FIVE FAQs

"Why would you want to own the S&P 500 if…."

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Equity and Quant Strategy
United States

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CRE = Commercial Real Estate

Q: "…rates stay higher for longer?"

A: Higher rates are worse for bonds than stocks. Rising rate cycles are generally accompanied by better growth. Moreover, S&P 500 refinancing risks are known and manageable, US homeowners' effective mortgage rates are likely to remain at pre-COVID levels for the foreseeable future and big Tech companies have already shortened their duration risk since the beginning of the year through cost cutting and cash return. Higher rates have historically meant better growth and productivity, where we are seeing seeds sown today for a productivity cycle similar to that of the mid-80s to mid-00's. During that period, the S&P 500 returned 15%/yr, real rates averaged 3.4% (vs a lower 2.35% today) and equity risk premia fell.

Q: "…geopolitical risks continue to rise?"

A: The Russia/Ukraine war and the Israel-Hamas conflict are tragic and inestimably costly at a human level. A greater conflict in the Middle East is a key risk, and other regions are making headlines. Prior geopolitical shocks with no fundamental, long-term implications drove sharp selloffs but saw full recoveries within three months. History suggests geopolitical dips should be bought, not sold (Exhibit 7).

Q: "…oil spikes and crush margins & consumption?"

A: US energy independence could soften the blow. For corporates, higher oil prices have helped, not hurt, earnings (Exhibit 8). Oil represents ~3% of costs; easing wage pressure (40% of total costs) should more than offset an oil shock. Historical consumption shocks occurred from much sharper oil spikes than today's (Exhibit 9). Our underweight in Staples reflects oil spike risks as the regressive tax tends to hit discount retailers rather than higher price point retailers.

Q: "…auto strikes drag on?"

A: Our economists estimate that UAW strikes represent a weekly 0.1% drag on GDP. Every 1ppt GDP impact translates to a 3ppt EPS impact for the S&P 500. Today marks the fourth week of the strike. The direct headwind for Autos is apparent (see UAW update), but Autos represents <2% of total earnings for the S&P 500. Industrials & Materials exposed to Autos could hurt more if overall auto demand drops but so far demand is healthy (Exhibit 12). Higher wages from an ultimate deal should be contained to the autos sector. Union workers represent only 6% of the private workforce (Exhibit 13), and we view the strike as a lagging indicator and see wage pressure easing in general.

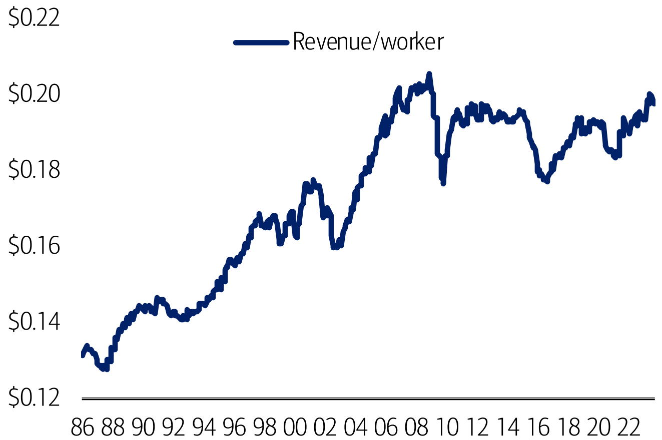
Q: "…commercial real estate is in free fall?"

A: CRE exposure is concerning, but not necessarily for the S&P 500. The S&P 500 Real Estate sector has <3% exposure to Office REITs (Exhibit 14). But the bigger risk is in small caps, where Office REITs represent 12% of the Russell 2000 Real Estate sector. Similarly, potential credit risk from CRE is a much bigger risk for regional banks, which drove 82% of total CRE growth since 2012 vs. just 18% for the big banks (Exhibit 15).

Q: What if…rates stay higher for longer?

