

Q-Series

Inflation bites: Who has the (pricing) power?

Amidst the inflation surge, relative pricing power set to drive alpha globally

With inflation pressures surging, pricing power relative to cost exposures will be a key theme and source of alpha for global equity markets in our view. Historically, when the US 2y inflation breakeven has been above 2.5%, companies with strong pricing power have outperformed their weak counterparts by nearly 14% on avg over the next 12mo. In this Q-Series report, to identify which regions, industries and stocks globally have better pricing power, we build a comprehensive and unique dataset that includes company markup power, wage exposures, margin structures, pricing trends, commodity/supply chain earnings call sentiment and granular industry cost structures.

Measuring pricing power: a differentiated approach

We develop a proprietary framework to assess pricing power at the stock level. Using our scores, we find that strong pricing power stocks have outperformed weak ones by 20% globally since 2021, with an IR > 2.5. We expect the momentum to continue: the relative 12m fwd P/E of our global strong vs weak pricing power screen is only 2% lower than avg despite heightened inflation pressures and consistently superior relative earnings revisions. Pricing power companies typically overlap with higher quality, a style which we favor given the current stage of the economic cycle. However, we also find our pricing power theme has actually worked best within lower quality areas of the market.

Pricing: a lever to fight inflation, but not one that every firm/industry can use

To better understand pricing trends we use a variety of proprietary datasets, including: (1) our markup calculation which measures the extent firms can set prices above marginal costs - Semi's, HH Prod and Pharma have the highest markups, (2) our US mapping of 1200+ PPI+CPI price and wage data points to stocks to gauge margin trends, (3) company market share and margin characteristics (level, vol, revisions), and (4) alternative data from UBS Evidence Lab such as apparel pricing, discounts and inventory trends, global airline fares and US, European and China C-Suite surveys.

Costs: assessing cost structures reveals the vulnerabilities/sensitivities

UBS economists assess the drivers and challenges for the inflation outlook, including supply chain bottlenecks. For US equities, commodities account for ~14% of total costs (incl oil, metals, chemicals, food, utilities), with transportation at 1.7% and wages 22%. HH Prod, Food & Bev, Cap Goods and Transports have the greatest commodity exposure. Although hedging can mitigate some risks, it varies within vulnerable industries. Tight labor markets are also a notable headwind: Europe and Japan are the most sensitive to wage growth with a 1ppt rise taking 1ppt off EBIT. Amongst industries, Food & Staples Retail and Cons Svcs are most vulnerable to labor costs. For the most wage sensitive US stocks, current industry wage growth would point to a ~15% EBIT headwind.

How to play the theme: stock screens, strategy takes, UBS analysts highlights

From a strategy perspective, our pricing power framework suggests the US is structurally more robust than Europe and APAC. Within sectors globally, Real Estate, Materials, Pharma and Software & Svcs rank best. Transportation, Cap Goods and Autos have the weakest pricing power vs cost issues. Based on our quantitative frameworks, we provide two global stock screens with the strongest/weakest pricing power. UBS analysts provide their insights for those covered stocks (65). For the comprehensive pricing/cost data sets for stocks globally or by region/sector, please reach out to the publishing authors.

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Executive Summary

As inflation and commodity prices soar and wages accelerate, investors must address a key question - who has pricing power? The companies which will succeed in an environment of rising costs are those with limited exposures and/or the ability to raise prices. In this report, we take a deep dive on corporate pricing power globally, exploring three areas (1) measuring company pricing power, (2) analyzing pricing trends and (3) assessing cost exposures.

Section 1: A global pricing power framework

We develop a model to calculate the extent of corporate pricing power for companies in the MSCI ACWI, building on our prior work focused on the US (see [here](#), [here](#) and [here](#)). We exclude Energy, Financials and Utility stocks from our analysis, given our research has shown pricing power is less relevant for these sectors. Our framework is unique in that it is centered around three pillars - pricing, input costs and margins/industry structure - and includes various alternative metrics such as our markup calculation, wage exposures, pricing trends and earnings call sentiment on supply chains and commodities.

Stock screens and UBS analyst highlights

We provide two screens, encompassing 100 global companies which rank as having strong and weak pricing power. Combining our top-down analysis with the bottom-up expertise of UBS analysts, we highlight a subset of 65 UBS-covered stocks which are best positioned for the theme, with accompanying commentary.

Multiple catalysts to drive pricing power outperformance

Strong vs weak pricing power stocks have outperformed by ~20% globally since 2021, based on our backtests of the top and bottom 10th pctl. The pricing power theme has worked best in EM, outperforming by 24% over the last year. It has also been rewarded in the US, up 16%. Despite the rally, the case for strong vs weak pricing power stocks remains: 1) global valuations are not stretched as the relative 12m fwd PE is 2% lower than average, 2) relative earning revisions are positive, and 3) historically when the US 2y breakeven is >2.5% (now~4.5%), the theme globally has outperformed by 14% over the next 12mo. Although strong pricing power stocks have a quality tilt, it is in areas of lower quality, notably high vol and price beta, where pricing power has performed best. Within sectors, pricing power has been a bigger performance driver for Materials, Cons. Disc. and Real Estate compared to Health Care and Tech.

Regional and sector scorecards

To gauge region and industry pricing power, we aggregate our stock level scores. The US market has the strongest pricing power (even on a sector neutral basis), while Europe ranks weakest by far. Real Estate, Pharma and Software & Svcs are the sectors which rank best, while Transportation, Autos and Cap Goods have less pricing power.

S&P 500 margin sensitivities and scenarios

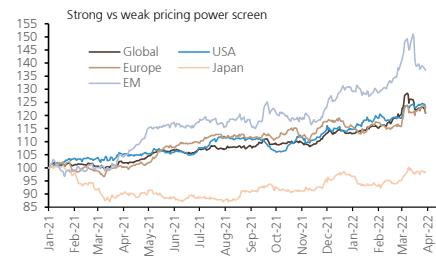
For the S&P 500 ex Energy, we provide a granular breakdown of the cost structure to get a clearer picture of the risks to margins. The greatest cost exposure is wages, which account for 22% of total costs. Oil, Utilities and Metals collectively are close to 7%. Food and transportation costs both account for slightly under 2%. Utilizing this data, we estimate that input cost changes during Q1 could be a ~50bp headwind to EBITDA margins (~2.5%), assuming corporates increase prices by 5%.

Section 2: Pricing trends: which corporates are raising prices?

The ability for firms to navigate input cost headwinds will depend on their capacity to raise prices. We use a variety of indicators to evaluate the pricing landscape.

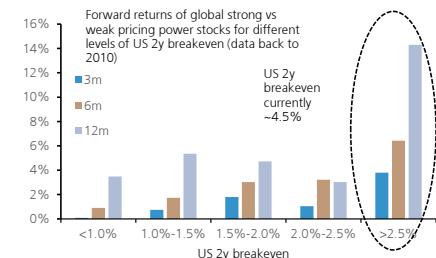
- Corporate markups:** To identify who has pricing power, we use a novel approach to calculate markups - the extent to which prices are set above marginal costs. Markups aren't explicitly visible, so we use a regression to estimate the output elasticity (% change in sales to change in COGS) and divide that by the expenditure share. This variable is an important component of our framework. Results show US stocks have the largest markup, reflecting the region's market power. Globally, markups are highest for Semi's, HH Prod and Pharma, but lower in Financials and Transportation.

Figure 1: Strong vs weak pricing power performance



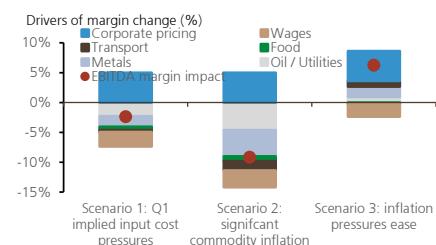
Source: Factset, UBS

Figure 2: Pricing power returns around inflation environments



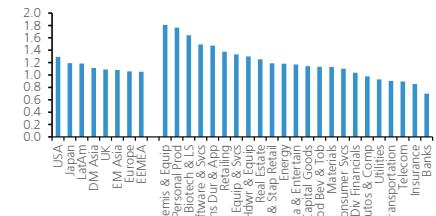
Source: Factset, UBS

Figure 3: S&P 500 margin scenarios



Source: Factset, UBS

Figure 4: Corporate markups



Source: Factset, UBS

- A proprietary approach to track pricing developments.** We map 1200+ US price and wage economic data points to stocks ([link](#)) to estimate pricing and wage momentum. Corporate pricing power has been improving and pricing for the S&P 500 (ex Energy, Fin, RE) is currently at 5% y/y. Wage growth stands at slightly over 3%. Besides Energy, consumer retail sectors have benefited the most from robust margin momentum over the last 3m based on our margin proxy of prices vs wages.
- UBS Evidence Lab:** We use UBS Evidence Lab datasets to uncover unique industry pricing trends. The [Global Merchandise Planning Monitor](#) shows fashion retailers are seeing price momentum of ~6% y/y. We identify brands with falling discount factors and inventory as a signal for pricing power. Elsewhere, the [US Grocery Retail Price Monitor](#) points to like for like growth of ~4%. The [Airlines fare tracker](#) points to strong pricing in the US (30% y/y) and Europe (15%). Our C-Suite surveys in [US](#), [Europe](#) and [China](#) show improving corporate pricing power expectations over the next 12mo.

Section 3: Input costs: where are the greatest exposures?

Inflation globally has accelerated and broadened beyond the pandemic price normalization in the services areas to goods and commodities as well. This is only the 3rd time since 1990 where there has been a synchronized increase in energy, goods and services inflation ([link](#)).

Commodity exposures

Commodity prices are up sharply, and in many cases back to multi-decade highs, largely on a rebound in post-pandemic demand, and more recently significant supply constraints. Our analysis shows that broad commodities (including oil, metals, chemicals, food and utilities) account for ~14% of total costs for the S&P 500. HH Prod, Food & Bev, Cap Goods and Transportation have the greatest exposure. Hedging can mitigate some of these risks, but our analysis shows that across major Cons Staples and Airline names hedging practices can be limited, especially in the US compared to Europe. Commodity moves driven by supply-side shocks can be particularly disruptive when prices are at elevated levels. Our model indicates that when Brent is >\$70bbl, a further 10ppt increase driven by supply is a 2.5ppt hit to the market. That sensitivity is higher for Consumer sectors such as Retailing (-3ppt) and Cons Dur & App (-5ppt).

Supply chain bottlenecks

Supply chain bottlenecks continue and UBS economists note there are minimal signs of improvement with their composite supply chain stress indicator at 2.74 stdev. We estimate that transportation costs are equivalent to 1.7% for the US market but are most significant in Retailing, Consumer Dur & Apparel and Food & Staple Retail (accounting for >5% of costs). Net supply chain sentiment on earnings calls has collapsed in the US, Europe and EM with concerns greatest in Cap Goods and Materials and improvement in Semis and Autos during the Q4-2021 earnings season. Freight costs have surged as much as 5x over the last 12mo. Company specific shipping volume data for the 100 largest US importers shows certain areas of Retail are particularly exposed with potential EPS headwinds >6%. As supply chain issues persist, incentives to reshore will increase. UBS Evidence Lab reshoring monitor notes a large increase in reshoring announcements driven by Health Care, Tech and Cons. Disc ([access data](#)).

Wage sensitivities

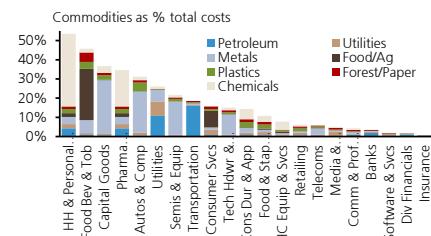
Tight labor markets and pent-up demand have seen upward wage pressures intensify, particularly in the US and for lower paid jobs. Our aggregate wage tracker for the US is running at ~4.5% y/y, the highest since early 2000. We calculate and estimate wage cost exposures for companies in the MSCI ACWI. Our analysis shows Europe and Japan are the most sensitive to wage growth with a 1ppt rise resulting in a 1ppt hit to EBIT, all else equal. Within industry groups, Food & Bev, Retailing and Cons Svcs are impacted most with a 1ppt rise in wages leading to a ~2ppt hit to EBIT; and this is more extreme within Europe specifically. Energy, Real Estate and Semis have the lowest EBIT exposure to wages. In the US, we refine our approach to measure wage sensitivities by including a number of alternative datasets such as median wage, union exposure, industry wage growth and earnings call sentiment ([link](#)). Our enhanced US high wage sensitivity stock screen has underperformed the market by ~20% since March 2021, but we believe wage pressures are still not fully priced in.

Figure 5: US corp pricing vs wages



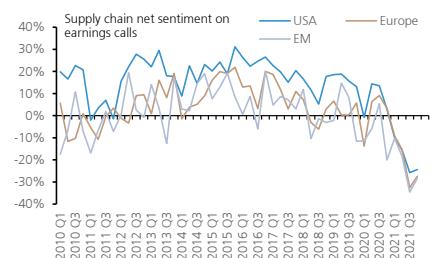
Source: BEA, Factset, UBS

Figure 6: Commodity cost exposures



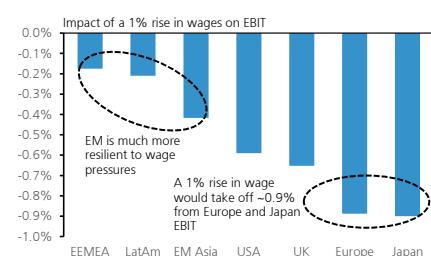
Source: BEA, Factset, UBS

Figure 7: Supply chain sentiment



Source: UBS Evidence Lab DTE, UBS

Figure 8: Regional sensitivity to wage growth



Source: Bloomberg, Factset, UBS

UBS analyst highlights: companies with strong pricing power

The Figures below show UBS covered stocks which rank as having strong/weak pricing power based on our framework (see page 12 for methodology), along with commentary from the covering analyst. For a broader list of stocks in our screens, including non covered companies, please see page 15 and 16.

Figure 9: UBS analyst comments on stocks with strong pricing power based on our framework and are Buy/Neutral rated

Ticker	Company	Rating	Analyst	Industry Group	Comments
United States					
AMT US	American Tower Corporation	Buy	Batya Levi	Real Estate	Robust end-user demand and high concentration of tower ownership supports LSD escalators and pricing power.
AAPL US	Apple Inc.	Buy	David Vogt	Tech Hdwr & Equip	Has been able to maintain and raise prices. End-market demand has been improving year-over-year leading to elevated "wait times" despite increased product procurement/production.
BKNG US	Booking Holdings Inc.	Buy	Lloyd Walmsley	Consumer Svcs	We see Booking Holdings benefiting from rising prices in accommodations (hotel and vacation rental) giving it's primary revenue stream is a commission rate on bookings. We anticipate rising underlying prices on the back of an anticipated strong post-pandemic demand recovery.
DE US	Deere & Company	Neutral	Steven Fisher	Capital Goods	DE is the leader of Ag sector in NA, and the brand is highly valued by farmers. Sustainable near-30% gross margins are a sign of strong pricing power. We think that DE's advanced technological capabilities in precision ag will support pricing over the long term. Additionally, high demand coupled with surging prices of used ag equipment gives Deere some bargaining power.
GNRC US	Generac Holdings Inc.	Buy	Jon Windham	Capital Goods	Dominant market share, manufacturing scale, large national installer-partner network, and low-cost customer acquisition platform enable production cost inflation to be largely passed-through to end-consumers as inflationary pressures having a larger cost impact on competitors.
HAS US	Hasbro, Inc.	Buy	Arpine Kocharyan	Cons Dur & App	HAS have pricing power because demand has held up well, while supply has been constrained given port congestions and difficulty to get product into the US.
MA US	Mastercard Incorporated Class A	Buy	Rayna Kumar	Software & Svcs	Mastercard and Visa have demonstrated pricing power. Historically, even when interchange rates have been regulated in certain geographies, both Card Networks have maintained or expanded their volume-based fees.
MRK US	Merck & Co., Inc.	Neutral	Colin Bristow	Pharma Biotech & LS	Participation in rare/orphan disease and/or oncology markets gives them strong pricing power given the scarcity of available treatments/novel therapies.
NKE US	NIKE, Inc.	Buy	Jay Sole	Cons Dur & App	UBS Evidence Lab survey and pricing data reveal the Nike brand currently has #1 in mindshare globally and the company has significant room to reduce promotions.'
NUE US	Nucor Corporation	Neutral	Andreas Bokkenheuser	Materials	The US steel industry is highly correlated with a handful of large mills accounting for >70% of supply. The industry has become more consolidated following Cleveland Cliffs acquisition of AK Steel and ArcelorMittal's blast furnaces. Coupled with select capacity shutdowns over the past 12mo, industry utilization has increased above 90%. As a result, producer pricing power has risen with US steel prices recently reaching record levels.
NVDA US	NVIDIA Corporation	Buy	Timothy Arcuri	Semis & Equip	NVDA is increasingly monetizing its software solutions more directly which should translate to higher margins and a greater component of revenue from recurring sources. Additionally, it continues to use software to open new markets for its unique hardware solutions which should provide headroom in terms of pricing
NVR US	NVR, Inc.	Neutral (CBE)	John Lovallo	Cons Dur & App	Homebuilder pricing power has been driven by an extreme supply/demand imbalance of single-family homes in the US and rising commodity costs (most notably lumber). Demand has also meaningfully accelerated at the first-time buyer level with the onset of COVID, which is a cohort that has been absent from the market since the GFC and where the least supply exists.
PFE US	Pfizer Inc.	Buy	Colin Bristow	Pharma Biotech & LS	Participation in rare/orphan disease and/or oncology markets gives them strong pricing power given the scarcity of available treatments/novel therapies.
PM US	Philip Morris International Inc.	Neutral	Nik Oliver	Food Bev & Tob	Very consolidated market with the top 4 tobacco companies controlling >80% of retail value; Favourable excise structure for cigarettes which generally incorporates a high fixed excise per stick creates a favourable pricing environment for the tobacco names eg in the UK a 1% increase in price at retail equates to a 3% manufacturer price increase; Strong franchise in tobacco heating which is an even more concentrated market than tobacco.
SBAC US	SBA Communications Corp. Class A	Buy	Batya Levi	Real Estate	Robust end-user demand and high concentration of tower ownership supports LSD escalators and pricing power.
STLD US	Steel Dynamics, Inc.	Buy	Andreas Bokkenheuser	Materials	The US steel sector underwent further consolidation in 2020-21 with the top-5 largest producers now accounting for 75% of US supply. Adding to this, renewed trade protectionism with the implementation of import tariffs and quotas (i.e. Section 232) has increasingly shifted pricing power towards producers, hereunder Steel Dynamics.
UNP US	Union Pacific Corporation	Buy	Thomas Wadewitz	Transportation	Rising commodity prices and the significant increase in truload rates over the past two years provide room for UNP to increase its prices. UNP also benefits from consolidated industry structure of the North American railroads and a favorable competitive dynamic.
VRTX US	Vertex Pharmaceuticals Incorporated	Buy (UR)	Colin Bristow	Pharma Biotech & LS	Participation in rare/orphan disease and/or oncology markets gives them strong pricing power given the scarcity of available treatments/novel therapies.

Source: UBS

Figure 10: UBS analyst comments on stocks with strong pricing power based on our framework and are Buy/Neutral rated

Ticker	Company	Rating	Analyst	Industry Group	Comments
Europe					
ASML NA	ASML Holding NV	Neutral	Francois-Xavier Bouvignies	Semis & Equip	We believe ASML has significant pricing power due to its near monopoly position in chip manufacturing tools (>70% market share in "legacy" products and 100% market share in next generation tools called extreme ultraviolet or EUV)
AZN LN	AstraZeneca PLC	Buy	Michael Leuchten	Pharma Biotech & LS	Because pharma launches new products on a regular basis, they have the ability to set prices for those products relatively freely (subject to them being innovative) before those products that enter the normal pricing dynamics until end of patent protection.
BNR GR	Brenntag SE	Neutral	Rory McKenzie	Capital Goods	As the global leader in chemical distribution, it holds significant inventory levels (c40 days, c€1.6bn), has strong supplier relationships, and buys at scale. Customers purchase small quantities of essential products and have low visibility on pricing during periods of high price volatility. Brenntag has therefore historically easily passed-through price increases while maintaining/growing its absolute mark-up.
BATS LN	British American Tobacco p.l.c.	Buy	Nik Oliver	Food Bev & Tob	Very consolidated market with the top 4 tobacco companies controlling >80% of retail value. 50% of profits derived from the US where cigarettes are the most affordable globally. BAT had led the US market on price over the past 2 years with 8 price increases (vs historic 2 pa) with no change in elasticity. More broadly the excise structure for cigarettes which generally incorporates a high fixed excise per stick creates a favourable pricing environment for the tobacco names.
DSV DC	DSV A/S	Neutral	Cristian Nedelcu	Transportation	Prices charged by freight forwarders to customers are largely linked directly to the underlying freight rates so any increase in spot freight rates can typically be passed on straight to the end customers.
FERG LN	Ferguson Plc	Buy	Gregor Kuglitsch	Capital Goods	As a distributor, Ferguson is a beneficiary from inflation. Over the past year, inflation has accelerated to high-teens and gross margins have expanded, leading to substantial profit growth. We expect this to normalise to lower rates of inflation over time and a risk would be a move to deflation in the future
RMS FP	Hermes International SCA	Neutral	Zuzanna Pusz	Cons Dur & App	Strong pricing power driven by higher demand vs supply for iconic bags.
IPN FP	Ipsen SA	Buy	Michael Leuchten	Pharma Biotech & LS	Because pharma launches new products on a regular basis, they have the ability to set prices for those products relatively freely (subject to them being innovative) before those products that enter the normal pricing dynamics until end of patent protection.
JMT PL	Jeronimo Martins, SGPS S.A.	Neutral	Michal Potyra	Food & Stap Retail	Dominant market share and price leadership on the food retail market in Poland. Assortment focused on private label products allows for more individual approach to price setting and margin management usually allowing to pass on input costs inflation to end-customer.
LOGN SW	Logitech International S.A.	Neutral	Joern Iffert	Tech Hdwr & Equip	Innovation account for c20% of Logitech annual sales. Here the company has prospects to pass on rising costs.
MC FP	LVMH Moet Hennessy Louis Vuitton SE	Buy	Zuzanna Pusz	Cons Dur & App	Strong pricing power as evidenced by price increases ranging high-single digit to low-double digit taken in February globally.
NXT LN	Next plc	Neutral	Olivia Townsend	Retailing	Next works to a flat bought in gross margin, passing all input cost inflation (that cannot be offset elsewhere in the business) through the consumer and taking any reduction in volume (in 2011, a period of even higher input cost inflation for apparel retailers, Next observed 1.1 price elasticity on LFL items). This has made for very stable gross margins over time.
RI FP	Pernod Ricard SA	Neutral	Nik Oliver	Food Bev & Tob	Over 50% of the portfolio comprises aged spirits where pricing power is strong, 25% of sales derived in the robust US spirits market which is seeing ongoing premiumisation.
Rest of the World					
ADSEZ IN	Adani Ports & Special Economic Zone Ltd.	Buy	Sourabh Taparia	Transportation	Adani ports enjoys better pricing power due to their better operational efficiency and connection to hinterland.
AREIT SP	Ascendas Real Estate Investment Trust	Neutral	Michael Lim	Real Estate	Business and Science Park in Singapore is receiving strong leasing demand from biomedical, IT and Tech sectors. This should support rent reversion in the low single digit for Singapore while overseas performance would continue its strong growth led by US business parks and Europe data centres.
BHP AU	BHP Group Ltd	Neutral	Lachlan Shaw	Materials	Track record of strong margins, industry leading asset quality, cost control and commodity inflation supports pricing power
2319 HK	China Mengniu Dairy Co., Ltd.	Buy	Mark Yuan	Food Bev & Tob	During raw milk inflation period in 2020-22, Mengniu proved its pricing power through price hikes, reducing gifting sales level (i.e. for premium UHT products, reduce from buy 8, get 1 free to buy 12, get 1 free), and mix upgrade through pushing more high-end products. It also managed to pass on cost pressures through increasing control on upstream dairy farms, negotiating a better procurement terms with suppliers, and improving its production efficiency.
6861 JP	Keyence Corporation	Buy	Hikaru Mizuno	Tech Hdwr & Equip	Keyence has an excellent cost management skill on the back of its fabless framework as well as centrally-managed procurement structure. Also its direct-sales structure enables the company to procure faster than FA peers. Keyence also has the policy to only commercialize products when new product can achieve an 80% gross margin, and it has been well accepted by customer.
4967 JP	Kobayashi Pharmaceutical Co., Ltd.	Buy	Hisae Kawamoto	HH & Personal Prod	Explore niche product category as the first player based on idea-driven new product launch, so that the company can keep leading position in each category.
2331 HK	Li Ning Company Limited	Buy	Samuel Wang	Cons Dur & App	UBS Evidence Lab suggests more consumers in China view Li Ning as a prestigious and cool brand over the past 4 years with highest mindshare among domestic brands.
2330 TT	Taiwan Semiconductor Manufacturing Co., Ltd.	Buy	Sunny Lin	Semis & Equip	TSMC is the powerhouse of leading-edge chips, primarily for smartphone processors and high-performance computing applications. The company is dominant in advanced semiconductor manufacturing technologies through a steady roll-out cadence at 7nm, 5nm and the upcoming 3nm nodes, demonstrates a solid execution in the ramp and enjoys the broadest clientele in the industry.

Source: UBS

UBS analyst highlights: companies with weak pricing power

Figure 11: UBS analyst comments on stocks with weak pricing power based on our framework and are Sell/Neutral rated

Ticker	Company	Rating	Analyst	Industry Group	Comments
United States					
BURL US	Burlington Stores, Inc.	Neutral	Jay Sole	Cons Dur & App	Consumers visit Off-Price retailers such as Burlington because of the value-for-money they offer. If those retailers were to raise price, it would counteract the very reason shoppers go there.
CPB US	Campbell Soup Company	Sell	Cody Ross	Food Bev & Tob	Since 2017, Packaged Food companies' pricing power diminished as barriers to entry eroded. However, COVID generated a significant step up in demand and elasticity is below historical levels. Thus, many companies' pricing power is stronger today than it was in 2019, but we anticipate will diminish and revert to historical levels over the long-term.
DAL US	Delta Air Lines, Inc.	Neutral	Myles Walton	Transportation	Travel itinerary substitution among competing airlines creates minimal pricing power, which will be compounded by elevated capacity growth, spiking fuel prices and less inelastic corporate travel drives a low pricing power score.
IP US	International Paper Company	Sell	Cleve Rueckert	Materials	Containerboard / paper product pricing power is mixed. Paper products are largely commoditized and traded globally; the market is also highly competitive. Further, producers rely heavily on third party logistics and freight in their domestic markets where inflationary pressures have been difficult to pass on.
KMB US	Kimberly-Clark Corporation	Neutral	Peter Grom	HH & Personal Prod	Even though KMB has demonstrated an ability pass along price increases over the last year the company does compete in categories with high private label penetration. Should prices continue to move higher this may drive consumers to trade down, particularly given perceived performance may not be as apparent vs. other HPC categories
LUMN US	Lumen Technologies, Inc.	Neutral	Batya Levi	Telecom	There is deflationary pricing in Enterprise products and contracts are re-rated down every year based on market pricing.
MNST US	Monster Beverage Corp	Neutral	Peter Grom	Food Bev & Tob	Established price follower of Red Bull; limited price-pack architecture runway. Limited long-term hedging program leaves exposure to open market.
DGX US	Quest Diagnostics Incorporated	Neutral	Kevin Caliendo	HC Equip & Svcs	As a full-scale nationwide testing lab, majority of DGX's reimbursement comes from commercial and government payors. In turn, these rates are negotiated in multi-year contracts. Given payor leverage, DGX tends to act as a price-taker in exchange for volumes.
LUV US	Southwest Airlines Co.	Neutral	Myles Walton	Transportation	Travel itinerary substitution among competing airlines creates minimal pricing power, which will be compounded by elevated capacity growth and less inelastic corporate travel drives a low pricing power score. LUV's fuel hedging will provide a near-term relief vs. competing airlines, but the benefit would normalize over time
SYK US	Stryker Corporation	Neutral	Matthew Taylor	HC Equip & Svcs	SYK loses 100-200 bps of price annually on average. For most medical device companies, customer purchasing power continues to increase with the rise of group purchasing organizations and hospital consolidation.
UHS US	Universal Health Services, Inc. Class B	Sell	Andrew Mok	HC Equip & Svcs	In 4Q the company struggled to control costs - something we expect to continue through at least Q1. While the nursing labor market should improve throughout the year, we're normalizing to a market that's structurally weaker than it was in 2019. Even then, labor had already been a multi-year headwind for UHS.
Europe					
BEI GR	Beiersdorf AG	Sell	Guillaume Delmas	HH & Personal Prod	Lower exposure to the two largest and fast-growing profit pulls of North America and China (c11% combined vs for example 45% for L'Oréal) and a relatively higher exposure to far more price-sensitive Western Europe (>40%) are the two key reason to the company's weaker pricing power.
BT/A LN	BT Group plc	Neutral	Polo Tang	Telecom	The main investor debate is on the value of the Openreach network that is the main provider of wholesale access for most broadband operators in the UK. With a growing number of alternative operators deploying fibre and Virgin Media O2 opening up its network for wholesale access, we think broadband infrastructure competition is rising.
BN FP	Danone SA	Sell	Guillaume Delmas	Food Bev & Tob	Danone derives significant portion of its revenues from highly commoditised categories that face high level of price elasticity and competition. In particular, c40% of the company's sales comes from traditional diary, which has over the past few years has seen increase in private label penetration.
LHA GR	Deutsche Lufthansa AG	Neutral	Jarrod Castle	Transportation	The aviation industry historically has suffered by excess supply which has created a headwind to achieving pricing. While Lufthansa has also in the past suffered from excess capacity we think pent up demand will lead to positive pricing for the company.
JMAT LN	Johnson Matthey Plc	Sell	Andrew Stott	Materials	Johnson Matthey is significantly exposed to ICE markets within autos, where EV penetration will likely continue to impair pricing power as OEMs increasingly look to add to the level of "price-downs" in contracts for the fading autocatalyst technologies. In addition the PGM refining and recycling operations are open to the volatility of pricing in the commodities, especially platinum and palladium.
UHR SW	Swatch Group Ltd. Bearer	Neutral	Zuzanna Pusz	Cons Dur & App	Weaker pricing power due to mid-segment price positioning and muted momentum for the majority of brands in the portfolio.
TEMN SW	Temenos AG	Sell	Hannes Leitner	Software & Svcs	Given Temenos' end market (banks) is shifting to the cloud, we see elevated pricing pressure from existing customers, while competitive pressure on cloud solution due to increased competition from new entrants (eg Mambu, Thought Machine)

Source: UBS

Figure 12: UBS analyst comments on stocks with weak pricing power based on our framework and are Sell/Neutral rated

Ticker	Company	Rating	Analyst	Industry Group	Comments
Rest of the World					
753 HK	Air China Limited Class H	Sell	Xin Chen	Transportation	Chinese airlines sector may be at weak equilibrium of supply and demand, or even oversupply in the next three years. In addition, traditional full-service carriers are facing fiercer competition from low-cost carriers and high-speed rail
1055 HK	China Southern Airlines Company Limited Class H	Sell	Xin Chen	Transportation	Chinese airlines sector may be at weak equilibrium of supply and demand, or even oversupply in the next three years. In addition, traditional full-service carriers are facing fiercer competition from low-cost carriers and high-speed rail
2777 HK	Guangzhou R&F Properties Co., Ltd. Class H	Sell	John Lam	Real Estate	R&F is suffering from falling property price in the lower tier cities where they operate in, whilst material cost is on the rise. It had announced to restructure its USD bond in Jan 2022, which makes homebuyers less confident to buy its property, more negative to its sales and selling price.
7267 JP	Honda Motor Co., Ltd.	Neutral	Kohei Takahashi	Autos & Comp	Automobile industry is highly competitive and demand-driven industry. Demands and pricing are impacted by multiple factors including interest rate, household debt, unemployment rate, and used car price. It is difficult for automobile OEMs to pass 100% cost increases to customers since other factors might have bigger impacts and competitors with excess capacities will try to gain market share by reducing their margin.
4452 JP	Kao Corp.	Sell	Hisae Kawamoto	HH & Personal Prod	Majority of business based in Japan, thus subject to impact of weak consumers' sentiment or downtrading. In their hygiene and living care business, competition is intensified as share difference is small and products could likely be commoditized.
034220 KS	LG Display Co., Ltd	Sell	Taewoo Lee	Tech Hdwr & Equip	Following overall underwhelming LCD panel pricing YTD, recent monthly pricing started to show differing trends between TV panels and IT panels; we expect the divergence between IT (decline) and TV (flat) to continue into 2Q2H. With most panel makers further shifting their capacity allocation, we see IT panel pricing downside to continue for longer, with ASP decline accelerating to 8-9%/9-10% in 1Q/Q22 (was -4%/-2%) and the negative trend continuing into 2H22, though possibly at a moderating pace.
4912 JP	Lion Corporation	Neutral	Hisae Kawamoto	HH & Personal Prod	Majority of business based in Japan, thus subject to impact of weak consumers' sentiment or downtrading. They may have pricing power in oral care and OTC medicine. In the meanwhile, competition is intensified and products could likely be commoditized in fabric care.
6753 JP	Sharp Corporation	Sell	Kenji Yasui	Cons Dur & App	Sharp's biggest business is LCD display where competition is very tough as big players in China, Taiwan and Korea all have scales. Sharp is one of the smallest player that put them one of the lowest position to negotiate on pricing with supplier as well as suppliers.

