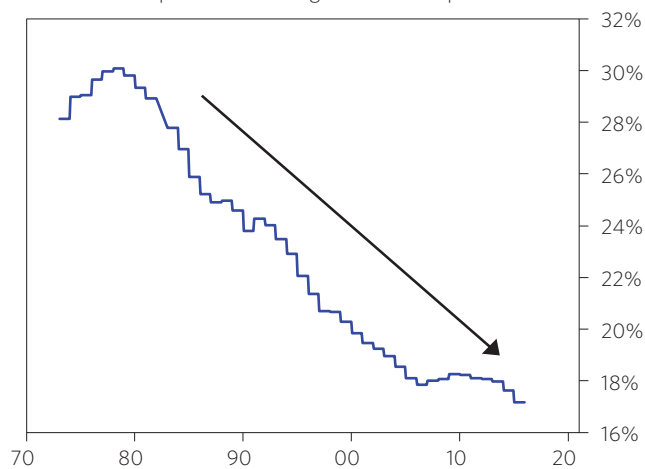
bargaining power, increased globalization, lower anti-trust enforcement, technology allowing for greater scale and lower marginal costs, and lower corporate taxes, interest rates, and tariffs. These factors have produced the most pro-corporate environment in history globally, with the US benefiting the most. China has been the major exception, as it was on the other side of the global outsourcing wave and saw its profit margins erode as its labor got bid up in the competition to serve Western demand. These differences, which we analyze below, help provide some clues on how much each driver has affected global margins.

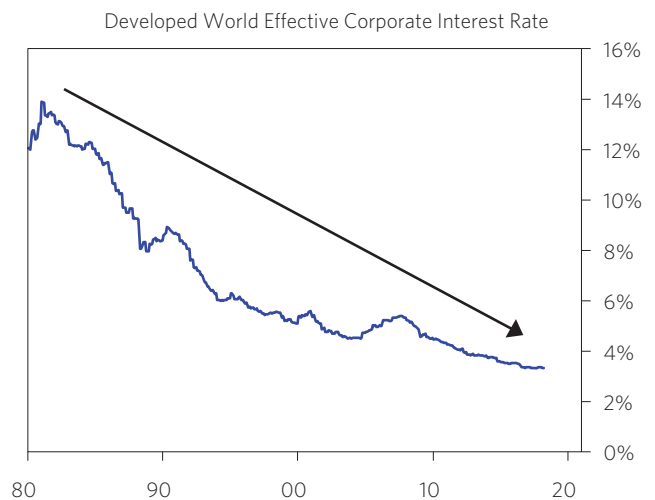
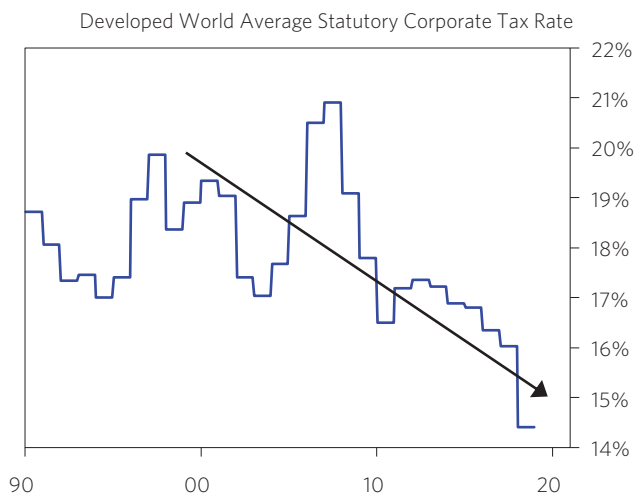
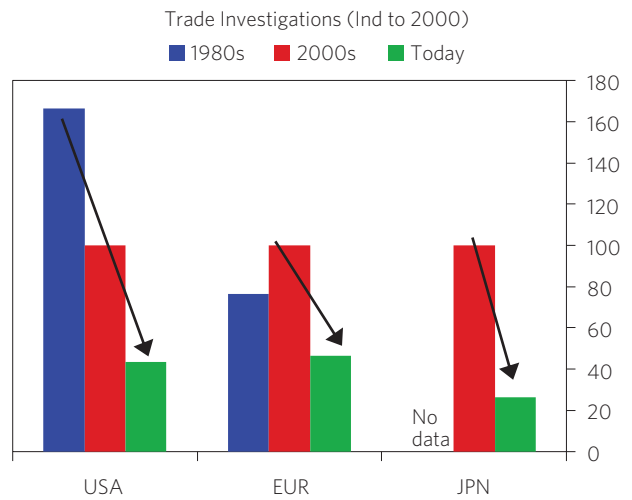
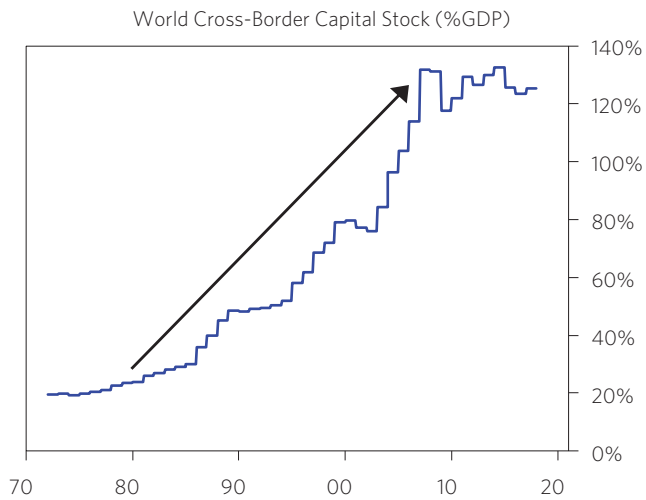
Before we get to analyzing each, the following panel of charts shows how every factor moved in the same direction, in favor of corporates globally. This global picture is similar to the US picture, but there are important differences across countries, which we will show below.

World Real Productivity-Adjusted Wages (Indexed to 2000)



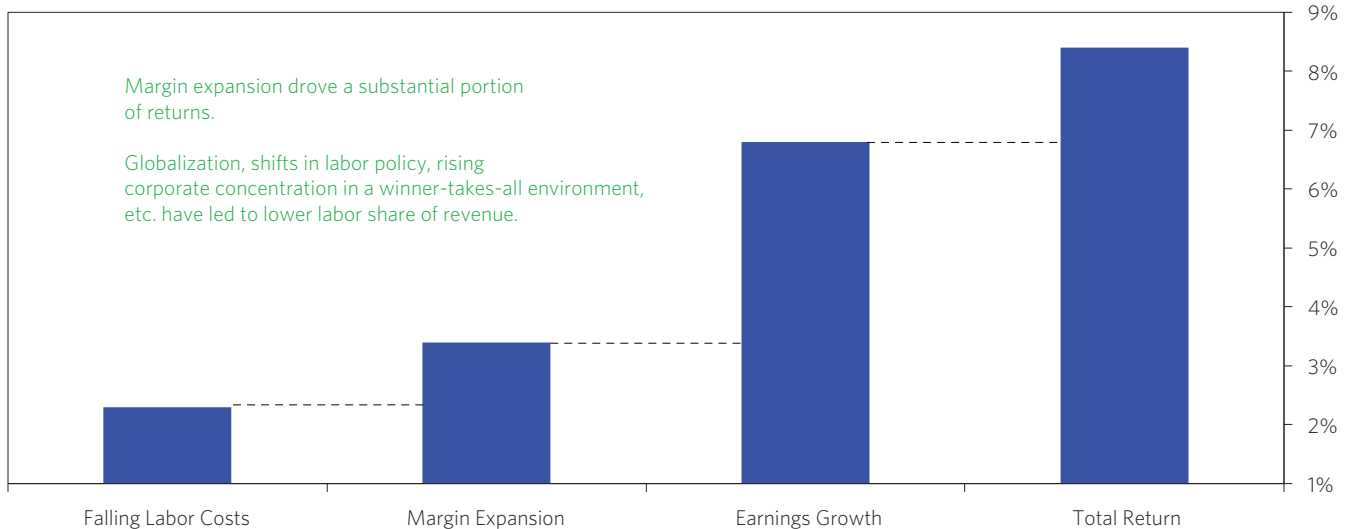
Developed World Average Union Participation Rate