A: In our view higher interest rates in unfavorable for bonds but beneficial for cyclicals. Despite the higher cost of capital, US companies are continuing to bring their operations closer to home. This shift towards domestic manufacturing is necessary due to a decade of insufficient investments and is being supported by stimulus measures. Cyclical stocks are expected to be the leaders in this scenario. Increased productivity is likely to drive down ERP. From the mid-80s to 2008, labor efficiency led to annual total returns of 15%, despite real rates averaging 3.4% (compared to today's 2.35%).

Exhibit 1: Labor efficiency improvements stalled post-GFC / ZIRP. What next?
S&P 500 inflation-adjusted $M revenue per year per worker (1986-8/23)



Source: FactSet, Bloomberg, BofA US Equity & Quant Strategy
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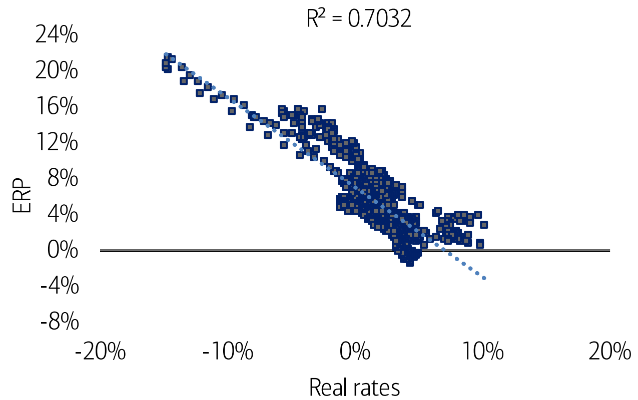
Exhibit 2: Higher real rates = lower ERP
Historical relationship between our normalized ERP vs. real rates (1945-8/23)



Source: BofA US Equity & Quant Strategy, Global Financial Data, Bloomberg. Note: See Methodology for details on calculations
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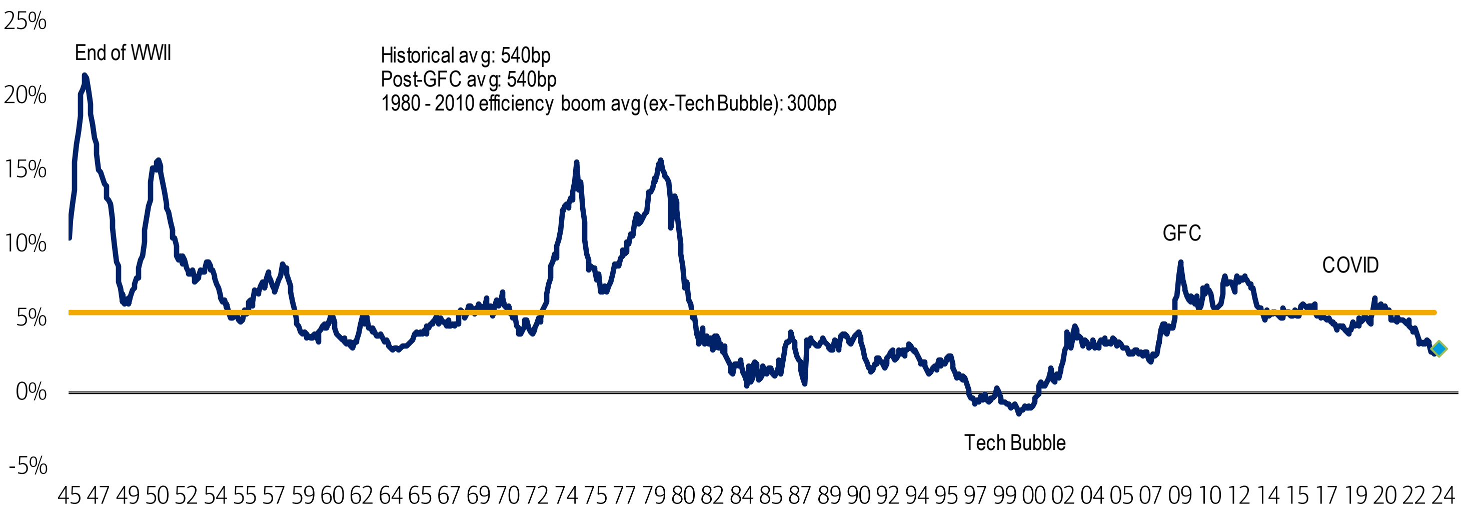
Exhibit 3: We expect ERP to normalize at levels lower than the post-Global Financial Crisis era's average of 540bp
Normalized equity risk premium (ERP) with BofA normalized ERP forecast (300bp), 1945-8/23



