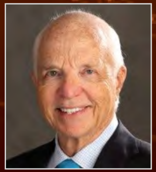
EPOCH | Epoch Investment Partners, Inc.

The Death of Dividends: Greatly Exaggerated



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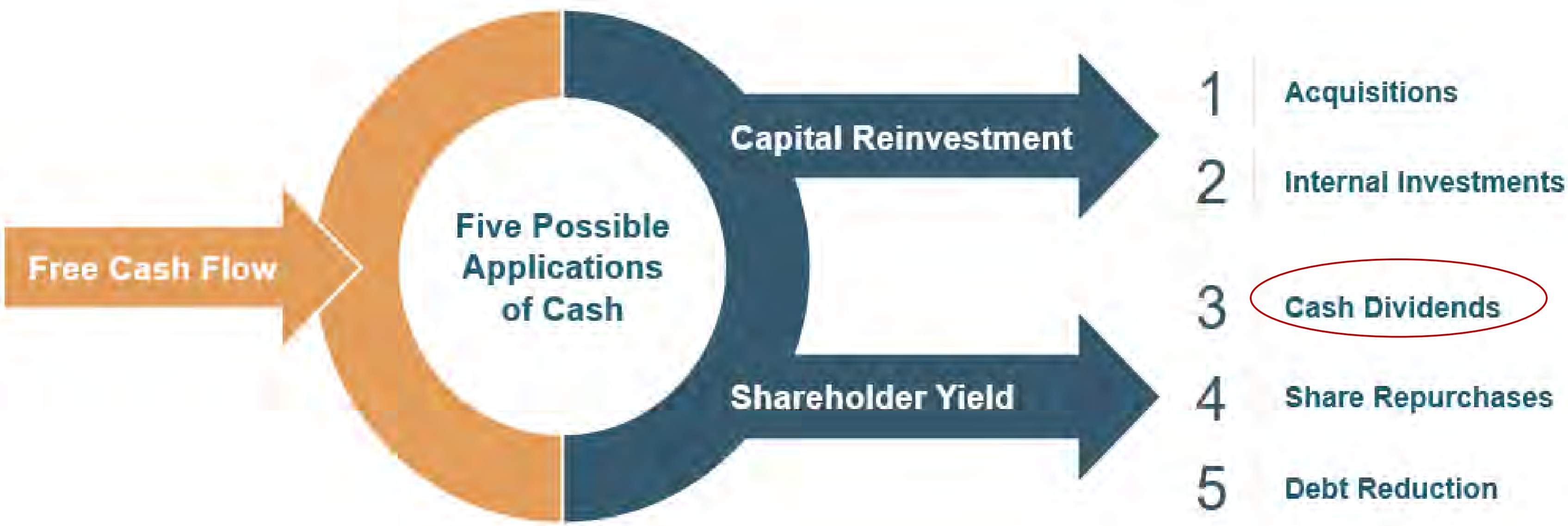
Thursday, April 30, 2020 | The webinar replay is available on our website: **www.eipny.com**

Companies Maximize Returns Through Disciplined Capital Allocation



- *A company should reinvest capital if the expected return on invested capital is greater than the company's cost of capital.*
- *Remaining free cash flow should be returned to shareholders via shareholder yield.*

Even during today's crisis, companies are not going to abandon sound policies of capital allocation

Tightening Wallets: This Too Shall Pass

Beyond the short- to medium-term, the drivers that have led to strong dividend payouts over past decades should remain intact

- **Tech is the new macro and capital-light business models**: The shift from atoms to bits, or asset-heavy to asset-lite business models (more Tech and Healthcare and less capital-intensive cyclicals) is, if anything, accelerating. This implies higher profit margins and lower capital requirement, freeing up a higher proportion of cash to be distributed to shareholders

- **Lower for even longer interest rates**: Incentivizes companies to maintain lean balance sheets and return excess cash earnings to shareholders. This is consistent with QE's raison d'etre, which is to discourage holding cash (by investors, corporates, or households) in favour of opportunities further out the risk curve.

- **Buybacks continue to be vilified by the press and some politicians:** Then S&P 500 companies could opt for boosting dividends. Total shareholder yield has averaged well over 4% for decades, and we don't see it declining materially during the 2020s.

- **A world of yield starvation, but there is still a need for income:** Bond yields had been driven lower by demographic challenges, benign inflation (reflecting the digitization of the economy), hyper-aggressive central banks, and elevated policy uncertainty. Many investors need income and this will continue to drive demand for dividend yield.

Technology Will Lead to Higher Payout Ratios

Capital Light Models are Great for Dividends

$$\text{ROE} = \text{Profit Margin} \times \text{Asset Utilization} \times \text{Leverage}$$

$$\text{ROE} = \left[\frac{\text{Profits}}{\text{Sales}}\right] \times \left[\frac{\text{Sales}}{\text{Assets}}\right] \times \left[\frac{\text{Assets}}{\text{Equity}}\right]$$

$$\text{ROE} = \frac{\text{Profits}}{\text{Equity}}$$

Payout ratios to rise with less need for equity to support decreasing asset base requirement

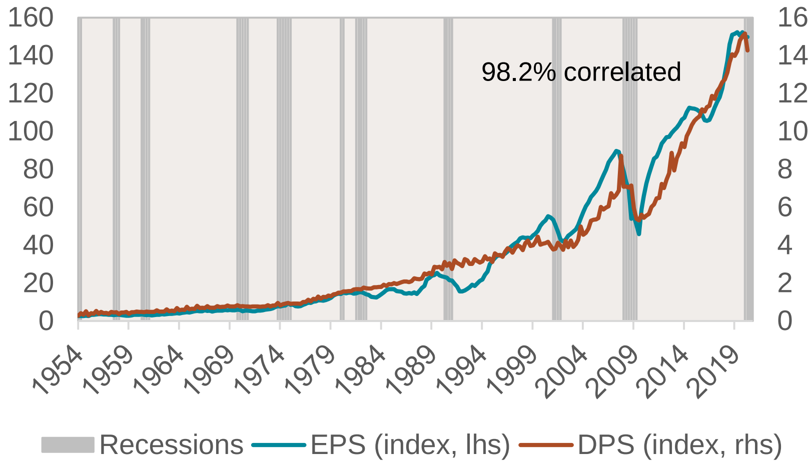
Lower labor cost increases margins and profits for distribution.

Lower capital needs increase utilization and reduce the amount of debt and equity needed.

Source: Epoch Investment Partners

What Happens to EPS and DPS During U.S. Recessions?

EPS and DPS: Tied at the hip



Source: Bloomberg, NBER, Epoch Investment Partners

During U.S. recessions profits fall: On average, by 20% (was 48% during GFC)

Typically takes five quarters for earnings to decline peak-to-trough: And then six quarters to rebound to previous peak

This time the drop will likely be sharper: But with a gradual, swoosh-shaped recovery

Dividends decline by 10% during recessions, on average: Biggest decline was the GFC (39%)

It takes two quarters for dividends to decline peak-to-trough, on average: And then three quarters to rebound to the previous peak

For this recession two quarters seems right for the drop: But the recovery could well take longer

Dividends typically decline by half as much as earnings during recessions

AVG FOR 8 RECESSIONS SINCE 1955	EARNINGS	DIVIDENDS
Peak-to-trough decline (%)	20.1%	9.9%
From peak to trough (# Qs)	5	2
Rebound to previous peak (# Qs)	6	3

Source: Bloomberg, NBER, Epoch Investment Partners

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What is the Consensus Call on U.S. 2020 EPS?