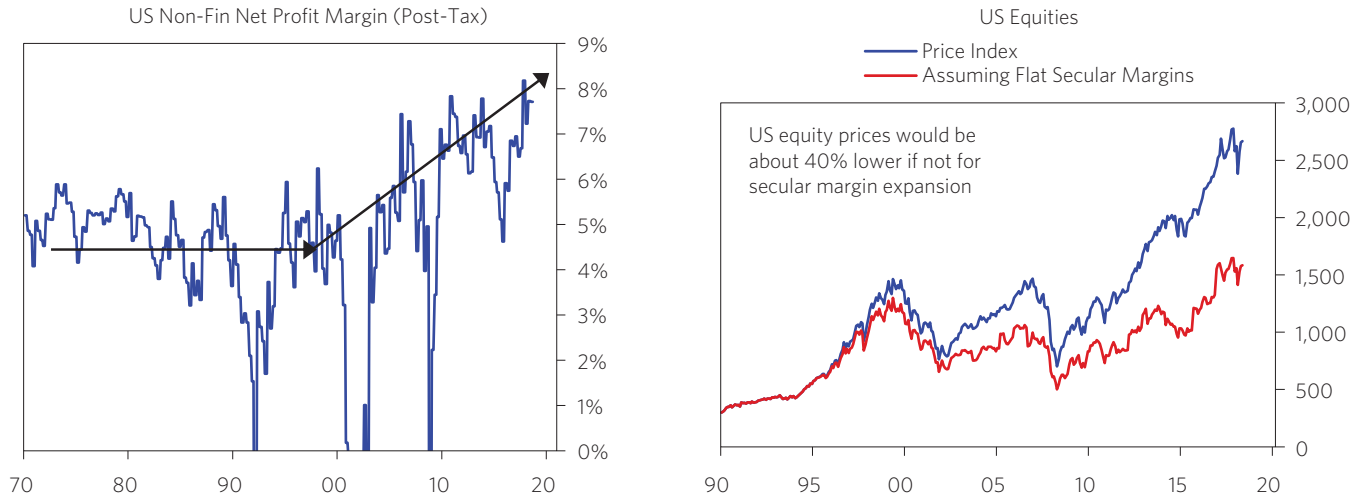


These phenomena compounded on each other as globalization weakened labor’s position, corporates gained political power, and policies reinforced the shift. Rising profit margins have accounted for about half of developed world equity returns over the last 20 years.

Contribution to Developed World Equity Returns (1995-Today, Ann)

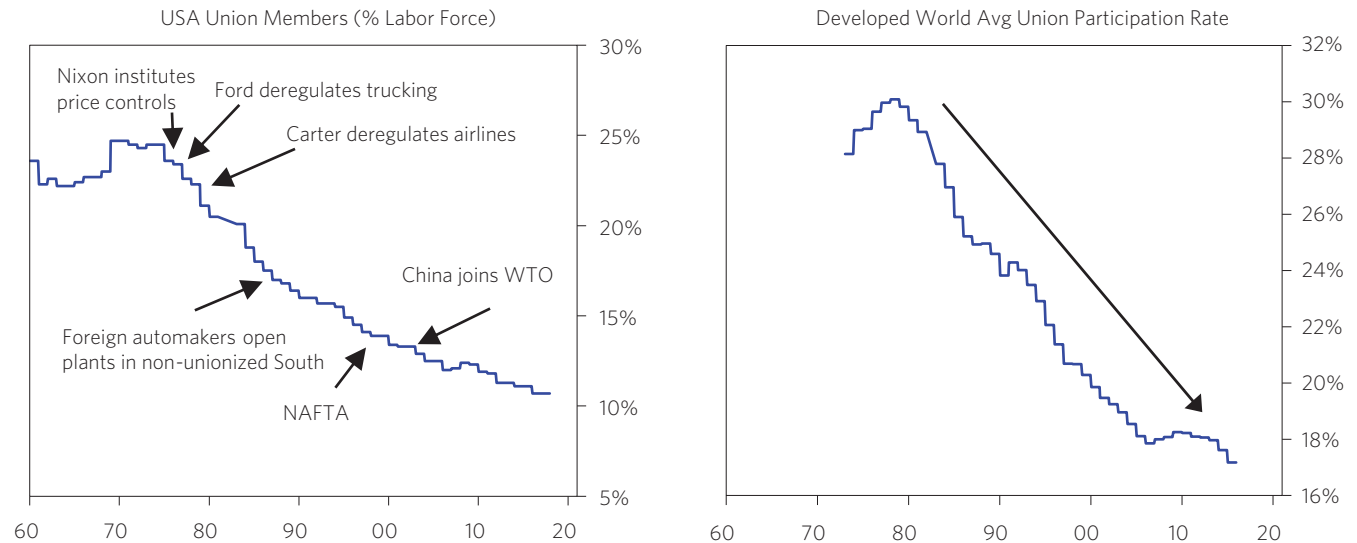


As noted above, without the consistent expansion of margins, US equities would be 40% lower than they are today.

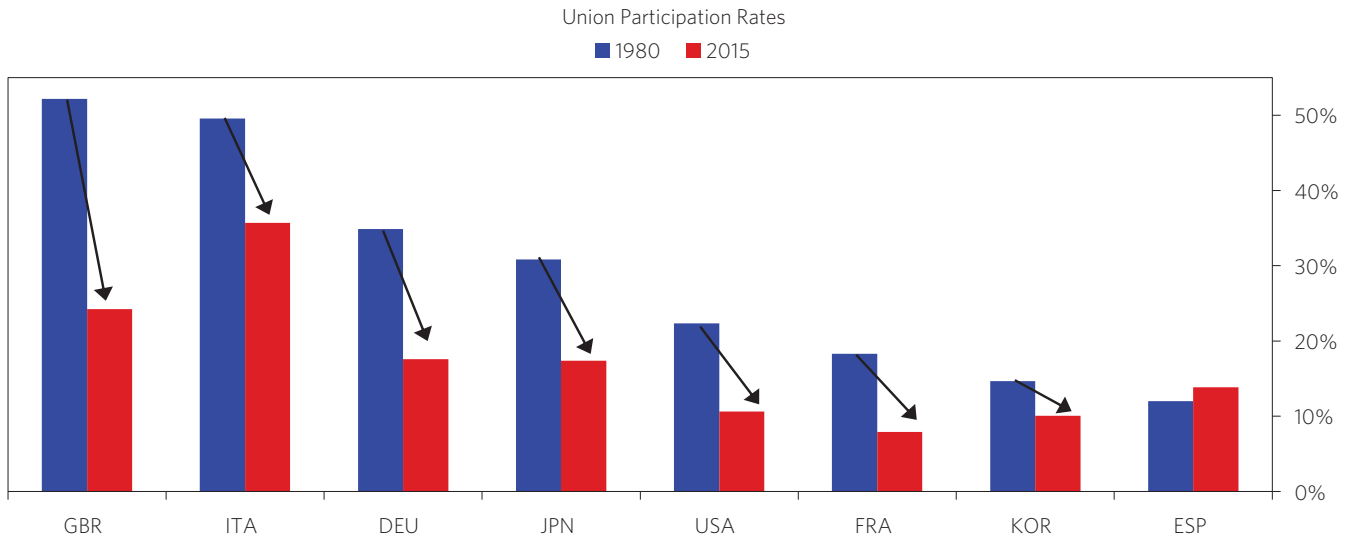


Decline in Organized Labor Has Reduced the Bargaining Power of Labor across the Developed World

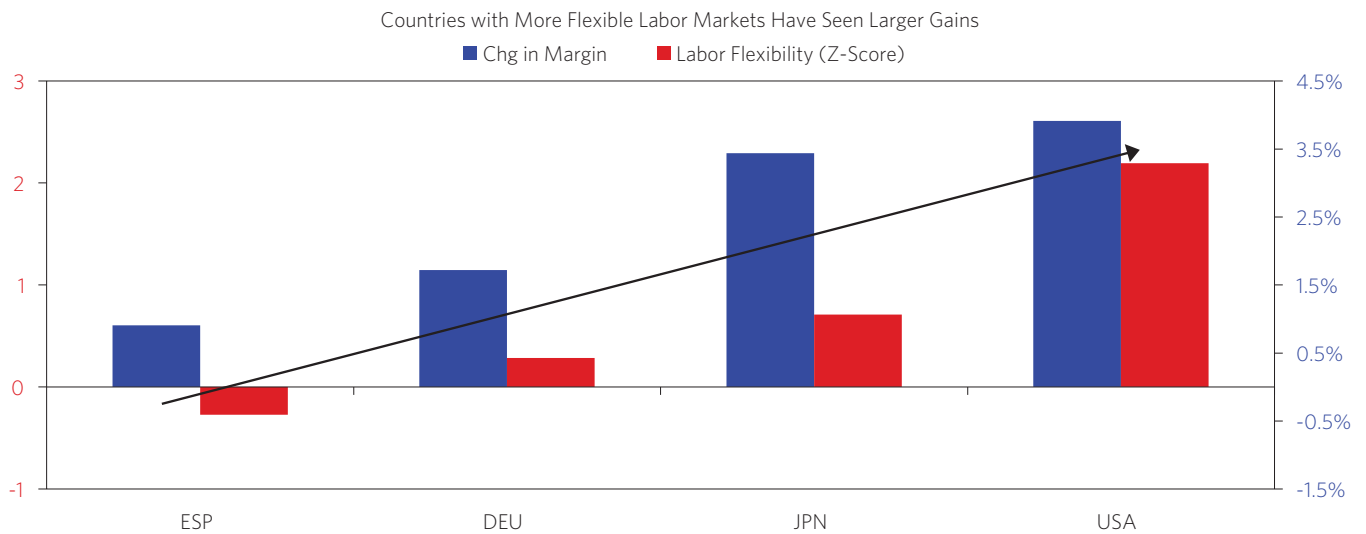
The biggest force behind the global profit margin expansion has been the decline in the labor share of output. A key factor that has contributed to this reduction in labor's bargaining power versus capital is the decline of organized labor and unions. This phenomenon has occurred over decades for an array of reasons that are intertwined with the other forces acting on margins—like access to pools of cheaper foreign labor and advancing automation technology.