Source: UBS

SECTION 1:

Who has pricing power? A global framework

A proprietary global pricing power framework

In an environment of elevated cost pressures, pricing power will be a key driver of margin sustainability and relative stock outperformance in our view. In this Q-series report, we attempt to answer the following question: which companies can effectively raise prices and pass on rising input costs? To address this, we build on our prior pricing power framework for the US market (see [here](#), [here](#) and [here](#)), and expand it globally, covering stocks in the MSCI ACWI.

Our framework is composed of a number of different variables which we show in further detail in Figure 14, but can be broadly grouped into three main categories:

1. Pricing

To measure company pricing we use two approaches. The first is calculating a "markup" which estimates the extent to which a company has set its price over and above marginal cost (see page 25 for more details). The second is our US PPI and CPI pricing data, which maps 1200+ industry price data points from US economic data to companies and industries. Although not available globally, we use this as a proxy for other regions.

2. Input cost exposures

To understand relative cost sensitivities, we look at three different aspects: (1) wage cost exposures and sensitivities, (2) commodity exposures as measured by the stock's beta to supply side oil drivers and sentiment on earnings calls, and (3) supply chain exposures as measured by the net sentiment on earnings calls.

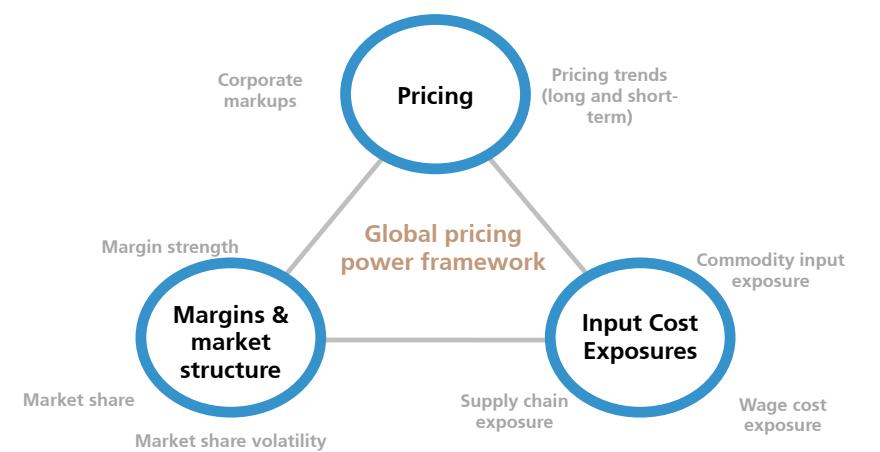
3. Margins and industry structure

Our third pillar measures margin levels (sign of pricing power) and stability, as well as market structure, including company market share and the volatility in the industry market share (a proxy for competition).

Putting it all together - an aggregate pricing power score

To calculate a pricing power score for each stock, we first take the variables and convert it into a sector neutral percentile rank. We then take a weighted average of these scores to come to our aggregate pricing power ranking (see Figure 14 for more details). The weights reflect a combination of our view on which variables are most important and the extent to which the variables have driven over/under performance. Our pricing power framework excludes companies from the Energy, Financials and Utilities sectors. Our previous analysis (see [here](#)) showed the pricing power theme has not been as effective in these sectors largely as a result of them being price takers/regulated.

Figure 13: Our global pricing power framework



Source: UBS

Figure 14: Pricing power framework: variables included in our model

Variable	Weight	Description	Rationale
Pricing	Markup 25%	We calculate corporate markup by estimating a regression of the log of sales to the log of variable costs (COGS) and the log of capital (PPE + capitalized R&D) using data going back to 2010. We use the beta of the variable costs.	This variable tries to estimate the extent to which the price is set over and above the marginal cost. If a firm has a relatively high markup it implies that they have a strong degree of market power.
	PPI 5y avg 5%	We use our US PPI pricing data, which maps 1200 industry price data points from US economic data to companies and industries, and calculate the 5y avg in y/y growth. Although this is not available globally we use it as a broader proxy for sub-industry pricing.	We use this longer-term perspective on pricing growth to see which sub-industries have had a proven track record of being able to raise prices.
	PPI 3m avg 5%	Our US PPI pricing data but this time we calculate the 3mma in the m/m growth.	A shorter-term momentum measure identifying areas of the market which have been able to raise prices to offset the current cost headwinds.
Input costs	Wage costs % EBIT 8%	Using data from a variety of sources we calculate the wage cost at the stock level and then divide this by 2022e consensus EBIT estimates.	This directly measures the sensitivity of corporate earnings from rising wages.
	Wage costs % sales 9%	Our wage cost estimates divided by 2022e sales estimates.	A higher wage share shows a company is more exposed to rising wages. We also include this variable to address potential problems around volatile EBIT numbers.
	% employees unionized 2%	The percentage of a company's labor force which is unionized.	A higher proportion of unionized members gives the labor force greater leverage to negotiate higher wages and benefits.
	DTE: commodity and supply chain 5%	Using UBS Evidence Lab's Deep Theme Explorer we scan earnings calls since 2017 to identify the net sentiment (#pos mentions - #neg mentions) when discussing topics related to commodity prices and supply chains.	This data can provide another clue as to which companies have historically mentioned they are sensitive to higher commodity prices or supply chain disruptions.
	Beta to supply-side oil moves 12%	We calculate the beta of relative weekly price performance to the weekly contribution of oil price moves from supply side drivers (NY Fed data), conditional on Brent oil prices being above >\$70bbl.	This variable is an indirect estimation of stock sensitivity to higher oil prices, driven by supply side shocks.
Margins/Industry structure	Market Share 5%	Company 2022e sales as % of total ACWI GICS industry sales.	Companies with a higher market share should exhibit greater pricing control and have ability to push up prices.
	IG market share turnover 3%	We calculate the average absolute change in market share (using ACWI GICS industry sales) for companies over the last 5 years.	The purpose of this variable is to show which industries are seeing the greatest shifts in market shares which is a potential sign of industry competition
	EBIT margins 5y avg 5%	5y average of 12m fwd EBIT margins	High EBIT margins, particularly relative to industry/sector competitors, is a sign of potential pricing power.
	2022e EBIT margin revisions 10%	3m revisions in 2022e EBIT margins	We look to identify companies which have positive EBIT margin revisions. A potential sign of companies having more pricing power than the consensus expected
	EBIT margins: 10y stdev 8%	10y standard deviation in EBIT margins	High margins with low volatility is another sign of a company which is structurally positioned with strong pricing power and ability to protect profit margins

Source: UBS

Strong pricing power stocks set to outperform

In Figures 15 and 16 we highlight two screens - stocks from the MSCI ACWI with the strongest and weakest pricing power relative to input cost exposures based on our frameworks. The screens are sector neutral and both include 50 companies across the major regions (US, Europe, DM Asia and EM). We remove UBS Sell-rated companies from the strong pricing power screen, and Buy-rated stocks from the weak pricing screen.

Pricing power screens: performance, valuations and earnings

Since 2021, our global strong pricing power screen has outperformed the weak pricing power screen by ~20%, with an information ratio >2.5, and performed best in EM (+37%). The theme has been less successful in Japan (flattish) where domestic inflationary pressures have been less intense (CPI growing 0.9% y/y). Relative to the market, strong pricing power companies have outperformed the MSCI ACWI by 2% over the last year. In US, the majority of the outperformance of the pricing power theme has been driven by the strong pricing power leg. In Europe and EM, the outperformance has been driven mainly by the underperformance of the weak pricing power companies.

We expect strong pricing power companies to continue their outperformance. The combination of elevated inflation and a shift towards a later cycle environment should be important catalysts. Historically, when the US 2y inflation breakeven is above 2.5%, strong pricing power companies globally have outperformed their weak counterparts by nearly 14% over the next 12 months. Valuation is also an important consideration. Despite their protection against higher input costs, strong pricing power stocks appear reasonably cheap vs weak pricing power companies. The relative 12m fwd PE for our global strong vs weak pricing power screen is 2% lower than the average since 2018. They are cheapest in Europe where the relative PE is 10% below average.

Meanwhile relative earnings revisions have been consistently robust and positive for strong pricing power companies, highlighting their ability to sustain earnings growth. The relative earnings momentum is strongest in the US/Europe/EM where the 3m % change in the 12m fwd EPS for strong pricing power stocks is currently ~2ppt higher than weak pricing power companies, and globally it has been >0 since July 2020.

Pricing power characteristics and factor overlays

Analyzing the characteristics of our pricing power screens, we find that strong pricing power screens have large tilts to quality, growth and momentum (both price and earnings). For example, the average ROE and historical earnings growth pctl rank for our strong pricing power screen is >15ppts higher than our weak one. Meanwhile strong pricing power companies are less inclined to fall in the value bucket.

Despite their quality orientation, we find that our pricing power theme actually worked best within the lowest quality areas of the market. For example, in Figure 17 we highlight the performance of the top vs bottom 25th pctl companies based on our pricing power scores within specific factor overlays. Our analysis shows that the pricing power theme worked best within the highest quartile of volatile stocks (+35% over the last year). It has also worked somewhat better for the highest quartile of growth.

The same figure also shows the performance of strong vs weak pricing power companies within sectors and regions. The theme has worked best in Materials (notably the US), Cons. Disc, Real Estate and Cons. Staples. Meanwhile it has struggled more in Health Care and Tech.

Stock screen - strong pricing power companies

See pages 12-13 for a description of the methodology and criteria for the aggregate pricing power score.

Figure 15: Global strong pricing power stock screen

Ticker	Company	Industry Group	Mcap (\$mn)	12m fwd PE	12m fwd EPS growth	Pricing Power Score (Pctl rank)		
						Pricing	Input costs	Margins/Market share
United States								
AMT US	American Tower Corporation	Real Estate	114,368	52.0	-11%	91%	84%	70%
PM US	Philip Morris International Inc.	Food Bev & Tob	145,615	15.2	2%	95%	67%	90%
STLD US	Steel Dynamics, Inc.	Materials	16,000	6.2	-15%	65%	89%	92%
NUE US	Nucor Corporation	Materials	40,174	8.8	-25%	61%	84%	99%
DE US	Deere & Company	Capital Goods	127,484	17.2	18%	78%	69%	95%
VRTX US	Vertex Pharmaceuticals Incorporated	Pharma Biotech & LS	65,304	17.8	10%	99%	65%	45%
BKNG US	Booking Holdings Inc.	Consumer Svcs	95,186	24.5	71%	96%	78%	26%
NVR US	NVR, Inc.	Cons Dur & App	15,699	9.8	30%	78%	76%	83%
SBAC US	SBA Communications Corp. Class A	Real Estate	37,014	78.5	65%	97%	69%	29%
NKE US	NIKE, Inc.	Cons Dur & App	176,817	30.1	21%	64%	67%	97%
MRK US	Merck & Co., Inc.	Pharma Biotech & LS	208,285	11.3	15%	86%	60%	83%
FLT US	FLEETCOR Technologies, Inc.	Software & Svcs	19,489	15.6	16%	79%	90%	25%
HAS US	Hasbro, Inc.	Cons Dur & App	11,742	15.4	2%	89%	56%	75%
LYV US	Live Nation Entertainment, Inc.	Media & Entertain	26,452	156.0	#N/A	92%	40%	86%
PFE US	Pfizer Inc.	Pharma Biotech & LS	296,169	7.5	34%	86%	47%	88%
MA US	Mastercard Incorporated Class A	Software & Svcs	351,275	32.7	23%	77%	71%	65%
AAPL US	Apple Inc.	Tech Hdwr & Equip	2,901,107	27.4	8%	74%	88%	55%
NLOK US	NortonLifeLock Inc.	Software & Svcs	15,821	14.0	9%	81%	71%	43%
GNRC US	Generac Holdings Inc.	Capital Goods	19,841	24.5	20%	88%	43%	64%
UNP US	Union Pacific Corporation	Transportation	173,868	22.9	15%	91%	35%	59%
NVDA US	NVIDIA Corporation	Semis & Equip	695,019	46.7	26%	80%	44%	68%
Europe								
BATS LN	British American Tobacco p.l.c.	Food Bev & Tob	97,516	8.8	8%	94%	84%	65%
NXT LN	Next plc	Retailing	10,901	10.8	5%	93%	52%	91%
RMS FP	Hermes International SCA	Cons Dur & App	153,575	49.9	9%	87%	59%	84%
MC FP	LVMH Moet Hennessy Louis Vuitton SE	Cons Dur & App	372,216	23.9	11%	87%	37%	99%
JMT PL	Jeronimo Martins, SGPS S.A.	Food & Stap Retail	15,260	25.1	5%	71%	62%	96%
BNR GR	Brenntag SE	Capital Goods	12,757	14.3	49%	67%	58%	97%
AZN LN	AstraZeneca PLC	Pharma Biotech & LS	207,389	19.1	27%	95%	41%	58%
RI FP	Pernod Ricard SA	Food Bev & Tob	57,597	23.7	14%	80%	45%	86%
LOGN SW	Logitech International S.A.	Tech Hdwr & Equip	13,345	16.0	6%	76%	23%	89%
IPN FP	Ipsen SA	Pharma Biotech & LS	10,611	13.0	-3%	99%	47%	27%
DSV DC	DSV A/S	Transportation	47,734	21.4	14%	91%	28%	80%
FERG LN	Ferguson Plc	Capital Goods	29,816	15.0	14%	87%	13%	96%
ASML NA	ASML Holding NV	Semis & Equip	282,360	34.8	17%	69%	27%	95%
Developed Asia								
823 HK	Link Real Estate Investment Trust	Real Estate	18,239	20.5	6%	100%	93%	77%
BHP AU	BHP Group Ltd	Materials	192,692	11.3	-12%	87%	94%	89%
3092 JP	ZOZO, Inc.	Retailing	8,416	25.7	10%	99%	91%	40%
4967 JP	Kobayashi Pharmaceutical Co., Ltd.	HH & Personal Prod	6,751	36.6	5%	92%	66%	85%
4578 JP	Otsuka Holdings Co., Ltd.	Pharma Biotech & LS	19,522	15.3	15%	96%	62%	73%
5333 JP	NGK Insulators, Ltd.	Capital Goods	4,607	8.5	7%	86%	71%	63%
9962 JP	Misumi Group Inc.	Capital Goods	8,719	24.2	10%	88%	29%	92%
6861 JP	Keyence Corporation	Tech Hdwr & Equip	114,094	41.4	14%	84%	40%	57%
Emerging Markets								
600519 CH	Kweichow Moutai Co., Ltd. Class A	Food Bev & Tob	342,076	33.4	18%	95%	99%	54%
AREIT SP	Ascendas Real Estate Investment Trust	Real Estate	9,156	17.8	-2%	100%	94%	77%
ADSEZ IN	Adani Ports & Special Economic Zone L	Transportation	21,331	22.7	24%	95%	94%	61%
HART MK	Hartalega Holdings Bhd.	HC Equip & Svcs	3,905	21.5	-77%	84%	92%	82%
2319 HK	China Mengniu Dairy Co., Ltd.	Food Bev & Tob	22,173	20.9	22%	80%	80%	88%
TTAN IN	Titan Company Limited	Cons Dur & App	29,500	75.6	26%	54%	95%	88%
2331 HK	Li Ning Company Limited	Cons Dur & App	22,684	27.6	21%	84%	77%	68%
2330 TT	Taiwan Semiconductor Manufacturing	Semis & Equip	545,033	18.8	27%	65%	80%	81%

Source: Factset, UBS

Stock screen - weak pricing power companies

See pages 12-13 for a description of the methodology and criteria for the aggregate pricing power score.

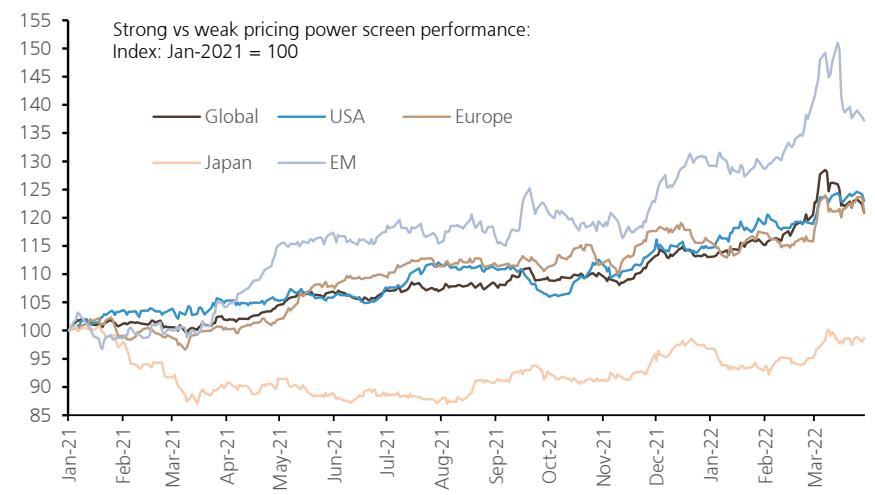
Figure 16: Global weak pricing power stock screen

Ticker	Company	Industry Group	Mcap (\$mn)	12m fwd PE	12m fwd EPS growth	Pricing Power Score (Pctl rank)			Aggregate Score
						Pricing	Input costs	Margins/Market share	
United States									
LUV US	Southwest Airlines Co.	Transportation	26,312	27.7	#N/A	6%	1%	5%	0%
GWRE US	Guidewire Software, Inc.	Software & Svcs	7,773	#N/A	#N/A	2%	20%	2%	1%
DAL US	Delta Air Lines, Inc.	Transportation	24,535	15.7	#N/A	4%	6%	8%	1%
MTN US	Vail Resorts, Inc.	Consumer Svcs	10,513	30.6	36%	10%	15%	19%	3%
DGX US	Quest Diagnostics Incorporated	HC Equip & Svcs	17,309	15.9	-32%	13%	4%	48%	3%
BURL US	Burlington Stores, Inc.	Retailing	12,434	26.0	-7%	31%	2%	16%	4%
TXT US	Textron Inc.	Capital Goods	16,166	18.4	19%	23%	2%	62%	6%
UHS US	Universal Health Services, Inc. Class B	HC Equip & Svcs	10,092	11.5	7%	17%	28%	16%	6%
LUMN US	Lumen Technologies, Inc.	Telecom	11,472	8.3	-24%	5%	48%	47%	9%
CPB US	Campbell Soup Company	Food Bev & Tob	13,320	15.8	0%	6%	55%	27%	10%
SYK US	Stryker Corporation	HC Equip & Svcs	102,024	27.1	9%	15%	21%	64%	10%
IP US	International Paper Company	Materials	17,358	10.4	29%	44%	8%	23%	12%
LEA US	Lear Corporation	Autos & Comp	8,529	11.1	53%	27%	27%	27%	13%
BLL US	Ball Corp	Materials	29,857	22.3	17%	34%	20%	31%	14%
KMB US	Kimberly-Clark Corporation	HH & Personal Prod	41,258	20.2	1%	27%	34%	25%	15%
MSI US	Motorola Solutions, Inc.	Tech Hdwr & Equip	39,549	23.4	9%	40%	22%	35%	22%
OMC US	Omnicom Group Inc	Media & Entertain	17,551	12.7	2%	15%	43%	76%	22%
BWA US	BorgWarner Inc.	Autos & Comp	9,256	8.5	12%	20%	45%	55%	23%
MNST US	Monster Beverage Corporation	Food Bev & Tob	42,359	28.1	12%	39%	47%	11%	24%
MTD US	Mettler-Toledo International Inc.	Pharma Biotech & LS	31,732	36.3	12%	49%	16%	48%	28%
Europe									
LHA GR	Deutsche Lufthansa AG	Transportation	9,627	109.4	#N/A	9%	0%	25%	1%
SCHB NO	Schibsted ASA Class B	Media & Entertain	5,414	27.1	11%	8%	1%	15%	1%
NEM GR	Nemetschek SE	Software & Svcs	10,815	65.2	14%	0%	3%	67%	1%
UHR SW	Swatch Group Ltd. Bearer	Cons Dur & App	14,170	15.8	13%	7%	5%	20%	1%
TEMN SW	Temenos AG	Software & Svcs	7,577	24.2	11%	6%	8%	56%	3%
PRY IM	Prysmian S.p.A.	Capital Goods	9,071	18.1	34%	14%	7%	33%	3%
BT/A LN	BT Group plc	Telecom	24,288	9.0	5%	1%	12%	92%	5%
MOWI NO	Mowi ASA	Food Bev & Tob	14,332	20.9	40%	4%	60%	10%	6%
BIM FP	bioMerieux SA	HC Equip & Svcs	12,677	26.6	-22%	12%	5%	83%	6%
SCHN SW	Schindler Holding AG	Capital Goods	22,945	26.0	2%	21%	6%	45%	7%
JMAT LN	Johnson Matthey Plc	Materials	4,469	8.2	7%	19%	39%	9%	7%
BN FP	Danone SA	Food Bev & Tob	38,472	15.9	-1%	12%	25%	60%	9%
BEI GR	Beiersdorf AG	HH & Personal Prod	26,001	28.7	8%	40%	34%	27%	21%
Developed Asia									
7267 JP	Honda Motor Co., Ltd.	Autos & Comp	51,068	7.8	14%	13%	28%	56%	10%
4613 JP	Kansai Paint Co., Ltd.	Materials	4,473	23.4	0%	25%	31%	23%	12%
7752 JP	Ricoh Company, Ltd.	Tech Hdwr & Equip	5,511	11.7	66%	25%	11%	59%	12%
4452 JP	Kao Corp.	HH & Personal Prod	19,397	19.5	10%	22%	33%	46%	17%
2587 JP	Suntory Beverage & Food Ltd.	Food Bev & Tob	11,930	19.7	7%	9%	42%	89%	20%
6753 JP	Sharp Corporation	Cons Dur & App	5,815	11.8	-21%	39%	43%	10%	20%
RHC AU	Ramsay Health Care Limited	HC Equip & Svcs	10,858	26.6	36%	32%	12%	80%	23%
4912 JP	Lion Corporation	HH & Personal Prod	3,296	19.4	-10%	44%	25%	50%	27%
Emerging Markets									
753 HK	Air China Limited Class H	Transportation	17,347	#N/A	#N/A	10%	0%	16%	1%
2474 TT	Catcher Technology Co., Ltd.	Tech Hdwr & Equip	3,705	12.4	10%	5%	24%	4%	1%
036570 KS	NCsoft Corporation	Media & Entertain	8,174	16.0	40%	13%	14%	8%	2%
GRUMAB MM	Gruma SAB de CV Class B	Food Bev & Tob	4,755	15.1	7%	12%	22%	11%	3%
1055 HK	China Southern Airlines Company Limi	Transportation	15,436	#N/A	#N/A	13%	1%	74%	4%
003490 KS	Korean Air Lines Co., Ltd.	Transportation	8,465	13.5	24%	11%	3%	69%	4%
034220 KS	LG Display Co., Ltd	Tech Hdwr & Equip	5,962	8.3	-27%	13%	19%	71%	9%
BRFS3 BZ	BRF SA	Food Bev & Tob	3,916	15.6	74%	6%	64%	18%	10%
2777 HK	Guangzhou R&F Properties Co., Ltd.	CI Real Estate	1,404	1.6	-7%	28%	73%	6%	22%

Source: Factset, UBS

Strong vs weak pricing power stock screen performance

Figure 17: Strong vs weak pricing power screen performance



Source: Factset, UBS

Our strong vs weak pricing power screen has outperformed globally by ~20% since 2021. The theme has worked best in EM, up 37%, and worst in Japan where it is broadly flat. This is likely due to the minimal inflationary pressures in Japan. In the US, strong vs weak pricing power stocks have outperformed by 16% over the last 12 months.

Figure 18: Performance of strong vs weak pricing broken down by component

Performance window

1m 3m 6m 12m 24m

Strong pricing power vs MSCI ACWI

	1m	3m	6m	12m	24m
Global	-1.7%	3.6%	0.6%	1.9%	26.9%
USA	2.9%	5.2%	7.7%	9.5%	34.5%
Europe	-1.1%	-3.4%	-4.0%	-0.8%	14.1%
Japan	-4.6%	-7.5%	-16.1%	-17.5%	-22.8%
EM	-5.1%	1.9%	-2.9%	0.7%	45.2%

Looking at the performance of the strong vs weak pricing power screens, we find that for the US the majority of the outperformance has been driven by the strong pricing power leg. In Europe and EM, the outperformance has been driven mainly by the underperformance of the weak pricing power companies.

Weak pricing power vs MSCI ACWI

	1m	3m	6m	12m	24m
Global	-2.5%	-3.4%	-9.9%	-14.2%	-1.1%
USA	-0.5%	-1.6%	-6.7%	-6.2%	6.8%
Europe	-5.4%	-7.1%	-12.1%	-17.5%	-8.0%
Japan	-8.0%	-9.0%	-22.0%	-24.5%	-30.7%
EM	-2.8%	-2.8%	-13.7%	-22.9%	-0.6%

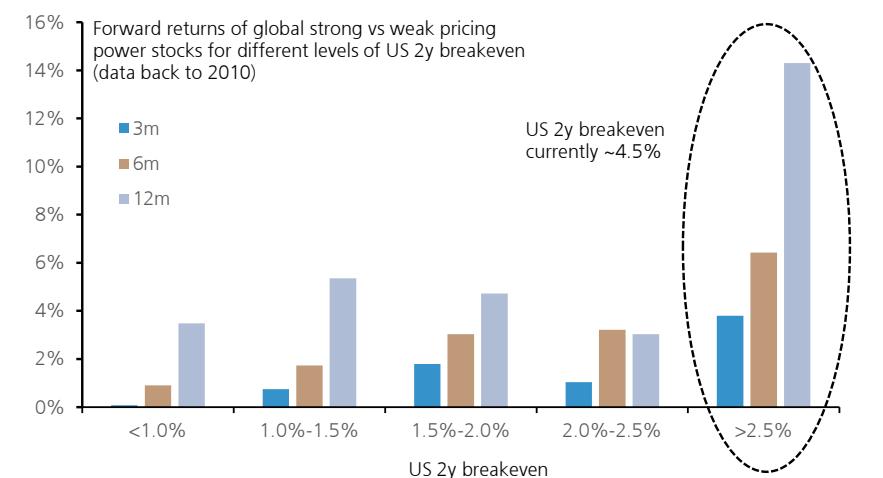
Strong vs weak pricing power

	1m	3m	6m	12m	24m
Global	0.7%	7.0%	10.4%	16.2%	28.0%
USA	3.4%	6.9%	14.4%	15.7%	27.7%
Europe	4.3%	3.7%	8.1%	16.8%	22.1%
Japan	3.4%	1.5%	5.9%	6.9%	8.0%
EM	-2.3%	4.8%	10.8%	23.7%	45.7%

Source: Factset, UBS

Pricing power: inflation, valuations and earnings

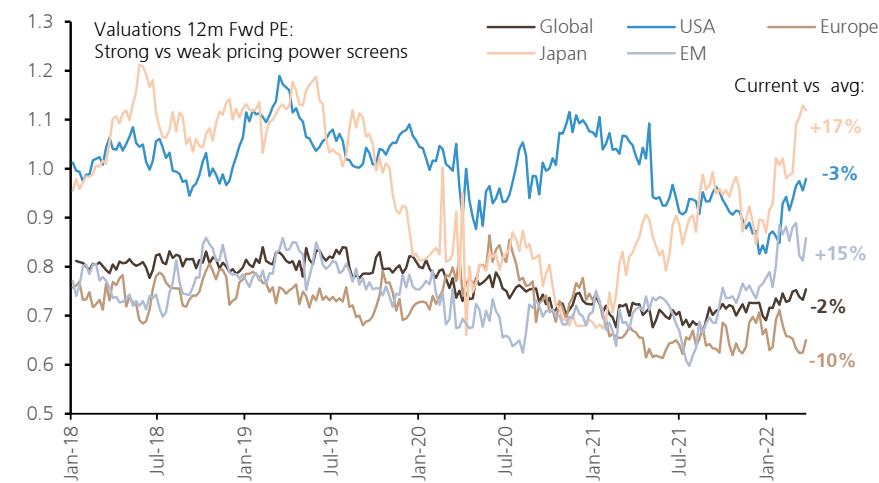
Figure 19: Forward returns of strong vs weak pricing power stocks at different levels of US 2y breakeven



Source: Factset, UBS

Despite the recent outperformance we believe there is still further upside for strong vs weak pricing power stocks. Historically, when the US 2y breakeven is above 2.5% strong pricing power companies have outperformed their weak counterparts by nearly 14% over the next 12 months.

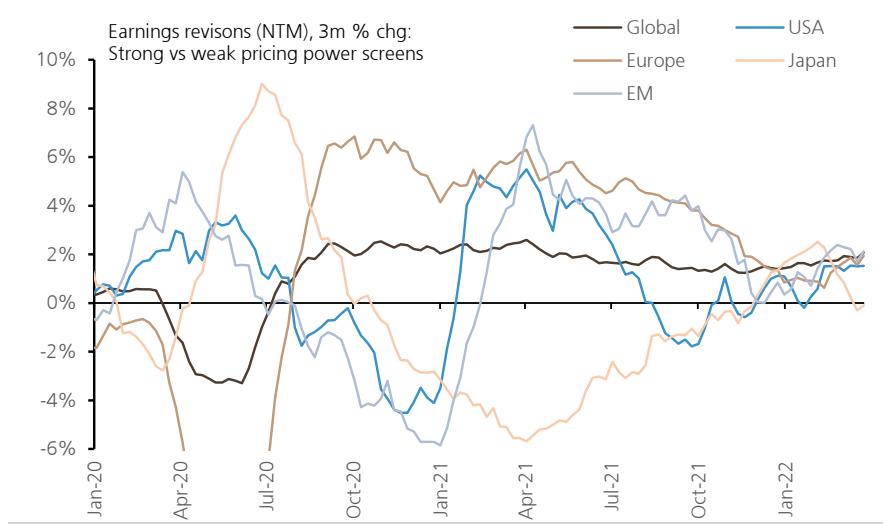
Figure 20: Relative valuations of strong vs weak pricing power companies



Source: Factset, UBS

Valuations for strong pricing power stocks relative to weak are slightly below their average since 2018 despite the sizeable risks around input costs. We believe there is room for relative valuations to re-rate higher from here. On a relative basis, the 12m fwd PE is cheapest in Europe at 10% below average and most expensive in Japan (+17% vs avg).

Figure 21: Earnings momentum of strong vs weak pricing power (3m % chg in NTM EPS)

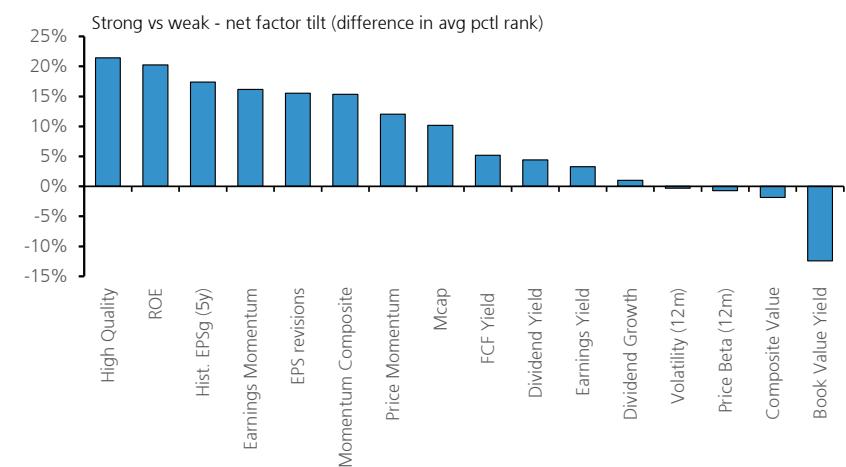


Source: Factset, UBS

Relative pricing power has been associated with stronger earnings momentum recently. The relative difference in the 3m % change in NTM EPS has been consistently positive across the major regions throughout 2022, a sign that strong pricing power companies have delivered robust earnings despite potential cost pressures. Currently, earnings momentum is weakest in Japan for strong vs weak pricing firms.

Pricing power: factor and style exposures

Figure 22: Pricing power factor tilts



Source: Factset, UBS Quant, UBS

Strong pricing power stocks have a sizeable quality, growth momentum and size tilt relative to weak pricing power companies. Firms with weak pricing power are typically more value oriented.

Figure 23: Strong vs weak pricing power performance: factor and sector overlays

Strong vs weak pricing power stocks (1y perf, sector & factor overlay)

Sector (Strong vs weak pricing power, 25pctl)

	Global	USA	Europe	Japan	EM
Materials	30%	51%	27%	13%	27%
Consumer Discretionary	21%	14%	23%	23%	21%
Real Estate	18%	8%	43%	5%	15%
Consumer Staples	12%	19%	19%	19%	12%
Industrials	11%	10%	17%	16%	41%
Communication Services	3%	-22%	-11%	-7%	30%
Health Care	3%	16%	29%	-5%	-19%
Information Technology	1%	-6%	-5%	-10%	30%

The strong pricing power theme has worked consistently across factors and styles. Despite being tilted towards high quality stocks, the theme has actually worked best within the low quality segment. For example, the strong vs weak pricing power theme has outperformed by nearly ~35% over the last year within the top quartile of volatile stocks. Within sectors, the theme has worked best for Materials and Cons Disc, but less so for Health Care and Technology.