Source: BofA US Equity & Quant Strategy, Global Financial Data, Bloomberg
Note: Nominal ERP is calculated as the spread between the normalized earnings yield and real risk-free rate, where normalized EPS is based on a log linear regression of a blend of S&P 500 pro-forma EPS and operating EPS. The real rate is the difference between 1) 10-yr Tsy yield and 2) 10-yr breakeven, where prior to 1998, fwd 1-yr CPI was used as a proxy, which showed the strongest correlation to the 10-yr breakeven.
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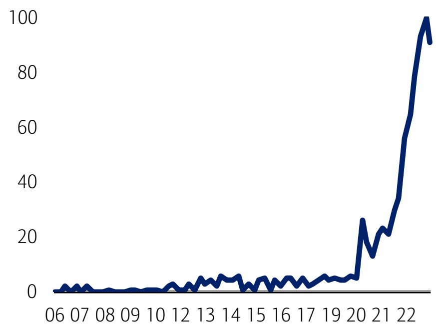
Exhibit 4: Companies are talking the talk: Mentions of re-shoring increased sharply over the past year

Companies mentions of re-/near-/on-shoring (100=max; 2006-8/31/23)



Source: AlphaSense, BofA Global Research

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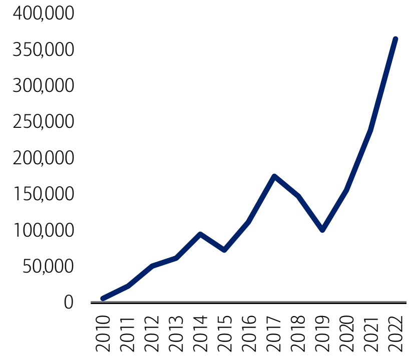
Exhibit 5: Reshoring in practice: Reshoring/FDI jobs in 2022 at an all-time high

Manufacturing job announcements, reshoring + Foreign Direct Investment (FDI)



Source: Reshoring Initiative Library data

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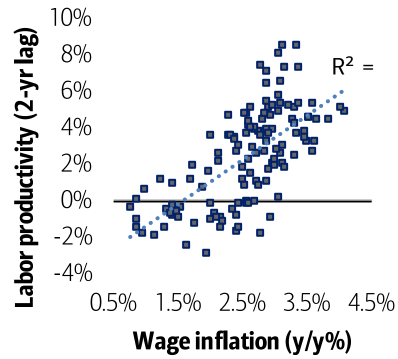
Exhibit 6: Wage inflation has historically led to labor productivity growth

US Manufacturing wage inflation and labor productivity (y/y % changes)



Source: Bureau of Labor Statistics, BofA Global Research

Note: Quarterly data of US manufacturing labor productivity versus average hourly earnings of production & nonsupervisory employees

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Q: What if…geopolitical risks continue to rise?

A: The onset of the Russia/Ukraine war and more recently the Israel-Hamas conflict are tragic and inestimably costly at a human level. A larger regional conflict in the Middle East is a key risk, and China/Taiwan and other regions are making headlines. Prior geopolitical shocks with no fundamental, long-term implications generally drive short sharp sellouts but saw full recoveries within three months or less. History tells us that geopolitical dips should be bought, not sold (Exhibit 7).