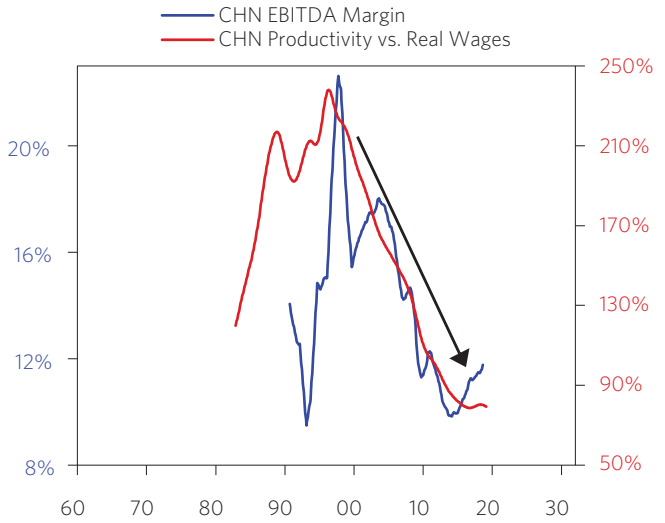
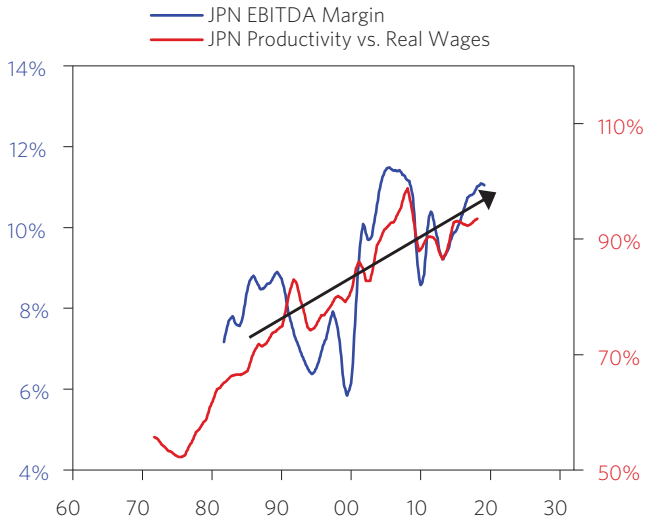
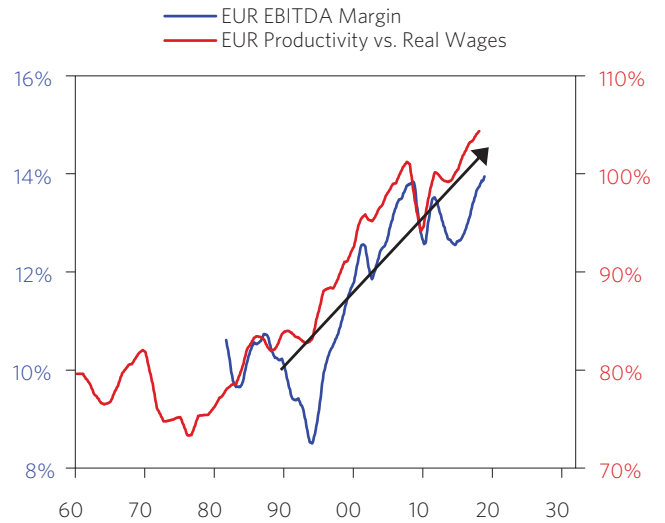
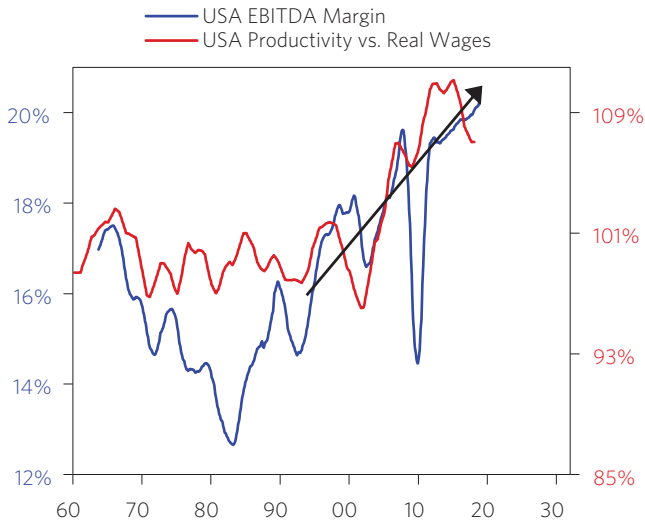
As you can see below, the change in union participation rates has been broad-based and has extended to most European countries and Japan, which have historically had stronger labor protections relative to the United States.



While this phenomenon has been broad-based, it has happened to varying degrees in different countries. Corporations located in countries with more flexible labor markets have been able to squeeze more benefits from labor. The chart below compares our aggregate measure of labor flexibility—based on our secular productivity study, available at economicprinciples.org—to changes in margins, highlighting this pattern.

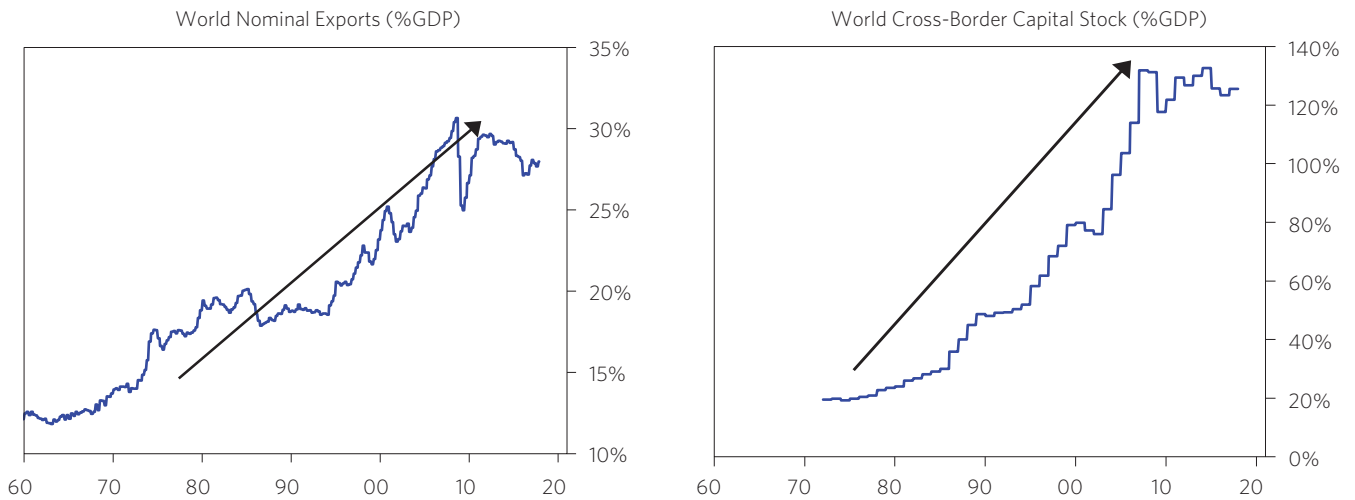


This dynamic has been a key driver of profit margins around the world. Real wages have lagged productivity gains in the major developed world economies since the 1990s, allowing corporations to grab an increasingly larger share of the overall output. A big force driving this phenomenon was the massive pool of cheap labor coming online in China, which depressed labor wages across the developed world (we discuss this in detail in the next section). In this process, wages in China were bid up from low levels, leading to the structural decline in profit margins for Chinese companies.