Factors (Strong vs weak pricing power, 25pctl)

	0-25pctl	25-50pctl	50-75pctl	75-100pctl
Volatility (12m)	6%	14%	10%	35%
EPS Growth FS (12m trailing to 12m fwd)	22%	5%	0%	33%
Revision to 12m fwd EPS FS (3m)	6%	4%	0%	25%
Price Beta (12m)	10%	9%	16%	21%
Momentum Composite	-1%	3%	3%	20%
DPS Growth FS (12m trailing to 12m fwd)	16%	16%	6%	19%
Composite Value (Sector Neutral)	9%	12%	11%	18%
Earnings Yield FS (12m fwd)	15%	11%	11%	18%
Net Debt to EV FS (12m fwd)	7%	14%	18%	18%
Earnings Momentum FS (1 2 and 3m combined)	7%	5%	1%	18%
Historical EPS Growth (5y)	11%	9%	10%	17%
Price Momentum (12m)	7%	1%	1%	17%
Dividend Yield FS (12m fwd)	18%	16%	13%	14%
ROE FS (12m fwd)	13%	11%	7%	13%
Book Value Yield (12m trailing)	10%	11%	11%	12%
FCF Yield FS (12m fwd)	23%	12%	14%	7%
High Quality	18%	21%	9%	5%
Security Market Cap USD	15%	10%	19%	4%

Source: Factset, UBS Quant, UBS

Global pricing power scorecard - sector & industry group

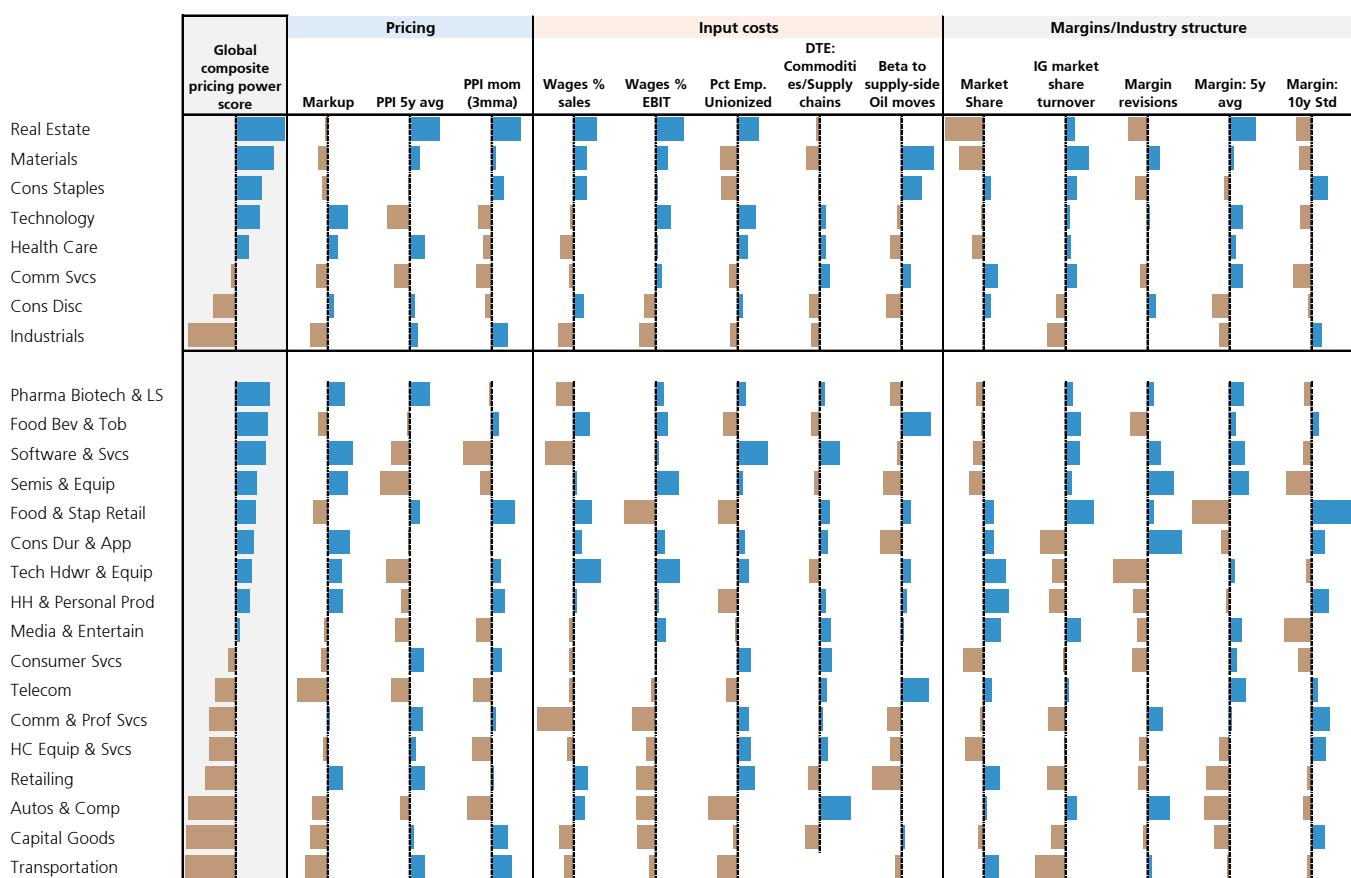
We create a global sector and industry group pricing power scorecard by aggregating metrics at the stock level. This allows us to get a better assessment of the areas of the markets where margins are most resilient or vulnerable.

Real Estate, Pharma show strength, Industrials and Retailing vulnerable

On our pricing power framework, Real Estate, Materials, Pharma, Software & Svcs and Food & Bev rank best globally. Real Estate is supported by rising prices and also very few input cost pressures (notably wages). Meanwhile for Software & Svcs, the sector has demonstrated a relatively high markup and benefits from strong margins and favorable industry structure.

Transportation, Gap Goods and Autos rank as the industry groups with the weakest pricing power. Transportation ranks as having low pricing power due to factors such as a low markup, high wage exposures and greater sensitivity to oil prices. Cap Goods also score poorly due to higher sensitivity to input costs. Autos also have high input costs (both wages and commodities) and have had slowing pricing momentum over the last quarter.

Figure 24: Global pricing power scorecard - industry groups



Source: Factset, UBS

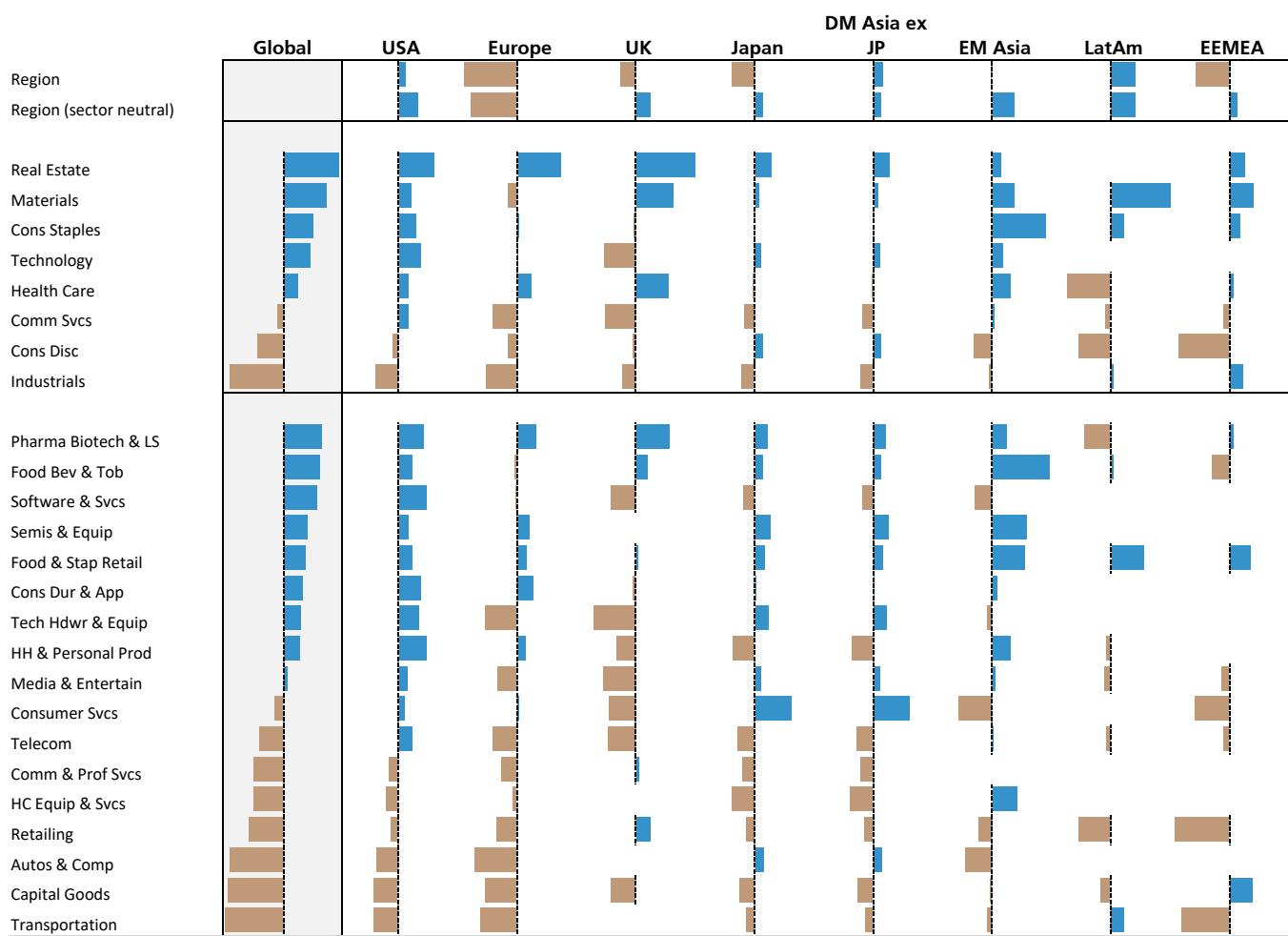
Regional sector pricing power scorecard

Drilling down further, in Figure 25 we show the sector and industry group scorecard split by region. This allows us to identify regional variations in pricing power by industry. It is evident that the US is the market with the strongest pricing power and we believe there are a number of structural explanations for this strength:

- **Index composition:** The US market is geared towards sectors which have stronger pricing power such as Health Care and Technology. But even on a sector neutral basis, the US market scores as having extremely high pricing power.
- **The power of labor (or lack of):** Since the 1980s, the US has seen a much faster demise in the power of its labor market. For example, labor unionization fell from a peak of 43% in 1980 to just over 10% now.
- **Operational efficiency:** Labor productivity in the US has been superior to other major DM regions such as Japan and Europe over the last decade (see page 58).
- **"Superstar" companies:** The US equity market has historically seen less regulatory scrutiny and anti-trust cases leading to the rise of "Superstar" companies and a perceived reduction in competition within certain industries.

Looking at the regional sector differences, we highlight a few interesting observations. Media & Entertainment in the US and Japan rank as having relatively high pricing power, but score poorly in Europe and the UK. European Retailing also has lower pricing power vs its regional peers due to lower margins and elevated wage exposures. Finally, Capital Goods in DM Asia (inc. Japan) have stronger pricing power than their counterparts in the US as a result of more concentrated market share and lower vulnerabilities to input costs.

Figure 25: Global pricing power scorecard - industries by region/country



Source: Factset, UBS

S&P 500 margin scenario analysis

In this report we rely heavily on the input-output tables from the BEA to estimate industry group and market cost structure for the S&P 500 ex Energy. This data provides a detailed picture of the inner workings and relationships between industries and commodities. For our analysis, we take the average energy and metals share of costs in the BEA input-output tables between 2015-2019 and multiply this by 1.5x and 1.25x respectively, to account for the recent sharp rise in commodity prices (~50% higher).

In table 26, we show the proportion of costs from commodities, transportation and wages, and the EBITDA sensitivity to changes in these input costs for the S&P 500 ex Energy. The greatest input cost exposure is wages, which account for 22% of total costs. Oil + Utilities and Metals collectively are close to 7.5%, while food and transportation costs are slightly under 2% each. At the industry group level, we show the EBITDA sensitivities to changes in the different input costs. Autos and Cap Goods have the largest sensitivity to Metals, with a 10% rise providing a >12% implied hit. Food & Bev has the highest exposure to Food/Ag commodities (10% rise a 10% EBITDA hit).

We also show three scenarios to highlight the sensitivity of margins in different inflation regimes. The risk reward is tilted to the downside for margin. The Q1 implied change in commodities, wages and corporate pricing would imply a modest fall in EBIT margins of -2.4% or -47bp. However, a scenario of substantial commodity inflation (i.e. a further +50% for oil) and wage growth accelerating 100bp could see margins fall at a much faster clip of nearly 2pppts to ~18%, the lowest rate since 2014. An easing of inflationary pressures could result in ~6% upside or +123bp.

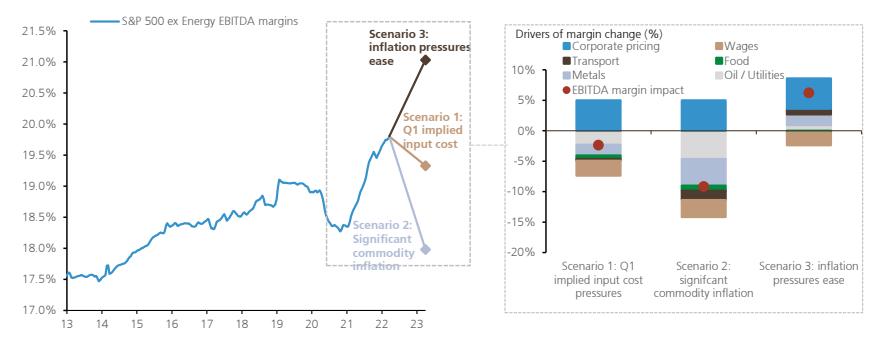
For industries, Cap Goods and Semis could see a 5% increase in costs in our scenario 1, driven by higher metal prices (Figure 29). This could escalate to nearly 10% for Cap Goods and Transportation in our scenario of stronger inflation pressures. Autos could be one of the biggest beneficiaries if commodity prices ease off.

Figure 26: S&P 500 ex Energy input cost sensitivities and scenario

	Oil / Utilities	Metals	Food	Transport	Wages	Total input cost headwind	Corporate pricing	EBITDA margin impact	Pricing needed to keep EBITDA flat
% of total costs	2.6%	4.9%	1.6%	1.7%	22.0%				
EBITDA Sensitivity	Δ+10%: -0.9%	Δ+10%: -1.8%	Δ+10%: -0.6%	Δ+10%: -0.6%	Δ+1ppt: -0.7%				
Scenario 1: Q1 implied input cost pressures									
Var. chg	25%	10%	10%	5%	3.5%				
EBITDA impact (%)	-2.3%	-1.8%	-0.6%	-0.3%	-2.5%	-7.4%	5.0%	-2.4% (-47bps)	5.9%
Scenario 2: significant commodity inflation									
Var. chg	50%	25%	15%	25%	4.00%				
EBITDA impact (%)	-4.6%	-4.4%	-0.8%	-1.5%	-2.8%	-14.2%	5.0%	-9.2% (-182bps)	11.4%
Scenario 3: inflation pressures ease									
Var. chg	-10%	-10%	5%	-15%	3.0%				
EBITDA impact (%)	0.9%	1.8%	-0.3%	0.9%	-2.1%	1.2%	5.0%	6.2% (123bps)	-1.0%

Source: BEA, Factset, UBS

Figure 27: EBITDA margin input cost scenarios



Source: BEA, Factset, UBS

Industry group sensitivities and scenario analysis

Figure 28: S&P 500 industry group EBITDA sensitivities to commodity costs

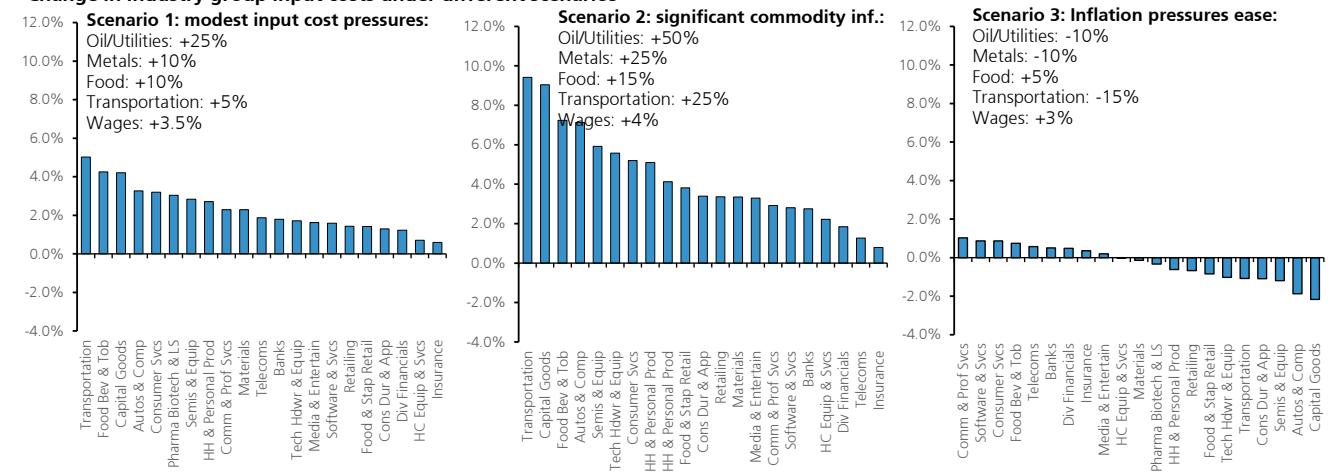
S&P 500 Industry Group 2022e EBITDA sensitivity

Input cost Change in variable	Oil				
	/Utilities	Metals	Food	Transport	Wages
S&P 500	-0.9%	-1.8%	-0.6%	-0.6%	-0.7%
Autos & Comp	-1.4%	-14.6%	0.0%	-0.1%	-1.1%
Banks	-0.4%	-0.1%	0.0%	-0.2%	-0.6%
Capital Goods	-0.7%	-12.8%	-0.1%	-0.3%	-1.3%
Comm & Prof Svcs	-0.5%	-0.3%	-0.1%	-0.5%	-1.7%
Cons Dur & App	-0.9%	-1.1%	-0.1%	-2.6%	-0.3%
Consumer Svcs	-1.0%	-0.3%	-2.5%	-0.3%	-1.0%
Div Financials	-0.2%	0.0%	0.0%	-0.1%	-0.4%
Food & Stap Retail	-4.1%	-2.0%	-1.2%	-9.8%	-1.8%
Food Bev & Tob	-0.7%	-2.5%	-9.9%	-0.3%	-0.5%
HC Equip & Svcs	-1.3%	-0.7%	-0.7%	-0.7%	-0.9%
HH & Personal Prod	-2.0%	-1.1%	-0.6%	-0.2%	-0.4%
Insurance	-0.2%	0.0%	0.0%	-0.1%	-0.7%
Materials	-1.8%		-0.5%	-0.3%	-0.5%
Media & Entertain	-0.5%	-0.1%	0.0%	-0.3%	-0.5%
Pharma Biotech & LS	-0.9%	-0.5%	-0.3%	-0.1%	-0.3%
Retailing	-1.3%	-0.4%	-0.3%	-3.4%	-0.9%
Semis & Equip	-0.1%	-2.2%	0.0%	-0.1%	-0.3%
Software & Svcs	-0.1%	-0.1%	0.0%	-0.1%	-0.6%
Tech Hdwr & Equip	-0.2%	-2.7%	0.0%	-0.3%	-0.3%
Telecoms	-0.2%	-0.7%	0.0%	-0.1%	-0.7%
Transportation	-8.8%	-0.3%	-0.3%		-1.1%

Source: BEA, Factset, UBS. Note doesn't take into account hedging or potential price offsets.

Figure 29: Change in IG costs under different input cost scenarios

Change in industry group input costs under different scenarios



Source: BEA, Factset, UBS

SECTION 2:

Pricing trends: Which corporates can raise prices?

Corporate markups: measuring pricing strength

The ability of companies to raise prices will depend to a large degree on their market power. To try and quantify corporate pricing power at the single stock level, we use an approach similar to that in the 2019 paper "Global Declining Competition" by Federico J. Díez, Jiayue Fan, and Carolina Villegas-Sánchez. We calculate the markup for companies in the MSCI ACWI. If a firm has a relatively high markup (i.e. high price relative to its marginal cost) it implies that they have a strong degree of market power and should be better placed to pass on costs.

The markup can be calculated as the output elasticity or the percentage change in sales in response to a change in COGS divided by the expenditure share (COGS divided by sales). Because we don't explicitly know the output elasticity companies sell their goods and services for, we derive it using a Cobb-Douglas function. Here we essentially estimate the beta of the log of sales to the log of variable costs (COGS) and the log of capital (PPE + capitalized R&D) using data going back to 2010.

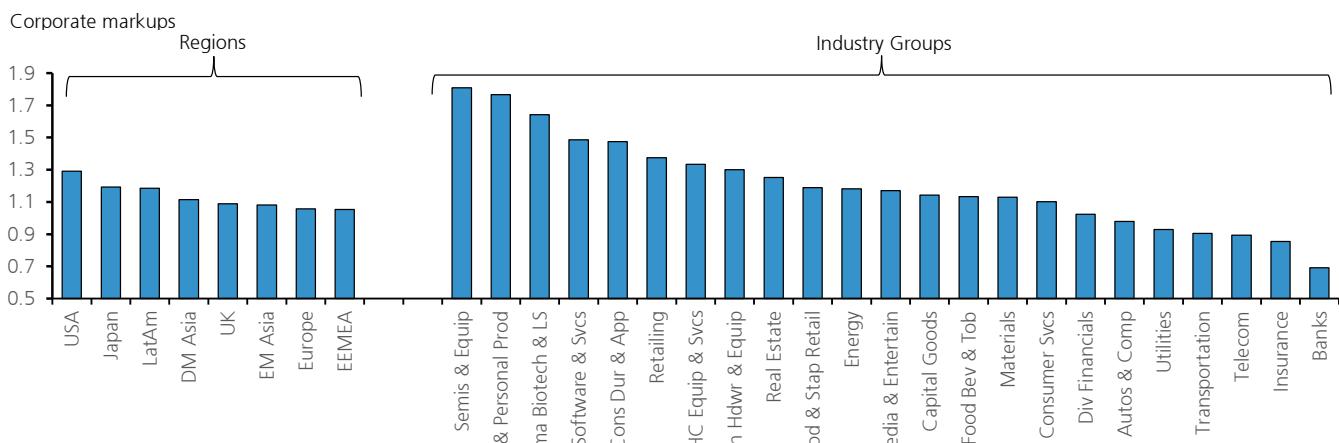
Figure 30 shows the results from our markup calculations aggregated up to the industry group level globally. It is worth noting that the markup is very high for a few select industries such as Semi's, Household products, Pharma, Software, and Consumer Durables & Apparel. These are the industries which should have some of the strongest pricing power and the greatest ability to pass on cost increases to the end consumer. At the other end of the spectrum, Financials, Transportations, Telecoms and Utilities have the lowest markup and therefore have more difficulty offsetting rising input costs.

Across regions the US stands out as having the largest markup. This not only reflects the industry composition of the US market but also the underlying market structure: greater monopoly power, less labor unions and fewer antitrust cases vs Europe which gives the US a structurally higher advantage.

We measure pricing power at the stock level by estimating corporate markups - the premium to which a company charges for its goods and services above the marginal cost.

Industries with the highest markup include Semi's, Household Products, while Pharma, Financials, Telecoms and Transportation have the lowest.

Figure 30: Corporate markup calculation for regions and industry groups



Source: Factset, UBS

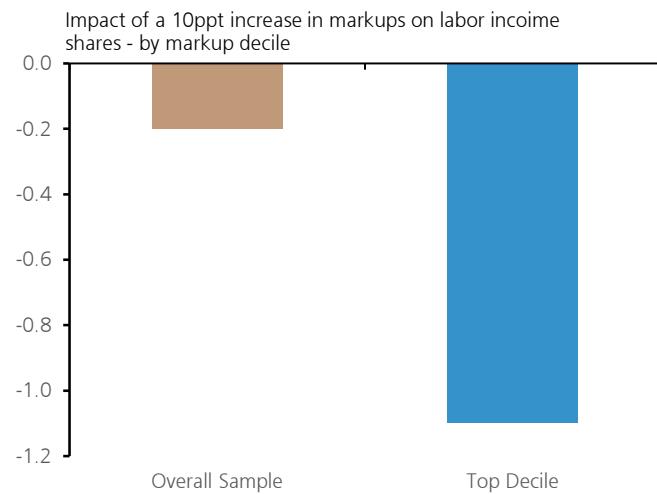
Impact of higher corporate markups and key drivers

An IMF study in the [April 2019 World Economic Outlook](#) used firm level data covering 27 countries and 900,000 distinct firms to calculate the markups for firms and assess the implications. The key findings include:

- **Labor income shares:** the IMF study shows that companies with higher markups have lower labor income shares, which is likely due to increased corporate market power being associated with rising economic rents. An increase in markups of 10ppcts is associated with a 0.2% decrease in labor share for the entire universe but a 1ppt reduction for the top decile of firms with the highest markup.
- **Patents:** Markups have a non-linear relationship with innovation. For example, low markups are associated with low market power and a lack of innovation (as proxied by patents). But as companies become more innovative and invest, markups begin to rise. However, this reaches an inflection point where significantly high markups coincide with lower patents reflecting how excessive market power can also stifle innovation.
- **Mergers & Acquisitions:** M&A has also historically seen the acquirer increase their markup, and have greater pricing power, as a result of market consolidation.

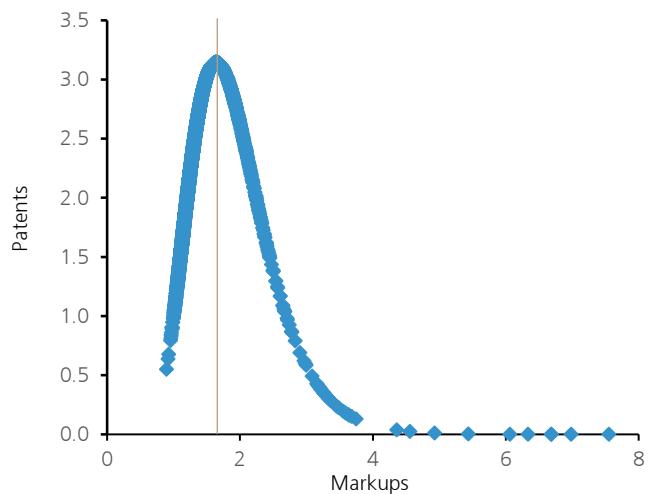
Our corporate markup analysis showed that regionally US companies had the strongest market power. Over time this has coincided with US equity market concentration growing considerably with the top 5 stocks in the S&P 500 accounting for ~25% of the market vs 11% for the STOXX 600 and 18% for the Nikkei 225.

Figure 31: Impact of markup on labor shares



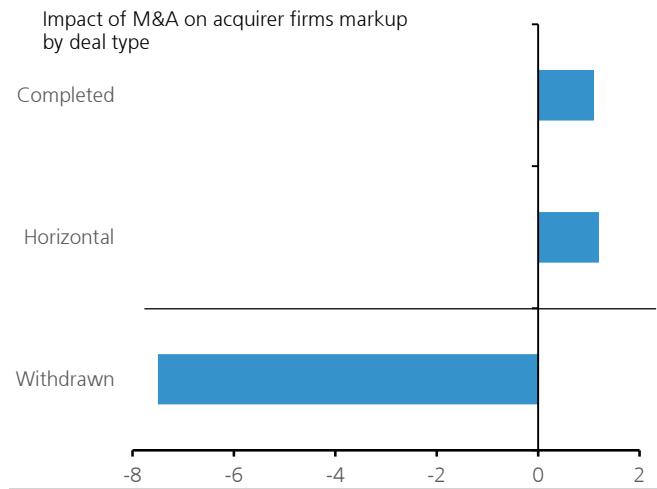
Source: IMF WEO April 2019, UBS

Figure 32: Markups and patents



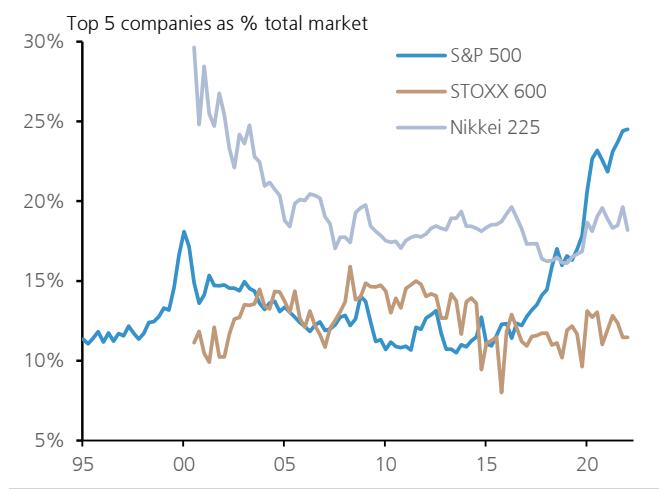
Source: IMF WEO April 2019, UBS

Figure 33: Impact of M&A on markups



Source: IMF WEO April 2019, UBS

Figure 34: Equity market concentration



Source: Bloomberg, UBS

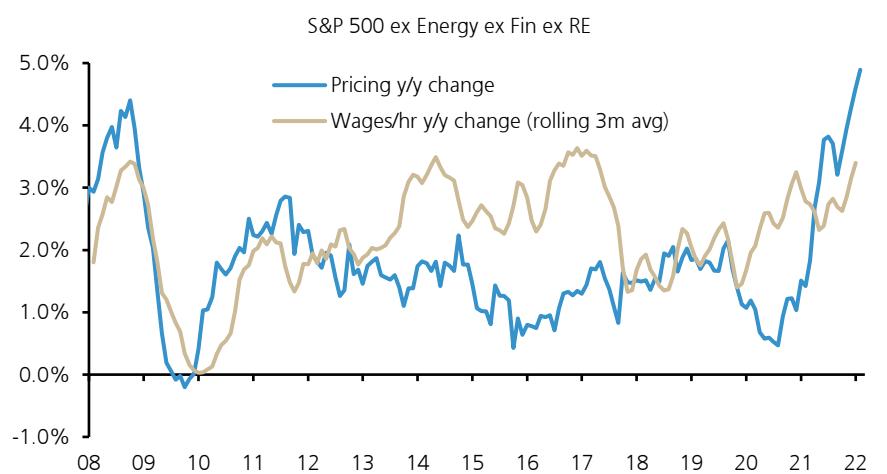
US pricing and margin developments

Proprietary approach to track pricing developments. The ability of firms to navigate input cost headwinds will depend significantly on the extent to which they can raise prices. To identify which industries currently have the strongest pricing momentum, we leverage our prior work ([link](#)). Our proprietary mapping of over 1200+ US price and wage economic data points to stocks ([link](#)) adjusts for the fact that equities are different than the economy. We create a market cap weighted pricing index of respective detailed industry PPI and CPI to track pricing trends. To assess margin changes, we adjust wage growth by labor share, which reflects the relative importance of wages ([link](#)). We compare this adjusted wage signal with pricing changes to derive a margin proxy signal.

Corporate pricing power has been improving and our market cap weighted pricing for the S&P 500 (ex Energy, Fin, RE) is currently at 5% y/y vs 1% at the beginning of 2021. Wage growth stands at slightly over 3%. Our margin signal proxy which looks at the difference between corporate pricing and the weighted contribution of wage growth has also been at a higher level, supporting the view that margins should be resilient.

Outside of Energy, which unsurprisingly has seen some of the strongest pricing growth, consumer retail sectors (Speciality Retail, Multiline Retail, Food & Staples Retail) have benefited from robust margin momentum over the last 3m, at an annualized pace of 20%. Financials have struggled - as have areas of Comm Svcs notably Media.

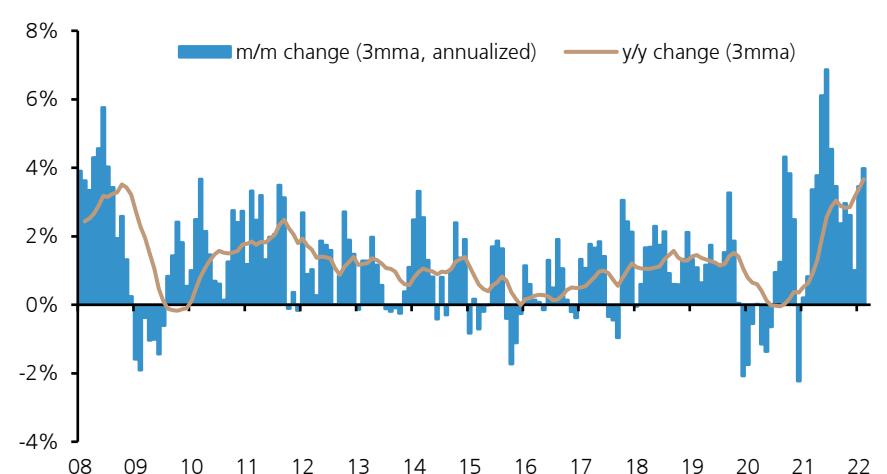
Figure 35: S&P 500 prices vs wages/hour (ex En, Fin, RE, ann. 3mma)



Source: FactSet, BLS, UBS

Corporate pricing trends are still very strong as S&P prices have increased by over 5% y/y, faster than wage growth.