Earnings visibility is always poor in the midst of a recession: And the dispersion among consensus estimates is now close to the record high set during the GFC

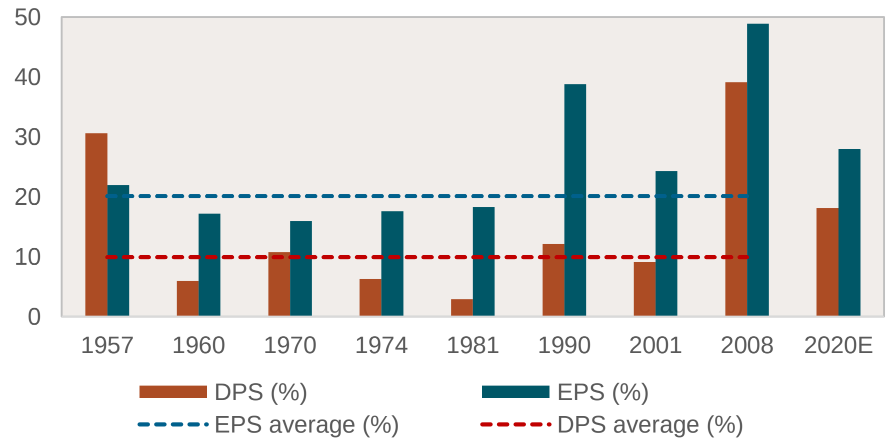
The Global Economic Policy Uncertainty Index stands at a record high: And almost twice its level during the GFC

The consensus is for earnings to decline by 30 to 40% during 2020: With the wide range being indicative of the acute degree of uncertainty

This is worse than the post-WWII mean: But in line with average of the three most recent recessions

Consensus view on 2020 DPS growth is even more diffuse: Ranging from +5% to -25% (with futures currently at -18%)

Peak-to-trough declines in EPS and DPS (%)



Source: Bloomberg, NBER, Epoch Investment Partners

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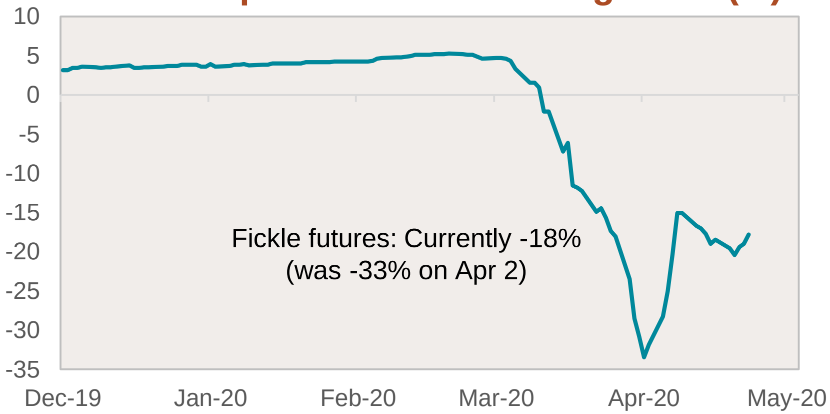
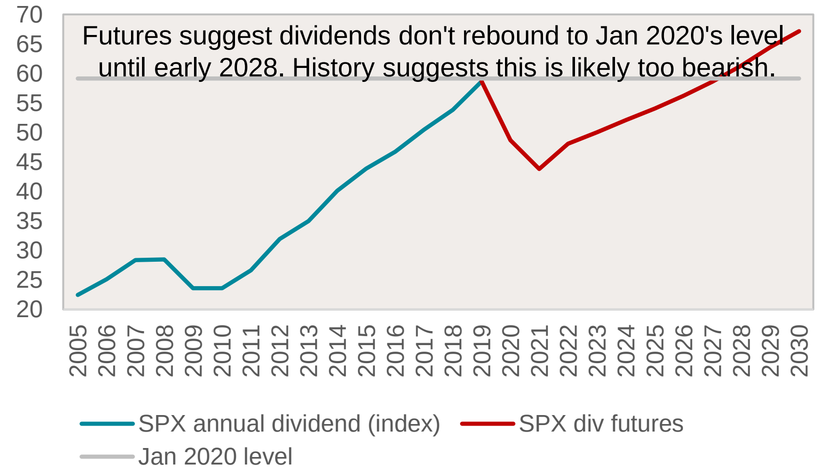
SPX Dividend Futures: Imply Declines of 18% in 2020 and 10% in 2021

Futures implied 2020 dividend growth (%)



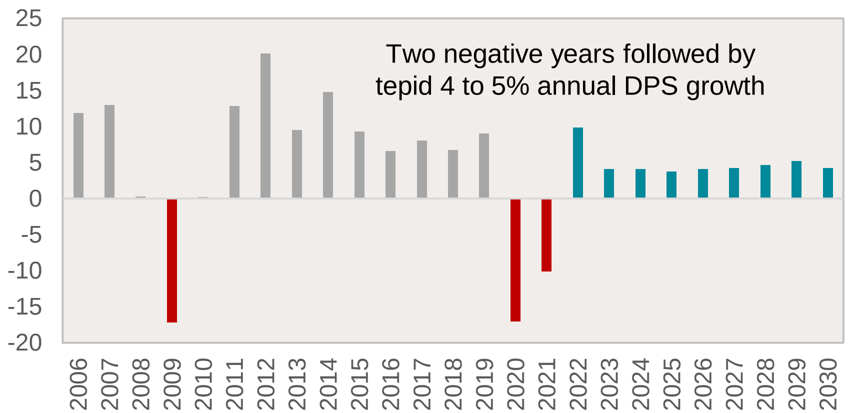
Source: Bloomberg, Epoch Investment Partners

Sharp drop in 2020: Very gradual rebound



Source: Bloomberg, Epoch Investment Partners

Futures implied annual DPS growth



Source: Bloomberg, Epoch Investment Partners. Actual to 2019, then based on futures

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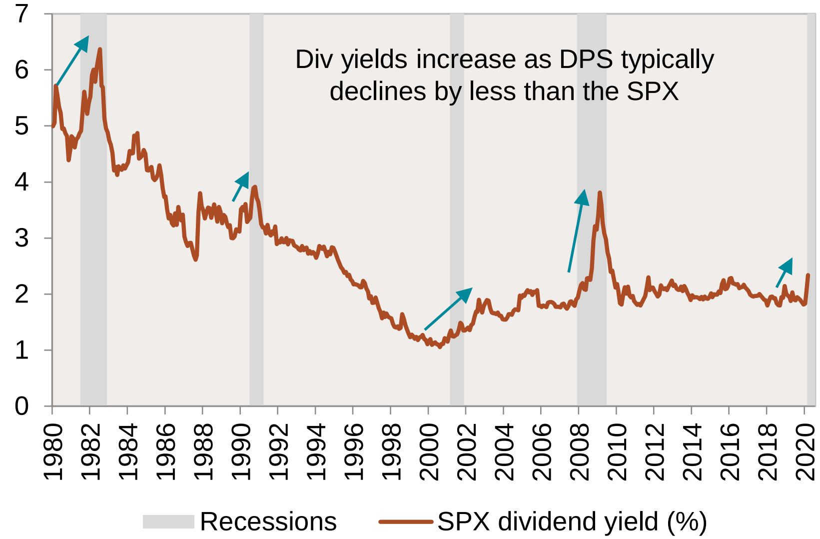
What Happens to Dividend Yields and Payout Ratios During Recessions?

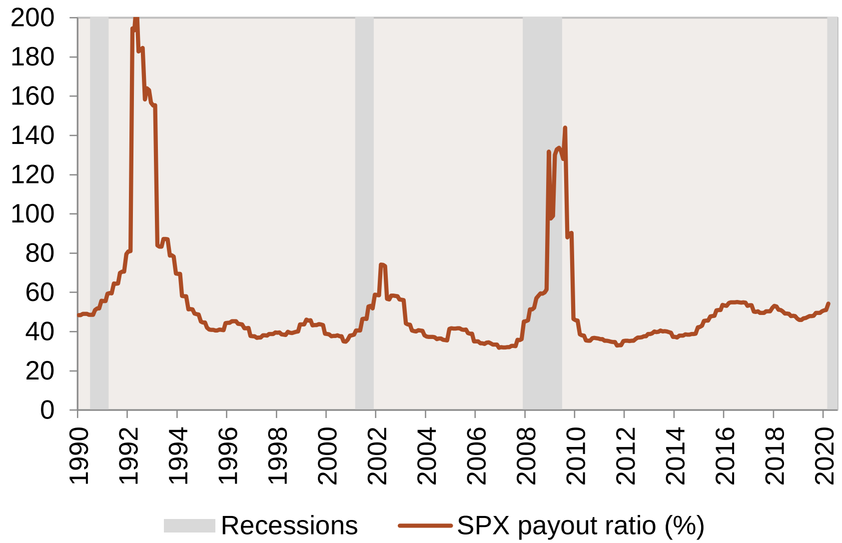
The dividend yield has increased during each of the last five U.S. recessions



Source: Bloomberg, NBER, Epoch Investment Partners

Will the behavior of dividends during the COVID-19 recession be different?