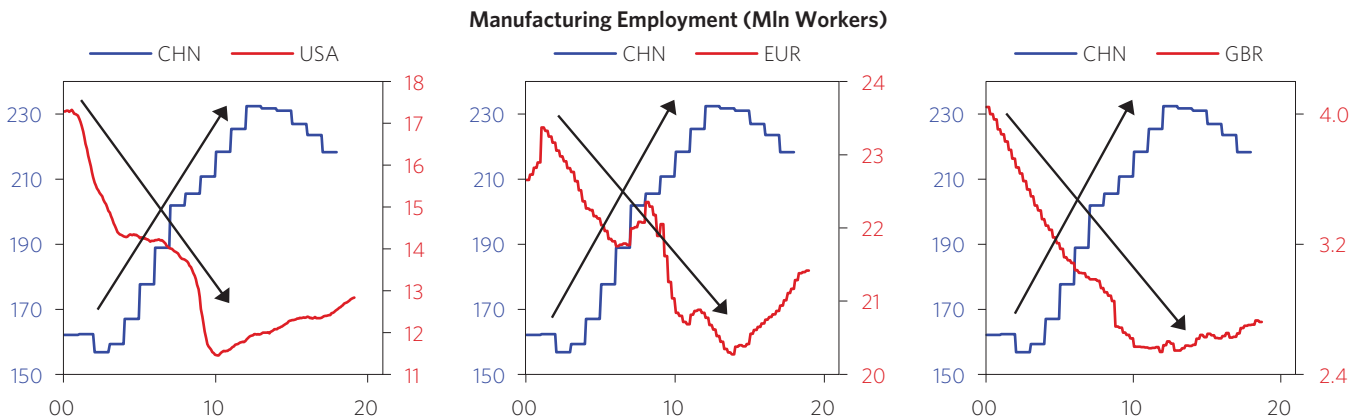


Globalization: Corporations Globally Have Seen Benefits from Globalization, Especially Access to Cheap Labor Pools in Countries Like China

The pace of globalization accelerated after 1990 as technology helped the world become more integrated, allowing pools of capital and labor to come together efficiently. As borders became more porous, corporations increasingly shifted their operations abroad (often building at lower cost), outsourced a range of activities, and tapped into new, faster-growing foreign markets. This directly reduced the labor costs for producing goods and exerted a downward pressure on wages in the developed world. As shown below, this accelerated after 2001, when China joined the WTO, and this trend has already started to flatten out in recent years.

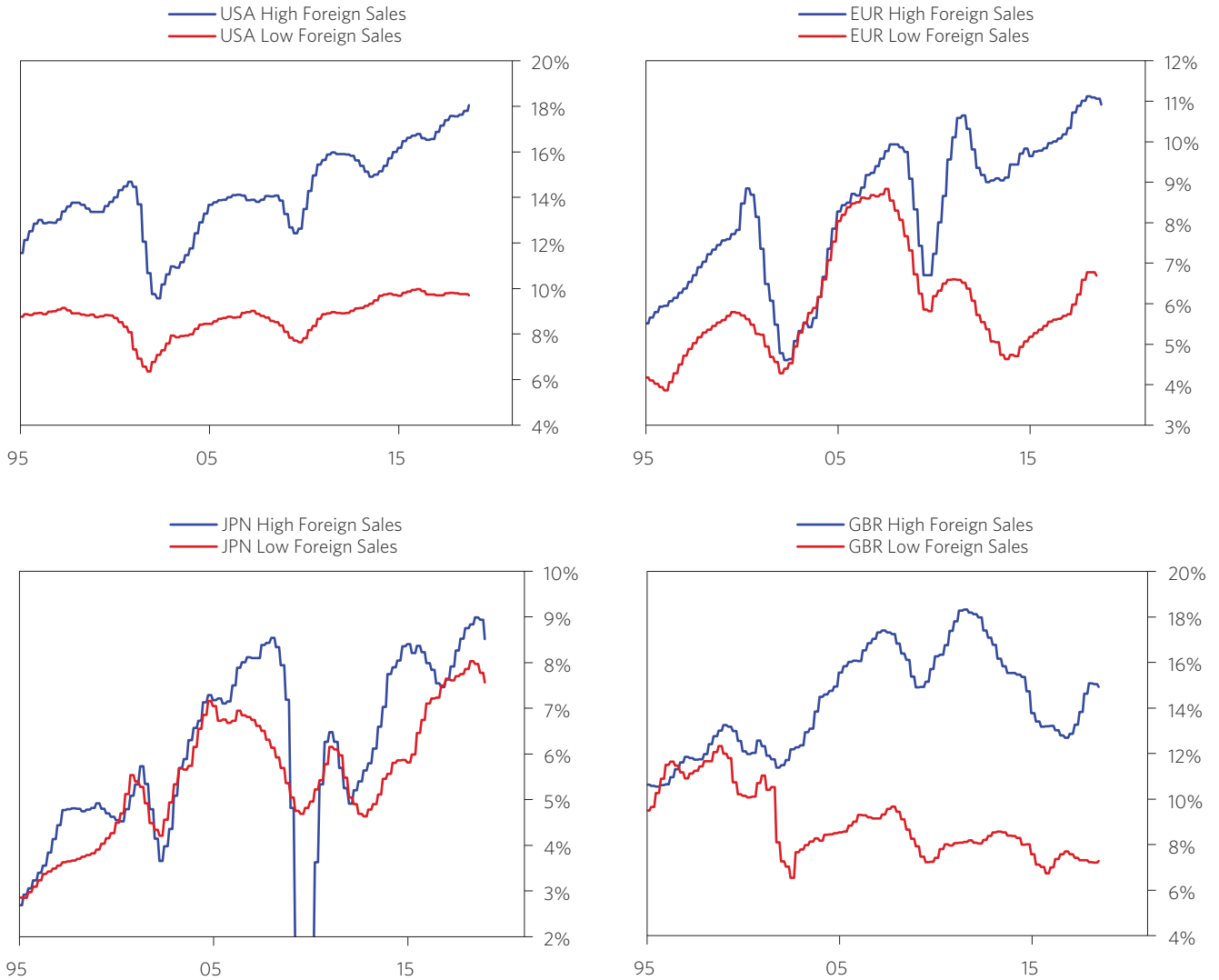


As stated, a big part of this globalization wave was driven by developed world corporations tapping (directly and indirectly) into the cheap labor pool in China, allowing them to significantly reduce their net production costs. Lower value-add employment and links in the supply chain (especially in manufacturing) migrated to China out of the developed world. While some of this was passed on to consumers through lower prices for goods, a big portion was retained by these companies in the form of higher profit margins. The charts below highlight how broad-based across the developed world this labor offshoring phenomenon has been (note the scales of the charts are different).



Access to foreign markets has allowed companies across the developed world to both tap into the growing demand in these regions and to reduce costs as a result of cheaper labor and materials. The charts below compare the revenue growth and profit margins of companies that have more sales exposure to foreign markets versus the ones that are more domestically focused. They highlight how companies that have a higher exposure to faster-growing foreign markets have seen a bigger improvement in profit margins.

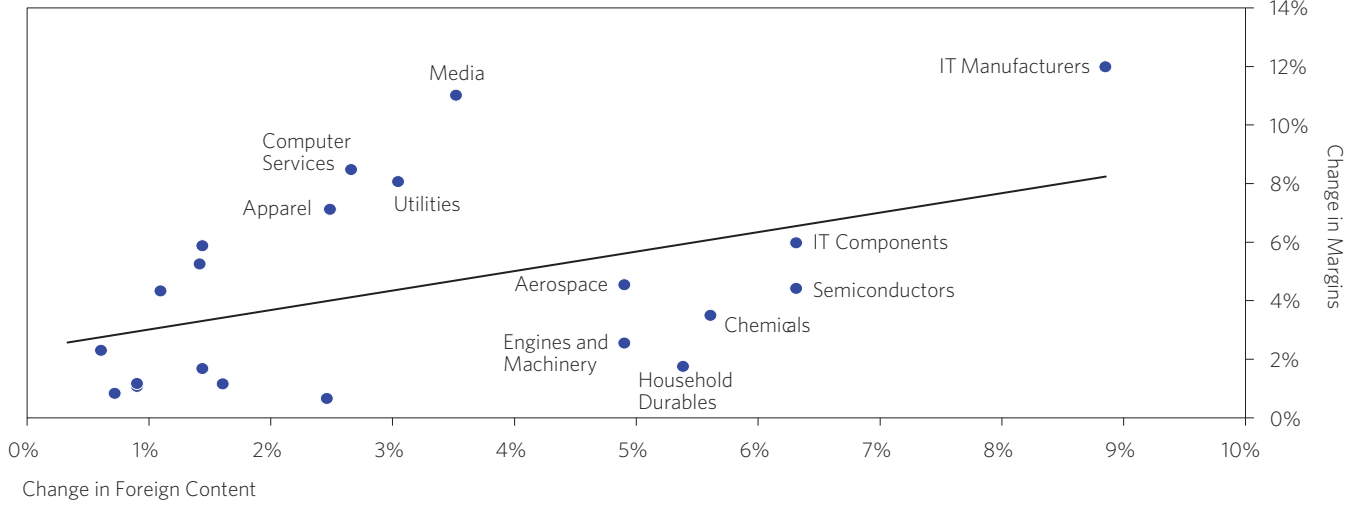
Operating Margin by Sales Exposure (Foreign vs. Domestically Focused)