Figure 36: Margin signal proxy – pricing growth minus wage growth (ex Energy ex Real Estate, 3mma)



Source: FactSet, BLS, UBS

Our margin signal proxy improved into Q1 '22 as pricing accelerated and wage growth stayed high but decelerated- this points to support for Q1 '22 margins all else equal.

Industry pricing, wage & margin trends

Figure 37: S&P 500 industry pricing, wage and margin trends

Industries	Pricing		Wages/hr		Margin signal (abs)	
	MoM % (3mma annualized)	YoY % (3mma)	MoM % (3mma annualized)	YoY % (3mma)	MoM % (3mma annualized)	YoY % (3mma)
S&P 500	5.3%	5.9%	4.3%	3.6%	4.2%	4.9%
S&P 500 ex Energy ex Fin ex RE	4.8%	4.6%	4.2%	3.4%	3.8%	3.7%
Auto Comp	5.7%	6.1%	10.9%	5.1%	4.1%	5.1%
Automobiles	4.3%	2.7%	18.3%	0.9%	2.1%	2.4%
HH Durables	8.7%	12.5%	2.9%	4.0%	7.9%	11.5%
Homebuilding	15.7%	18.8%	3.1%	3.8%	15.7%	18.8%
Restaurants	6.8%	6.4%	5.6%	14.1%	6.6%	1.9%
Hotels & Leisure	0.5%	22.7%	-4.1%	12.6%	-0.6%	19.0%
Leisure Products	10.9%	13.9%	-7.4%	3.4%	11.4%	13.2%
Textiles & Apparel	4.1%	3.5%	3.9%	9.1%	3.4%	2.4%
Specialty Retail	34.7%	14.2%	2.8%	3.6%	36.1%	13.0%
Multiline Retail	17.0%	13.6%	-6.2%	-3.2%	14.6%	14.8%
Internet Retail	-8.1%	0.9%	-5.9%	-1.8%	-5.4%	1.6%
Food & Staples Retail	16.7%	12.4%	-4.4%	-1.8%	14.4%	13.0%
Food Products	16.3%	9.0%	1.4%	5.2%	16.2%	8.2%
Beverages	7.1%	5.2%	8.3%	7.2%	6.0%	4.5%
Tobacco	10.2%	8.3%	-	-	10.2%	8.3%
Household Products	12.9%	8.0%	-3.2%	1.2%	12.2%	7.9%
Personal Products	13.0%	7.4%	-2.7%	1.0%	12.3%	7.2%
HC Tech	2.6%	8.7%	7.6%	2.1%	-4.3%	6.2%
Pharmaceuticals	2.8%	2.3%	8.5%	4.9%	2.4%	1.8%
Life Sciences	5.4%	4.4%	3.4%	2.9%	5.2%	3.5%
HC Equipment	5.5%	2.9%	0.7%	3.6%	5.5%	2.2%
HC Supplies	7.1%	2.2%	-7.4%	3.4%	7.6%	1.6%
HC Distributors	4.0%	7.3%	1.9%	5.6%	3.7%	5.8%
HC Svcs	9.6%	0.9%	9.6%	6.3%	6.4%	-1.8%
HC Facilities	6.2%	2.8%	8.1%	7.5%	3.4%	-0.4%
Managed HC	1.4%	0.8%	1.6%	2.1%	1.8%	0.2%
Banks	-6.4%	2.7%	2.4%	3.1%	-9.8%	2.1%
Capital Markets	-6.4%	8.6%	6.2%	8.7%	-7.5%	6.2%
Div Financial Svcs	1.4%	0.8%	1.6%	2.1%	1.8%	0.2%
Insurance	1.2%	1.6%	1.0%	2.6%	0.7%	0.7%
Chemicals	13.8%	20.0%	3.1%	2.4%	13.3%	19.7%
Containers & Packaging	15.9%	19.2%	-1.2%	3.8%	15.3%	18.4%
Metals & Mining	-10.6%	26.0%	7.2%	4.2%	-11.8%	24.9%
Construction Materials	17.4%	7.2%	6.4%	3.8%	16.1%	6.2%
Electrical Equipment	13.9%	13.0%	3.3%	4.9%	14.1%	11.9%
Aerospace & Defense	3.6%	2.5%	9.0%	4.4%	1.8%	1.7%
Machinery	10.6%	8.9%	7.2%	2.2%	8.5%	8.2%
Trading Comp & Distributors	8.5%	18.6%	5.0%	3.4%	6.9%	17.5%
Construction & Eng	21.0%	14.6%	5.1%	5.0%	17.3%	11.7%
Building Products	10.4%	12.3%	8.7%	4.2%	8.5%	11.2%
Industrial Conglomerate	8.7%	5.4%	4.1%	5.8%	7.5%	4.2%
Comm Svcs & Supplies	7.4%	5.1%	2.9%	6.3%	5.0%	3.3%
Professional Svcs	-2.3%	4.1%	13.6%	8.7%	-6.3%	1.6%
Airlines	4.4%	19.8%	3.1%	5.7%	7.6%	18.1%
Air Freight & Logistics	14.7%	14.8%	15.5%	11.5%	14.7%	10.0%
Road & Rail	8.1%	8.9%	10.6%	6.4%	6.0%	6.9%
Semis & Equip	7.7%	4.1%	9.9%	7.3%	6.1%	2.3%
IT Services	-1.6%	1.8%	9.3%	6.6%	-5.8%	-0.6%
Software	-1.1%	0.4%	0.0%	-3.4%	-0.9%	1.5%
Tech Hardware Storage	12.5%	3.6%	10.2%	7.8%	10.9%	1.8%
Electronic Equip Instru	8.7%	3.5%	9.4%	7.8%	7.2%	1.7%
Comm Equipment	12.4%	3.6%	-0.8%	-0.4%	13.3%	3.7%
Media	-0.9%	-1.7%	9.9%	4.0%	-4.6%	-2.6%
Entertainment	3.2%	6.2%	-0.8%	8.1%	1.2%	4.0%
Interactive Media & Svcs	-0.5%	0.8%	1.4%	-1.1%	-0.9%	1.0%
Div Telecom Svcs	1.6%	1.6%	4.7%	3.2%	0.0%	0.6%
Energy Equip & Svcs	13.7%	9.6%	10.2%	6.3%	17.2%	6.4%
Integrated Oil & Gas	45.9%	50.3%	12.7%	6.0%	44.8%	49.5%
O&G Exploration & Prod	36.1%	55.8%	5.0%	2.0%	35.4%	55.2%
O&G Refining	48.1%	53.0%	12.9%	6.0%	47.6%	52.6%
O&G Storage and Transport	0.9%	2.8%	-7.7%	-3.5%	3.5%	3.9%

Source: BLS, Haver, Factset, UBS

Pricing and margin momentum tend to persist

With pricing trends strong, we focus on relative price momentum to identify potential opportunities. We see persistence in margin changes as important as well, with margins reflecting the difference in price and volume growth relative to the growth in costs like labor and raw materials.

The recent jump in relative pricing differences could persist for some time.

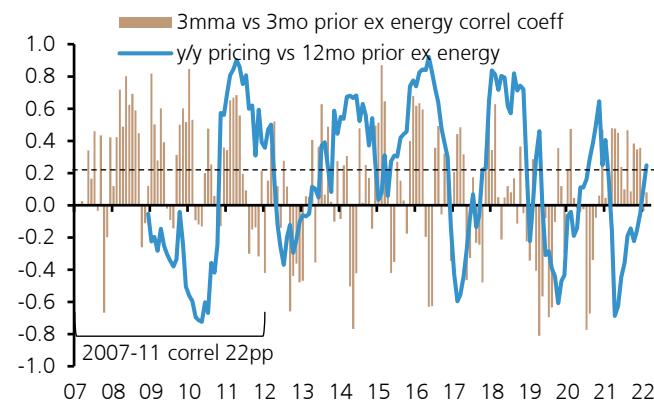
Prices have momentum. The median correlation over the last 12yrs comparing sub industry pricing y/y to the prior year's pricing has been 23%. Pricing momentum was even stronger from 2007-11 compared to 2012-2019 – with the correlation 22pp higher using comparison periods of three months (Figure 38). Additionally, using the stdev of pricing amongst sub industries, we find that the range of pricing differences remained much wider from 2008-2011, suggesting that the recent jump in relative pricing differences could persist for some time. Indeed, there has been again signs that relative industry pricing trends have persisted over the last year, with consistent positive correlation.

Margins have momentum. In prior research ([link](#)), we found that fundamental momentum tended to persist on average, with EBITDA margins moving higher in the year following stronger increases in margins for firms – using a sector neutral approach (Figure 39). The opposite was true for deteriorating margins, where weakness tended to continue into the following year – with some mean reversion. To measure margin persistence, we used the following methodology: 1) calculated 1yr change in EBITDA margin for each S&P 500 company relative to its sector median since 1990 (on a monthly basis); 2) adjusted for outliers by removing the bottom decile of stocks (sector neutral) and grouped companies into sector-neutral deciles (monthly); 3) used the median, 1yr fwd change (relative to sector median) for each decile.

A big reason for the persistence of margin momentum is likely because pricing momentum also tends to persist. Importantly, our prior work also showed that companies with low and rising margins tended to outperform within sectors.

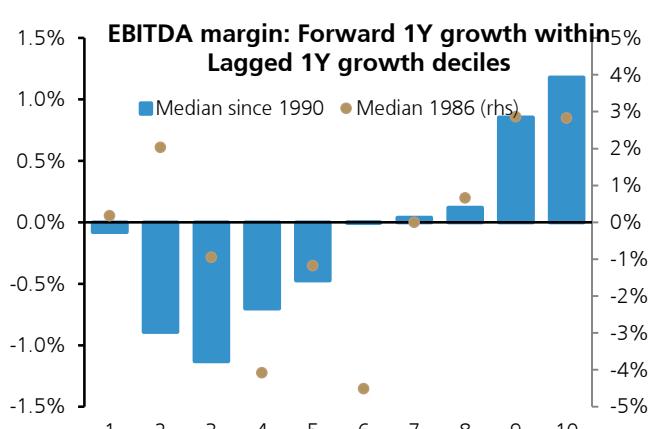
Thus, we look to relative pricing power, using our proprietary mapping, as well as relative margin changes as a guide to capitalize on the shifting inflation landscape and to identify industries and stocks that are attractive on the theme.

Figure 38: Correlation of pricing changes to prior pricing



Source: BEA, BLS, Haver, UBS

Figure 39: EBITDA margin changes tend to persist



Source: UBS Quants, FactSet, UBS

UBS Evidence Lab: alternative data to uncover pricing trends

We utilize the vast array of UBS Evidence Lab datasets to uncover unique insights into pricing trends within the US market and globally:

1. Global Merchandise Planning Monitor ([>access data](#))

- **Description:** UBS Evidence Lab tracks pricing and inventory for over 150 fashion brands across seven categories and over 20 countries/regions, allowing users to evaluate trends ahead of reported results. The data is sourced from thousands of websites, with metrics including average price, discount factor, inventory age, SKU count, and more. The monitor is updated monthly and has historical data since 2013.
- **Takeaways:** Pricing trends across fashion categories are gaining momentum. Tracking the y/y price growth of goods across companies, we find Fashion Retailers are seeing the strongest price increases (~6%) while sportswear brands are closer to flat. Luxury continues to exhibit significant pricing power with consistently strong pricing activity over the last 4 years. To identify fashion brands with strong pricing power, we compare how promotions and inventory are trending vs pre-COVID-19 levels in the US. The analysis shows a number of companies have seen a decline in both promotional activity and inventory weeks available between February 2022 vs February 2019 - including American Eagle and Abercrombie. Lululemon, Skechers and Steve Madden have shown weaker pricing power trends.

2. Industry specific pricing / spending monitors

- **Description:**

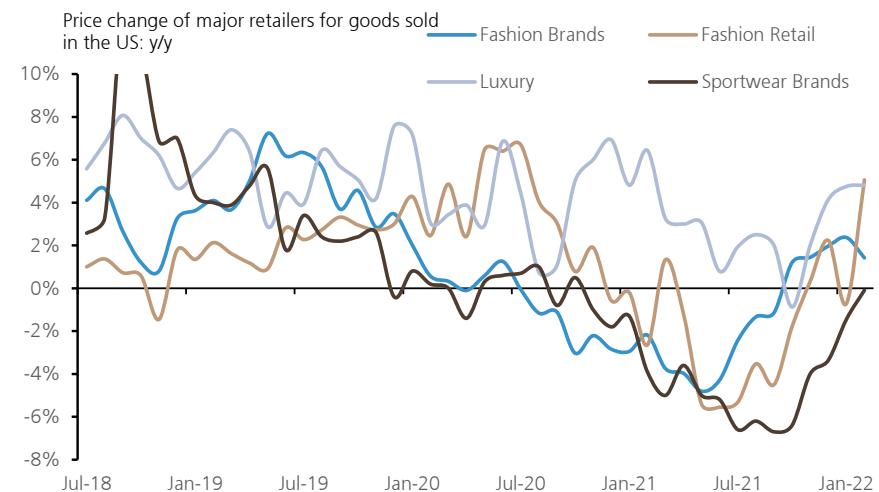
- **US Retail Consumer Spending Intention Scores ([>access data](#)):** Built using regression with ARIMA errors approach and UBS Evidence Lab Spend Intention Score (UBS SIS). UBS Evidence Lab created a unique UBS SIS index based on monthly survey respondents data. They took into consideration their attitude to spend in a given set of categories and modeled that on the US Census sales data. UBS Evidence Lab use this data to make predictions for y/y sales growth 3 months out. We highlight data for Food & Bev, Personal Goods, Sporting Good and Electronics.
- **US Grocery Retail Price Monitor ([>access data](#)):** Tracks price strategy and competition in US Grocery Retail. Data includes like-for-like price trends, relative price differences between competitors, discounted items as a percent of total items, and average level of promotion when the item is on sale.
- **Airlines Yield Management Monitor ([>access data](#)):** Track price strategy and competition across global Airlines. This analysis is based on highly frequent price observations within the booking window for the service to capture the dynamic nature of pricing in this sector. The analysis allows for discovery of price trends as well as an assessment of how companies are managing their pricing.
- **Takeaways:** The US Retail Consumer Spending Intention scores point to near-term sales pressures y/y in the next 1-2 months for Personal Goods, Sporting Goods and Electronics, but should pick up thereafter. Within the grocery space like for like price growth has been robust at >4% for major players and highest for Amazon at ~8% in Q1-22. Finally airlines continue to see strong pricing in both US and Europe, with y/y growth running at 30% and 15% on average respectively.

3. C-Suite Survey (US [>access data](#), Europe [>access data](#) and China [>access data](#))

- **Description:** The C-Suite surveys cover US, Europe and China senior executives and provides a view on companies' industry outlooks, and their perceptions of the macro environment in which they operate. The US survey consists of 450 senior executives, in Europe 675 (across UK, France, Germany, Italy & Spain) and China 539.
- **Takeaways:** In the Jan 2022 US survey, a net 40% of respondents expected pricing power to improve over the next 12 months down slightly from the June-21 survey, however there was a notable increase in 12-24mo expectations. Telecoms, Materials and Health Care saw the most positive responses, while Real Estate, Utilities and Energy were more cautious. Within Europe and China the most recent surveys saw a sizeable pick up in companies responding that they had pricing power and had the ability to raise prices, with positive responses back to near survey history highs.

UBS Evidence Lab: Global Merchandise Planning Monitor

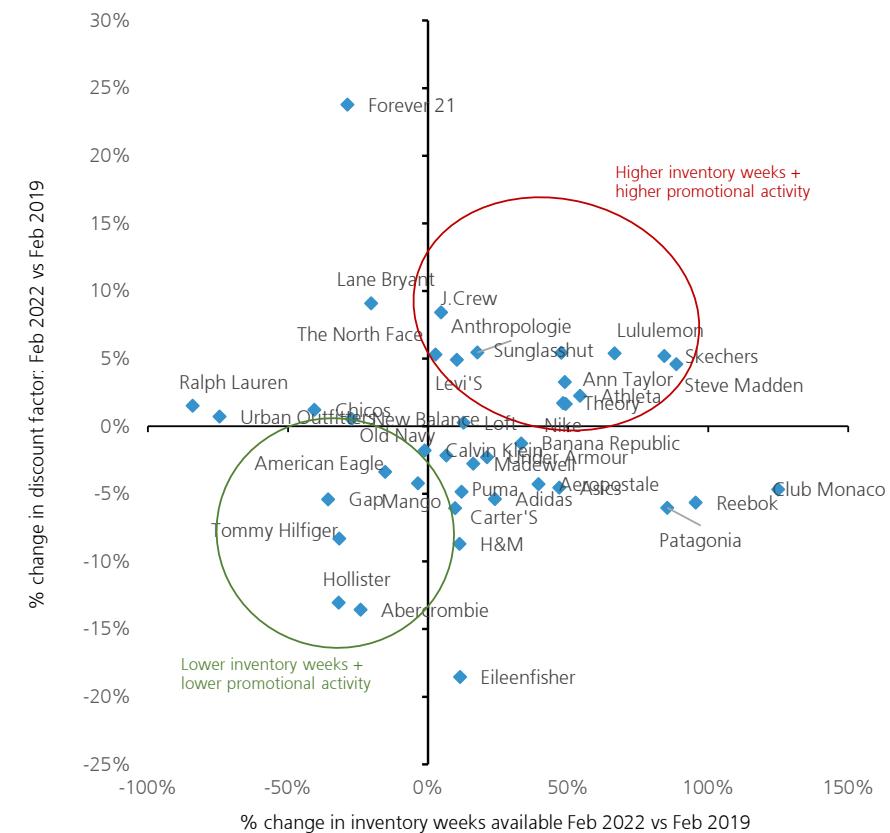
Figure 40: Y/Y price changes for major merchandise retailers/brands



Source: UBS Evidence Lab ([>access data](#)), UBS

Pricing growth has improved notably over the last 6 months for major Fashion companies. Fashion retail has seen the fastest rate of growth at ~6% y/y. Luxury has seen strong pricing power, consistently raising prices over the last few years.

Figure 41: Change in retail discount factor and inventory weeks

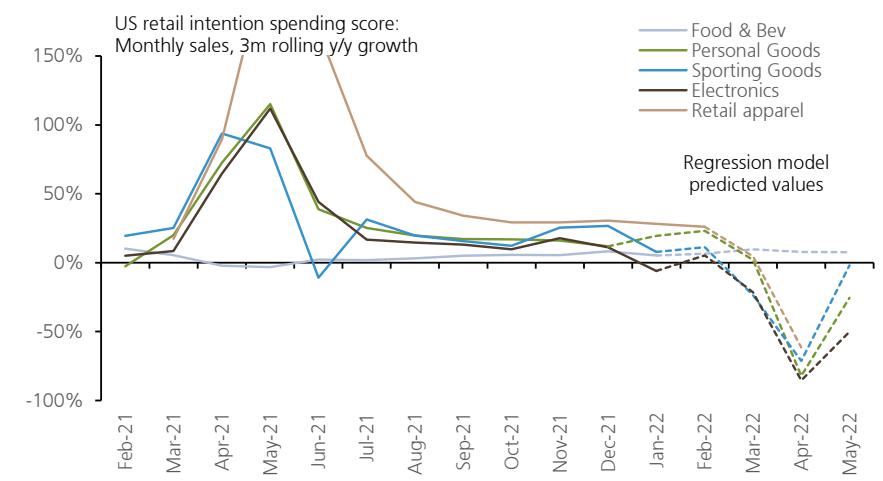


Source: UBS Evidence Lab ([>access data](#)), UBS

To identify fashion brands with the room for strong pricing power we look for two things - (1) reduction in product discounts since 2019, and (2) a reduction in inventory. These two characteristics are a sign of resilient pricing and robust demand. American Eagle, Gap and Abercrombie currently tick this criteria. Lululemon, Skechers and Steve Madden show weaker pricing strength.

UBS Evidence Lab: Industry pricing and spending trends

Figure 42: US retail intention spending score



Source: UBS Evidence Lab ([>access data](#))

The UBS Consumer Spending Intention Score showed a sharp dip in expected retail spending in the next few months with inflation hurting US consumers' willingness to spend on goods, particularly apparel and footwear. Higher savings, particularly amongst the higher income cohort, may provide some buffer.

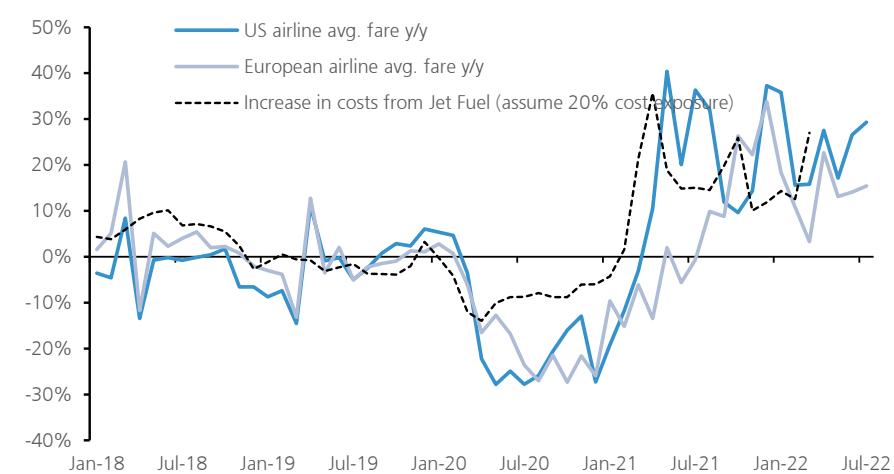
Figure 43: Grocery like for like price growth



Source: UBS Evidence Lab, ([>access data](#))

Grocery retailers have been raising prices; however, at ~4% there are concerns about margins given the faster pace of commodity costs and wage pressures ([link](#)). Amazon and Walmart have delivered the strongest like for like growth in Q1.

Figure 44: Average airline fares - Europe and US

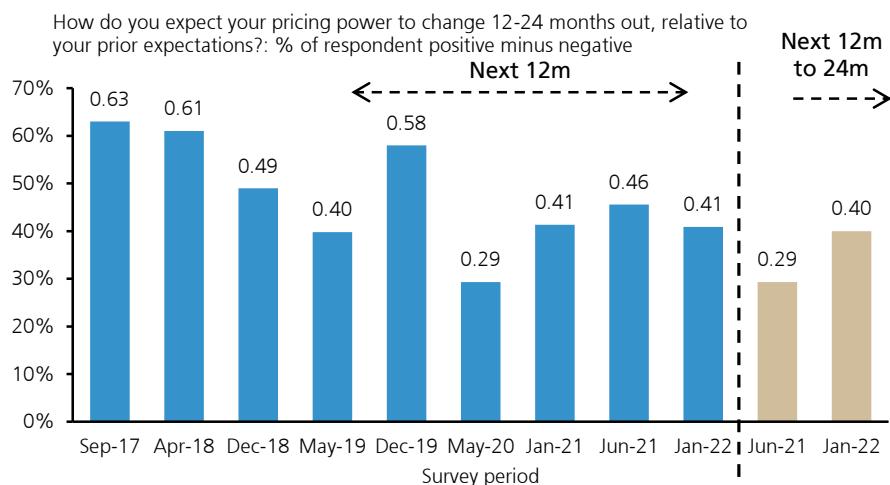


Source: UBS Evidence Lab ([>access data](#)), UBS

Airline fares in the US are growing 30% y/y on avg according to UBS Evidence Lab data, broadly in line with the impact higher oil prices are having on input costs. In Europe, fare rates are growing at a slightly slower pace but input costs are also likely not rising as fast due to greater hedging activity.

UBS Evidence Lab: C-Suite survey - pricing power outlooks

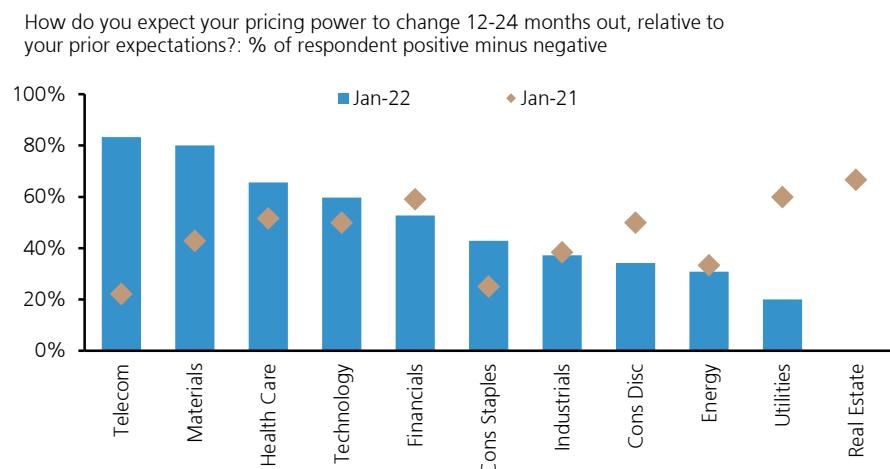
Figure 45: US C-Suite pricing power expectations



Source: UBS Evidence lab ([Access Dataset](#))

Our US C-suite survey showed that the outlook for profit and spending have shifted across many areas. 12-24m sales growth expectation increased notably led by pricing power, which jumped the most across profit drivers.

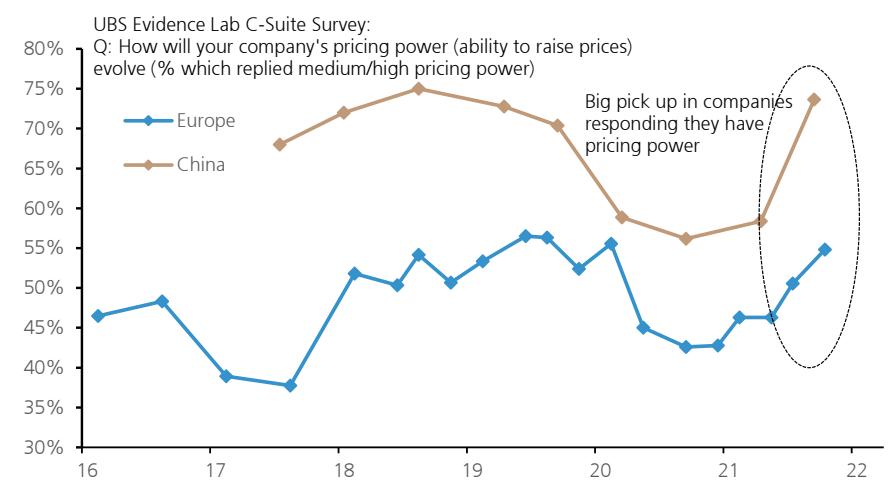
Figure 46: US C-Suite pricing power expectations across sectors



Source: UBS Evidence lab ([Access Dataset](#))

Across sectors, CEO's and CFO's were most bullish about pricing power in Telecoms, Materials, Health Care and Technology. Real Estate and Utilities were less positive. Consumer Disc saw a modest decline vs our January 2021 survey.

Figure 47: Europe and China C-Suite pricing expectations



Source: UBS Evidence lab ([Access Dataset](#))

In both Europe and China, pricing expectation saw a big pick up in the Q4-21 surveys, with a sizeable ~72% of companies in China responding they have strong ability to raise prices. In Europe this was closer to 55% but back to pre-COVID highs.

SECTION 3:

Input costs: What are the exposures?

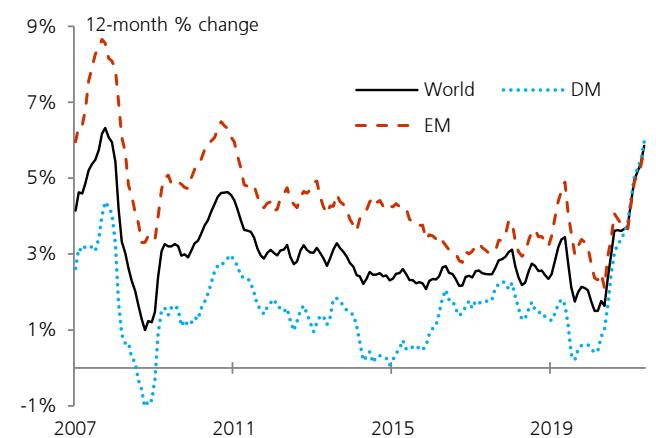
UBS Econ: Inflation outlook, drivers

A Global Inflation Surge

Prior to the pandemic global inflation was running in the 1¾% to 3 ½% range it had been oscillating in since 2012. However, after dipping below that range in the first year of the pandemic, inflation has risen sharply across the globe with the most recent 12-month global CPI change just below 6% — very close to the maximum pace hit prior to the GFC. In emerging markets the rise has reversed a decade of gradually slowing inflation. In the developed markets the rise has put inflation at a 30-year high. Within the developed markets inflation has been strongest in the US, but the run-up is quite broad with many countries at the highest levels of inflation in the past couple of decades (Japan and Switzerland being notable exceptions). The case is more mixed across emerging markets where only a handful of markets are at highs of the past couple of decades and China, Vietnam, and Indonesia seeing rather pedestrian increases.

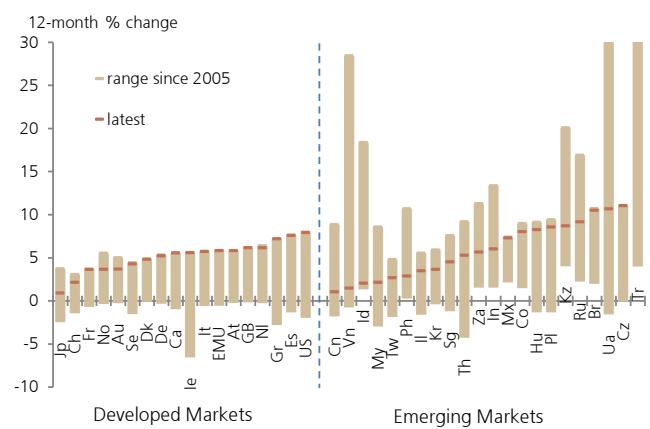
Energy prices (after their initial plunge early in the pandemic) have led the inflationary surge, but food and core prices ([particularly for goods](#)) have also moved up swiftly. Booming transportation costs and rising prices for industrial commodities are factors behind the rising inflation for consumer tradables, likely driven by strong demand for exports from emerging markets.

Figure 48: Global inflation is at the pre-GFC peak



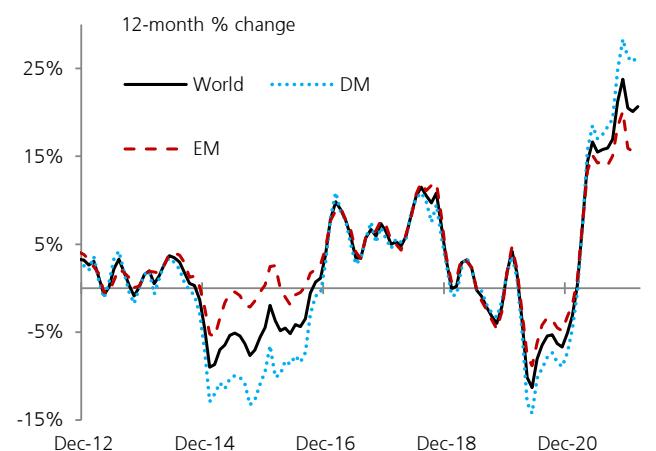
Source: National statistical agencies, Haver, UBS

Figure 49: Most developed markets are seeing inflation at the highest level in a couple of decades



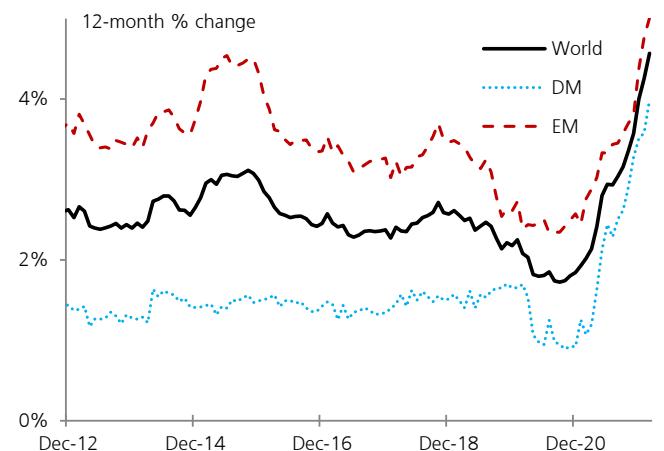
Source: National statistical agencies, Haver, UBS

Figure 50: Energy prices globally are up 20% over the past year



Source: National statistical agencies, Haver, UBS

Figure 51: Core CPI inflation averages at about 5%



Source: National statistical agencies, Haver, UBS

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Pricing and cost trends in the US

Over the last year cost pressures have increased significantly for US producers due to rising prices for both labor and non-labor inputs. However, there have been some differences between goods and services-producing industries.

The producer price index (PPI) which captures prices that producers receive, as opposed to the cost that consumers pay, has seen much higher increases of >15% for goods sectors while services increases have been a little below 10%. Additionally, prices for intermediate inputs that are further down the production chain have seen larger increases than final demand products.

The strong PPI inflation has not only been driven by food and energy prices. For example, for final demand producers, PPI ex energy has increased by over 8% the last year, well above the 0%-4% range seen over the previous ten years or so. A similar strength is seen for intermediate demand producers.