Payout ratios typically increase late-recession as DPS declines by less than EPS



Source: Bloomberg, NBER, Epoch Investment Partners

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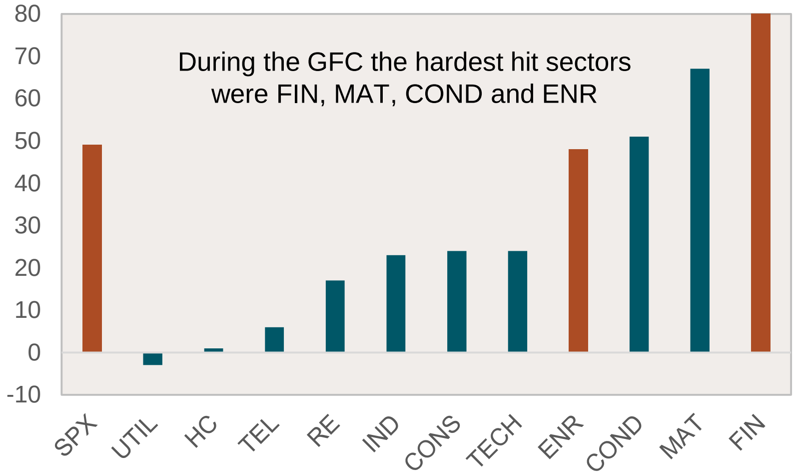
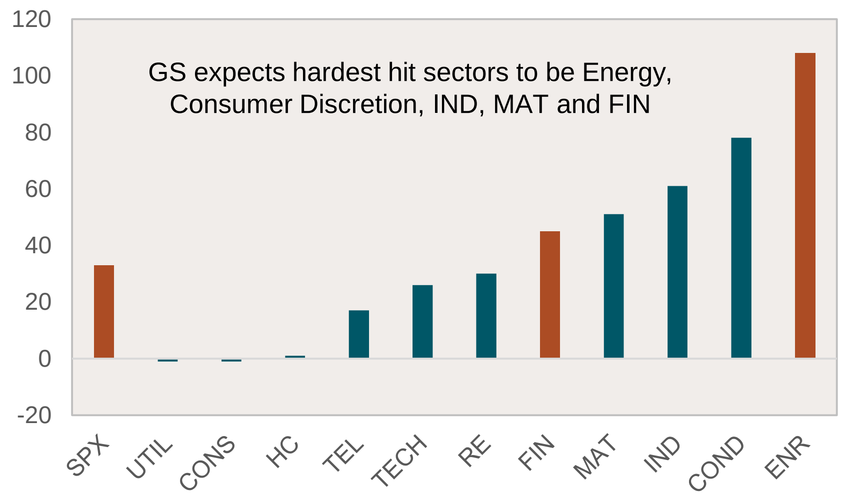
Which SPX Sectors are Expected to Take the Biggest EPS Hit in 2020?

EPS decline (%) during the GFC



Source: Goldman Sachs

Sector-level EPS declines (%), 2020E



Source: Goldman Sachs

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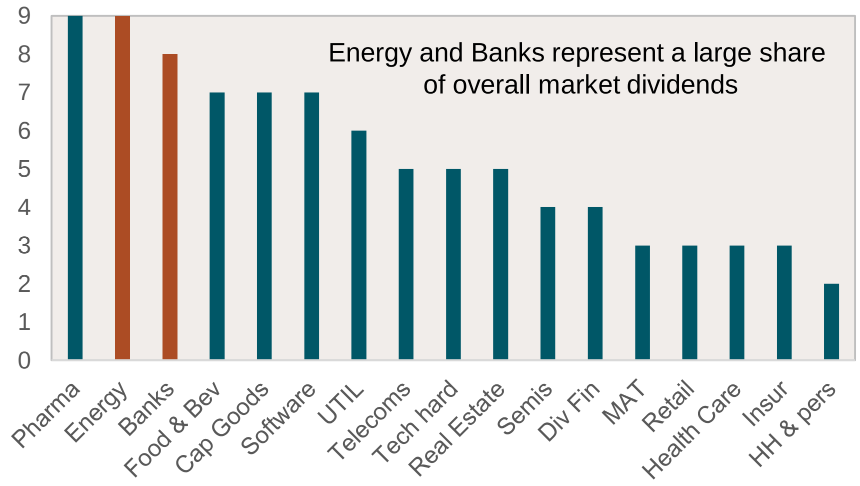
DPS Damage Typically Concentrated in a Few Sectors

- During recessions dividend cuts are usually concentrated in a small number of sectors: FIN and COND, and to a lesser extent INDU and MATR
- The sectors where dividends held up the best: TECH, HLTH, CONS and UTIL

For 2020, The Economist recommends sorting companies into three buckets

1) Those that have received government assistance (e.g., airlines, banks in Europe)
2) Cyclical companies with large EPS declines that may need to issue debt to fund dividends
3) Firms with solid balance sheets and resilient earnings (e.g., tech, healthcare, utilities)

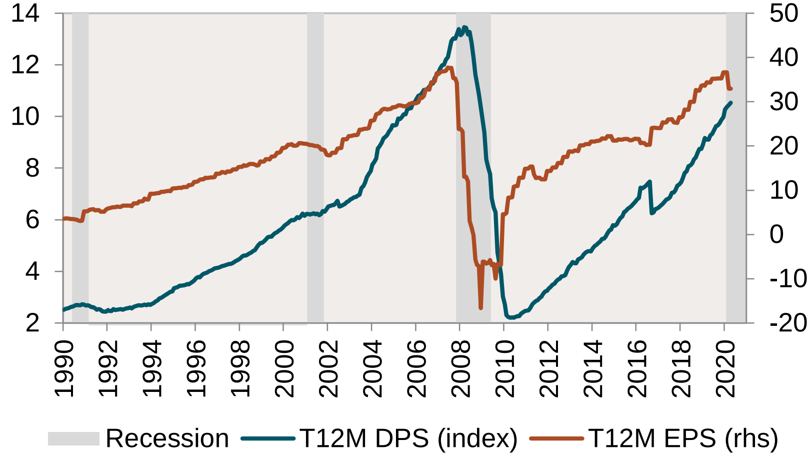
Sector dividend share of overall market (%)



Source: Bloomberg, Epoch Investment Partners

Two Sectors That Are Typically Hit Hard During Recessions

FIN: Always at the center of the storm



Source: Bloomberg, NBER, Epoch Investment Partners

SPX FIN

- 61% corr since 1990 (2nd lowest sector)
- Both EPS & DPS plummet during recessions

Peak-to-trough declines

Recession	EPS (%)	DPS (%)	DPS as % of EPS
1991	10.2	10.3	101.2
2001	13.4	1.1	8.4
2008	144.3	83.4	57.8
Average	**55.9**	**31.6**	**55.8**