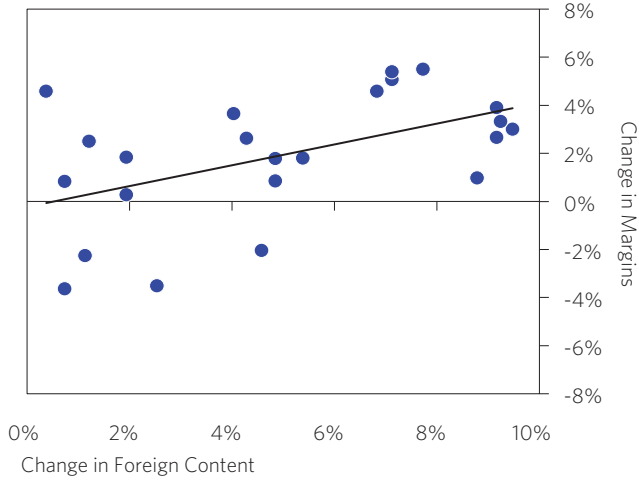
The next set of charts tries to more directly connect the change in margins to the change in the share of input costs that has been outsourced across manufacturing sectors in developed world economies (based on government reporting). Segments like computers, electrical equipment, and machinery, which have seen a larger increase in foreign-made content (e.g., moved abroad more to lower costs), have seen bigger increases in margins than segments like utilities and construction, which are still primarily domestically sourced.

Change in Margins vs. Change in Share of Foreign Inputs

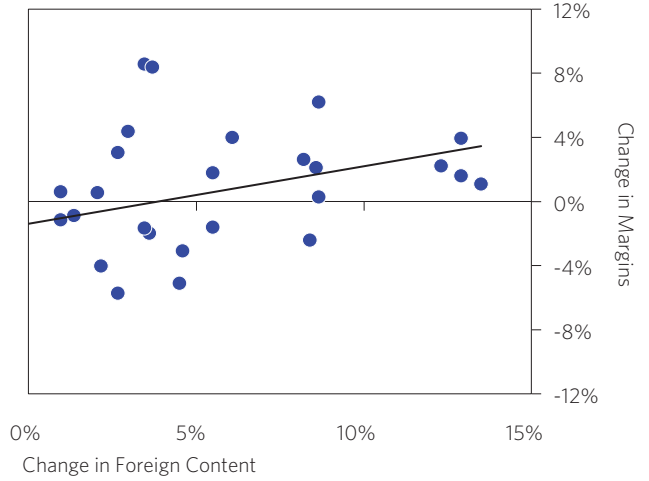
United States



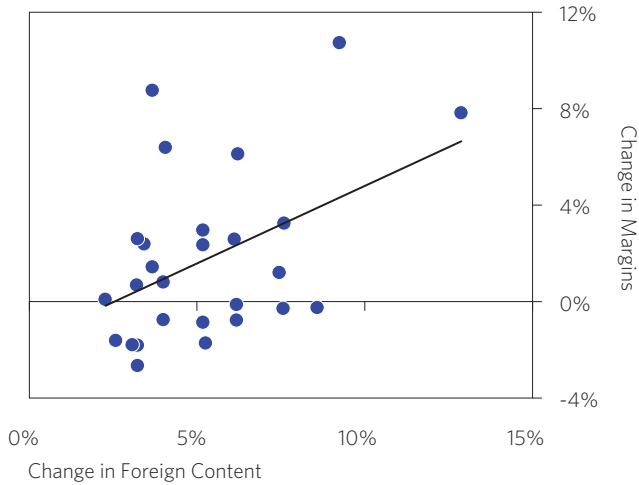
Japan



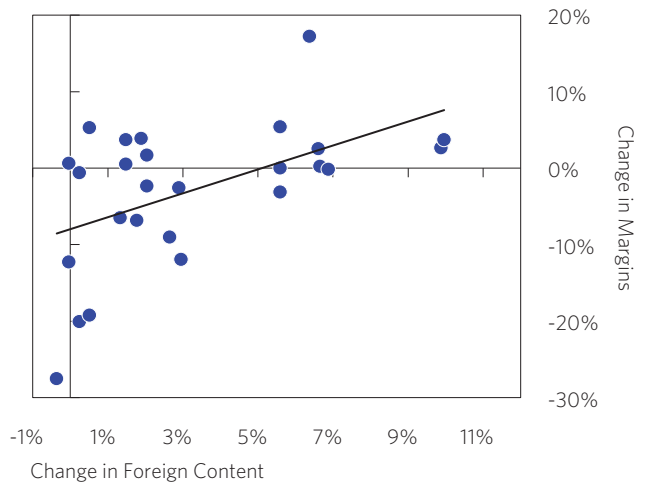
Germany



France



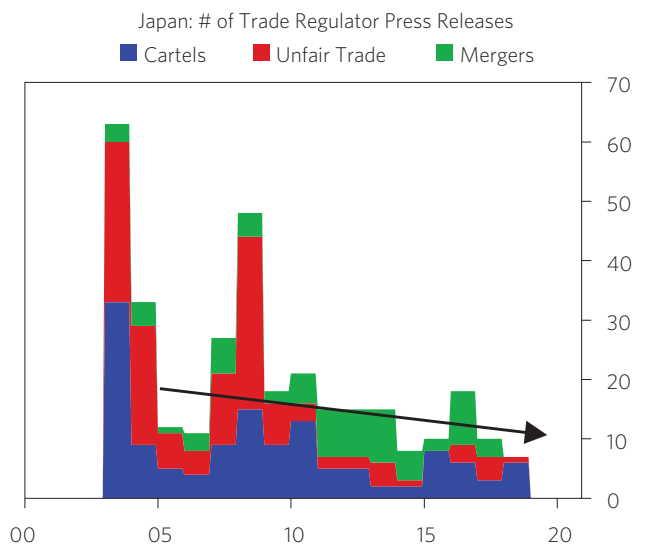
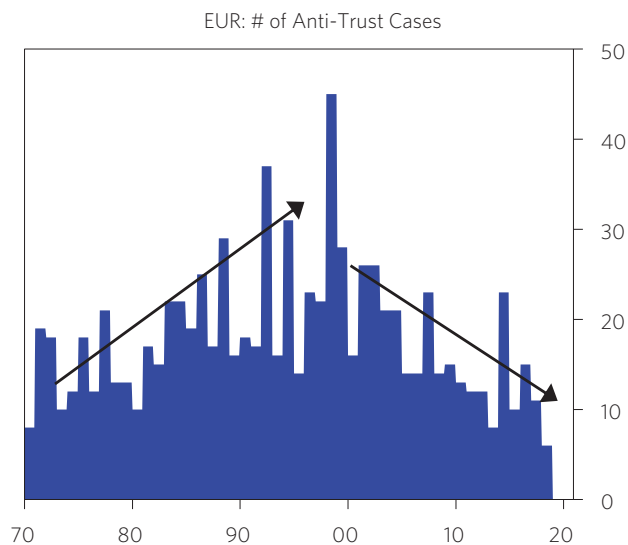
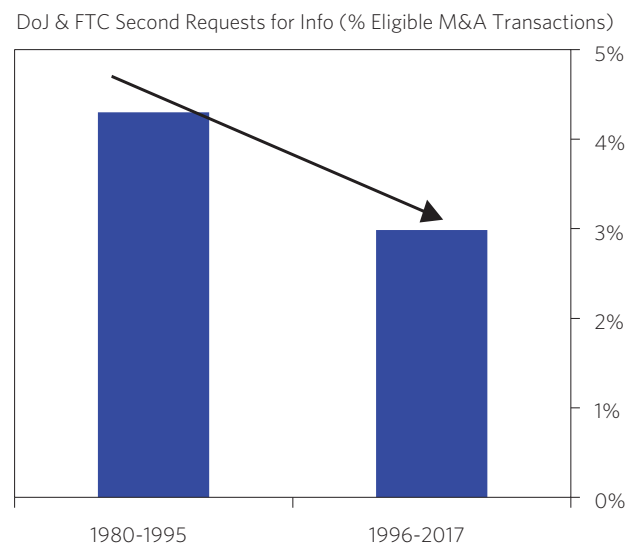
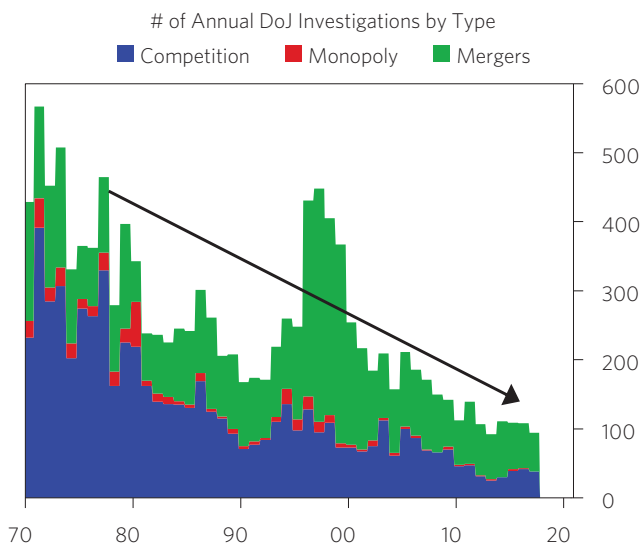
Italy