Exhibit 7: S&P 500 peak-to-trough declines have been 7-8% on average during major macro shocks/geopolitical events, but more than fully recovered after three months

S&P 500 price changes around historical macro shocks and geopolitical events since 2010

Events	-1 month	-1 day	+1 day	+1 month	+3 month	Peak to trough	Trough to +3m after event	Trough days after (before) event
S&P downgrades Greek Sovereign Debt to junk/1st Greek Bailout	3.9%	-0.4%	-2.3%	-9.0%	-8.1%	-16.0%	9.0%	66
Arab Spring: "Beginning", Tunisian Revolution begins	3.9%	0.1%	0.3%	4.1%	2.8%	-1.6%	13.8%	-18
Arab Spring: Syrian/Libyan civil war begins	-2.4%	-0.6%	-1.1%	1.8%	-2.4%	-6.4%	8.5%	1
S&P downgrades US debt	-10.3%	-4.8%	-0.1%	-2.2%	4.4%	-18.8%	16.9%	59
US government shuts down	3.0%	-0.6%	0.8%	4.8%	9.9%	-5.4%	13.2%	7
Scotland passes referendum to vote on independence (voting date was 9/18/14)	3.6%	-0.4%	0.3%	2.8%	1.5%	-2.3%	11.7%	-24
Russia annexes Crimea	1.0%	1.0%	0.7%	0.3%	5.3%	-4.0%	7.8%	24
Swiss abandons cap on Franc vs. Euro FX rate	1.1%	-0.6%	-0.9%	4.3%	4.7%	-0.8%	7.3%	-30
Greece: misses debt payment to IMF	-2.3%	0.3%	0.7%	2.0%	-6.8%	-12.2%	6.8%	55
China: Devalues yuan	1.3%	1.3%	-1.0%	-6.8%	-1.4%	-12.2%	13.0%	14
S&P downgrades Japan credit rating	-5.4%	1.3%	0.9%	2.8%	4.8%	-11.2%	13.0%	-22
Turkey shoots down Russian plane for violating Turkish airspace	0.6%	-0.1%	0.1%	-1.2%	-7.5%	-13.3%	6.4%	79
Fed - 1st rate hike - increase interest rate 25bps	-0.5%	1.1%	1.5%	-8.0%	-0.8%	-13.0%	10.8%	57
Brazil: House votes to begin President impeachment trial	1.5%	-0.1%	0.7%	-1.6%	4.1%	-5.6%	8.3%	70
Brexit: UK votes to leave the EU	3.2%	1.3%	-3.6%	2.9%	2.4%	-5.6%	9.5%	4
Trump orders 59 Tomahawk cruise missiles to be fired at the Shayrat airbase in Syria	-0.9%	-0.3%	0.2%	2.0%	2.4%	-2.4%	5.3%	7
Trump fires FBI director James Comey	1.9%	0.0%	-0.1%	1.3%	3.1%	-1.2%	6.5%	-26
North Korea detonates a hydrogen bomb -its most powerful nuclear test ever	0.0%	0.2%	0.0%	2.1%	6.7%	-2.2%	9.2%	-15
Catalonia votes for independence from Spain	1.7%	0.4%	0.4%	2.4%	6.1%	-0.8%	9.5%	-26
The US announces imports of steel and aluminum threaten national security Under Section 232	-1.6%	1.2%	0.0%	0.8%	-0.3%	-10.2%	8.0%	-8
Trump administration releases initial list of Chinese products worth $50bn that are under consideration for tariffs	-4.1%	-2.2%	1.3%	1.9%	5.1%	-7.3%	7.9%	-1
Italian bond yields spike on budget concerns	0.6%	0.4%	-0.1%	2.1%	4.7%	-2.9%	8.7%	-14
Collapse in Argentina and Turkey's currency ignites concerns of emerging market currency crisis	1.6%	-0.3%	0.7%	1.4%	5.5%	-1.5%	8.9%	-18