In contrast, labor input costs have increased similarly for both types of industries. For example, the Employment Cost Index (ECI), which captures total compensation per hour for a consistent set of industries and occupations, increased 4.1% for services in 2021, only slightly different than the 3.7% observed for goods - although in the last couple of quarters there has been more pressure in services.

At the industry level, leisure & hospitality, retail, wholesale, and health care have seen the strongest employment cost pressures. Leisure & hospitality and retail are relatively lower-wage industries that depend on workers without college degrees. At the same time we estimate that about 80% of the shortfall in labor force participation has been driven by workers without college degrees.

Going forward wage pressures are likely to moderate as labor supply continues to rise. Lower-income households increased savings only slightly during the pandemic and should have less capacity to absorb the sharp reduction in fiscal support in Q4 and Q1. However, a headwind to labor supply will continue to be driven by demographics given the large number of baby boomers moving into retirement.

From a consumer prices perspective, inflation in the last year has been driven by goods rather than services. This is probably driven by both supply chain disruptions associated with the pandemic, but also due to a change in the consumption basket of households away from services and into goods. As of January, the real consumption of core goods was 10% above the pre-pandemic trend, down from the 18% deviation seen in March 2021. In contrast, real consumption of core services is still 5% below trend.

Putting it all together the goods sector has seen a spike in non-labor input prices but has had pricing power over the last year due to abnormally high demand for its products. This has likely allowed producers of this sector to pass through higher input prices to consumers. Going forward, higher supply of labor might moderate wage growth, although lingering supply chain issues might keep some upward pressure on the prices of other inputs. This could be a challenging environment for producers of goods in the context of expected lower demand which could dry up sooner rather than later as Covid cases and mobility restrictions continue to diminish.

On the flip side, strong demand for services amid higher labor supply, particularly in retail and in the leisure & hospitality sectors, could lead to higher pricing power for firms amid decreasing costs. These two factors could allow service-oriented industries to pass through to consumers any further upward pressure that they face in non-labor input costs.

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Retail and leisure & hospitality have led the increase in ECI.

Lower income households are likely to see greater increases in labor force participation in coming months.

CPI inflation has been driven by goods.

Demand for goods has been abnormally high.

Service-oriented industries might have increasing pricing power going forward.

Figure 52: Producer price index for final demand has increased more for good than services...

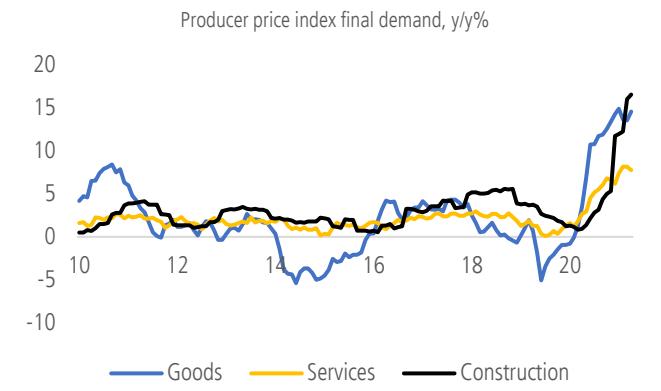


Figure 54: Employment costs have increased for both goods and services industries

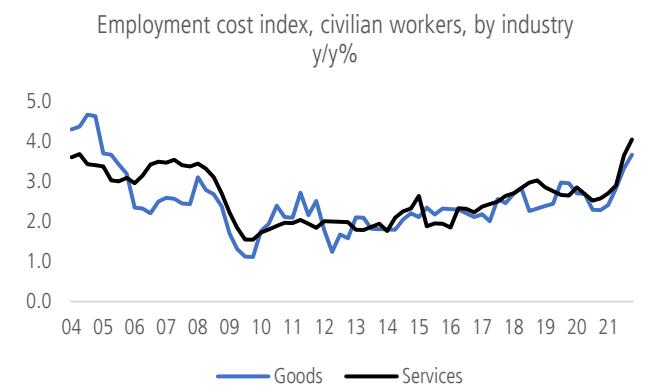


Figure 56: Consumption of goods should move down to trend as the pandemic impact diminishes

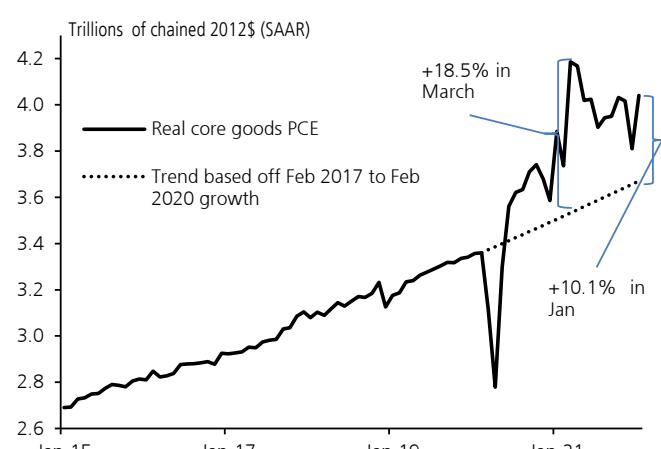


Figure 53: ...and more for intermediates inputs than for final demand

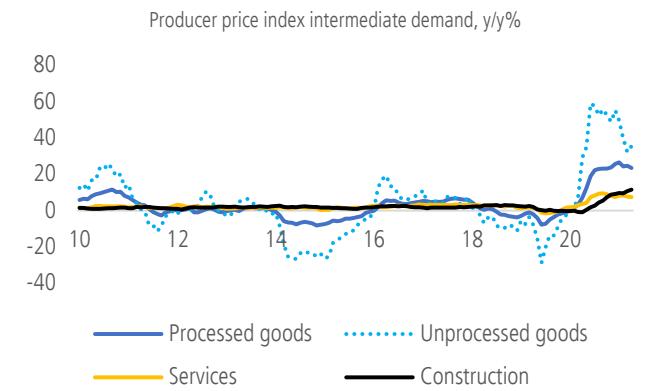


Figure 55: Leisure & hospitality and retail have seen strong employment cost pressure

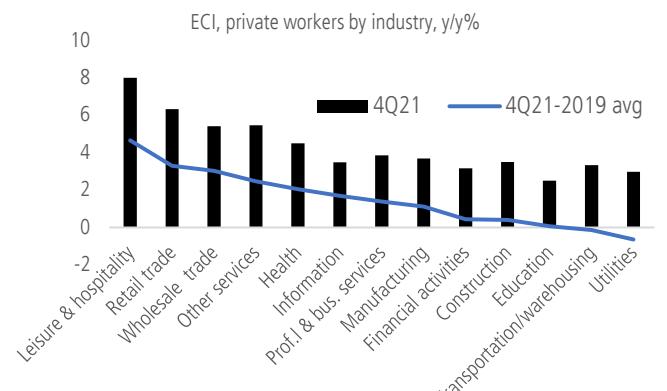
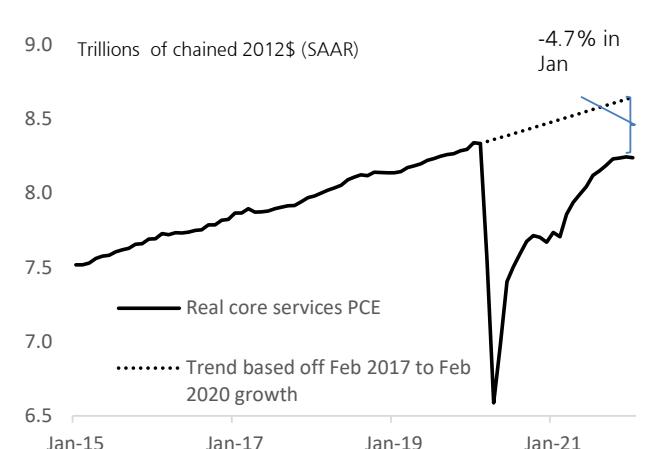


Figure 57: Consumption of services should also normalize



Pricing and cost trends in the Eurozone

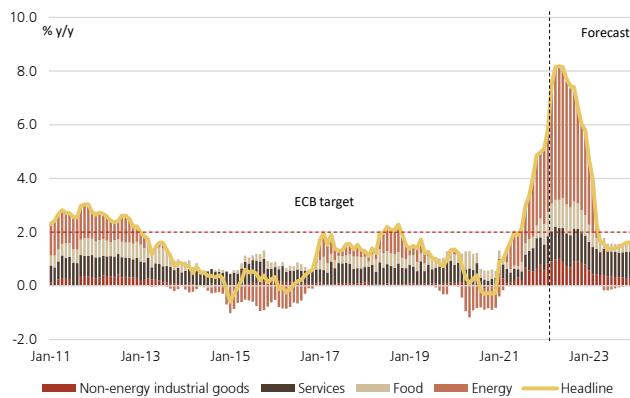
Between January 2021 and March 2022, Eurozone inflation rose by 6.6pp to an all-time high 7.5% y/y. The energy component was by far the largest contributor, accounting for over 70% of the increase (4.8pp), followed by core (16% or 1.1pp) and food inflation (11% or 0.7pp). We now forecast inflation to average 7% this year (consensus: 5.6%) and 2.0% in 2023 (consensus: 2.1%), but see the forecast risks as skewed to the upside. In the near-term, risks are largely related to supply-chain disruptions (Russia/Ukraine and China) as well as higher food and energy prices (although the latter have been somewhat muted by government interventions ([link](#), [link](#))). Medium term, key upside risks are rising wage growth and elevated energy prices amid increased efforts to boost energy security.

In contrast to the US, where the rise in energy prices was predominantly driven by oil, Europe saw sharp price increases for both oil and gas. Higher energy prices, in turn, have worsened other Covid-related supply disruptions, which have pushed goods inflation to 3.4% y/y in March, the highest since the start of the monetary union.

In March 2022, Eurozone services inflation stood at 2.7% y/y, the highest since August 2008. A large part of this has been due to the "reopening effect": As discussed in [The Inflation Compendium: What are the 10 most critical market questions?](#), at the start of the pandemic a number of HICP items (e.g. clothing, "services away from home" such as transport services), demand and availability of which was negatively affected by mobility restrictions, saw big price declines. Since May 2021, however, coinciding with easing in mobility restrictions, some of the earlier price declines have reversed, although our calculations show that prices of the affected items are still somewhat below the pre-Covid trend (Figure 60).

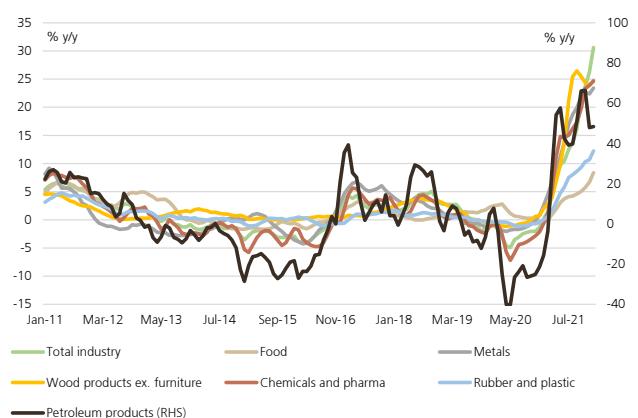
As regards to the medium term, we stress the importance of Eurozone wage growth, which we expect to accelerate to 3.0% by the end of 2023, thus exceeding the previous peak of 2.5% in 2019. With companies continuing to show confidence around pricing power and their ability to maintain margins, we expect higher wage growth to positively contribute to services and core inflation (Figures 7 and 8). Our forecasts assume that the fallout on Eurozone labour markets will be limited. Our monthly indicator of Eurozone negotiated wages stood at 1.8% y/y in nominal terms in December. However, the sharp rise in inflation has led to a dramatic decline in real wage growth (-3.2% y/y in January), which is likely to get worse over the coming months. Against this background, we expect Eurozone wage negotiations to be a lot more contested in 2022/23. Germany, where wage contracts for c. 22% of employees will be renegotiated this year will be a key focus, particularly the metals industry (covering 9% of employees) which will be negotiated in September.

Figure 58: Eurozone HICP - component contributions (pp)



Source: Haver, UBS estimates

Figure 59: Eurozone PPI - selected sectors



Source: Haver, UBS

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Eurozone inflation is at a record high, and rising further...

...as Europe suffered a double-whammy of higher oil and gas prices.

The pick-up in services inflation has so far been driven by the "reopening effect" ...

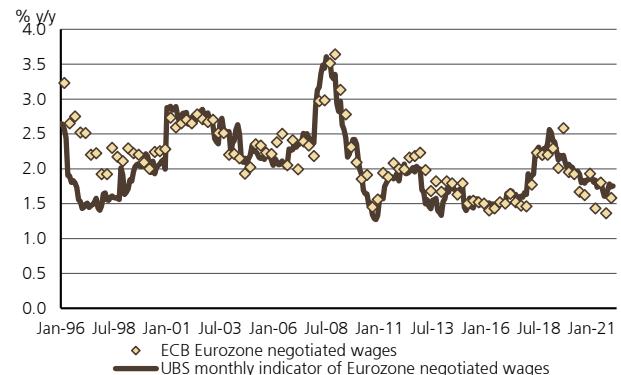
...but higher wage growth is likely to push it higher

Figure 60: Impact of the pandemic on service prices and apparel in the Eurozone



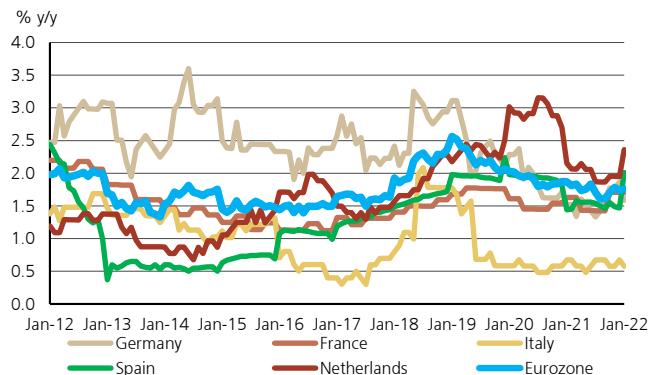
Source: Haver, UBS calculations. Note: The data attempts to remove changes in the timing of sales (and the VAT holiday in Germany), which has created large temporary swings in some prices

Figure 61: Eurozone negotiated wages



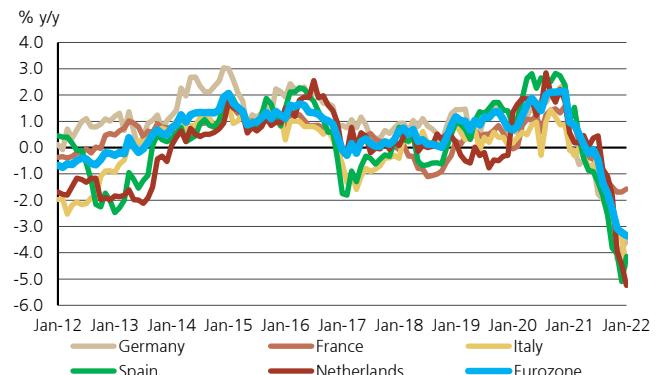
Source: Haver, UBS calculations

Figure 62: Eurozone nominal negotiated wages



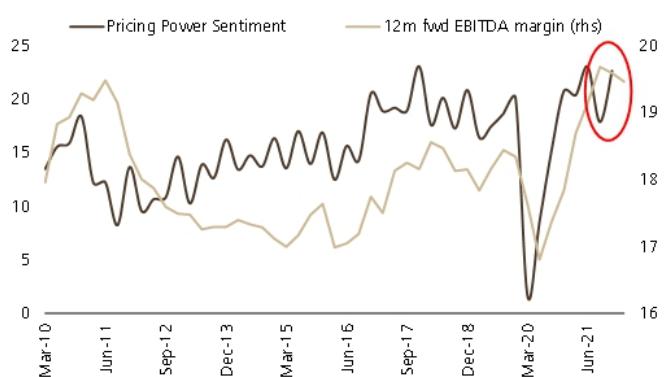
Source: Haver, UBS

Figure 63: Eurozone real negotiated wages



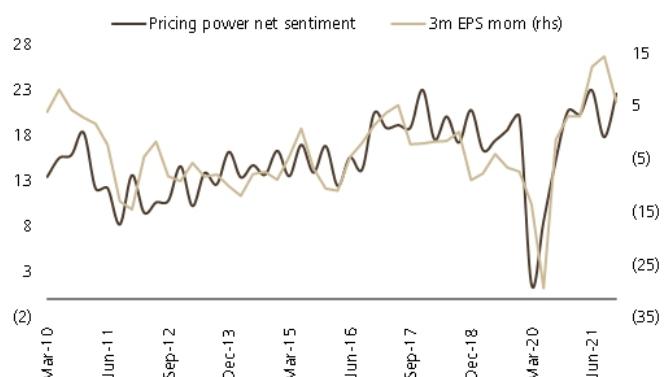
Source: Haver, UBS

Figure 64: Pricing power net sentiment vs 3m Earnings Momentum



Source: UBS Evidence Lab, Thomson Datastream, UBS Equity Strategy

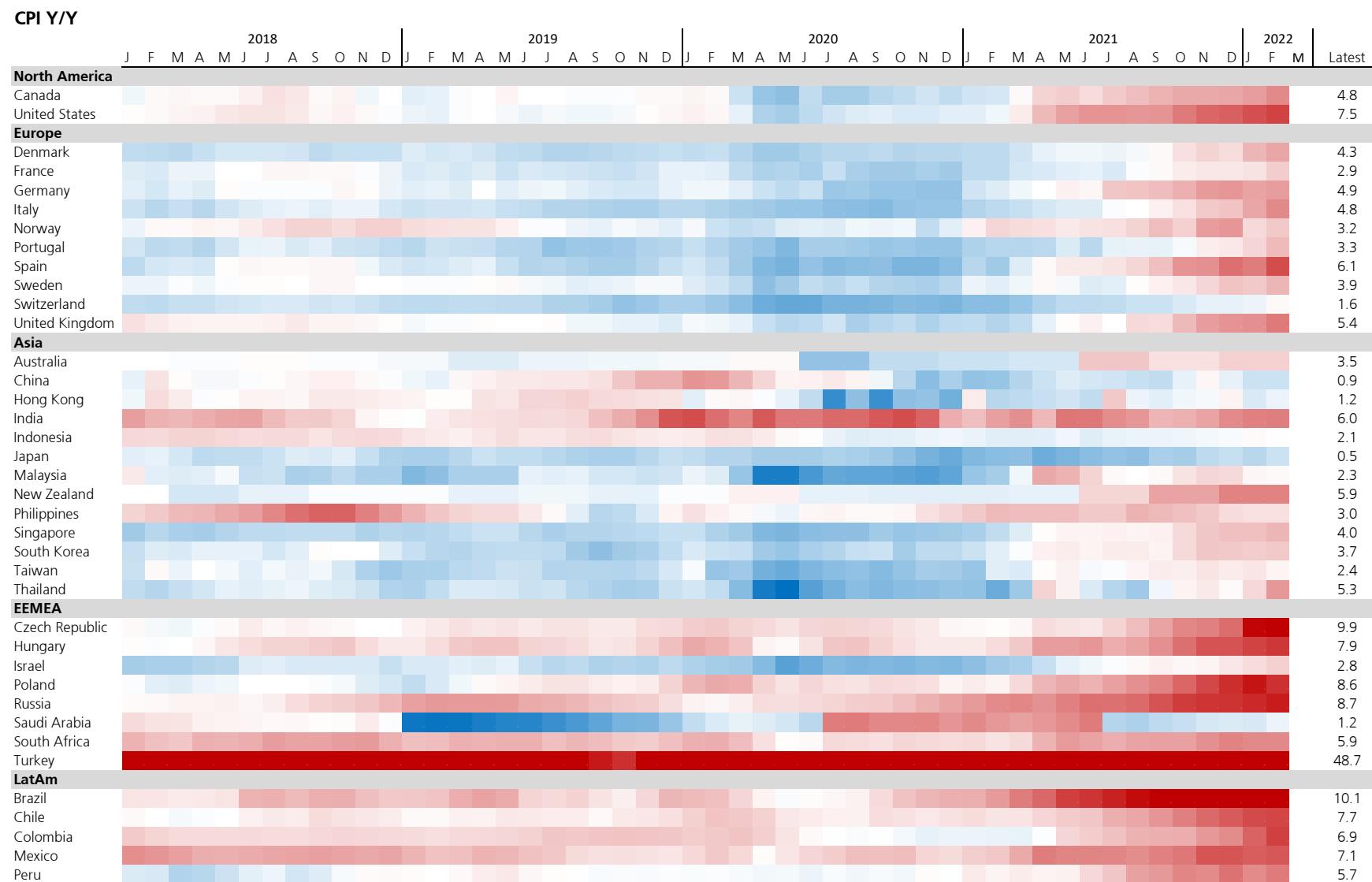
Figure 65: Pricing Power net sentiment vs 12m forward EBITDA margin (IBES)



Source: UBS Evidence Lab, Thomson Datastream, UBS Equity Strategy

Global inflation heatmap

Figure 66: Global inflation heatmap - CPI y/y



Source: Bloomberg, UBS

Commodities

Input costs: Key themes and trends

Commodity prices are up sharply, and in many cases back to multi-decade highs, largely on a rebound in post-pandemic demand, and more recently significant supply constraints. The Russia/Ukraine war could be disruptive with both countries collectively accounting for a large share of global oil, gas, platinum, aluminium, wheat and fertilizer production/supply. Europe in particular depends on Russian pipelines for a third of its gas supplies. From an economic perspective higher commodity prices could squeeze consumer incomes. Consumer spending share on energy is highest in Europe, particularly for the lower income quartile, where it accounts for ~8% in Sweden, Denmark and Germany. The US is more insulated, and by our estimates even a sustained rise in oil prices to \$150bbl would lift the energy share of consumption to only 4.5% (the highs in 2007). Excess savings are a cushion mainly for the higher income consumer. As a % of GDP, excess savings have been highest in the USA (12%) and UK (10%), while significantly lower for EM markets.

Quantifying exposures

Our analysis of the US input-output tables suggests that commodities (including oil, metals, chemicals, food and utilities) as % of total costs is ~14%. However, focusing on energy and metals specifically the cost share is ~7.5%. HH & Pers. Products and Food & Bev have the highest commodity exposures at >50% and 45% respectively, but this is heavily dominated by Chemicals and Food/Agricultural products. Sectors with the greatest sensitivity to oil, utilities and metals include Cap Goods (30% of costs) Autos (25%) and Transportation (>18%).

Sensitivities to oil price shocks

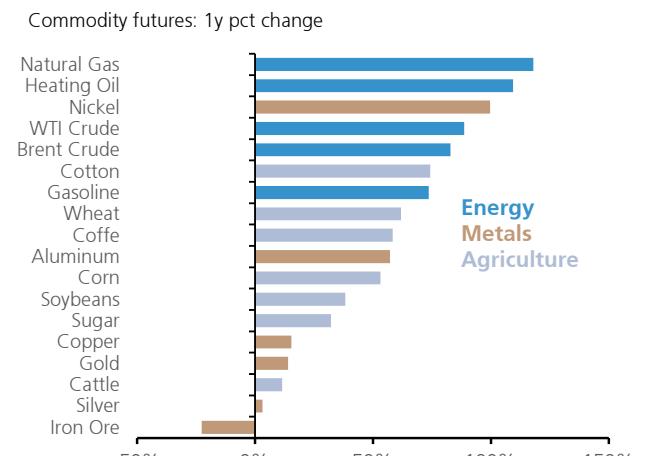
The Russia/Ukraine war has provided a significant supply side shock to the oil market sending Brent well above \$100bbl. The NY Fed's decomposition of oil price movements shows that supply side drivers have accounted for all of the oil gains YTD. Higher oil prices pose a bigger risk to equities when driven by supply side factors. Our prior analysis shows that every 10ppt increase in Brent driven solely by supply is a 2.5ppt hit to market when oil prices are above \$70bbl. Extending this work to regional industry groups we calculate the beta of sector returns to the weekly change contribution in oil price from supply side drivers. Energy, unsurprisingly is the biggest beneficiary with the beta (1x) highest in the US. Consumer sectors such as Retailing and Cons Dur & App have the most negative betas, with the highest sensitivity also in the US market (-0.3 and -0.5 respectively).

Sector specifics: hedging

- **Airlines:** the Airline industry has amongst the highest exposure to fuel, accounting for 10-35% of total costs across the major global players. To mitigate these risks, many airline companies are involved in some form of hedging practices. Looking at the recent reports and disclosures, on average the industry globally hedges roughly 50% of their exposure. Exposures differ significantly though with the big three US airlines (DAL, UAL and AAL) reportedly not hedging, while the European airlines hedge closer to 60% of exposures. Another way the airlines industry can offset fuel costs is from pricing. Using UBS Evidence Lab [Airline fares](#) dataset we find that avg airline fares in the US and Europe are growing close to 15-30% y/y which should offset most oil input cost pressures.
- **Consumer Staples:** The Consumer Staples sector is another area with sizeable commodity exposures and where cost inflation remains a headwind. Our analysis shows that within Food & Packaging, protein is the largest cost exposure (accounting for ~60%), in Beverages it is grain/wheat/corn (25%) and aluminium (19%) while for Household & Personal Care direct commodity exposure is much lower with chemicals accounting for a far greater share. Mapping the different cost exposure with inflation, we find that input cost pressures are running highest for Beverages at over 25% y/y. Our analysis of commodity hedges for the largest 21 Staples. companies in the MSCI ACWI that disclose notional commodity derivatives indicates that overall hedging practices are limited, often less than 10% of COGS and with a significant skew. Mondelez is the main exception with notional commodity derivatives > 50% of COGS. The one caveat is that our estimates are based on latest filings and hedging activity could be higher given recent volatility.

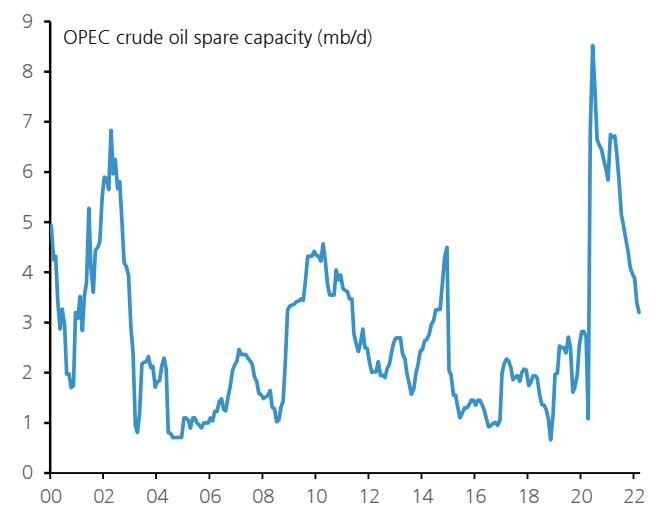
Commodity market snapshot

Figure 67: Performance of commodities (1y % chg)



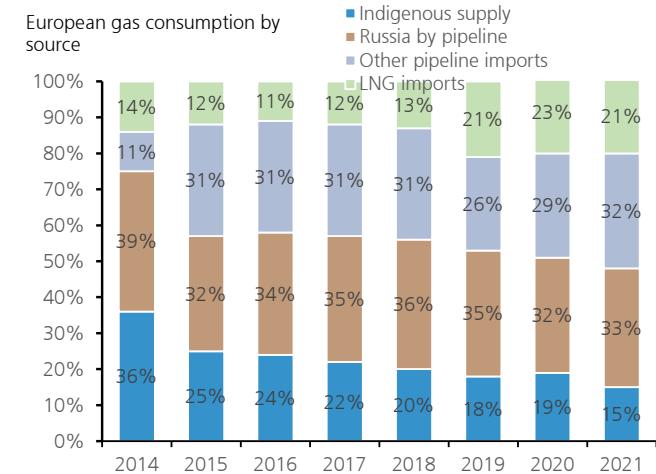
Source: Bloomberg, UBS

Figure 69: OPEC spare capacity



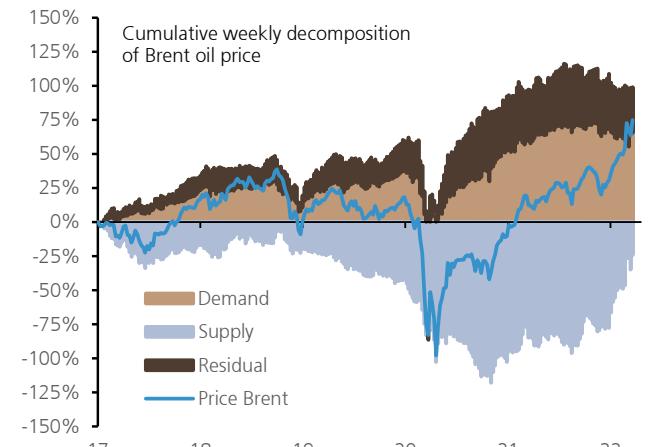
Source: Bloomberg, UBS

Figure 71: European gas consumption by source



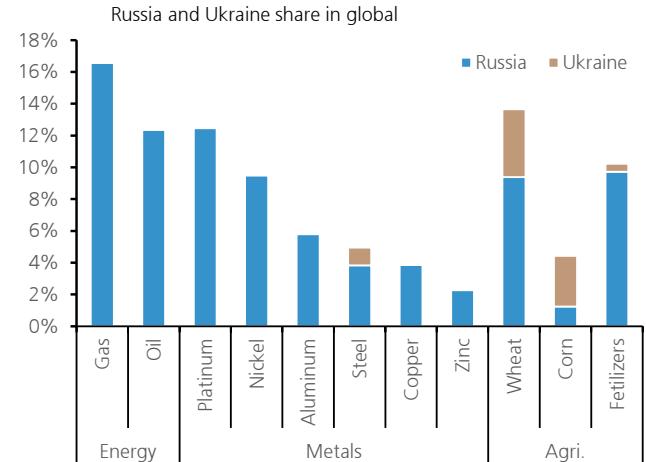
Source: BP statistical review of world energy, Eurostat, IEA, JODI, UBS

Figure 68: Decomposition of oil price change



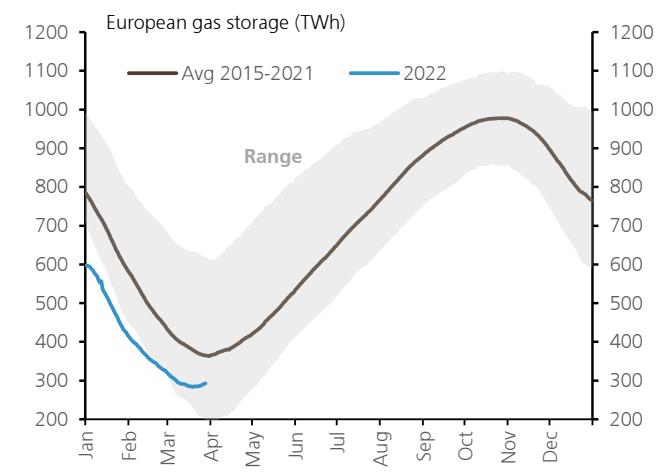
Source: Fed New York, UBS

Figure 70: Russia and Ukraine share in global production of commodities



Source: World Bank Commodities Market Outlook, UBS

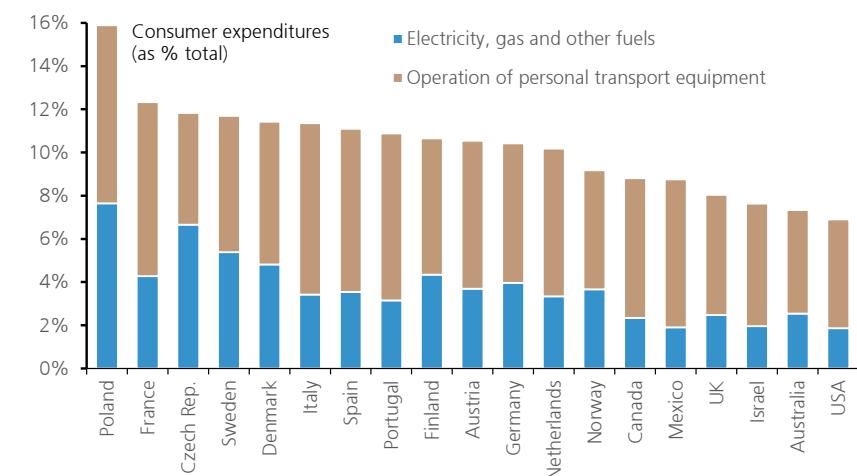
Figure 72: European gas storage



Source: Bloomberg, UBS

Energy consumption perspectives

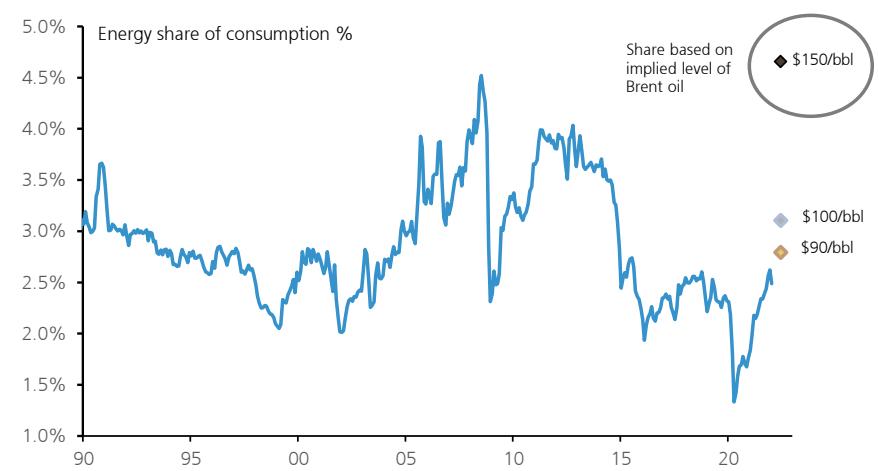
Figure 73: Consumer expenditures on direct and indirect energy costs



Source: OECD, UBS

Direct consumption of electricity, fuel and gas is nearly 4% of PCE on average across major regions, but adding indirect exposure on items such as operation of personal transport increases it to over 9%. The US, Australia, Israel, and the UK spend a smaller proportion of consumer expenditures on Energy. Europe is more exposed.