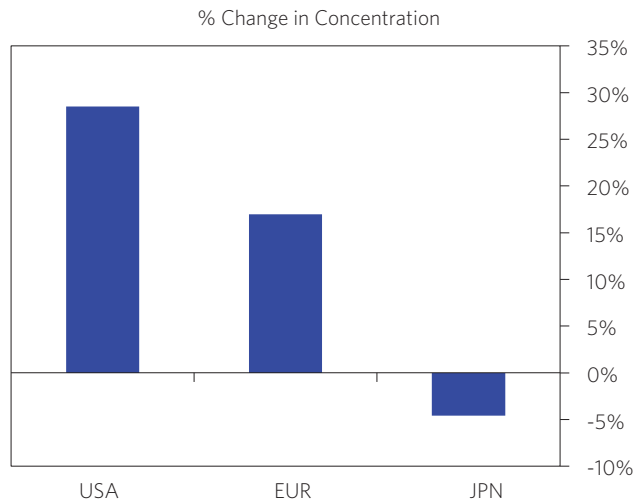
Consolidation: We Have Seen a Gradual Relaxation in Anti-Trust Enforcement (Merger Enforcement), Allowing for Larger, More Dominant Firms, Especially in the US

The charts below show some trends that are indicative of a gradual relaxation in policies that target firm concentration and competition and that have effectively allowed for the formation of larger, more dominant firms. The first chart on the right shows the share of pre-merger notifications that the FTC and DoJ (the two US merger enforcement agencies) flagged for additional information requests, which has signaled an intent to

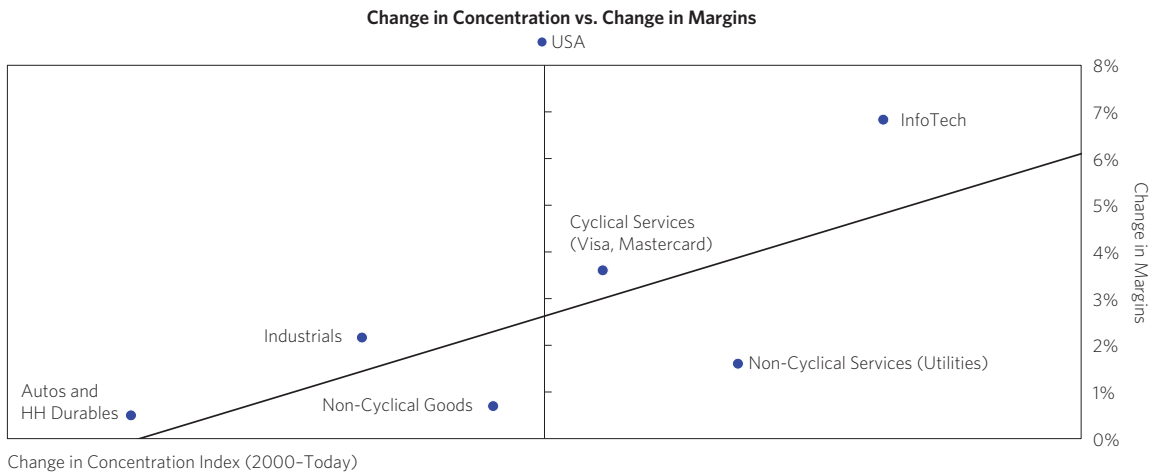
pursue a deeper investigation. The share of transactions flagged in this way fluctuates on a year-over-year basis, but has been lower overall since 1996 than it was in the 15 years prior. Below that, we show a related perspective on anti-trust enforcement in Euroland and Japan. Euroland has shown a general trend downward over the last 20 years, and while we wouldn't over-squint at the trend in Japan, enforcement has been down to flat there as well.



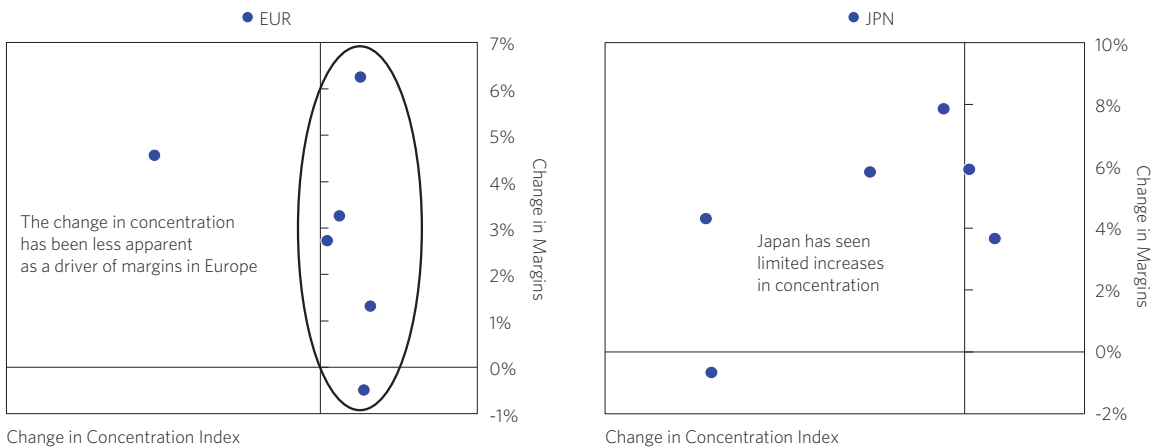
The net of this has been a meaningful increase in corporate concentration in the US and a modest increase in Europe over the past two decades, as larger and more dominant firms have emerged through mergers. Japan has not seen an increase in concentration over this period.



Results at the sector level are also consistent with this picture. Within the US, rising concentration within a sector has shown a strong positive relationship with expanding margins, suggesting the greater pricing power that comes from having more economies of scale, less head-to-head competition within a market, and overall higher bargaining power against labor.



Similar to the aggregate results above, outside of the US this relationship is weaker, which is consistent with the smaller increase in concentration in Europe, and the limited increase in Japan.

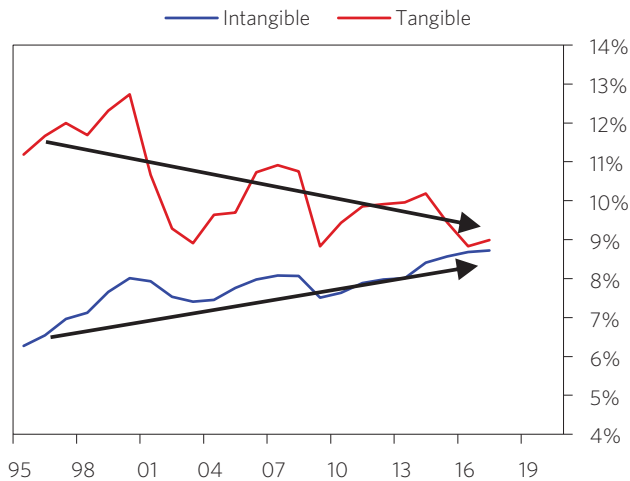


Scalability and Winner Takes All: Greater Scalability and Winner-Takes-All Dynamics Have Further Supported the Rise of Larger, More Dominant Firms and Margin Resilience

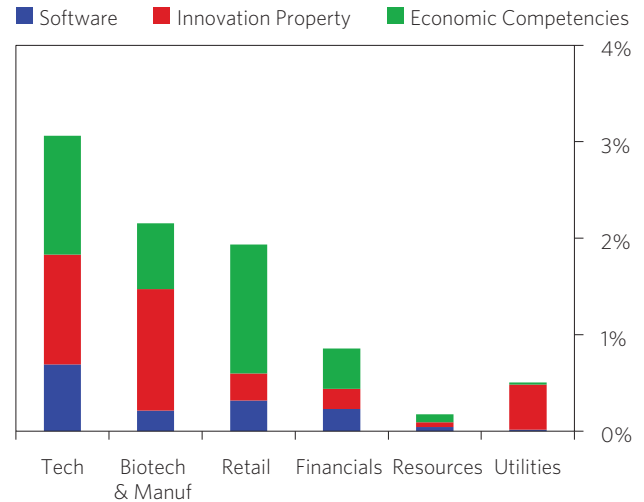
Another major shift over the past few decades that has helped firms increase and maintain their high profit margins is the ability of large firms to scale up their operations without raising costs by as much as smaller firms would. That high operating leverage and sheer scale have contributed to “winner-takes-all” dynamics in many sectors. With the changing nature of the overall economy and demand, the secular shift away from tangible investments—like physical equipment and buildings—and toward intangible investments—like intellectual property, including software and patents, for example—has facilitated the production and

consumption of these scalable products (e.g., software). This has helped these companies build a “moat,” increasing barriers to entry for new entrants. The left-hand chart below shows how the share of intangible investments of companies in the developed world has risen secularly. The chart on the right breaks down the various forms intangible investment can take, from software investment to economic competencies (which include management improvements, organizational design, marketing, and the like) to innovation property (including patents, research and development, etc.).