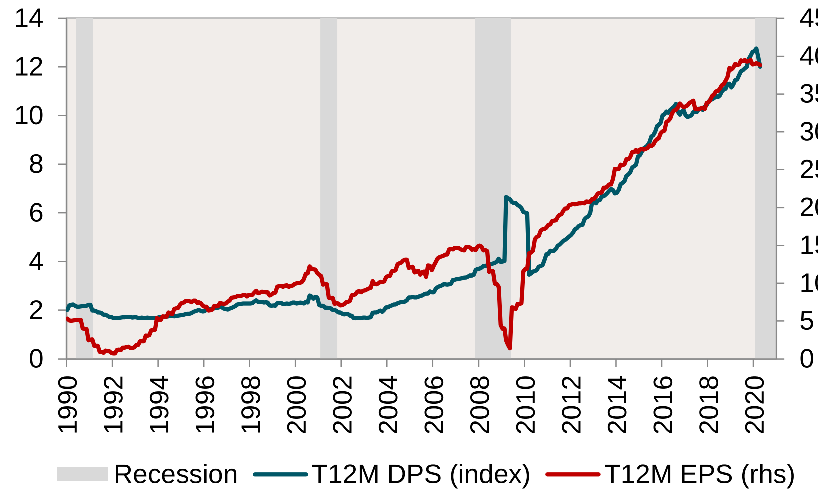
SPX COND

- 94% corr since 1990
- Very cyclical, DPS declines by 31% as much as EPS during recessions

Peak-to-trough declines

Recession	EPS (%)	DPS (%)	DPS as % of EPS
1991	78.2	-0.9	-1.2
2001	37.3	27.2	72.8
2008	50.9	10.6	20.8
Average	**55.4**	**12.3**	**30.8**

COND



Source: Bloomberg, NBER, Epoch Investment Partners

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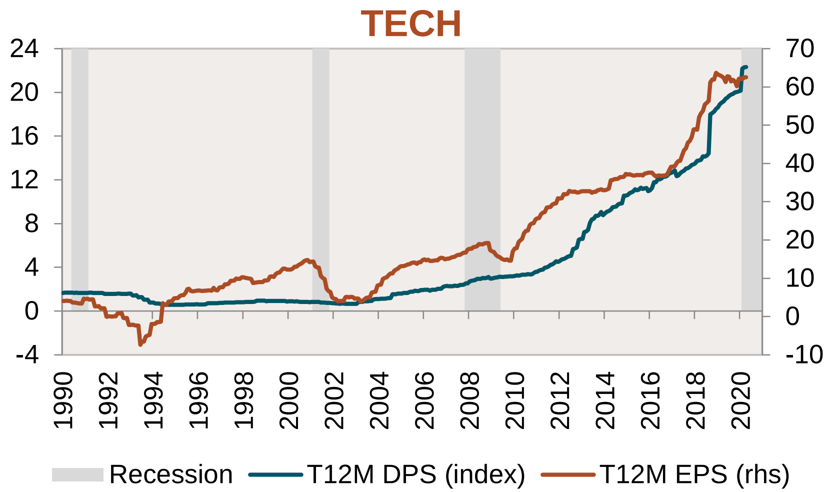
Two Sectors for Which Dividends Held Up Well During Past Recessions



Source: Bloomberg, NBER, Epoch Investment Partners

SPX TECH EPS & DPS

- 94% correlation
- Tech DPS holds up well during recessions

Peak-to-trough declines

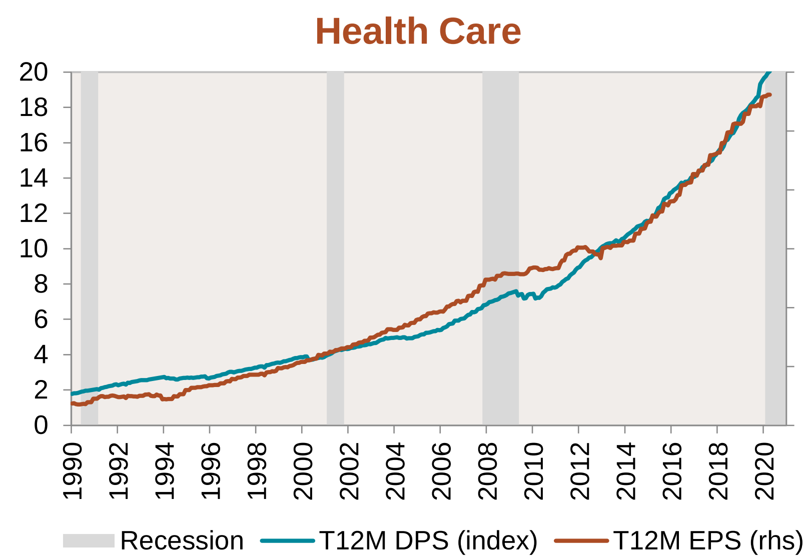
Recession	EPS (%)	DPS (%)	DPS as % of EPS
1991	100.6	1.8	1.8
2001	72.8	29.0	39.9
2008	23.9	na	0.0
Average	**65.8**	**15.4**	**13.9**

SPX Health Care

- 98.7% corr since 1990 (highest of any sector)
- Recession proof

Peak-to-trough declines

Recession	EPS (%)	DPS (%)	DPS as % of EPS
1991	na	na	na
2001	na	na	na
2008	0.7	5.7	na
Average	**0.7**	**5.7**	**na**



Source: Bloomberg, NBER, Epoch Investment Partners

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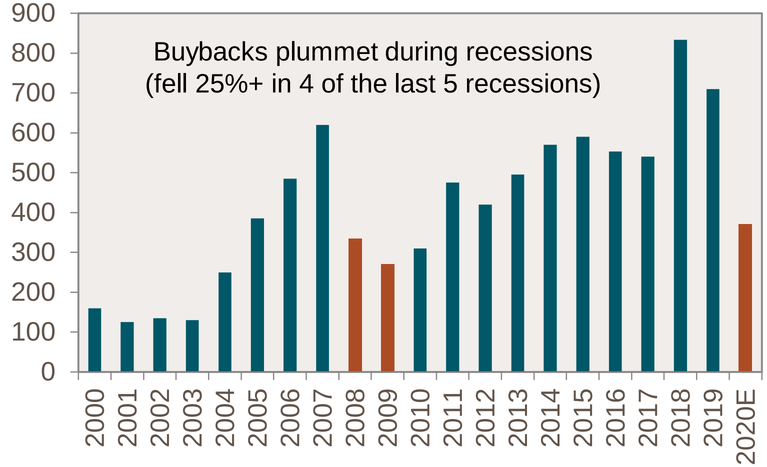
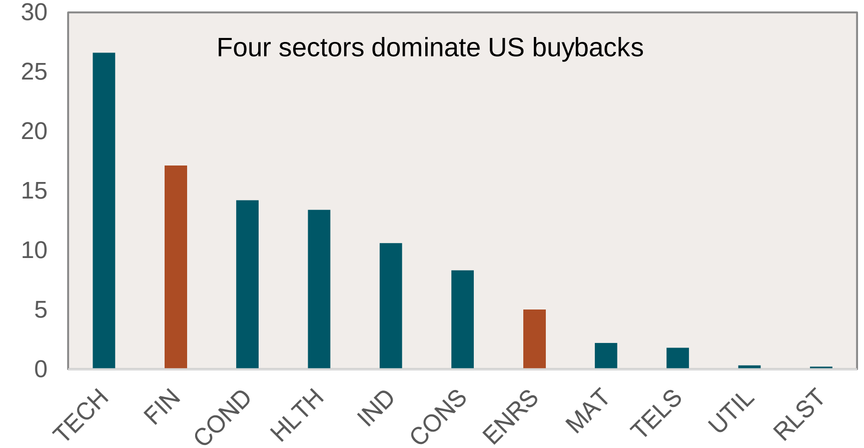
Buybacks as the Shock Absorber: Expected to Decline 50% in 2020

Executed buybacks (USD bn)