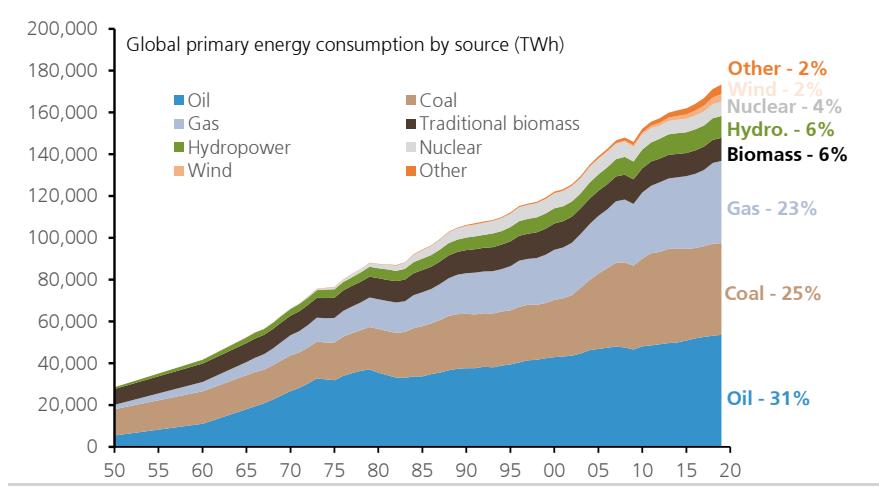
Figure 74: US Energy share of consumption



Source: Bloomberg, UBS

US energy share of consumption remains low relative to history at ~2.5%. A sustained move in Brent above \$100/bbl would likely see the share increase to ~3% which is still well below the highs of 4% during 2012-2014.

Figure 75: Global primary energy consumption by source

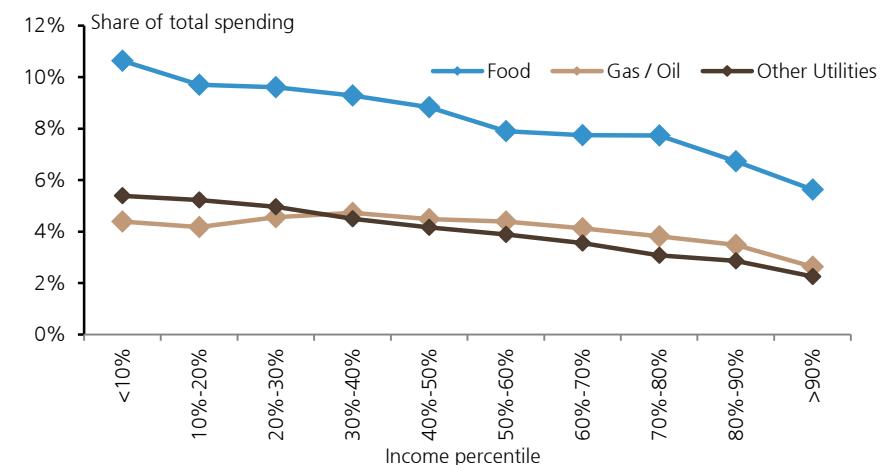


Source: Our World In Data, UBS

Traditional energy sources such as oil, coal and gas account for the vast majority of global energy consumption at ~80%.

Low-income consumer sensitivity to energy prices

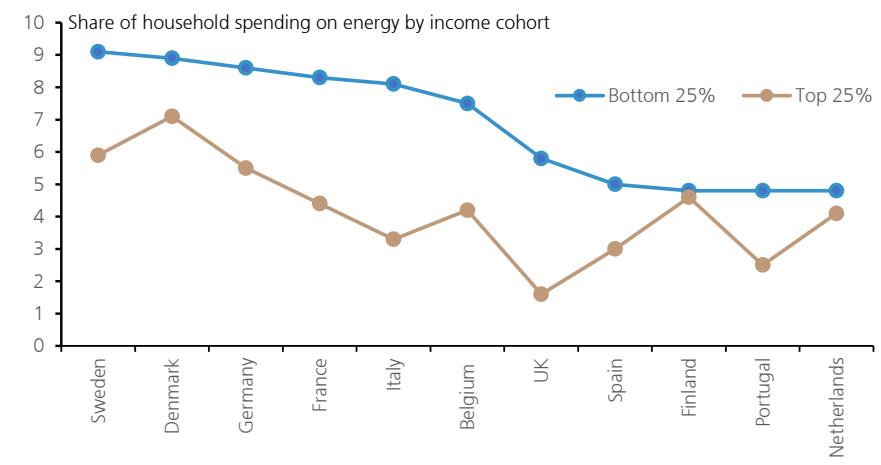
Figure 76: US share of food and oil/gas as percentage of total spending



Source: BLS, Consumer Expenditure Survey, UBS

Lower income US households are more susceptible to commodity inflation: food, energy and utilities account for nearly 20% of total consumption for lower income households vs 10-12% for higher income HHs.

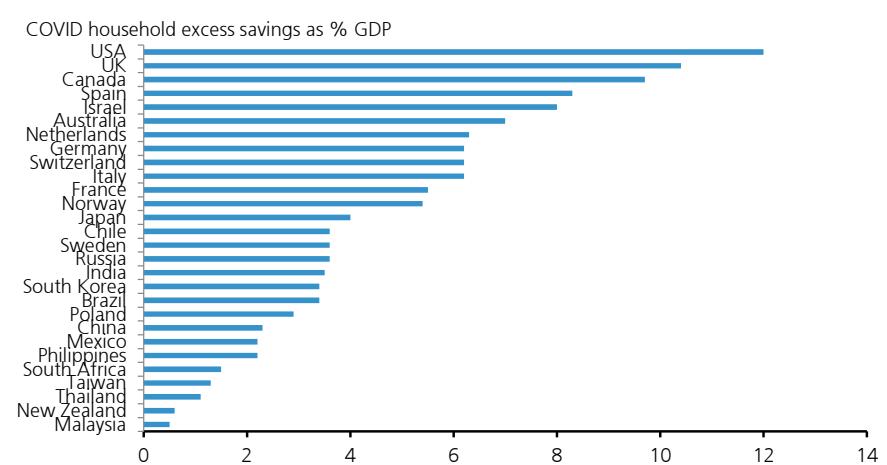
Figure 77: Share of European household spending on energy by income cohort



Source: CEB, UBS

Within Europe, lower income households could see a significant squeeze from higher energy prices given the bottom 25% of household income earners spend over 8% of their expenditures on direct Energy consumption in Sweden, Denmark, Germany, France and Italy.

Figure 78: Household excess savings as % GDP



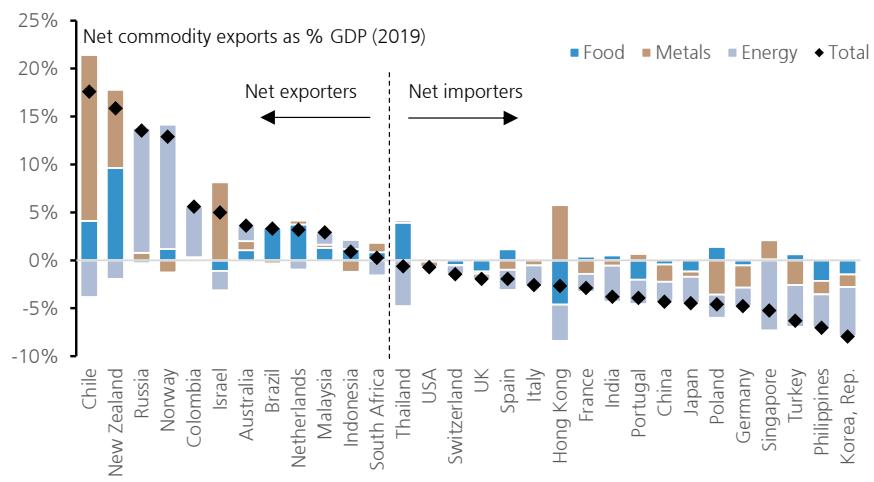
Source: Bloomberg, Moody's, UBS

Higher oil and commodity costs could prove to be a headwind for consumers. But households have accumulated significant excess savings during Covid-19, led by the US (12% GDP), UK (10%) and Canada (10%). This could cushion the blow.

EM consumers have accumulated far less savings, so has New Zealand and Sweden in DM.

Commodities and global trade

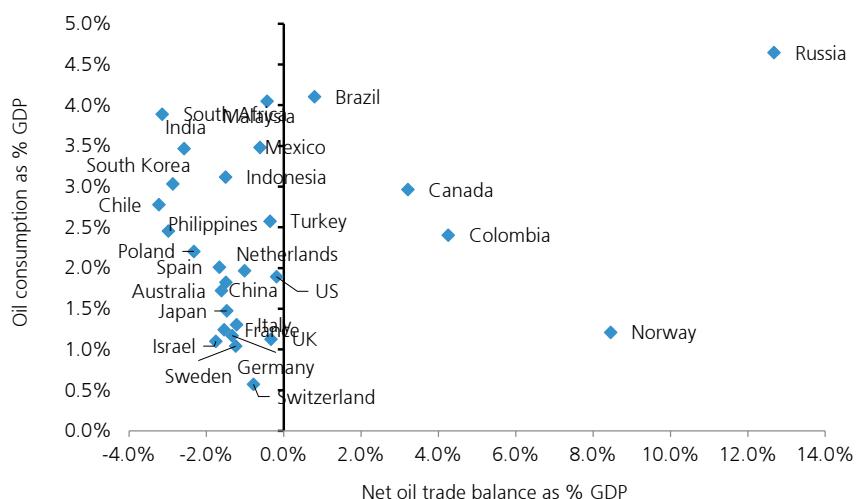
Figure 79: Net commodity exports as % GDP



Net commodity exporters should see an improvement in the terms of trade. Biggest commodity net exporters (as % GDP) include Chile, New Zealand, Russia, Norway. The largest net importers are Korea, Philippines and Turkey.

Source: WITS, UBS

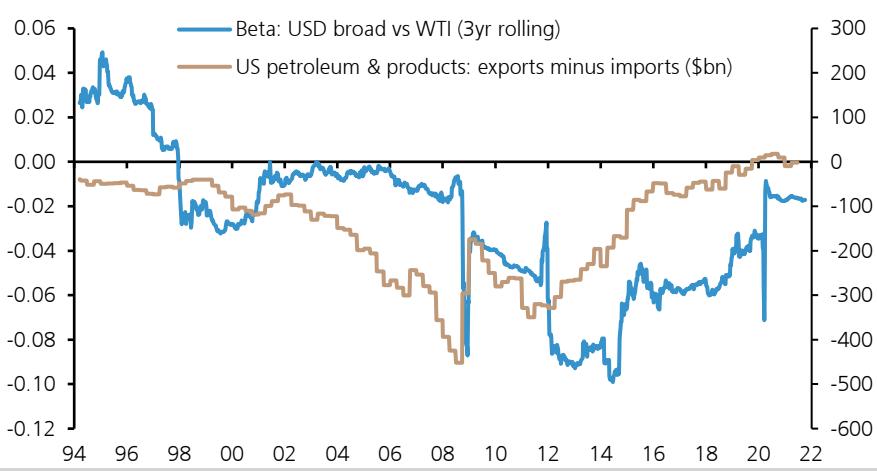
Figure 80: Oil consumption and trade balance



South Africa, Korea and India have high oil consumption as a percentage of GDP and a large oil trade deficit, leaving those economies more vulnerable to higher oil prices. Parts of Europe, notably Spain and the Netherlands, are also at risk. Norway is one of the biggest beneficiaries.

Source: IEA, Bloomberg, UBS

Figure 81: US is no longer a net importer of oil products

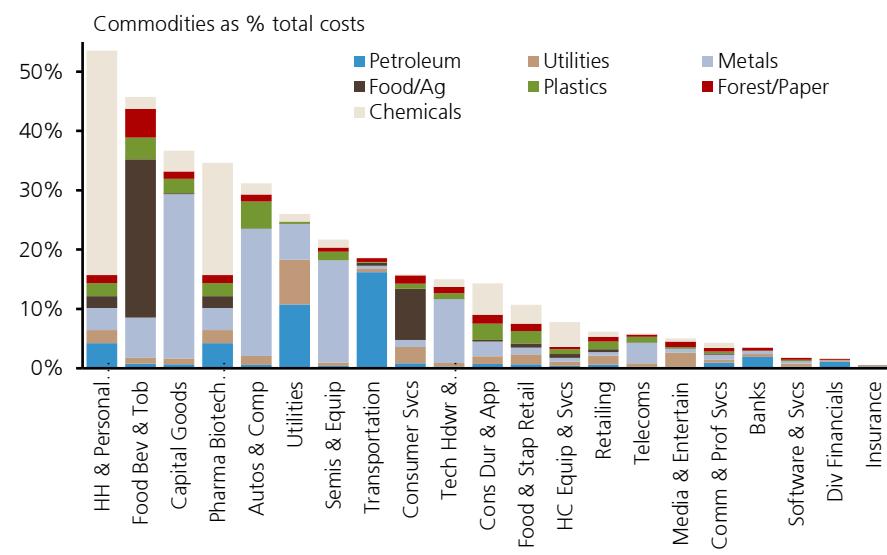


The surge in US oil production has meant that the US is no longer a net importer of oil products, which can help explain the more muted sensitivity of the USD to oil price changes.

Source: Haver, UBS

US equity market commodity cost structure

Figure 82: Commodity input cost exposures by industry group



Source: BEA, UBS

In aggregate commodity inputs (inc. oil, utilities, metals, agriculture and chemicals) for the S&P 500 account for ~14% of total costs. HH & Pers. Prod and Food & Bev have the highest exposures (>45%). For energy costs specifically, Cap Goods, Autos, Utilities and Transportation are most exposed. Financials, Software & Svcs and Media & Entertainment have far lower commodity costs (<4% of total)

Figure 83: Impact of 10% rise in commodities on 2022e earnings

	Oil	Coal	Nonferrous metals (ex. aluminum)	Iron & steel	Aluminium
Transportation	-8.4%	0.0%	0.0%	-0.1%	0.0%
Capital Goods	-0.3%	0.0%	-1.9%	-7.5%	-2.2%
Utilities	0.0%	0.0%	0.0%	0.0%	0.0%
Autos & Comp	-0.3%	0.0%	-1.2%	-7.9%	-0.8%
Food Bev & Tob	-0.3%	-0.4%	0.0%	0.0%	-2.0%
Semis & Equip	0.0%	0.0%	-1.3%	-0.5%	-0.1%
Pharma Biotech & LS	-0.5%	-0.5%	0.0%	0.0%	0.0%
HH & Personal Prod	-1.3%	-0.4%	0.0%	0.0%	0.0%
Tech Hdwr & Equip	-0.1%	-0.6%	-0.5%	-0.2%	-0.1%
Consumer Svcs	-0.2%	-0.3%	0.0%	0.0%	0.0%
Cons Dur & App	-0.3%	-0.1%	-0.1%	-0.7%	-0.2%
Banks	-0.3%	0.0%	0.0%	0.0%	0.0%
Comm & Prof Svcs	-0.3%	0.0%	0.0%	-0.2%	0.0%
Food & Stap Retail	-1.2%	-1.9%	0.0%	0.0%	0.0%
Telecoms	0.0%	0.0%	-0.3%	-0.2%	0.0%
Retailing	-0.4%	0.0%	-0.4%	0.0%	0.0%
Media & Entertain	0.0%	0.0%	-0.1%	-0.1%	0.0%
HC Equip & Svcs	-0.5%	-0.3%	-0.1%	-0.2%	0.0%
Div Financials	0.0%	0.0%	0.0%	0.0%	0.0%
Software & Svcs	0.0%	0.0%	0.0%	0.0%	0.0%
Insurance	-0.2%	0.0%	0.0%	0.0%	0.0%

Source: BEA, UBS

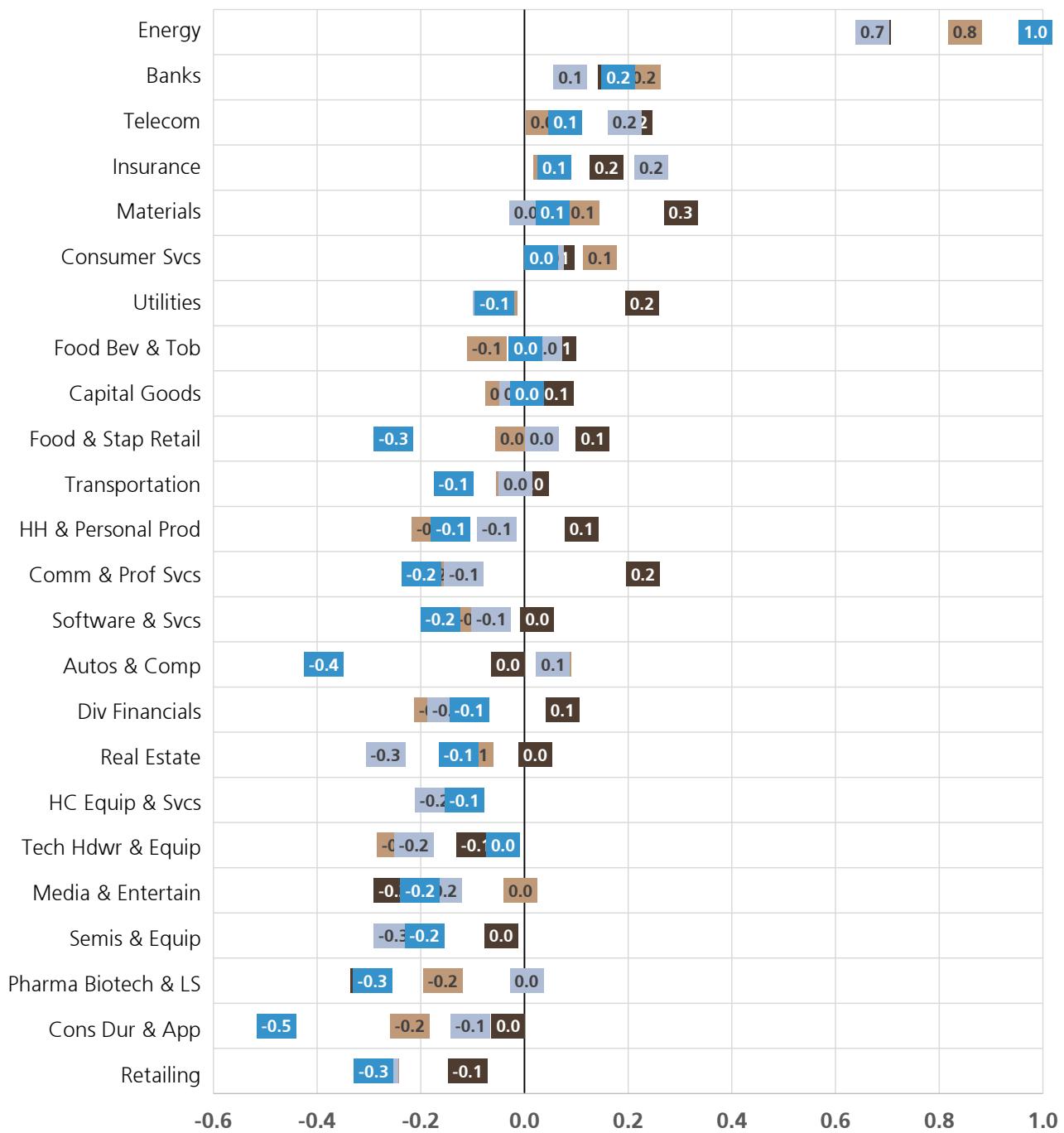
Our sensitivity analysis of earnings to a 10% rise in oil and specific metal prices, shows that Transportation is the most impacted by an oil price shock, while Insurance is the least. Autos and Cap Goods have high exposure to Iron & Steel and along with Food, Bev & Tob, Aluminium too.

Sensitivities to oil price supply side shocks

Figure 84: Beta of industry group relative returns to supply side oil price contribution when Brent > \$70bbl

Region: USA Europe Japan EM

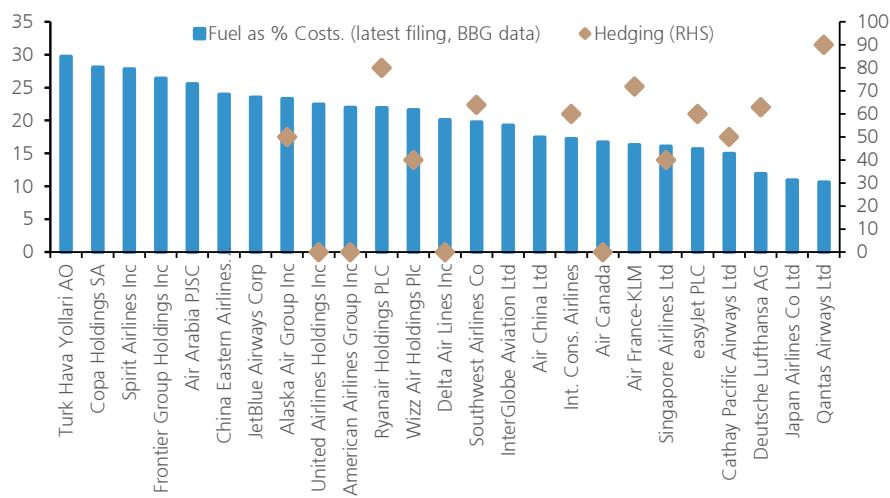
Beta of IG returns to weekly chg in oil price from supply side drivers (when Brent >\$70bbl)



Source: Fed of NY, Bloomberg, UBS

Airlines and oil exposures

Figure 85: Airline fuel exposures



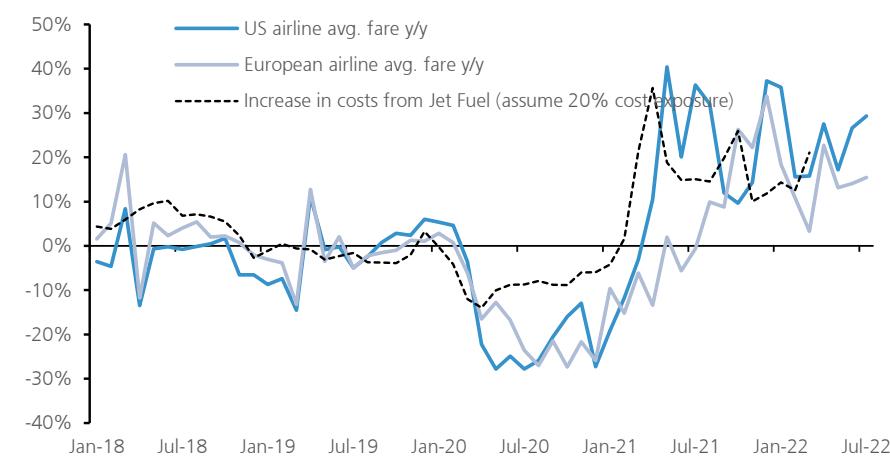
Source: Bloomberg, UBS

Across major global airlines, fuel accounted for ~20% of total costs on average in 2021 (see "Airline hedging and surcharges offset some oil price pain", Reuters 11 March 2022).

However, with Brent >\$100/bbl this share could be closer to 30%.

Hedging is important to manage the volatility. Across airlines hedging practices vary. In the US the big three (UAL, DAL, AAL) tend to not hedge. Alaska and Southwest in comparison hedge closer to 60% of their fuel costs. European airlines are also more active in hedging, covering ~60% of their fuel costs for 2022. In Asia, hedging is more sporadic but airlines such as Air China and Japan Airlines use surcharging to cover the cost of higher fuel.

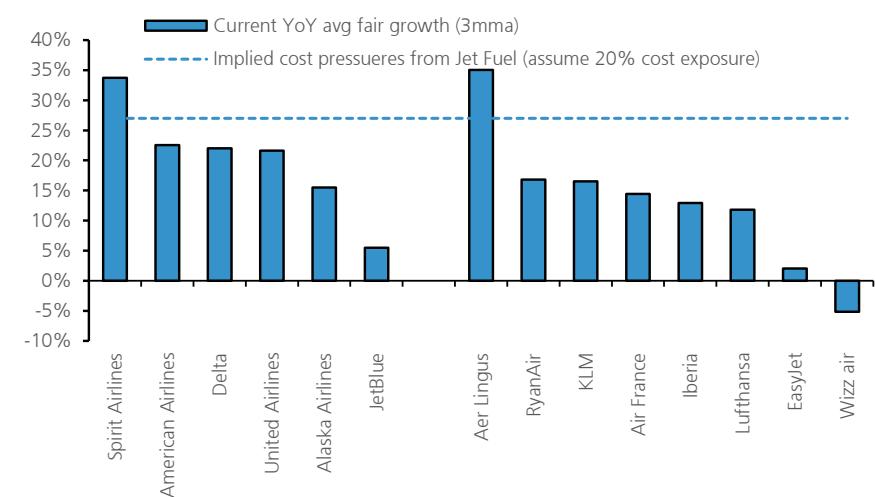
Figure 86: Average airline fares - Europe and US



Source: UBS Evidence Lab [access data](#), UBS

Airline fares in the US are growing 30% y/y on avg according to UBS Evidence Lab data, broadly in line with the impact higher oil prices are having on input costs. In Europe, fare rates are growing at a slightly slower pace but input costs are also likely not rising as fast due to greater hedging.

Figure 87: Current YoY avg fair growth across major airlines

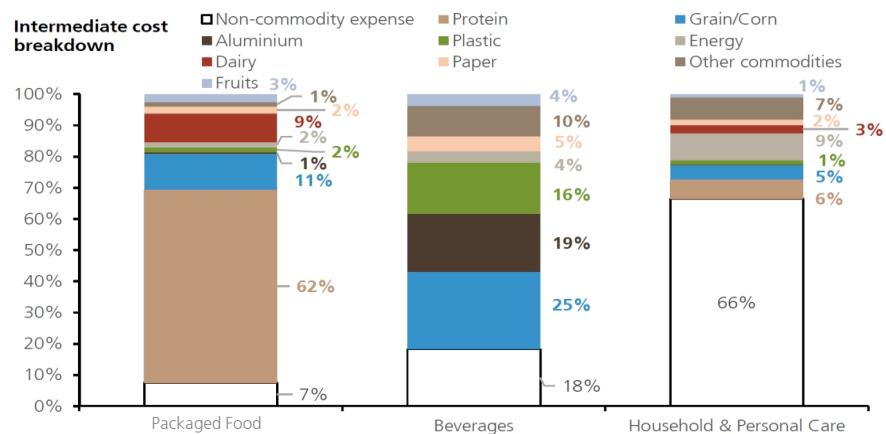


Source: UBS Evidence Lab [access data](#), UBS

Average y/y fare growth over the last 3 months for major US and European airlines.

Consumer Staples sensitivities to commodities

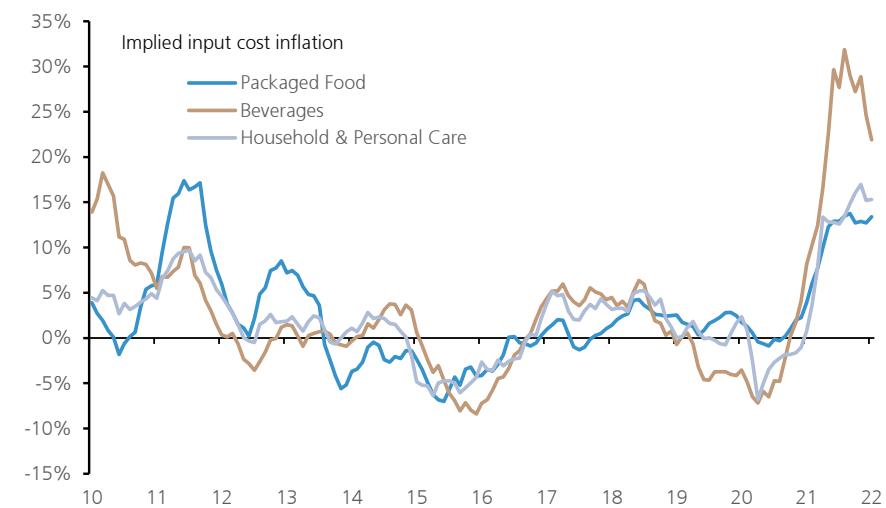
Figure 88: Consumer Staples - breakdown of input costs



Source: BEA, UBS

Within Consumer Staples, Packaged Food has the largest commodity exposure to protein, for beverages it is grain/wheat/corn and aluminum and for Household & Personal Care it is Chemicals followed by Energy.

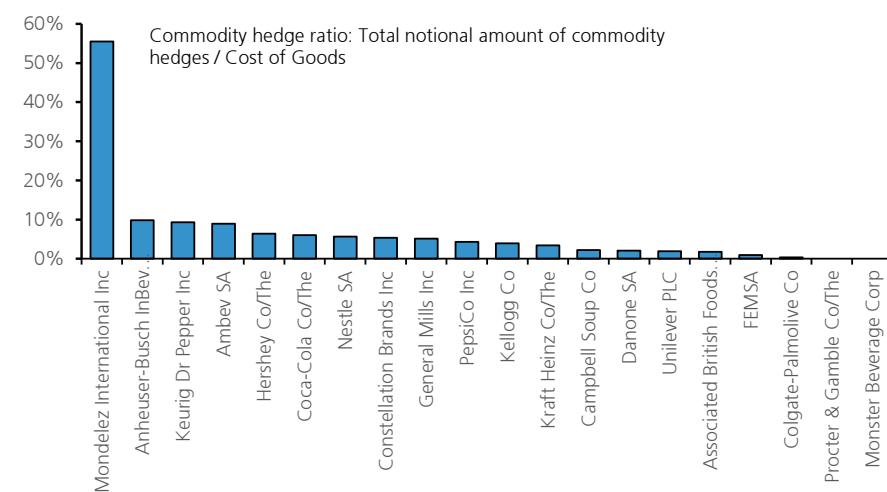
Figure 89: Implied input costs inflation for Consumer Staples sub-industries



Source: BEA, Bloomberg, UBS

Mapping PPI detailed sub-industry inflation data to Consumer Staples industry cost structures, we estimate input cost inflation is running at the fastest rate for Beverages companies.

Figure 90: Hedging practices of select global Consumer Staples companies



Source: Company reports, Bloomberg, UBS

Amongst the largest global Consumer Staples firms, there is a wide variety of different hedging practices. Broadly speaking, overall hedging of commodity exposure is somewhat low. Based on latest filings, notional values of commodity hedges for major companies are often less than 10% of total Cost of Goods Sold. However, these numbers are point in time and could be higher given recent volatility.

Supply chain

Supply chains: Key themes and trends

Supply chain bottlenecks have continued, with a stall recently in the improvement. UBS econ's composite supply chain stress indicator now stands at +2.7 stdev with most indicators showing little material change of late. Persistent supply chain problems may cause longer-lasting cost headwinds than corporates originally anticipated. New sources of disruption have also emerged. China's tightening of COVID-related restrictions could be problematic. The impact of the Russia/Ukraine war also has the potential to disrupt commodity production, trade routes and manufacturing.

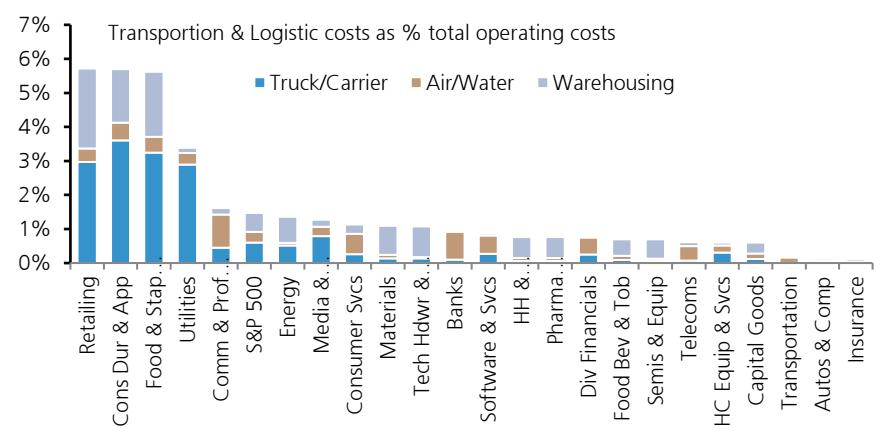
Quantifying exposures

Using the BEA input-output tables, we estimate that transportation costs are equivalent to over 1.5% for the US market but are most significant in Retailing, Consumer Dur & Apparel and Food & Staple Retailing, accounting for >5% of costs (Figure 91). Air/water transportation specifically is closer to 0.5%. A doubling in freight/shipping costs could therefore provide a 4+% hit to EPS for these most impacted industries.