Exhibit 7: S&P 500 peak-to-trough declines have been 7-8% on average during major macro shocks/geopolitical events, but more than fully recovered after three months

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Events	-1 month	-1 day	+1 day	+1 month	+3 month	Peak to trough	Trough to +3m after event	Trough days after (before) event
US releases list of $200bn Chinese goods subject to tariffs	0.2%	0.9%	0.3%	1.8%	0.1%	-3.1%	8.6%	-13
Powell says we're "a long way" from neutral on interest rates	0.8%	0.0%	0.1%	-6.9%	-16.3%	-19.8%	6.8%	82
US government shuts down	-8.8%	-2.1%	-2.7%	8.9%	15.9%	-15.7%	21.4%	2
US Treasury designates China as a currency manipulator	-2.0%	-0.7%	-3.0%	1.5%	4.9%	-6.1%	8.4%	9
Drones were used to attack the state-owned Saudi Aramco oil processing facilities	4.1%	-0.1%	-0.3%	-0.6%	6.1%	-2.6%	12.1%	-24
Top Iranian military official killed by US airstrike	3.8%	0.0%	0.8%	-0.2%	-21.8%	-1.0%	17.6%	81
China puts Wuhan City, the center of the COVID-19 outbreak, on lockdown	3.0%	0.0%	0.1%	0.5%	-15.8%	-33.9%	28.5%	60
Russia/Ukraine conflict begins	-4.2%	-1.8%	1.5%	7.0%	-6.7%	-15.8%	1.9%	84
Average	-0.1%	-0.2%	-0.1%	0.7%	0.4%	-8.2%	10.5%	17
Median	0.8%	0.0%	0.1%	1.8%	2.8%	-5.6%	8.9%	4
Min	-10.3%	-4.8%	-3.6%	-9.0%	-21.8%	-33.9%	1.9%	
Max	4.1%	1.3%	1.5%	8.9%	15.9%	-0.8%	28.5%	
Average non-US	0.9%	0.1%	-0.1%	0.9%	-0.6%	-7.4%	10.3%	
% positive	61%	45%	61%	71%	65%			

Source: BofA US Equity & Quant Strategy, FactSet, S&P

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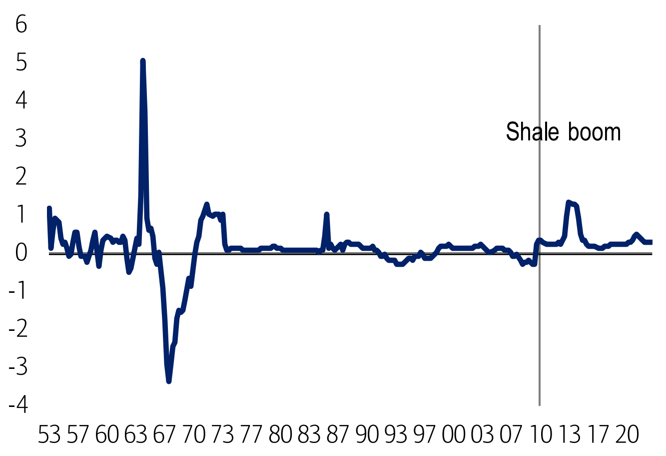
Q: What if…oil spikes and crush margins & consumption?

The recent increase in both rates and oil prices suggests an improvement in economic growth rather than a decline. It's worth noting that historically higher oil prices have positively impacted S&P earnings, even when the impact of better GDP was stripped out (Exhibit 8). Oil represents just 3% of total costs, and the likelihood of a significant disruption in consumption due to oil shocks is low (Exhibit 9), especially considering the potential mitigating effect of US energy independence. Easing wage pressure (40% of total costs) should more than offset the impact from oil.