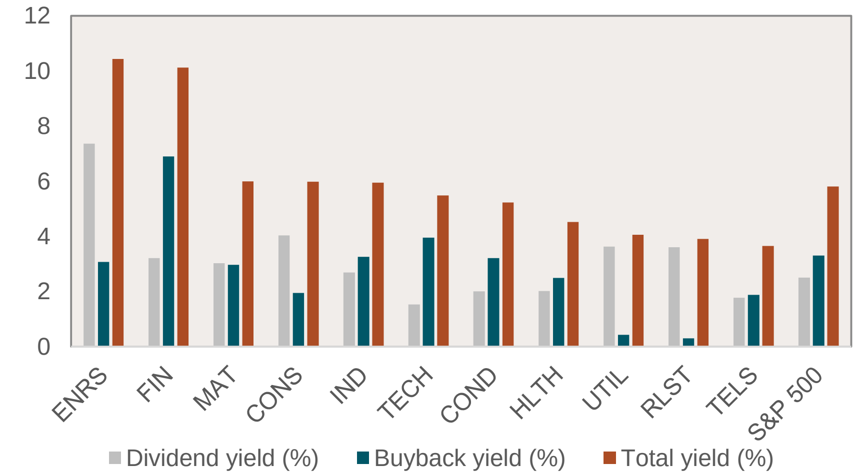
Source: Goldman Sachs

Buybacks by sector, 2010-2019 (% share)



Source: Standard and Poor's, Epoch Investment Partners

Total yield by sector, 4Q2009



Source: Standard and Poor's, Epoch Investment Partners

Consensus expects buybacks to fall c50% this year, followed by a small decline in 2021. This is consistent with the 8Q, 67% peak-to-trough decline during the GFC.

Vulnerable sectors: FIN, COND, IND, ENRS

Least impacted: TECH, HLTH, CONS, TELS

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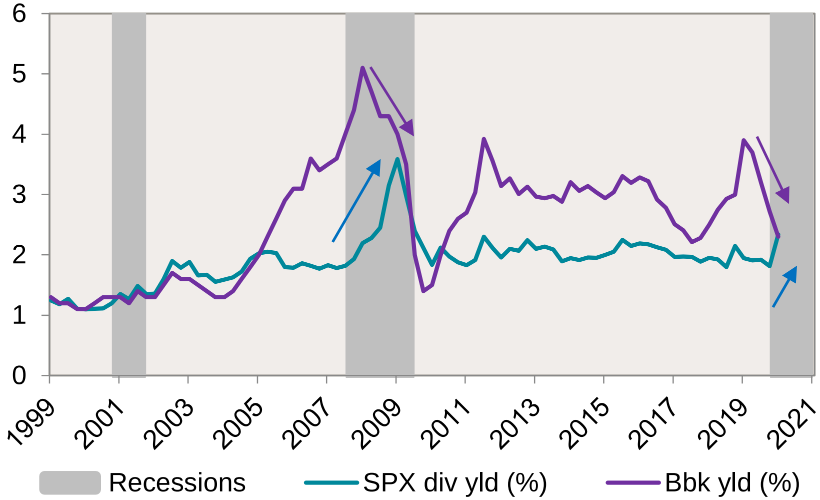
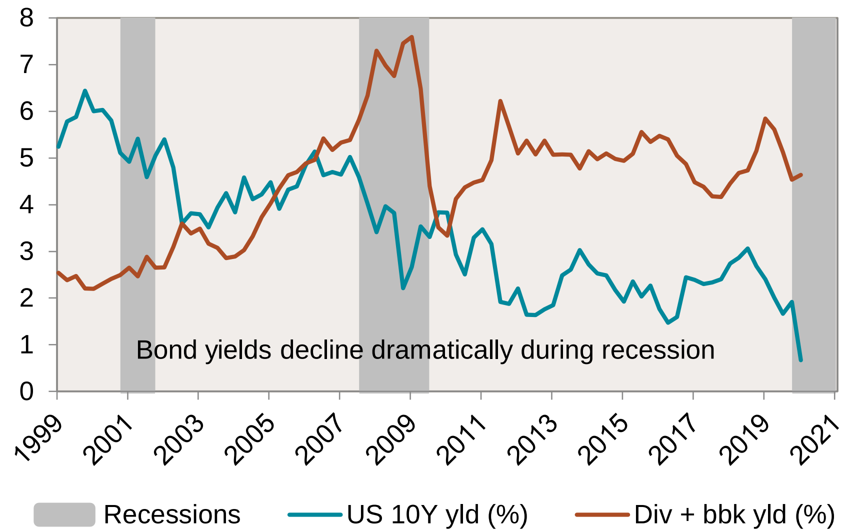
Dividend and Buyback Yields: Move in Opposite Directions in Recessions

During the GFC, the buyback yield plummeted, while the dividend yield soared



Source: Bloomberg, NBER, Epoch Investment Partners

Over the last decade, total equity yield has far surpassed that obtained from bonds



Source: Bloomberg, Epoch Investment Partners

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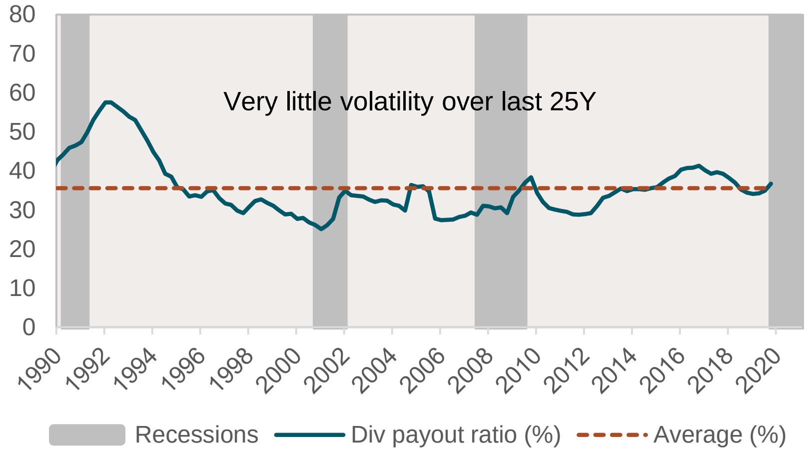
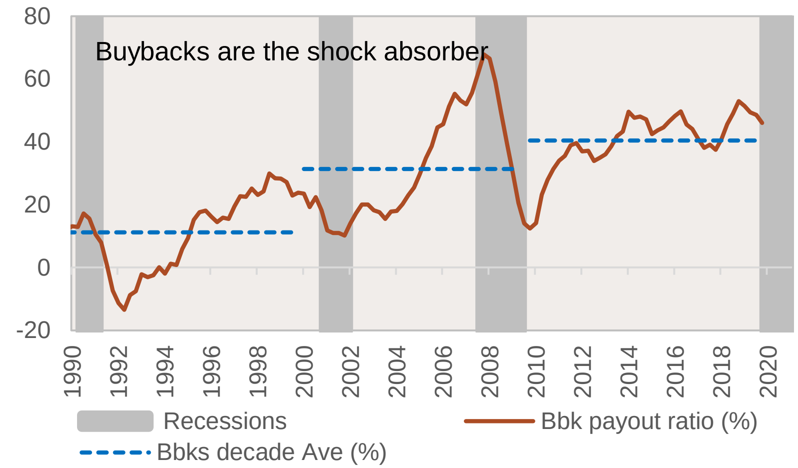
Dividend and Buyback Payout Ratios: SPX ex-FIN & REITS

Dividend payout ratio: Almost a constant



Source: Credit Suisse, Epoch Investment Partners. Note: SPX ex-FIN & REITS

Buyback payout plummets in recessions

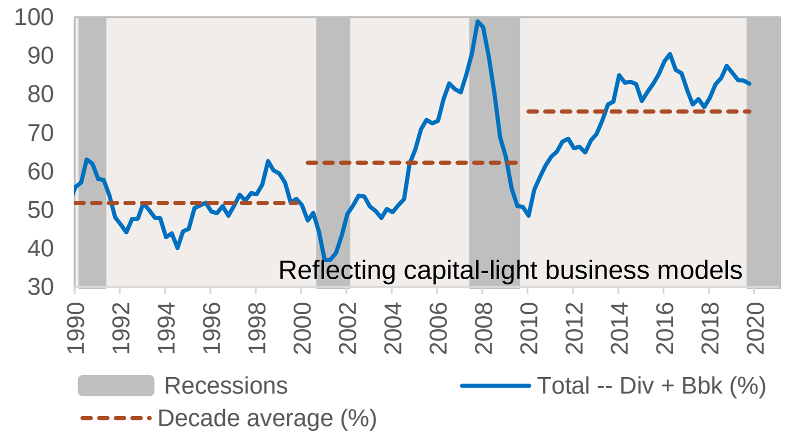


Source: Credit Suisse, Epoch Investment Partners. Note: SPX ex-FIN & REITS

What has allowed buybacks to flourish?