Shipping costs, earnings calls, reshoring and geographical exposure

- **Shipping costs:** Freight costs have surged, up as much as 5x over the last 12 months. The impact of freight costs is somewhat limited for the S&P 500 overall. The exposure is much bigger for certain areas of Retail and related. Using data from the Journal of Commerce, we look at the top 100 importers and their use of forty foot containers. We assume that: (1) The ratio of 2022e FEU's / Sales remain the same as it did in 2020, (2) retailers fulfill 80% of shipping needs via contracts, and 20% in the spot market, and (3) the contract rate is \$2k while market rate is \$10k. We find that Target (-6.7%), Williams-Sonoma (-6.5%), and Dollar-Tree (-6.4%) are the most exposed and could see the biggest hit to EPS from a 5x increase in freight costs.
- **Supply chain sentiment on earnings calls:** Using UBS Evidence Lab Deep Theme Explorer, we find that net sentiment towards supply chains on earnings calls has fallen significantly over the last 18 months, led by Tech Hdwr, Semis and Autos in Q4-2021. The improvement in Q4 reporting was minimal.
- **Reshoring:** Supply chain bottlenecks have increased incentives for companies to relocate their supply chain back home. To identify which industries would be most inclined to reshore we look for (1) sectors where the import content of intermediate goods is high, but (2) the country import concentration is low - i.e. lower dependency on specific countries/locations etc. Using OECD input-output data we find sectors which tick this criteria include Autos, Chemicals and Cap Goods. The UBS Evidence Lab reshoring monitor, which tracks announcements of supply chain movements in the US, has increased since COVID-19 driven by Health Care, Technology and Cons. Disc. For more analysis on the sectors most impacted and the potential beneficiaries from reshoring see Michele de Souza, [Supply chain disruption: Reshoring](#).
- **Geographical exposures:** countries/industries with high foreign revenue exposure are vulnerable to supply chain pressures. Regional sectors with the highest foreign revenue exposure include EM Tech (85%), European Pharma (72%) and Japanese Autos (74%). The US and EM are the most domestic markets (just 30% foreign revenue) while Utilities is the most domestic sector.

Figure 91: Transportation costs across US industries



Source: BEA, Factset, UBS

The state of global inflation bottlenecks

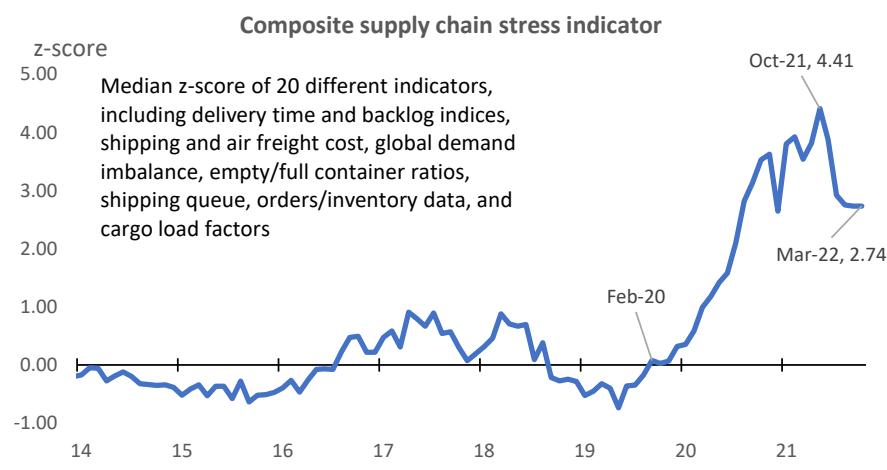
Little further net improvement in global bottleneck pressure recently

Global supply chain bottleneck pressures remain extremely elevated. Our composite supply chain stress indicator now stands at 2.74 stdev above normal (Figure 92). Most indicators have shown little signs of improvement over the last month (e.g. delivery times in the US deteriorated but improved elsewhere; shipping costs went up in the US but down in Europe), and a few even deteriorated slightly (expenditure switching in the US, global orders/inventories). However, there have been some encouraging developments with a very significant improvement in port congestion in the US with the shipping queue outside LA now nearly back at last summer's level (Figure 95). The other notable development is a significant increase in global semiconductor production coming from Taiwan, China and Japan and may be contributing to the improvement in electronic PMIs and the gradual easing in auto supply shortages.

Russia/Ukraine war and China all potential new sources of bottleneck pressure

China's tightening of Covid-related restrictions is a potential source of new supply chain disruption, but we've shown that the [aggregate tightening is actually mild](#) (so far) and has only brought China in line with the rest of Asia, which has moved away from zero-Covid policies. There are also [reports](#) of auto manufacturers planning to operate in a closed loop where workers would eat/sleep at their workplace to avoid disruption. The impact from the Russia/Ukraine war so far is less than we feared. [Only 10% of the supply of wire harnesses](#) for European producers comes from Ukraine and most of it can be shifted in 2-3 months. That could still disrupt several percentage points of European auto production (mainly Germany) but it's not the 10-15% disruption we earlier feared. Similarly, less than 20% of Neon gas for the production of lasers for the design of silicon wafers for semiconductors comes from Ukraine/Russia and chip companies appear to be able to source them elsewhere or have buffers. That said, the situation is fluid and [trade with Russia has collapsed](#), which should affect the sourcing of some inputs for production, and there are other materials (e.g. palladium) where we do not yet have a firm estimate of the potential supply chain impact.

Figure 92: Composite supply chain stress indicator



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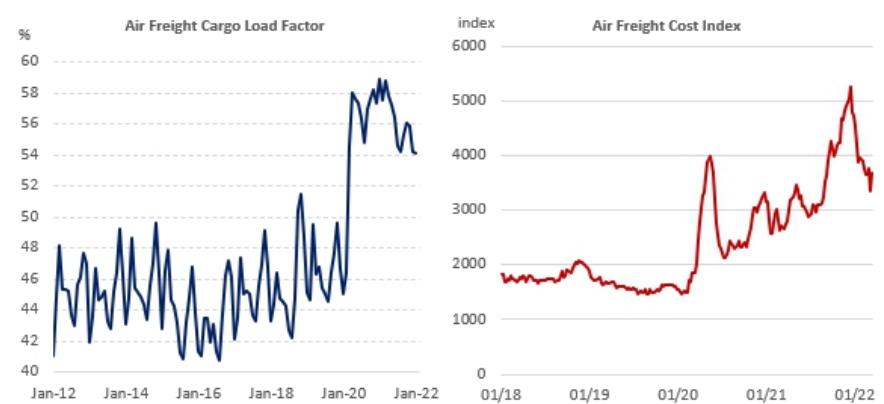
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Figure 93: A recovery in passenger flight has improved available cargo space and reduced freight costs (small incremental progress this month)



Source: UBS, Haver

Expensive shipping and strong demand for PPE gear were among the factors that pushed up demand for air freight during the pandemic. But with a lack of passenger travel, cargo capacity was stretched (e.g. during Jan-Nov '21 cargo capacity on passenger flights was still [nearly 40% below 2019 levels](#)) and the cost of air freight increased sharply. The recovery in passenger flights is helping add capacity back and starting to push air freight cost down again.

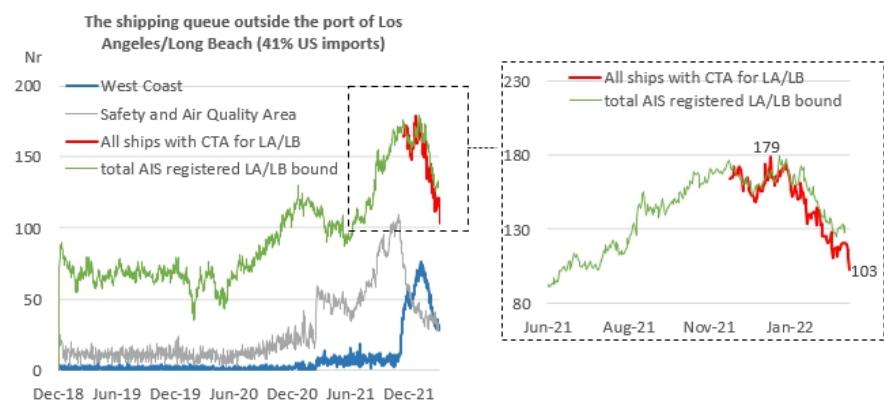
Figure 94: Global manufacturing orders/inventories have normalized



Source: UBS, Haver

Slowing momentum in goods spending is mirrored in declining manufacturing orders. The ratio of manufacturing orders to inventories, which in DM had been running 2 standard deviations above normal, is back to its historical average. This is almost entirely due to the sharp decline in orders, which peaked in May '21 and declined for 8 consecutive months until ticking up again this month.

Figure 95: Port congestion is getting better



Source: UBS, Reuters Refinitiv, Haver

Congestion in the port of Los Angeles & Long Beach (41% of US imports) is declining. The shipping queue that had built up since June has nearly fully reversed (a decline of 76 container ships since early January), though to fully normalize the queue needs to decline by an additional 30 ships or so. A new queuing system pushed ships further offshore to reduce pollution, and stretched the line of ships across the Pacific; the place in the queue is now determined by when a ship leaves its port of origin.

Freight and container cost exposures

Figure 96: Container cost sensitivities

Company	Ticker	US imports: FEU's in 2022e	Contracts fulfilled by spot market	Impact of 5x increase in spot rate to \$10k		
				Total Container Costs	Container costs as % 22e Revenue	Impact of 5x increase in spot rate to EBIT
US companies						
Target	TGT	381,062	20%	1,282,123,593	1.17%	-6.73%
Williams-Sonoma	WSM	56,796	20%	181,846,429	2.12%	-6.53%
Dollar Tree	DLTR	98,531	20%	341,062,394	1.22%	-6.38%
Newell Brands	NWL	41,168	20%	143,397,454	1.42%	-5.53%
Under Armour	UAA	15,438	20%	49,117,624	0.81%	-4.89%
Gildan Activewear	GIL	15,402	20%	46,081,750	1.44%	-4.11%
Kohl's	KSS	31,524	20%	103,047,815	0.54%	-3.46%
Element Electronics	ESI	11,403	20%	35,334,771	1.31%	-3.33%
PVH	PVH	18,957	20%	60,713,503	0.64%	-3.22%
Ross Stores	ROST	47,631	20%	143,261,709	0.72%	-3.18%
Walmart	WMT	491,014	20%	1,726,027,848	0.29%	-2.92%
Tractor Supply	TSCO	25,457	20%	82,254,053	0.60%	-2.91%
Mattel	MAT	12,944	20%	42,040,939	0.72%	-2.45%
Lowe's	LOW	181,123	20%	626,246,536	0.64%	-2.29%
Home Depot	HD	302,397	20%	1,020,898,927	0.66%	-2.07%
VF Corp	VFC	20,713	20%	65,426,832	0.51%	-1.88%
Dollar General	DG	38,211	20%	131,659,220	0.35%	-1.79%
LKQ Corp.	LKQ	13,919	20%	47,025,773	0.35%	-1.47%
Nike	NKE	71,799	20%	241,198,484	0.46%	-1.30%
Best Buy	BBY	22,015	20%	77,070,730	0.15%	-1.28%
Continental Tire	CTTAY	13,474	20%	50,558,326	0.12%	-0.80%
Hewlett-Packard	HPE	15,700	20%	55,080,091	0.19%	-0.79%
Stanley Black & Decker	SWK	10,595	20%	33,874,948	0.17%	-0.67%
L Brands	BBWI	5,159	20%	22,317,679	0.27%	-0.45%
Starbucks	SBUX	13,957	20%	43,941,885	0.13%	-0.41%
Costco Wholesale	COST	18,953	20%	60,971,684	0.03%	-0.38%
General Electric	GE	11,856	20%	43,111,858	0.06%	-0.28%
Caterpillar	CAT	13,785	20%	43,863,081	0.08%	-0.27%
Amazon	AMZN	32,428	20%	101,863,070	0.02%	-0.17%
Non-US companies						
Canadian Solar	CSIQ	17,534	20%	48,564,887	0.67%	-7.56%
Trina Solar	688599	24,965	20%	64,226,788	0.51%	-5.76%
Electrolux	ELUX/B	26,079	20%	93,173,144	0.67%	-5.69%
LG Corp	003550	73,265	20%	256,718,254	4.01%	-5.38%
Sumitomo Corp	8053	46,424	20%	159,248,017	0.33%	-4.52%
Mitsubishi Motors	7211	16,297	20%	51,923,997	0.29%	-3.64%
Yokohama Rubber	5101	9,735	20%	33,860,584	0.58%	-3.13%
Heineken	HEIA	44,981	20%	152,362,205	0.55%	-1.67%
Toyota Tsusho	8015	23,691	20%	81,241,968	0.13%	-1.46%
adidas AG	ADS	18,545	20%	63,731,530	0.24%	-1.04%
Yamaha Motor	7272	10,316	20%	34,917,583	0.22%	-1.01%
Subaru	7270	9,604	20%	33,841,040	0.12%	-0.78%
Nissan Motor	7201	9,050	20%	30,748,990	0.04%	-0.48%
Panasonic	6752	9,101	20%	32,754,223	0.05%	-0.43%

Using data from the Journal of Commerce, we look at the top 100 importers and their use of forty-foot containers.

Based on the work from the US Broadline Retail team we assume that: (1) The ratio of 2022e FEU's / Sales remain the same as it did in 2020, (2) retailers fulfill 80% of shipping needs via contracts, and 20% in the spot market, and (3) the contract rate is \$2k and the market rate is \$10k.

We find that in the US, Target (-6.7%), Williams-Sonoma (-6.5%), and Dollar Tree (-6.4%) are the most exposed and could see the biggest hit to EPS from a 5x increase in freight costs.

Source: Journal of Commerce, Factset, UBS

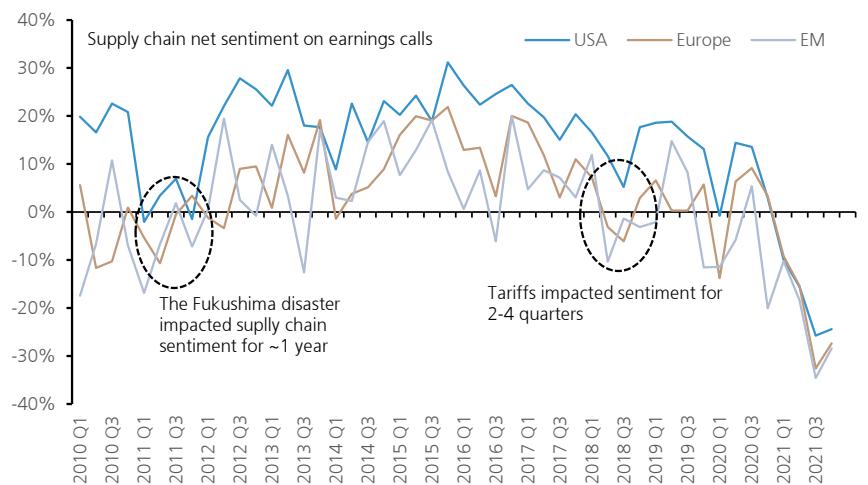
Figure 97: Performance of companies with high shipping cost exposures



Source: Factset, Bloomberg, UBS

Earnings calls: supply chain sentiment

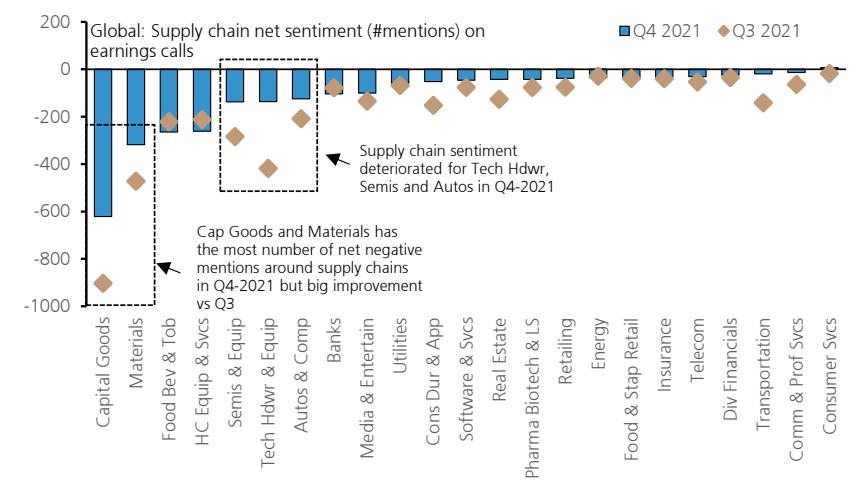
Figure 98: Supply chain net sentiment on earnings calls regionally



Source: UBS Evidence Lab DTE, Factset, UBS

Net sentiment towards supply chains on earnings calls has fallen significantly over the last 18 months. It took 1yr for supply chain sentiment to normalize after the 2011 Fukushima earthquake and 2-4 quarters after the 2018 tariff escalation.

Figure 99: Global industry group net supply chain sentiment

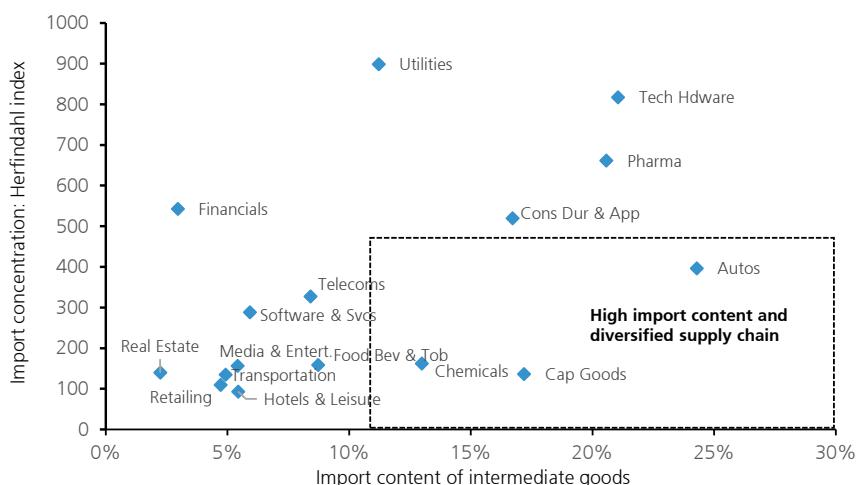


Source: UBS Evidence Lab DTE, Factset, UBS

Across sectors Cap Goods and Materials have seen the most negative comments on supply chains. Tech Hdwr, Semis and Autos saw less negative sentiment on Q4 earnings calls.

Reshoring of supply chains

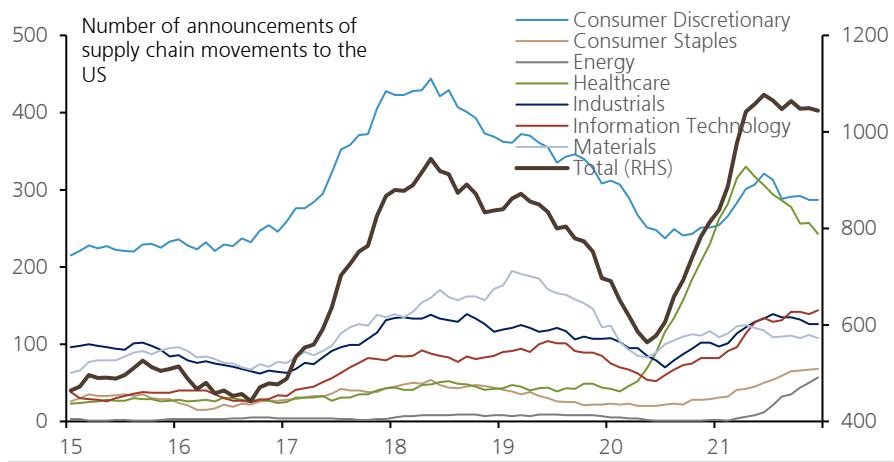
Figure 100: Industry import exposures and concentrations



Source: OECD, UBS

Industries with a high import content of intermediate goods and whose supply chains are more diversified have greater incentives to reshore their production and supply chains. Industries which match this criteria include Autos, Cap Goods, and Chemicals.

Figure 101: Reshoring announcements

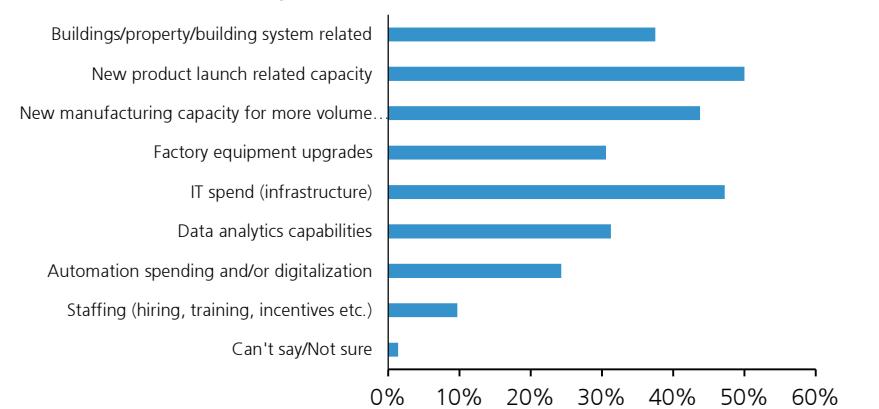


Source: UBS Evidence Lab ([Access data](#))

The UBS Evidence Lab US Reshoring Monitor highlights the sharp rise in the number of companies announcing moves in their supply chains back to the US. Health Care has been a key driver recently, so has Technology.

Figure 102: Areas of potential US investment spending from relocating investment out of China

For which of the following categories of investment spending would you expect to see largest relative increase from relocating investment out of China?



Source: UBS Evidence lab ([Access Dataset](#))

US reshoring likely to increase investments in automation, digital, data analytics as well as other capex/IT categories.

Wages

Input costs: Key themes and trends

Tight labor markets and pent-up demand have resulted in wage pressures intensifying. Our aggregate wage tracker for the US is running at 4.5% y/y, the highest since early 2000. These headwinds are unlikely to abate soon: labor shortages are widespread and the time to fill job openings has jumped ~50% since pre-COVID. In Europe and Japan, wage pressures have been accelerating but to a lesser extent than the US, growing 2% and 1% y/y respectively. Labor cost increases have been especially acute in lower paid cohorts; in the US for example, jobs paying under \$20/hr are experiencing wage growth of >8% y/y. From this perspective, labor unions could play an important role in negotiating further wage increases. Trade unions are much more prevalent in Europe (~25% of labor force) vs EM markets (Korea, Turkey, Mexico) and the US at roughly ~10%.

To inform our views on wage sensitivities we have collected data on wage/salary burdens and the pct of employees unionized for companies globally. For the US, we also include data on median wage and net wage cost sentiment on earnings calls.

Despite the broader fears about growing labor costs, it is worth putting a few things in perspective. First real wage growth is actually falling with inflation rates exceeding the growing cost of labor - an indication that corporates could offset the potential headwinds. Secondly, the impact of wage growth on margins also depends on labor productivity. When the labor productivity / wage growth ratio is rising US margins have typically expanded. Across Europe, US, Japan and EM labor productivity grew over 3% in 2021, an indication that some wage inflation has been manageable.

Quantifying exposures

We calculate and estimate wage cost exposures for companies in the MSCI ACWI. Our analysis shows Europe and Japan are the most sensitive to wage growth with a 1ppt rise resulting in a 1ppt hit to EBIT, all else being equal. The US (0.6%), Latam (0.2%) and EMEA (0.2%) are less vulnerable. Within industry groups Food & Bev Retail and Cons Svcs are more exposed with a 1ppt rise in wages accounting for 2ppt hit to EBIT, and this is more extreme within Europe specifically. Energy, Real Estate and Semis have the lowest EBIT exposure to wages. Comparing changes in labor costs for the MSCI ACWI, the Financials sector and Cons Dur & App appeared to have some of the fastest rates of wage growth in 2021 (~8% y/y).

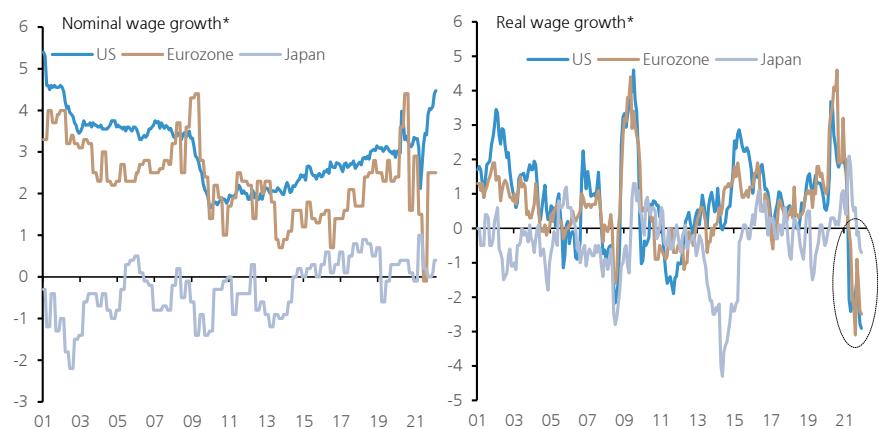
US deep dive: high wage sensitive stocks

To identify US companies most exposed to rising wage costs, we developed a framework which included a number of alternative datasets such as median wage, union exposure, industry wage growth and earnings call sentiment ([link](#)). This allows us to more accurately identify companies exposed to the hottest areas of the labor market. Our enhanced US high wage sensitivity stock screen has underperformed the market by ~20% since March 2021. We quantify and assess the earnings sensitivity, outlook and valuations for our screen of high wage sensitive stocks:

- **Earnings sensitivity:** We estimate that a 1ppt increase in wage growth could reduce EBIT by ~2.7% for both our sector neutral (SN) and non sector neutral (NSN) wage sensitivity screens. Although 2022e consensus EBIT margins for our screens have been revised downward by -30bps (-3%), 2022 estimates are still 6% higher than 2019. To put the risks into context, by mapping industry wage data to companies, we find wage growth could be 5-7% y/y for our screens implying a ~15-17% headwind to EBIT.
- **Warnings on earnings calls signal underperformance:** Negative sentiment related to wages/labor costs on earnings calls have surged to record levels and over 70% of companies have mentioned labor related issues. Stocks with wage exposures and negative wage sentiment on earnings calls have underperformed by 5.5% on avg in the following 6months, and were particularly punished in Q4 reporting, falling over 3% on the day.
- **What's priced?** The relative 24m fwd PE of wage sensitive stocks has de-rated since 2020, but we believe the market is only marginally concerned about labor costs: accounting for daily returns in factors, our high wage sensitivity screen barely trades at a discount. Based on the historical relationship since 2013, we find wage sensitive stocks often underperform the market when y/y wage growth is above 3%.

Global wage trends

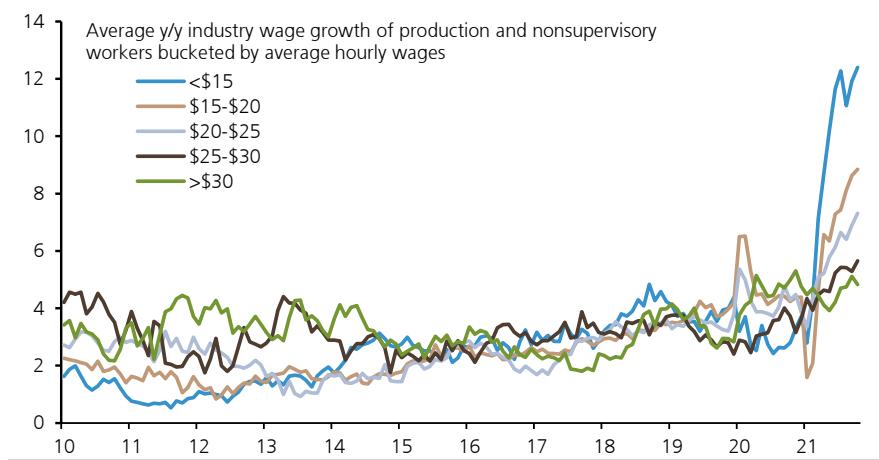
Figure 103: Regional nominal and real wage growth



Wage growth has been picking up, particularly in the US (4.5% y/y), but real wages have declined significantly suggesting corporates are successfully passing on wage costs through higher prices.

Source: Bloomberg UBS. *Note: US wage growth is the average of Employment Cost Index, Average Hourly Earnings, Atlanta Wage Tracker and NY Fed 1y Wage Growth Exp. For the Eurozone we use Eurostat's labor cost index, and for Japan we use the avg monthly scheduled cash earnings.

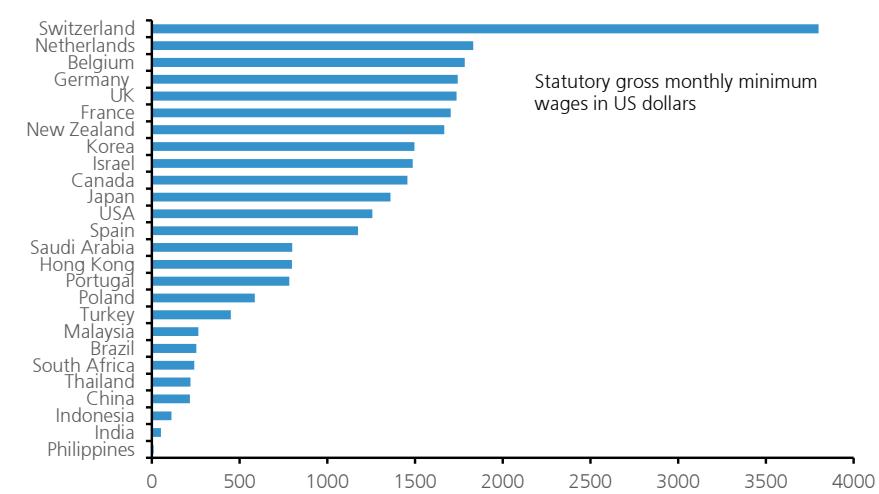
Figure 104: Wage growth by average hourly earnings



Low-income jobs have seen the greatest wage pressures: y/y growth for industries with hourly wages under \$15 is above 10%. Growth has also been accelerating for jobs paying \$15-\$25 an hour.

Source: Bloomberg, UBS

Figure 105: Regional minimum wages

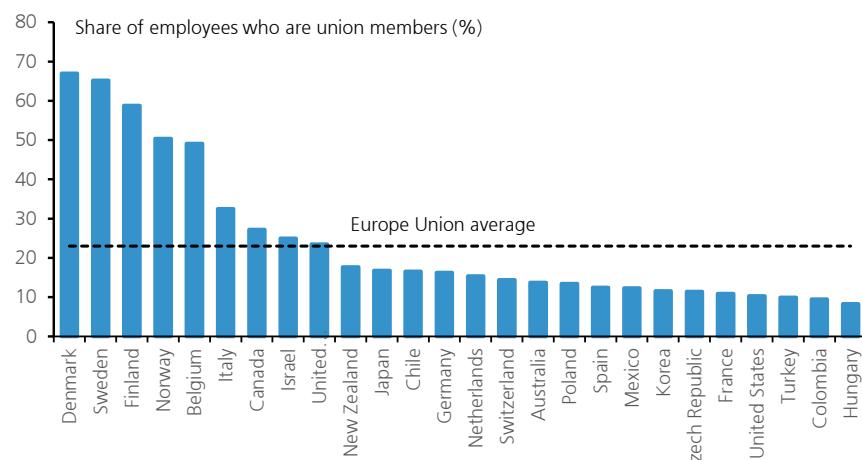


Within developed markets Portugal, Spain and the US have low statutory minimum wages and thus could face greater wage pressures amongst the lowest-income segments. In EM, minimum wage costs are high in EMEA, while Asia (Thailand, Indonesia, India and Philippines) has some of the lowest minimum wages globally.

Source: ILO, UBS

Global labor market productivity and unions

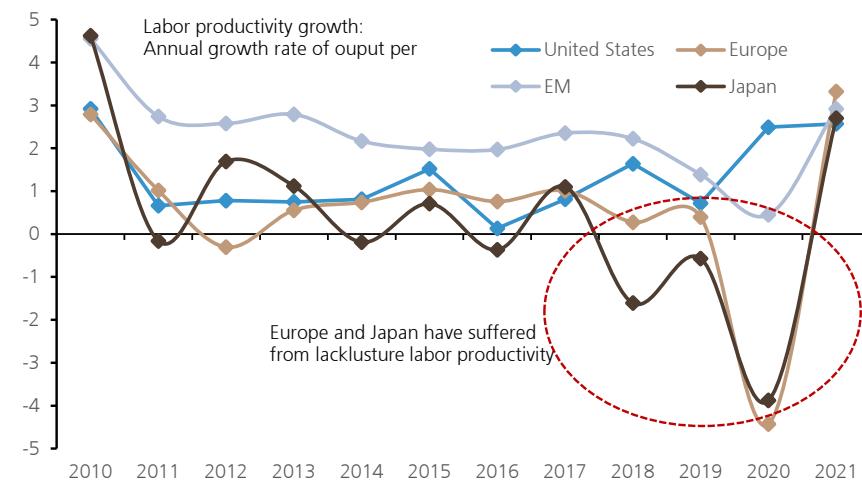
Figure 106: Employee unionization across countries



Source: OECD, UBS

Labor unions cover a far greater proportion of the workforce in the Scandis (~60%) and Europe as a whole (23%), which could provide the workforce with greater bargaining power. EM markets rank as having some of the lowest labor union representation - as does the US (~10%) which partly explains the dramatic decline in the share of employee compensation as % GNP over the last few decades.