Exhibit 8: Higher oil prices have historically been a tailwind to earnings, especially after the shale revolution

WTI 5-yr rolling beta to S&P 500 earnings based on a multivariate regression using WTI and GDP vs. S&P EPS (1953-2Q23)



Source: Haver, FactSet, BofA US Equity & Quant Strategy

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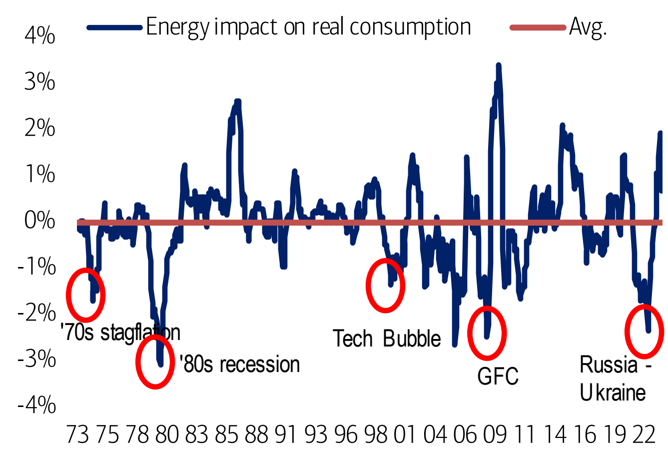
Exhibit 9: Lower oil added ~70bps to real consumption. A significant jump in oil is needed to have a similar impact as prior shocks

Spread between CPI ex. Energy and CPI YoY (1973-8/23)



Source: BofA US Equity & Quant Strategy, Haver Analytics

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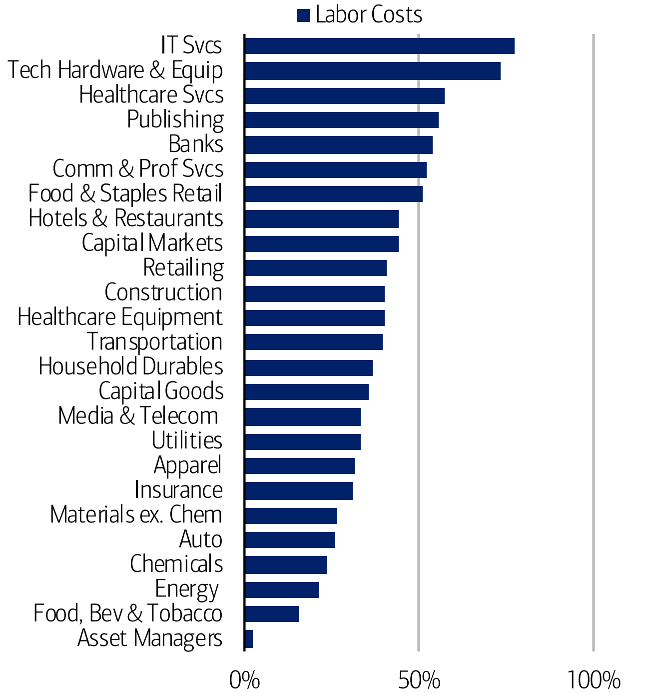
Exhibit 10: Labor Costs are the biggest cost component for most industries...
Labor Costs as % of Total Operating Costs by Industry (the use of commodities by industries; as of 2020)