- In 1982 the SEC instituted Rule 10B-18 which provides a safe harbor from liability for manipulation (as defined by the SEC Act of 1934, sections 9(a)(2) & 10(b) and rule 10b-5)
- In 2003, the Commission amended Rule 10b-18 to update the safe harbor provisions in light of market developments since 1982 (e.g., block trading and after-hours activity)

Total payout has been rising



Source: Credit Suisse, Epoch Investment Partners. Note: SPX ex-FIN & REITS

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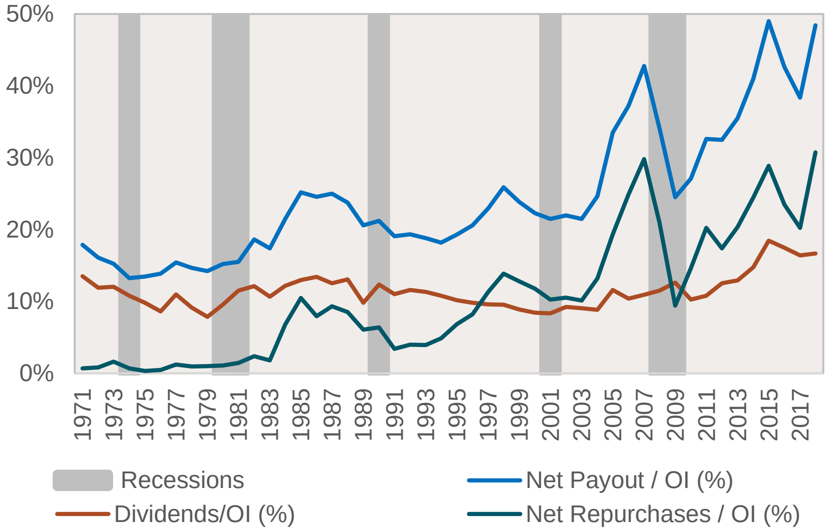
Are Corporate Payout Ratios Too High?

Buybacks increased over the last two decades: Is that sustainable?

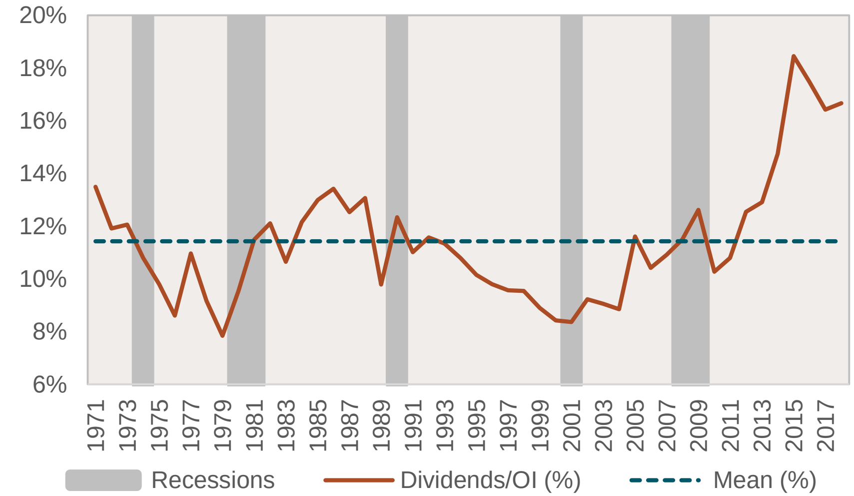


Source: Kahle and Stulz, "Are Corporate Payouts Abnormally High?", 2020
Note: Public U.S. firms, ex-FIN & UTIL

Most (but not all) of the increase in the 2000s can be explained by fundamentals

- Increase in aggregate corporate income
- Assets & age: Older and larger firms exhibit higher payout ratios
- Higher cash holdings: Especially tech
- Decline in capex (capital-light business models)

Dividend payouts (% of operating income), have increased over the last decade



Source: Kahle and Stulz, "Are Corporate Payouts Abnormally High?", 2020
Note: Public U.S. firms, ex-FIN & UTIL

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Buybacks were Slashed During the GFC, Dividends Declined Only Modestly

Uses of cash ($ bn)	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020E
Buybacks	629	341	279	327	486	437	535	581	592	553	540	838	749	371
Dividends	259	264	241	227	270	323	356	387	415	434	452	483	514	398
Cash Acquisitions	259	186	114	185	234	247	158	194	401	362	321	431	262	134
R&D	185	202	178	185	198	228	238	258	259	278	305	337	359	327
Capex	518	558	457	497	612	665	693	731	661	617	626	719	731	534
Total cash usage	1,850	1,550	1,270	1,420	1,800	1,900	1,980	2,150	2,327	2,244	2,245	2,808	2,615	1763

Source: Goldman Sachs

During 2008 and 2009, total cash usage declined by 16% and 18%

- Buybacks fell dramatically, by 46% in 2008 and 18% and 2009
- Dividends actually increased in 2008, by 2%, before declining modestly in 2009 & 2010
- Then, for the remainder of the decade, allocations to shareholders rose markedly

What should we expect for 2020 and beyond?

- Buybacks: Could decline anywhere between 40% and 65% (Goldman estimates -50%)
- Dividends: A broad range, -5% to -30% is feasible (indicative of the degree of uncertainty)
- 2021 might also prove challenging: But then expect a recovery in payouts, albeit less robust than post-GFC

Uses of cash (% chg yoy)	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020E
Buybacks	-46	-18	17	49	-10	22	9	2	-7	-2	55	-11	-50
Dividends	2	-8	-6	19	20	10	9	7	5	4	7	6	-23
Cash Acquisitions	-28	-39	62	27	6	-36	22	107	-10	-11	34	-39	-49
R&D	9	-12	4	7	15	4	9	0	7	10	10	7	-9
Capex	8	-18	9	23	9	4	5	-10	-7	1	15	2	-27
Total cash usage	-16	-18	12	27	6	4	9	8	-4	0	25	-7	-33

Source: Goldman Sachs

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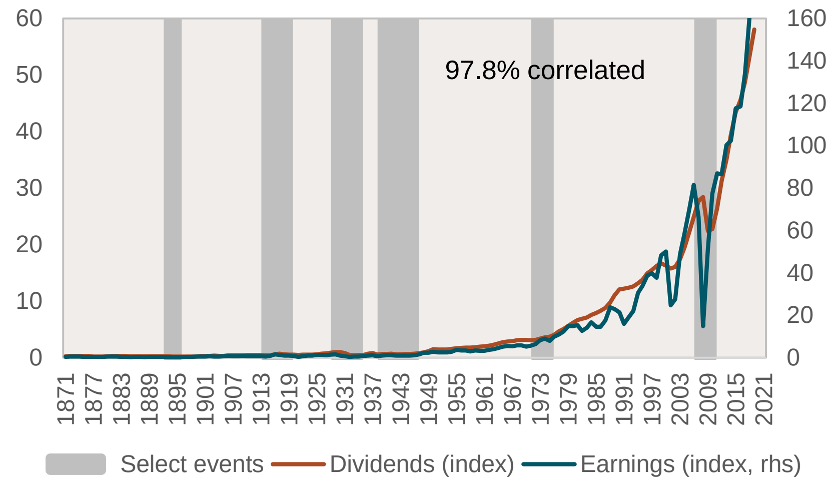
The Long-View: 150 Years of Dividends and Earnings