Figure 107: Labor productivity growth

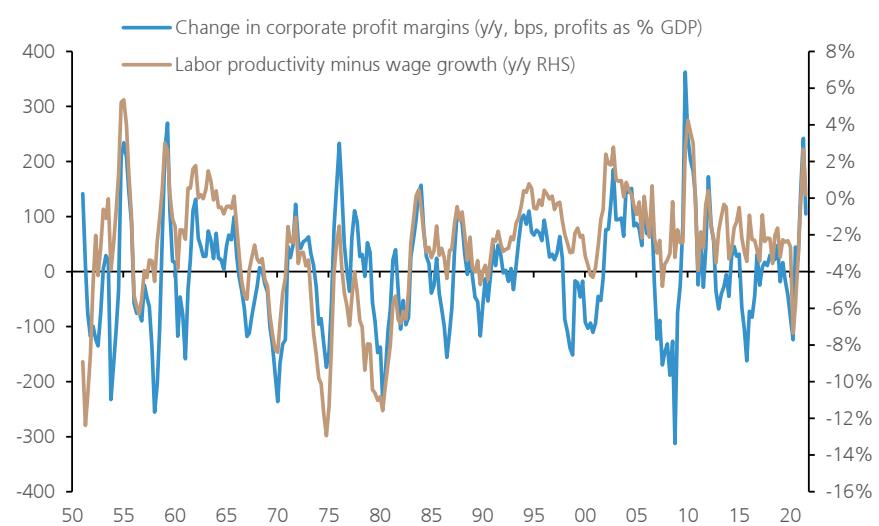


Source: ILO, UBS

Higher wages are not necessarily bad, particularly if they are associated with higher labor productivity. Following the COVID-19 pandemic, labor productivity rebounded sharply in 2021, growing >3% across all of the major regions.

Historically, Europe and Japan have suffered from lackluster labor productivity compared to the US and EM, which has contributed partly to the weakness in both regions' profit margins over the last decade.

Figure 108: Corporate profit margins and labor productivity vs wages

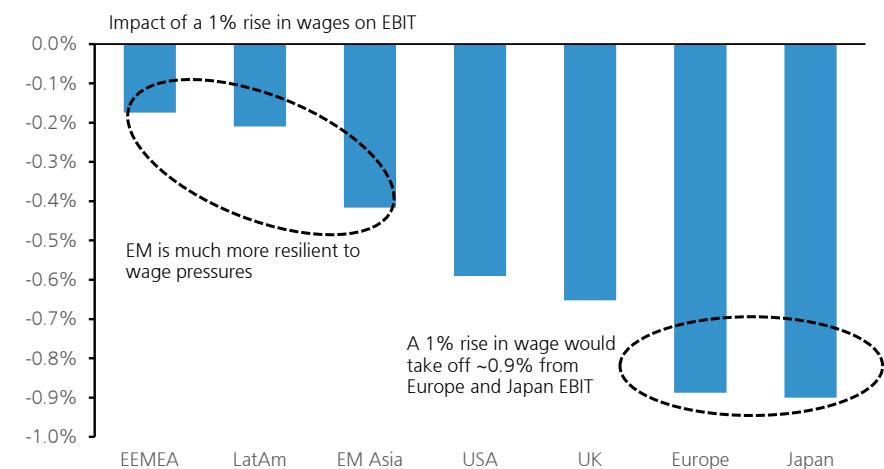


Source: Bloomberg, UBS

A sizeable gain in labor productivity, supported by accelerating capex, should offset some of the headwinds from higher wages and support margins through 2022.

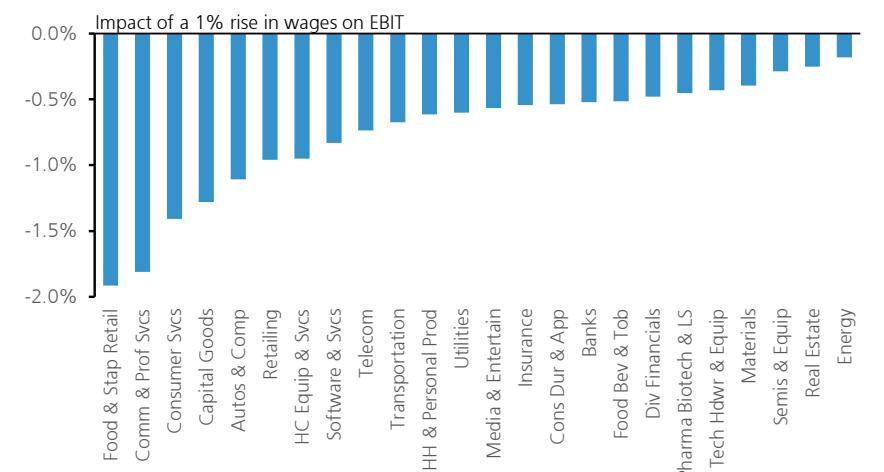
Global equity sensitivities to wage growth

Figure 109: Regional EBIT sensitivity to a 1 ppt rise in wage



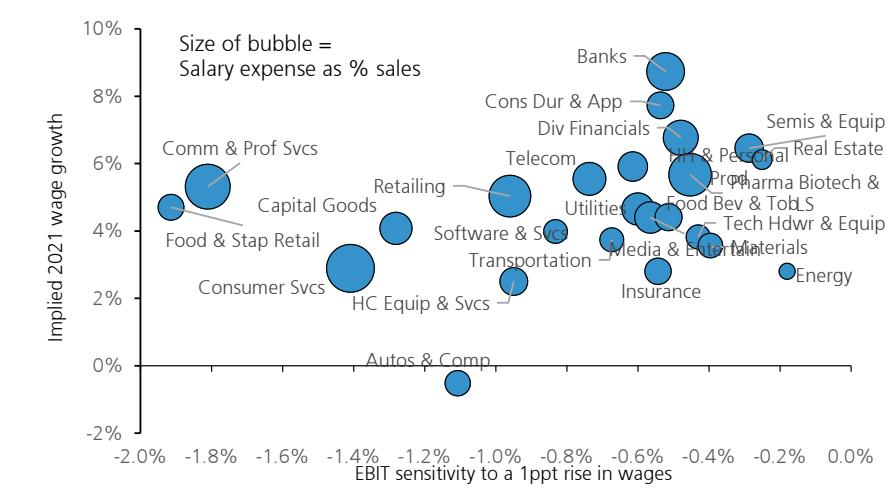
Our analysis of labor cost exposures at the stock levels shows that a 1ppt rise in wages would provide the biggest hit to Europe and Japan, shaving 1ppt off EBIT. EM is far more resilient. In LatAm and EMEA that sensitivity is closer to just 0.2ppcts.

Figure 110: Global industry group EBIT sensitivity to a 1 ppt rise in wages



Across global industry groups, Food & Staples Retail, Comm & Prof Svcs and Consumer Svcs are the most exposed to higher wages. Energy, Real Estate and Semis are far less exposed.

Figure 111: Global industry group EBIT sensitivity vs wage growth



Comparing wage exposures with company implied wage growth in 2021, we estimate that the biggest impact from tight labor market was seen in Food & Stap Retail, Comm & Prof Svcs, Cap Goods and Financials.

Source: Bloomberg, Factset, UBS

Regional industry group EBIT sensitivities to rising wages

Figure 112: Regional industry group EBIT sensitivities to a 1ppt rise in wages

Impact of 1ppt rise in wages on EBIT

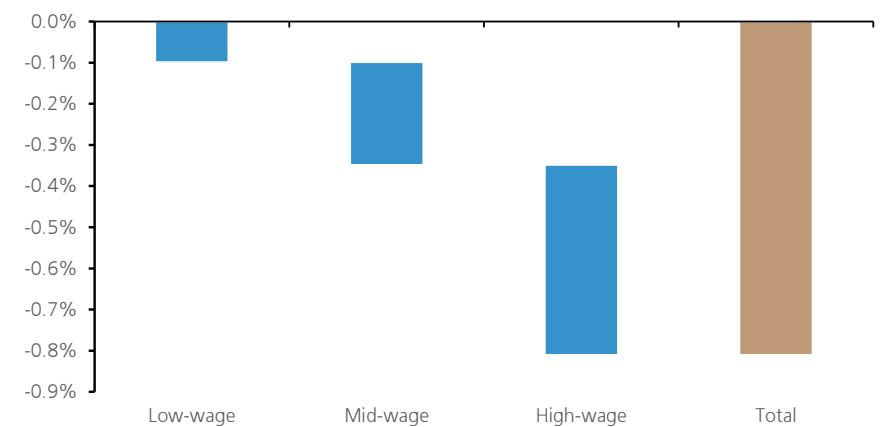
	USA	Europe	Japan	EM
Food & Stap Retail	-1.8%	-2.7%	-2.1%	-1.3%
Software & Svcs	-0.6%	-1.7%	-2.5%	-1.9%
Comm & Prof Svcs	-1.7%	-2.3%	-1.1%	-0.1%
Capital Goods	-1.3%	-1.8%	-1.3%	-0.6%
Retailing	-0.9%	-1.3%	-1.7%	-1.1%
Consumer Svcs	-1.0%	-2.9%	-0.1%	-0.9%
Autos & Comp	-1.1%	-1.4%	-0.8%	-0.8%
HC Equip & Svcs	-0.9%	-1.5%	-0.7%	-0.6%
Media & Entertain	-0.5%	-2.2%	-0.6%	-0.3%
Tech Hdwr & Equip	-0.3%	-1.6%	-0.9%	-0.6%
HH & Personal Prod	-0.4%	-0.7%	-1.0%	-0.6%
Telecom	-0.7%	-1.0%	-0.7%	-0.3%
Transportation	-1.1%	-0.7%	-0.6%	-0.3%
Cons Dur & App	-0.3%	-0.5%	-0.9%	-0.9%
Utilities	-0.7%	-0.7%	-0.9%	-0.3%
Div Financials	-0.4%	-0.7%	-0.8%	-0.3%
Food Bev & Tob	-0.5%	-0.5%	-0.8%	-0.5%
Pharma Biotech & LS	-0.3%	-0.6%	-0.8%	-0.5%
Banks	-0.6%	-0.6%	-0.7%	-0.3%
Materials	-0.5%	-0.5%	-0.8%	-0.2%
Insurance	-0.7%	-0.9%		-0.4%
Semis & Equip	-0.3%	-0.5%	-0.2%	-0.2%
Real Estate	-0.4%	-0.1%	-0.3%	-0.2%
Energy	-0.3%	-0.2%	-0.3%	-0.1%

Source: Bloomberg, Factset, UBS

US exposures to low -income wage growth

Figure 113: Impact of wage growth by income cohort

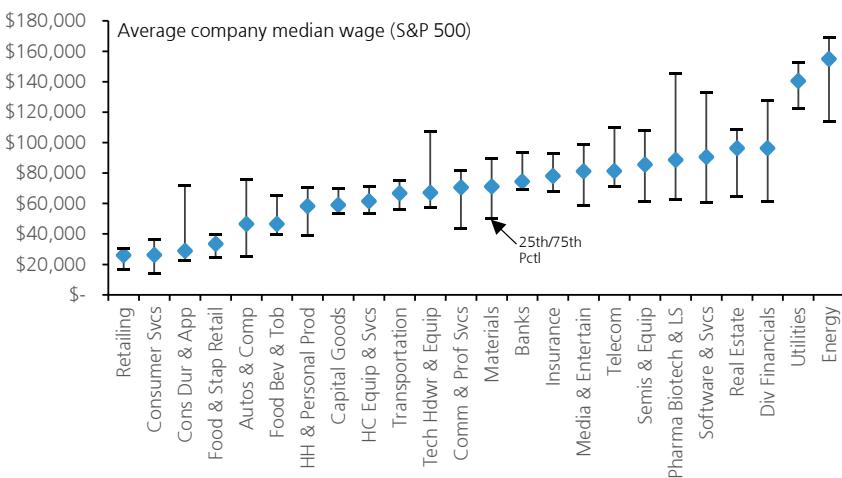
Impact of 1ppt rise in wage growth by earnings-cohort on S&P 500 EPS



Source: Factset, company reports, UBS

The S&P 500 is 4x more sensitive to wage growth for high income workers than lower wage workers. Over 55% of companies have a median wage of \$65,000. We estimate a 1% rise in wage growth for the high-wage cohort specifically would be a -0.4% hit to EPS vs -0.1% for low wage.

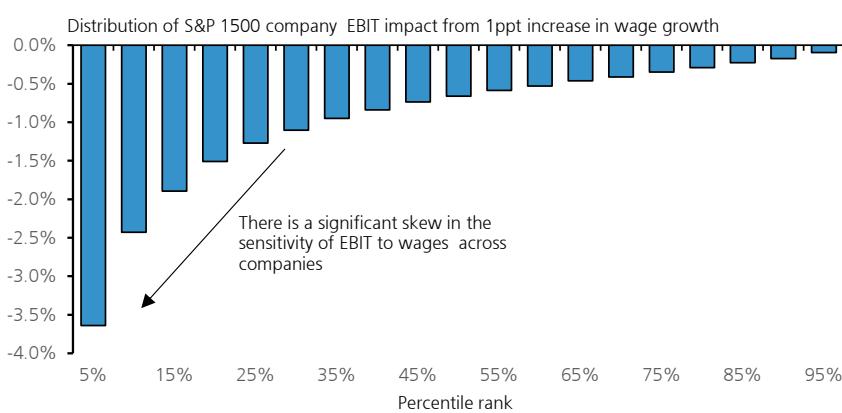
Figure 114: Breakdown of median wage by industry group



Source: Factset, company reports, UBS

Retailing, Consumer Services, Consumer Durables and Food & Staples Retail have the highest exposure to low wage growth - with companies in these industries on average paying a median wage of ~ \$30k. Energy, Utilities and Div Financials have a much higher wage skew.

Figure 115: Distribution of EBIT impact of 1ppt increase in wage growth

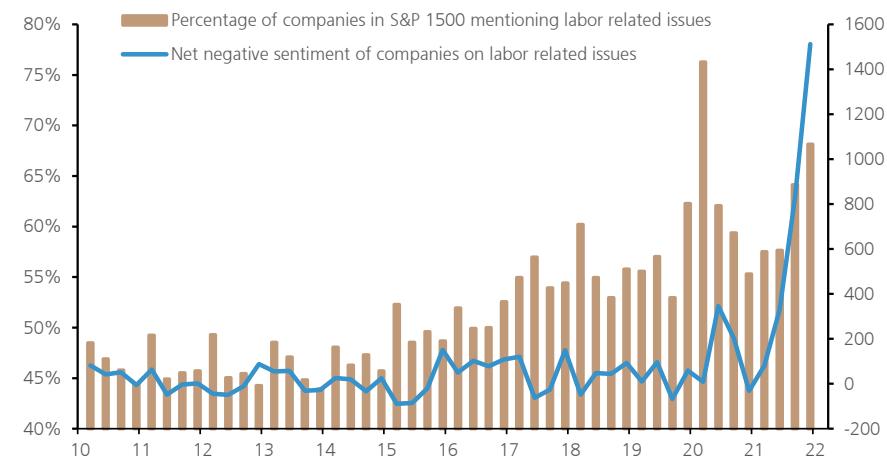


A 1% increase in wage growth would be a >3.5% hit to EBIT for the most wage sensitive firms in S&P 1500.

Source: Factset, UBS

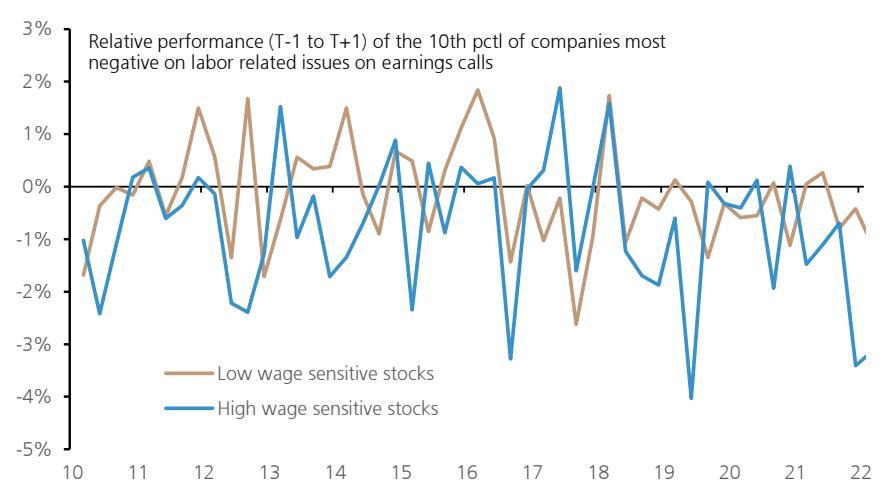
A signal: labor sentiment on US earnings calls

Figure 116: Net sentiment (negative - positive mentions) of corporates on earnings calls when discussing labor related issues



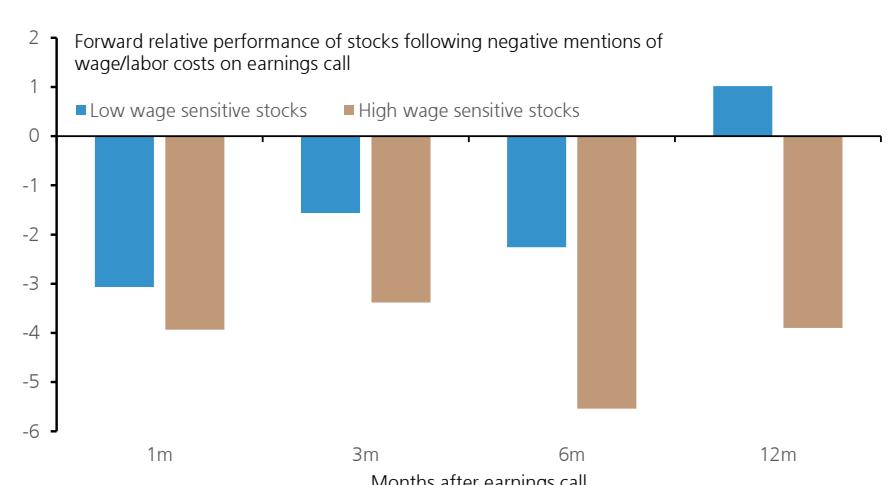
Using UBS Evidence Lab Deep Theme Explorer we find that net negative sentiment of corporates around labor related issues has surged to unprecedented levels with the number of companies reporting such problems climbing to nearly 70%.

Figure 117: Median performance of companies with most negative sentiment (top 10th pctl) on labor related issues on earnings calls



Companies reporting wage concerns have been punished more severely, particularly those which are the most wage sensitive. The top 10% of companies with the most negative labor sentiment and that have high wage exposure underperformed by 3% in Q4 reporting.

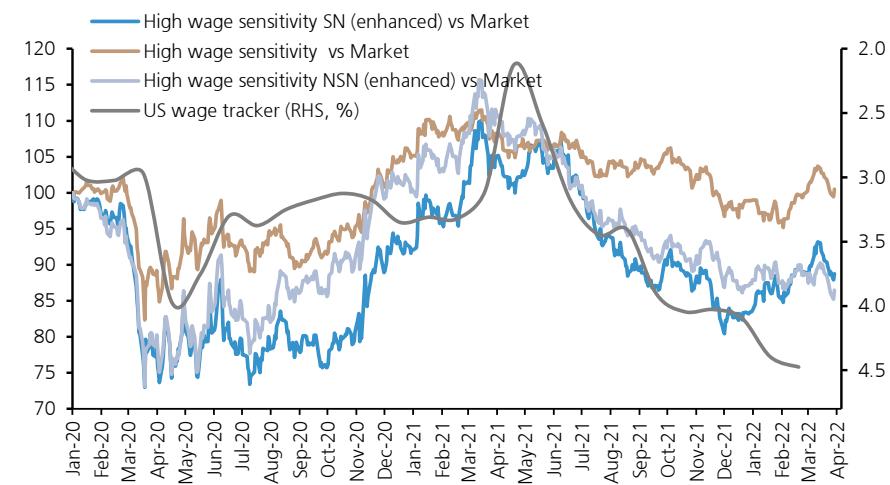
Figure 118: Forward performance of stocks following negative mentions of wage/labor costs on earnings calls



High wage sensitive stocks with negative sentiment on earnings calls have underperformed by 4-5.5% in the 1-6 months after reporting.

US high wage sensitive stocks - what's priced?

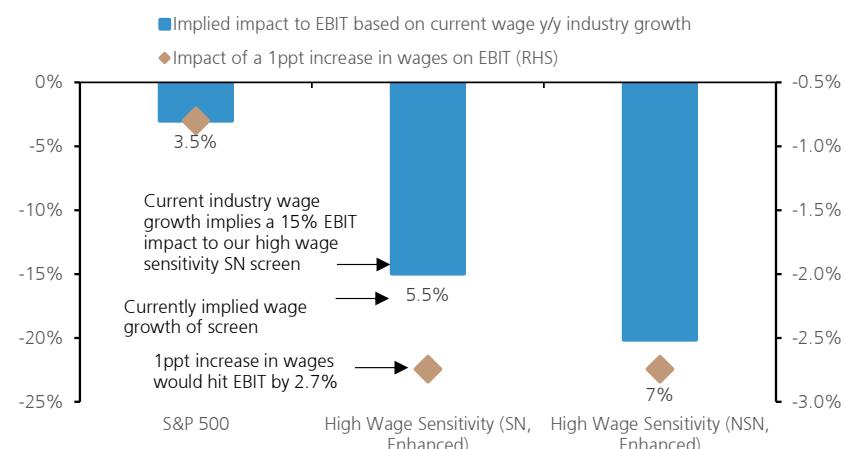
Figure 119: Performance of high wage sensitivity screens vs market



Source: Bloomberg, UBS

Our enhanced high wage sensitivity screen has underperformed the market by roughly 20% since its peak in March 2021, tracking the acceleration in wage growth.

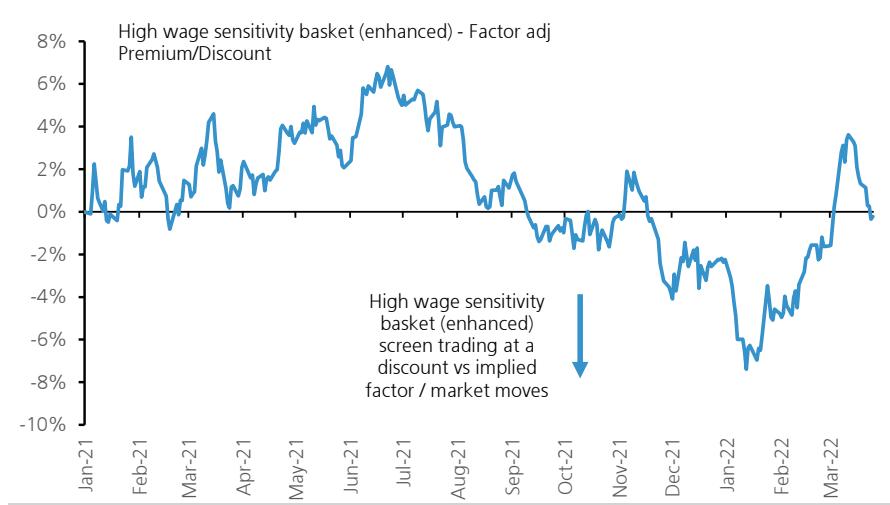
Figure 120: EBIT sensitivity of stock screen to 1ppt rise in wages



Source: Factset, UBS

A 1ppt rise in wages could take 2.7% off EBIT for wage sensitive stocks vs 0.7% for the S&P 500. Mapping industry wage growth data to the company level, we find that current y/y run-rates in wages would imply a significant 15-20% EBIT hit to our SN and NSN screen, over 5x higher than the S&P 500.

Figure 121: High wage sensitivity screen premium/discount after accounting for Factor returns



Source: Bloomberg, UBS Quant Research, UBS

To isolate the wage theme component of our high wage sensitivity screen, we run a regression of daily returns on our screen vs daily returns of factor performance. We then compare this with actual returns to identify the potential wage premium/discount after accounting for other factors.

The analysis suggests that high wage sensitive stocks are barely pricing in a discount despite their vulnerabilities. We expect a larger discount to become embedded as investors continue to fear the possible margin headwinds.

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US Retail Consumer Spending Intention Scores: Built using regression with ARIMA errors approach and UBS Evidence Lab Spend Intention Score (UBS SIS). UBS Evidence Lab created a unique UBS SIS index based on monthly survey respondents data. They took into consideration their attitude to spend in a given set of categories and modeled that on the US Census sales data. UBS Evidence Lab use this data to make predictions for yly sales growth 3 months out.

US Grocery Retail Price Monitor: Tracks price strategy and competition in US Grocery Retail. Data includes like-for-like price trends, relative price differences between competitors, discounted items as a percent of total items, and average level of promotion when the item is on sale.

Airlines Yield Management Monitor: Track price strategy and competition across global Airlines. This analysis is based on highly frequent price observations within the booking window for the service to capture the dynamic nature of pricing in this sector. The analysis allows for discovery of price trends as well as an assessment of how companies are managing their pricing.

C-Suite Survey: The C-Suite surveys cover US, Europe and China senior executives and provides a view on companies' industry outlooks, and their perceptions of the macro environment in which they operate. The US survey consists of 450 senior executives, in Europe 675 (across UK, France, Germany, Italy & Spain) and China 539.

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Valuation Method and Risk Statement

Equity market returns are influenced by corporate earnings, interest rates, risk premia, as well as other variables influenced by the business cycle. The outlook for any and all of these variables is subject to change.

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Neutral	FSR is between -6% and 6% of the MRA.	35%	29%
Sell	FSR is > 6% below the MRA.	10%	26%
Short-Term Rating	Definition	Coverage ³	IB Services ⁴
Buy	Stock price expected to rise within three months from the time the rating was assigned because of a specific catalyst or event.	<1%	<1%
Sell	Stock price expected to fall within three months from the time the rating was assigned because of a specific catalyst or event.	<1%	<1%

Source: UBS. Rating allocations are as of 31 December 2021.

1:Percentage of companies under coverage globally within the 12-month rating category.

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UBS AG London Branch: Anna Titareva, Arend Kapteyn, Reinhard Cluse. **UBS Securities LLC:** Alastair Pinder, Keith Parker, Sean Simonds.

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Company Name	Reuters	12-month rating	Price	Price date
ASML ^{13,16b}	ASML.AS	Neutral	€617.40	04 Apr 2022
Adani Ports and SEZ	APSE.BO	Buy	Rs818.70	04 Apr 2022
Air China - A ^{18a,16a}	601111.SS	Sell	Rmb9.83	01 Apr 2022
American Tower Corporation ^{16b}	AMT.N	Buy	US\$256.95	01 Apr 2022
Apple Inc. ^{7,6b,16b}	AAPL.O	Buy	US\$174.31	01 Apr 2022
Ascendas REIT	AEMN.SI	Neutral	\$2.93	04 Apr 2022
AstraZeneca ^{7,6b,6c,16b}	AZN.L	Buy	10,143p	04 Apr 2022
BHP ^{3,14,4,7,5a,16b}	BHP.AX	Neutral	A\$52.46	04 Apr 2022
BT Group ^{7,6b,6c}	BT.L	Neutral	183p	04 Apr 2022
Beiersdorf ^{18b}	BEIG.DE	Sell	€97.50	04 Apr 2022
Booking Holdings Inc ^{16b}	BKNG.O	Buy	US\$2,367.83	01 Apr 2022
Brenntag SE ^{18b}	BNRGn.DE	Neutral	€72.68	04 Apr 2022
British American Tobacco ^{14,4,7,6b,6c,16b}	BATS.L	Buy	3,239p	04 Apr 2022
Burlington Stores Inc ^{20a,16b}	BURL.N	Neutral (CBE)	US\$181.95	01 Apr 2022
Campbell's Soup Company ^{7,6b,6c,16b}	CPB.N	Sell	US\$45.05	01 Apr 2022
China Mengniu Dairy ^{16a}	2319.HK	Buy	HK\$42.35	04 Apr 2022
China Southern Airlines ^{18a,16a,16b}	1055.HK	Sell	HK\$4.68	04 Apr 2022
DSV	DSV.CO	Neutral	DKr1,269.5	04 Apr 2022
Danone ^{18b}	DANO.PA	Sell	€50.18	04 Apr 2022
Deere & Co. ^{7,16b}	DE.N	Neutral	US\$416.80	01 Apr 2022
Delta Air Lines Inc ^{20a,4,7,6a,16b}	DAL.N	Neutral (CBE)	US\$39.31	01 Apr 2022
Deutsche Lufthansa AG ^{20b,7,18b}	LHAG.DE	Neutral (CBE)	€7.31	04 Apr 2022
Ferguson PLC ^{5b,16b}	FERG.L	Buy	10,188p	04 Apr 2022
Generac Holdings Inc ^{16b}	GNRC.N	Buy	US\$301.00	01 Apr 2022
Guangzhou R&F Properties	2777.HK	Sell	HK\$3.09	04 Apr 2022
Hasbro Inc ^{16b}	HAS.O	Buy	US\$84.45	01 Apr 2022
Hermès International SCA ^{18b}	HRMS.PA	Neutral	€1,301	04 Apr 2022
Honda Motor ^{7,16b}	7267.T	Neutral	¥3,455	04 Apr 2022
International Paper Company ^{16b}	IP.N	Sell	US\$46.30	01 Apr 2022
Ipsen SA ^{18b}	IPN.PA	Buy	€117.20	04 Apr 2022
Jeronimo Martins	JMT.LS	Neutral	€21.38	04 Apr 2022
Johnson Matthey ¹³	JMAT.L	Sell	1,932p	04 Apr 2022
Kao	4452.T	Sell	¥5,021	04 Apr 2022
Keyence	6861.T	Buy	¥58,170	04 Apr 2022
Kimberly-Clark Corp ^{16b}	KMB.N	Neutral	US\$125.03	01 Apr 2022
Kobayashi Pharmaceutical	4967.T	Buy	¥9,820	04 Apr 2022
LG Display ^{16b}	034220.KS	Sell	Won20,050	04 Apr 2022

Company Name	Reuters	12-month rating	Price	Price date
LVMH Moet Hennessy Louis Vuitton SA ^{18b}	LVMH.PA	Buy	€663.90	04 Apr 2022
Li Ning ^{16a}	2331.HK	Buy	HK\$67.15	04 Apr 2022
Lion	4912.T	Neutral	¥1,368	04 Apr 2022
Logitech ^{13,5b,16b}	LOGN.S	Neutral	CHF70.20	04 Apr 2022
Lumen Technologies, Inc. ^{20a,7,6b,6c,16b}	LUMN.N	Neutral (CBE)	US\$11.51	01 Apr 2022
Mastercard Inc ^{16b}	MA.N	Buy	US\$363.97	01 Apr 2022
Merck & Co. ^{1,7,6b,5b,16b}	MRK.N	Neutral	US\$83.52	01 Apr 2022
Monster Beverage ^{16b}	MNST.O	Neutral	US\$82.15	01 Apr 2022
NVIDIA Corp ^{16b}	NVDA.O	Buy	US\$267.12	01 Apr 2022
NVR Inc ^{20a,16b}	NVR.N	Neutral (CBE)	US\$4,531.41	01 Apr 2022
Next ^{14,4,7}	NXT.L	Neutral	6,162p	04 Apr 2022
Nike Inc. ^{20a,16b}	NKE.N	Buy (CBE)	US\$133.52	01 Apr 2022
Nucor Corp ^{16b}	NUE.N	Neutral	US\$149.26	01 Apr 2022
Pernod Ricard ^{18b}	PERP.PA	Neutral	€198.85	04 Apr 2022
Pfizer Inc. ^{7,6b,6c,16b}	PFE.N	Buy	US\$51.57	01 Apr 2022
Philip Morris International Inc ^{4,7,6a,16b}	PM.N	Neutral	US\$96.78	01 Apr 2022
Quest Diagnostics Inc ^{16b}	DGX.N	Neutral	US\$136.33	01 Apr 2022
SBA Communications Corp ^{16b}	SBAC.O	Buy	US\$350.60	01 Apr 2022
Sharp	6753.T	Sell	¥1,138	04 Apr 2022
Southwest Airlines ^{20a,16b}	LUV.N	Neutral (CBE)	US\$45.91	01 Apr 2022
Steel Dynamics Inc ^{16b}	STLD.O	Buy	US\$84.99	01 Apr 2022
Stryker Corp ^{16b}	SYK.N	Neutral	US\$269.05	01 Apr 2022
Swatch Group AG ^{13,7,5b}	UHR.S	Neutral	CHF265.00	04 Apr 2022
Taiwan Semiconductor Manufacturing ^{16b}	2330.TW	Buy	NT\$589.00	01 Apr 2022
Temenos ^{59,5b}	TEMN.S	Sell	CHF92.94	04 Apr 2022
Union Pacific Corporation ^{7,16b}	UNP.N	Buy	US\$259.96	01 Apr 2022
Universal Health Services Inc ^{16b}	UHS.N	Sell	US\$144.18	01 Apr 2022
Vertex Pharmaceuticals Inc ^{16b}	VRTX.O	Buy (UR)	US\$266.15	01 Apr 2022

Source: UBS. All prices as of local market close.

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