Source: BEA, BofA US Equity & Quant Strategy

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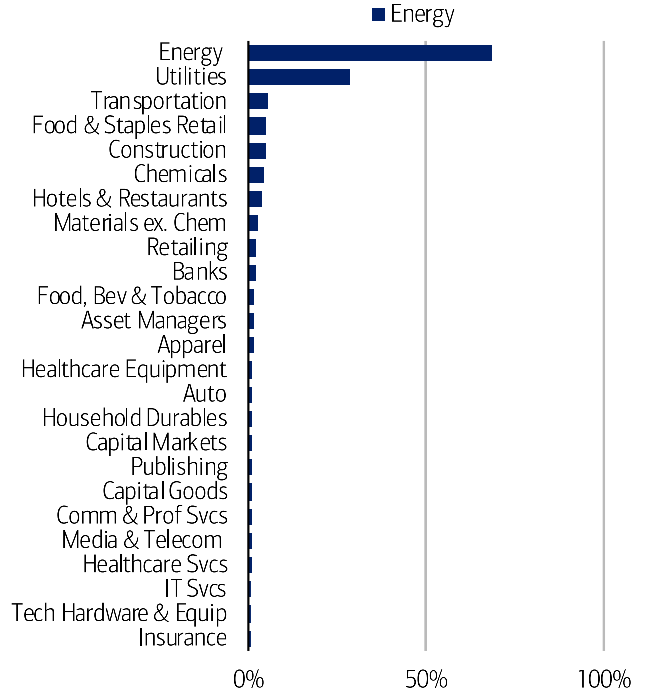
Exhibit 11: ...whereas Energy costs are insignificant in most industries
Energy Costs as % of Total Operating Costs by Industry (the use of commodities by industries; as of 2020)



Source: BEA, BofA US Equity & Quant Strategy

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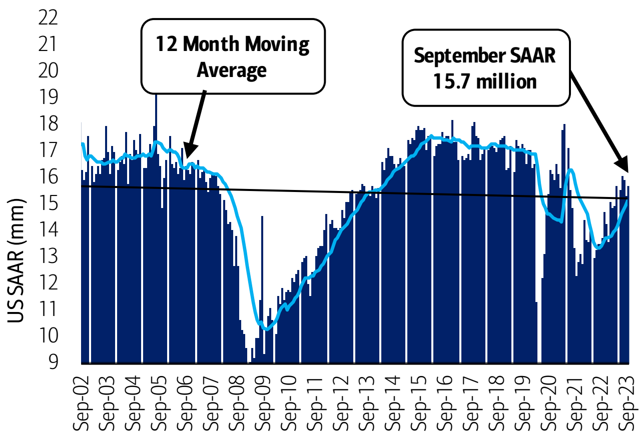
Q: What if…auto strikes drag on?

A: Our economists estimate that the UAW strike will drag the economy by 0.1%/week, and the rule of thumb is every 1ppt GDP impact translates to a 3ppt EPS impact for the S&P 500. Today marks the fourth week of strike. It's a direct headwind for Autos (see the latest UAW update), but it represents <2% of total earnings for the S&P 500. The bigger impact could be from Industrials & Materials that are exposed to Autos, but the overall auto demand still remains healthy (Exhibit 12).

Higher wages from an ultimate deal should be contained to the autos sector. Union workers represent only 6% of the private workforce, and we view the strike as a lagging indicator and see wage pressure easing in general.

Exhibit 12: U.S. seasonally adjusted annual rate (SAAR)
September SAAR of 15.7mm was above the 12-month moving average



Source: WardsAuto InfoBank

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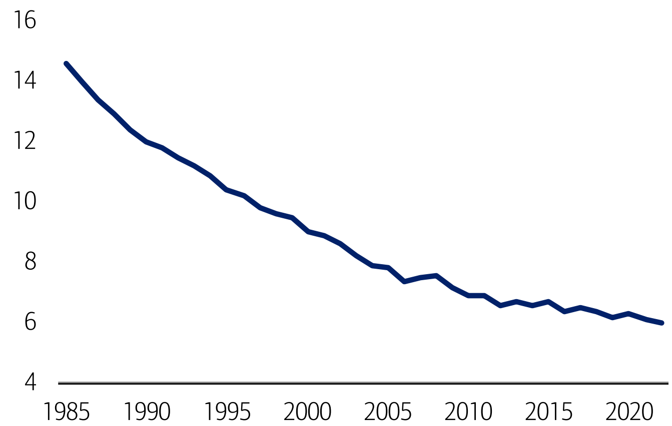
Exhibit 13: Union Members of Private Employment (%)
Union membership only represents about 6% of the private workforce