Dividends track earnings over time



Source: Robert Shiller, NBER, Bloomberg, Epoch Investment Partners
Select events: Panic of 1893-94, WWI, Depression, WWII, OPEC shock, GFC

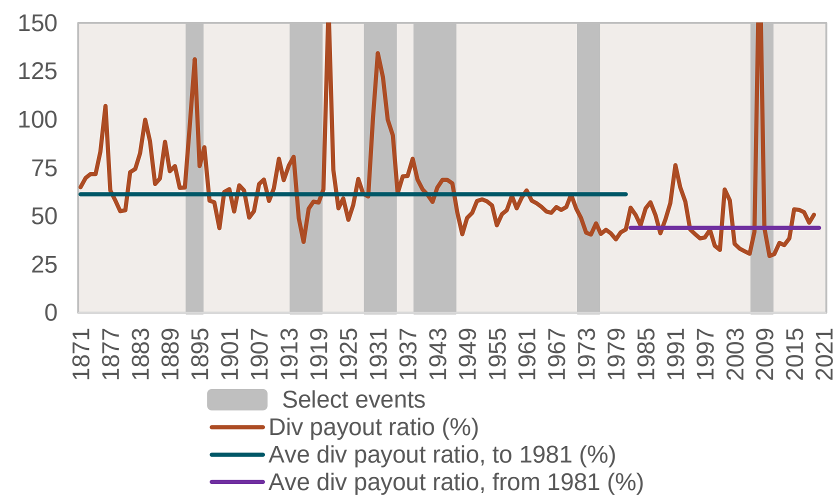
DPS typically declines by 25%

- The average of four major pre-1970 events
- Dividends usually fall by about half of earnings

	EPS decline (%)	DPS decline (%)	DPS as % of EPS
Panic of 1893	56.8	24.0	42.3
WWI	39.2	17.4	44.4
Depression	74.5	54.6	73.3
WWII	19.8	4.8	24.2
Average	**47.6**	**25.2**	**46.0**

Source: Robert Shiller, NBER, Bloomberg, Epoch Investment Partners

Div payout ratio: A bit lower since 1981, but from 2005 bbks have more than compensated



Source: Robert Shiller, NBER, Bloomberg, Epoch Investment Partners
Select events: Panic of 1893-94, WWI, Depression, WWII, OPEC shock, GFC

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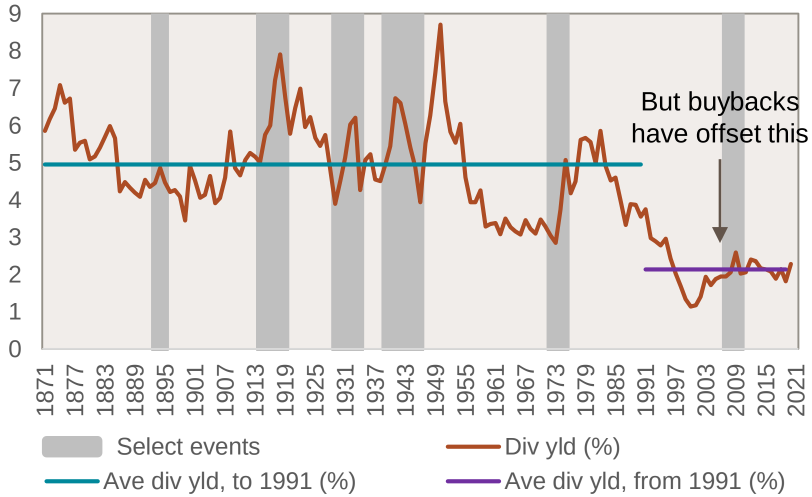
The Long-View: The Death of Dividends, Again?

Dividend yield: Markedly lower since 1991

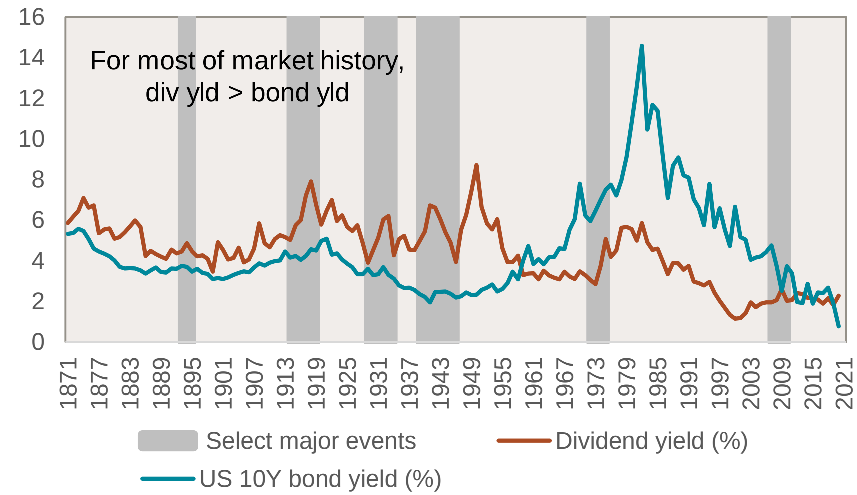


Source: Robert Shiller, NBER, Bloomberg, Epoch Investment Partners
Select events: Panic of 1893-94, WWI, Depression, WWII, OPEC shock, GFC

The death of dividends?

- Not the first time Cassandras have issued warnings
- Low dividend yield: Following 1893 panic, in 1929, at end of WWII, the "nifty 50" and the tech boom
  - o Fama, E., and K. French, "Disappearing dividends: Changing firm characteristics or lower propensity to pay?" Journal of Financial Economics, 2001

Dividend yield: Now higher than bond yields, as was the norm pre-Eisenhower



Source: Robert Shiller, NBER, Bloomberg, Epoch Investment Partners
Select events: Panic of 1893-94, WWI, Depression, WWII, OPEC shock, GFC

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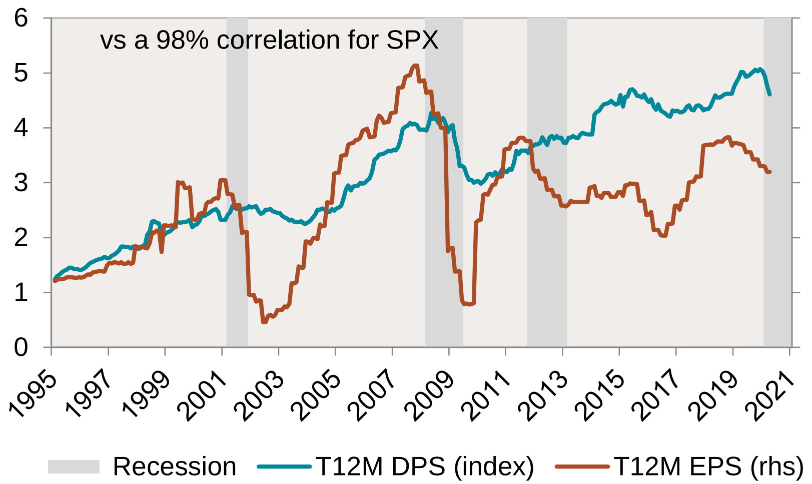
Europe: What Happens to EPS and DPS During Recessions?

EPS and DPS: 59.6% correlated



Source: Bloomberg, EABCN, Epoch Investment Partners

Since the Euro's inception there have been three recessions: On average, profits fell 75% from peak-to-trough (for the entire post-WWII period, the mean decline was 30%).

It has typically taken six quarters for earnings to decline peak-to-trough: And then ten quarters to rebound to the previous peak (much longer than America's six quarters, due to Europe's weak policy response)

This time the drop appears sharper, with a gradual recovery most likely

On average, dividends declined 14% during recessions (similar to America's 10%): With the biggest decline occurring during the GFC

It takes, on average, three quarters for dividends to decline peak-to-trough: And then five quarters to rebound (vs 3Qs for the U.S.)