Developed World Tangible and Intangible Investments (%GDP)



Intangible Investments by Sector (%GDP)

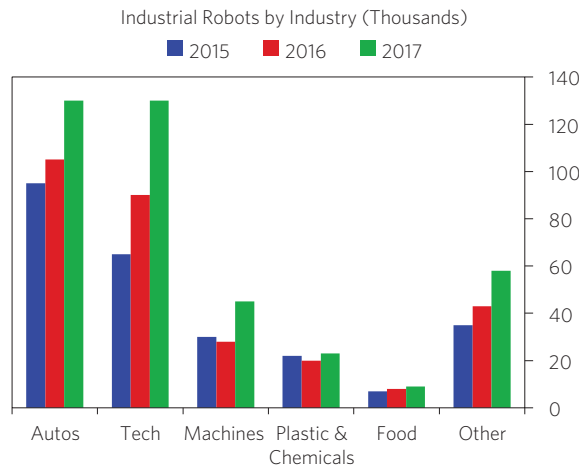


US Superstar Phenomenon: When we scan around the world, the US stands out as having a disproportionate share of “superstar” companies: large firms with very strong market positions, high margins, and substantial profits. The table below shows a list of the current global “superstars,” highlighting the predominance of US firms, especially tech companies. The Chinese tech giants (Alibaba and Tencent) are also notable for their rapid rise up this list.

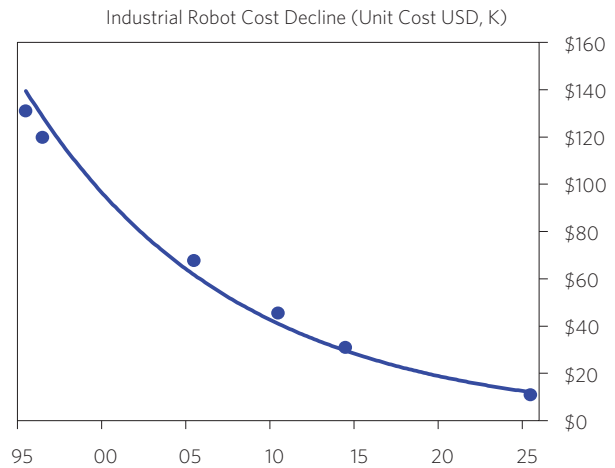
Superstar Companies Are Concentrated in the United States

Market	Company	Sector	Mkt Cap (USD, Bln)	Op Margin	Op Inc (USD, Bln)	P/E
United States	Microsoft	Tech	872	33%	39	28.1
United States	Apple	Tech	853	26%	68	15.0
United States	Alphabet	Tech	831	19%	26	27.7
United States	Facebook	Tech	491	45%	25	22.9
China	Alibaba	Tech	468	17%	9	39.5
China	Tencent	Tech	435	34%	15	33.9
United States	Johnson & Johnson	Biotech/Pharma	371	25%	20	20.6
United States	Proctor & Gamble	Biotech/Pharma	250	20%	13	24.5
United States	Pfizer	Biotech/Pharma	232	26%	14	26.0
South Korea	Samsung	Tech	231	24%	54	6.8
Switzerland	Novartis	Biotech/Pharma	230	15%	8	16.7
United States	Cisco	Tech	230	27%	13	20.6
United States	Merck	Biotech/Pharma	210	20%	8	18.6
Taiwan	Taiwan Semiconductor	Semiconductors	199	37%	13	17.5
United States	Coca-Cola	FoodBevTobacco	197	27%	9	21.9
United States	Oracle	Tech	189	34%	14	19.1
United States	Comcast	Telecom	179	20%	19	15.8
United States	Disney	Media	171	24%	14	16.4
Belgium	AB Inbev	FoodBevTobacco	164	31%	17	36.2
United States	PepsiCo	FoodBevTobacco	164	16%	10	21.3
United States	McDonald's	FoodBevTobacco	139	42%	9	24.5
United States	Philip Morris	FoodBevTobacco	138	38%	11	17.6
United States	Union Pacific	Transportation	119	37%	9	21.0
United States	Amgen	Biotech/Pharma	115	43%	10	14.3
United States	Altria	FoodBevTobacco	104	46%	9	14.1
Saudi Arabia	SABIC	Petrochemical	97	21%	10	17.1
United Kingdom	British American Tobacco	FoodBevTobacco	93	30%	12	11.3
Japan	Nippon Telegraph	Telecom	83	16%	17	9.6
United States	Gilead Sciences	Biotech/Pharma	83	37%	8	12.4
Japan	NTT Docomo	Telecom	75	22%	9	12.8
Brazil	Vale	Mining	69	31%	11	16.8
Japan	KDDI	Telecom	58	19%	9	10.4

Automation: While at this point it is hard to quantify automation’s impact, it could have a more material impact in the future. There are early signs of companies in a broad range of industries purchasing more industrial robots in recent years, as costs of robots have gone down. A few sectors (autos and electronics) have seen a larger adoption so far.



Source: International Federation of Robotics



Source: ARK Investment Management, LLC

Though only a few sectors have implemented automation on a large scale so far, the table below shows how several sectors have the potential to be meaningfully impacted as costs come down and adoption becomes more widespread. The measures shown below assess how automatable the skills required in different sectors currently are, given the technology available.

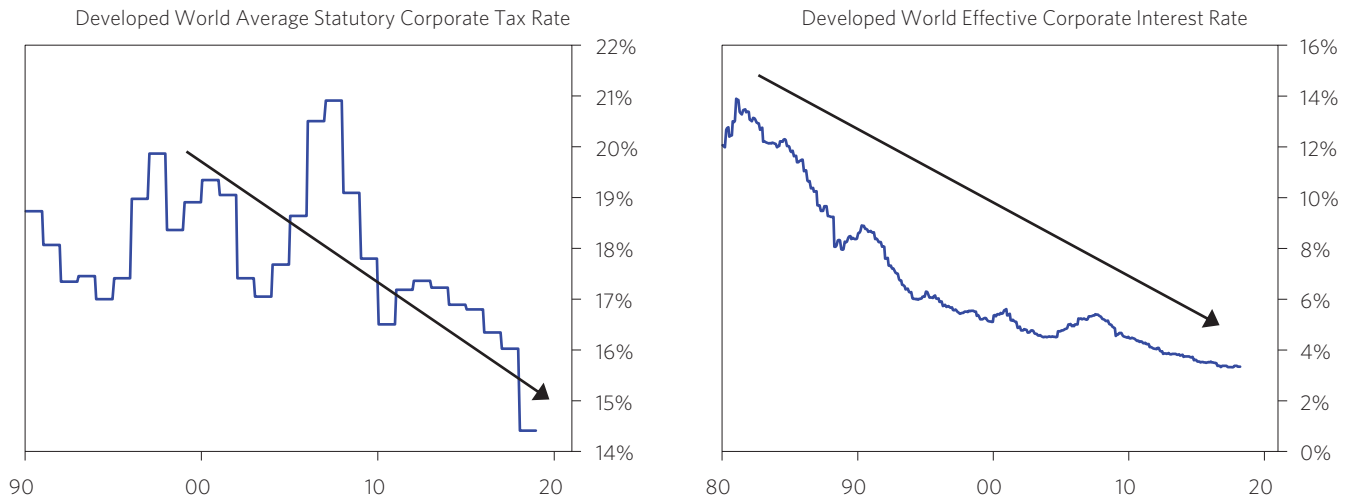
Current Technical Feasibility of Automation by Activity Type and Sector**