Source: BLS, Haver

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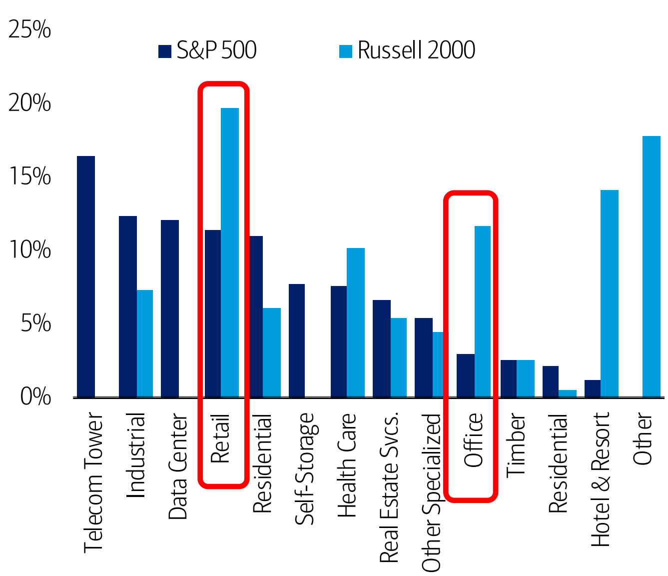
Q: What if…commercial real estate is in free fall?

A: Commercial real estate (CRE) exposure is concerning, but not necessarily for the S&P 500. The S&P 500 Real Estate sector has less than 3% exposure to Office REITs. But the bigger risk is in small caps, where Office REITs represent 12% of the Russell 2000 Real Estate sector. Similarly, potential credit risk from CRE is a much bigger risk for regional banks, which drove 82% of total CRE growth since 2012 (vs. just 18% for the big banks).

Exhibit 14: CRE exposure is in the Russell 2000, not the S&P 500
% weight by subindustry in the S&P 500 Real Estate sector vs. Russell 2000 Real Estate sector



Source: Bloomberg, BofA US Equity & Quant Strategy

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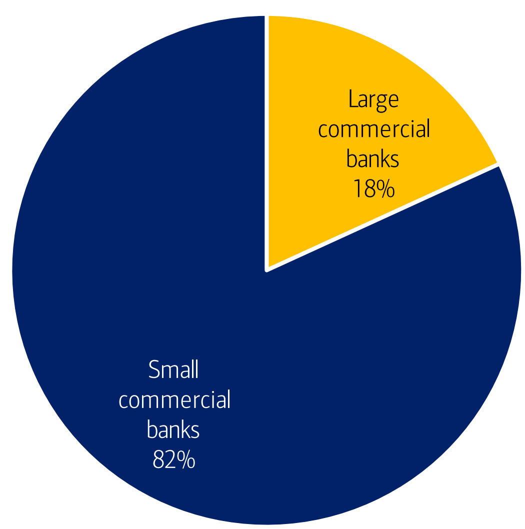
Exhibit 15: Majority of CRE growth driven by smaller banks
Contribution to total CRE growth since 2012



Source: Federal Reserve
Note: CRE loans comprised of nonfarm/nonresidential, multifamily, and construction loans

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Important Disclosures

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Investment rating	Total return expectation (within 12-month period of date of initial rating)	Ratings dispersion guidelines for coverage cluster[R1]
Buy	≥ 10%	≤ 70%
Neutral	≥ 0%	≤ 30%
Underperform	N/A	≥ 20%

[R1] Ratings dispersions may vary from time to time where BofA Global Research believes it better reflects the investment prospects of stocks in a Coverage Cluster.

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