Sector	Automation Potential	Managing Others	Applying Expertise	Stakeholder Interactions	Unpredictable Physical Work	Data Collection	Data Processing	Predictable Physical Work
Accommodation and food services	73%	2%	4%	22%	5%	8%	10%	48%
Manufacturing	60%	5%	13%	8%	8%	22%	11%	33%
Agriculture	60%	3%	5%	7%	51%	11%	9%	13%
Transportation and warehousing	57%	4%	8%	14%	14%	22%	14%	24%
Retail trade	53%	3%	6%	26%	5%	15%	28%	17%
Mining	51%	7%	11%	8%	24%	21%	12%	17%
Other services	49%	7%	12%	17%	13%	15%	11%	25%
Construction	47%	5%	10%	8%	41%	15%	11%	10%
Utilities	44%	7%	14%	13%	19%	23%	13%	12%
Wholesale trade	44%	5%	12%	24%	11%	17%	19%	12%
Finance and insurance	43%	6%	19%	23%	0%	16%	34%	3%
Arts, entertainment, and recreation	41%	10%	13%	24%	15%	13%	11%	14%
Real estate	40%	7%	12%	21%	19%	16%	17%	8%
Administrative	39%	6%	13%	14%	23%	21%	13%	10%
Health care and social assistance	36%	8%	14%	14%	11%	20%	13%	21%
Information	36%	5%	25%	20%	7%	16%	20%	6%
Professionals	35%	7%	27%	16%	2%	19%	23%	5%
Management	35%	10%	25%	16%	3%	17%	24%	5%
Educational services	27%	22%	29%	10%	8%	13%	10%	7%

**% of time spent on activities that could be automated by adapting current technology
Source: McKinsey & Company

Falling Taxes and Interest Rates: The Borrowing and Tax Environment Has Been Favorable for Corporates Everywhere

While tax policy in the US has recently attracted a lot of attention, corporate tax policy has generally favored business everywhere over the last few decades. Globally, corporate tax rates are now at all-time lows, with the recent US tax reform just the largest and most recent cut. The chart below on the left shows the evolution of corporate tax rates around the world. Similarly, falling borrowing costs for corporations have also been a support globally.



The sustained secular fall in interest rates has been a meaningful support to corporate margins, as companies have been able to fund investment and financial spending through borrowing, while keeping their debt service costs low due to falling rates. These costs would be difficult to cut going forward if sales growth slows, and the secular low level of rates makes another leg down in borrowing costs structurally hard to achieve.

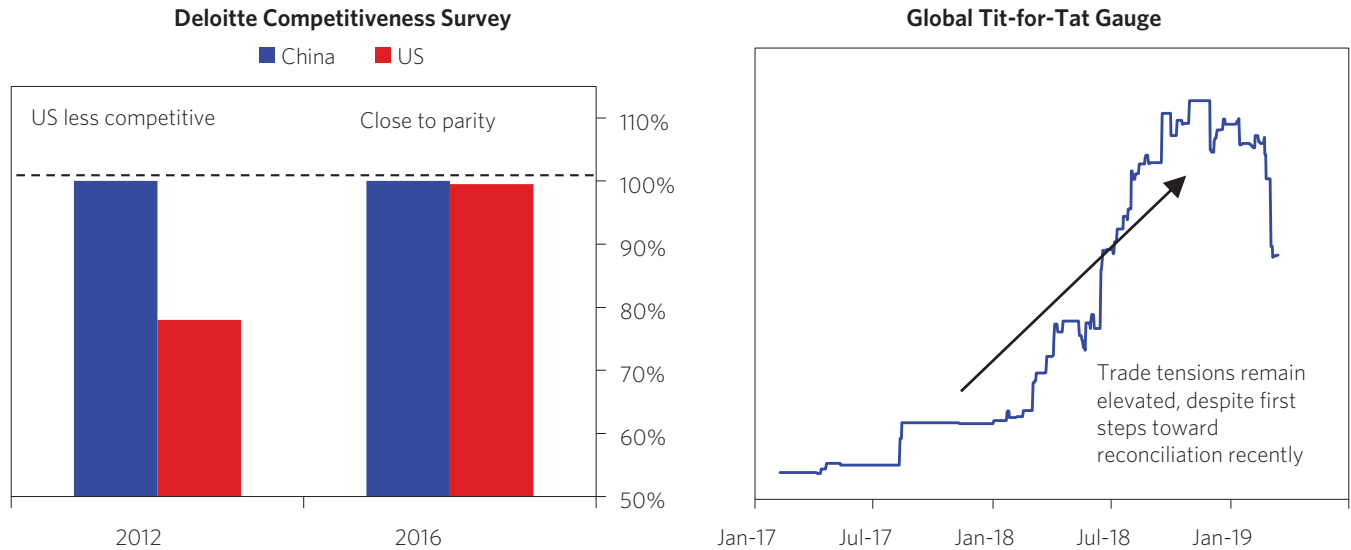
Interest Expense (%Sales)

	USA	EUR	JPN	GBR	CAN	AUS
2000 Level	2.5%	2.0%	1.3%	2.3%	2.7%	2.0%
2018 Level	2.0%	1.4%	0.4%	1.5%	2.9%	1.5%
Change (Impact on Margins)	-0.5%	-0.6%	-0.9%	-0.7%	0.2%	-0.5%

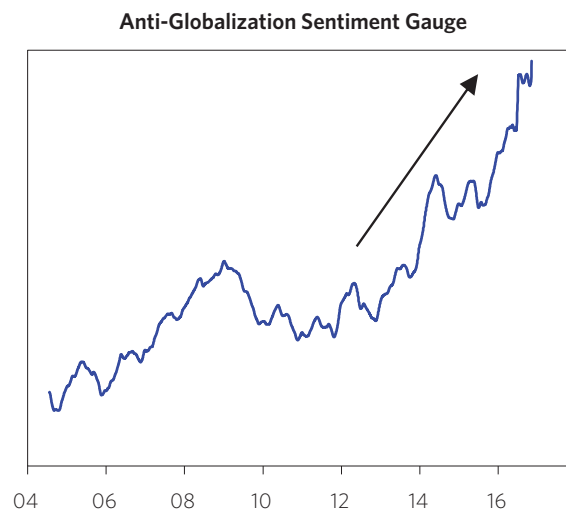
Interest expense has fallen relative to sales, supporting margins, as the broad decline in rates has offset the increase in corporate debt levels around the world

Looking Ahead: Some of These Supports Are Unlikely to Persist

Looking ahead, some of the forces that have supported margins over the last 20 years are unlikely to provide a continued boost. Incentives for offshore production have been reduced as global labor costs have moved closer to equilibrium, with domestic costs and rising trade conflict increasing the risk from offshoring, while the potential tax rate arbitrage from moving abroad is now much smaller. The chart below on the left shows that the gap in competitiveness has nearly closed, and on the right we show our measure of global trade tensions.



We have seen popular sentiment begin to sour against the forces that have driven margin expansion, as well as against the companies that have benefited most from them. As we have discussed at length in prior research papers, we are in the midst of a populist backlash against rising inequality and we are increasingly seeing a move toward more protectionism. Recent surveys show increasing animosity toward globalization and the power of companies more broadly, and a bit more welcoming attitudes toward government regulation of firms.



We have recently seen an increase in the discussion around the world on taxing mega-profitable firms that have benefited from current policy. Below, we list some of the measures around taxing and regulating superstar tech firms being discussed globally. For example, France’s potential “digital services tax” is explicitly designed to close the tax arbitrage (by introducing a sales tax on online revenues from residents). While the current impact of these proposed rules on the overall profitability of these tech giants is relatively small, they are a straw in the wind that the tide might be turning and that the multi-decade boost from favorable taxation policies is unlikely to be repeated.

Recent Actions to Curb Tech Sector Power

Date	Geography	Tech Companies Affected	Theme	Program	Status
2019	FRA	Internet Services	Taxation	Impose a 3% tax on digital revenue.	Proposed
2019	USA	FANG	Platform power	Designate platforms as “utilities” that must be separated from other businesses.	Proposed
2019	USA	FANG	Platform power	More proactively pursue reversing anticompetitive tech mergers.	Proposed
2019	IND	Amazon, Walmart	Market power	Restrict foreign e-commerce platforms from selling their own private label products.	Implemented
2018	USA, DEU	eBay, Amazon, AirBnB	Taxation	Require online platforms to collect local taxes.	Implemented
2018	EUR, DEU, GBR	Internet Services	Platform power	Require online platforms to take down hate speech.	Implemented
2018	EUR	Full Tech Sector	Platform power	Hold platforms liable for copyright violation.	Implemented
2018	EUR	Full Tech Sector	Data privacy	Restrict the monetization of user data.	Implemented
2018	EUR	Google	Platform power	Impose fine for anticompetitive practices in Android OS.	Imposed
2018	CHN	Qualcomm	Market power	Blocked merger of chipmakers Qualcomm and NXP due to competition fears.	Implemented

While there is no precision to when and how much each of the factors described above will weigh on profit margins and how much can be offset (for example, by automation picking up), it will be hard for companies around the world to maintain the current level of profitability over the coming decade, let alone increase margins further from here.

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