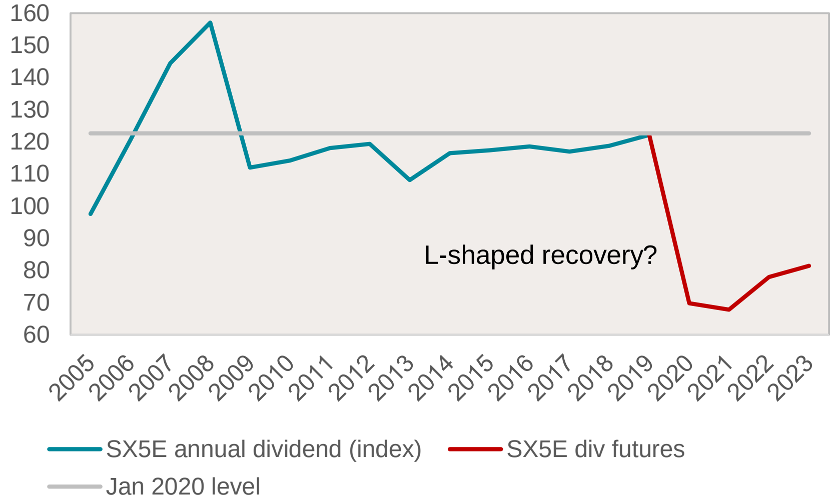
Dividends typically decline by half as much as earnings during recessions

Average for last 3 recessions	Earnings	Dividends
Peak-to-trough decline (%)	75	14
From peak to trough (# Qs)	6	3
Rebound to previous peak (# Qs)	10	5

Source: Bloomberg, EABCN, Epoch Investment Partners

Euro Stoxx 50 Dividend Futures: Is a Decline of 40% in 2020 too Bearish?

Sharp drop in 2020: Very little rebound priced in



Source: Bloomberg, Epoch Investment Partners

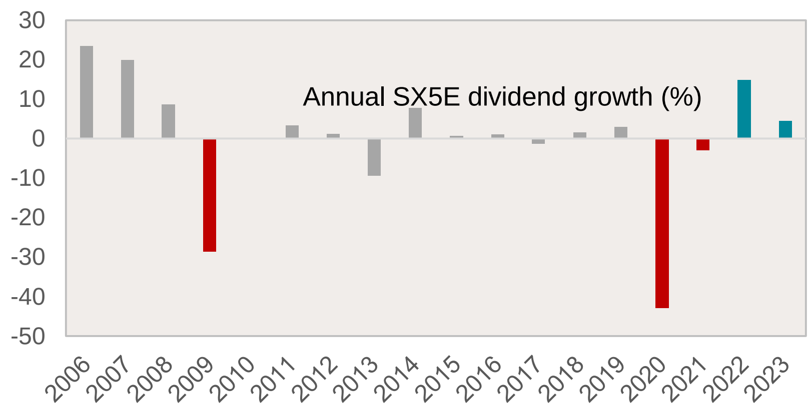
2020E consensus: For European EPS to fall 30-55%. Most see the economic fallout to be similar in severity to the '08-09 recession.

Further, there is expectation that SXXP EPS will rebound strongly, c50%, in 2021

The bearish view on 2020 dividends reflects concerns that dividends for Banks and Energy decline toward zero, while other sectors experience falls similar to the GFC

Strange that dividend futures are not pricing in more of a rebound, given the optimism regarding 2021 EPS

Dividend growth implied by futures is even more bearish than what occurred post-GFC



Source: Bloomberg, Epoch Investment Partners.
Note: Actual to 2019, then based on futures

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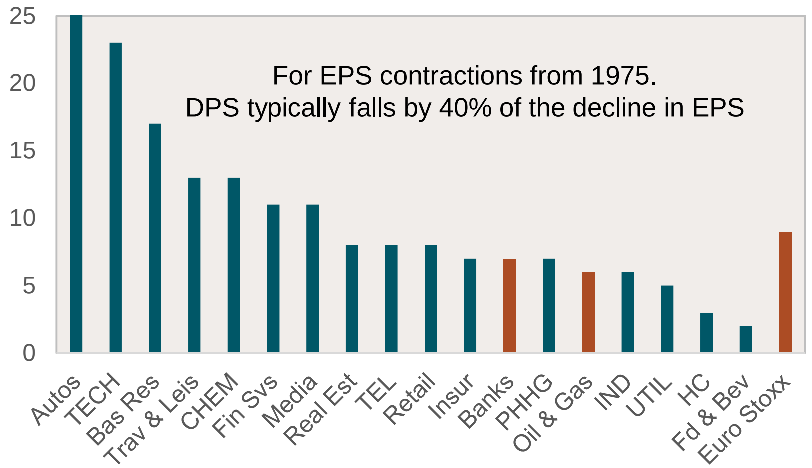
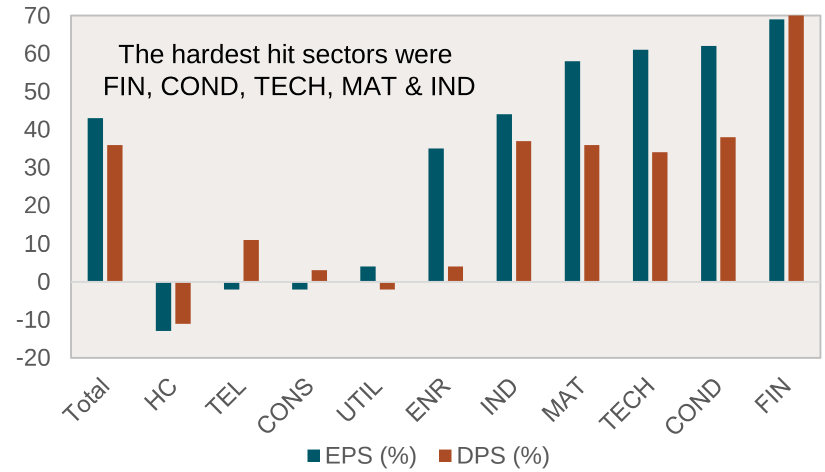
Euro Stoxx: Which Sectors Take the Biggest Hit During Downturns?

Average peak to trough decline in DPS (%)



Source: Goldman Sachs. Note: Autos is 51%, truncated on chart

% decline in EPS & DPS during GFC



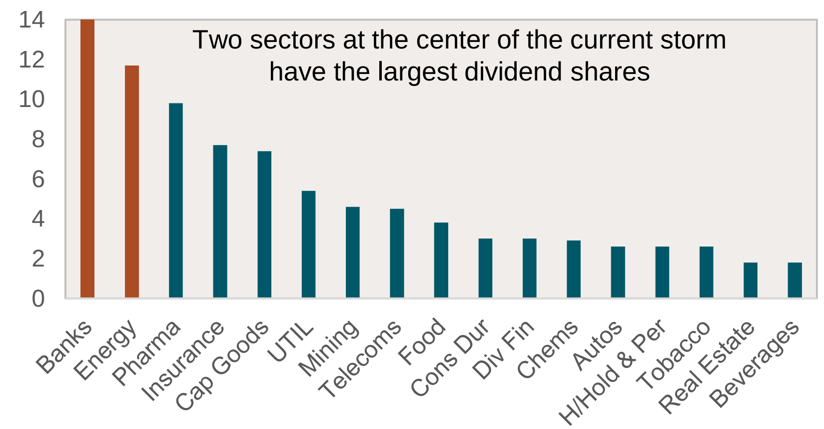
Source: Barclays

<u>Sectors where dividends have been most reliable include</u>: Healthcare, Utilities, Telecoms and Consumer Staples

<u>The sectors where dividends have been most vulnerable include</u>: Finance, Consumer Discretionary, Materials and Tech

Aside from tech, this is similar to the U.S.

Sector dividend share of overall MXEU (%)



Source: UBS

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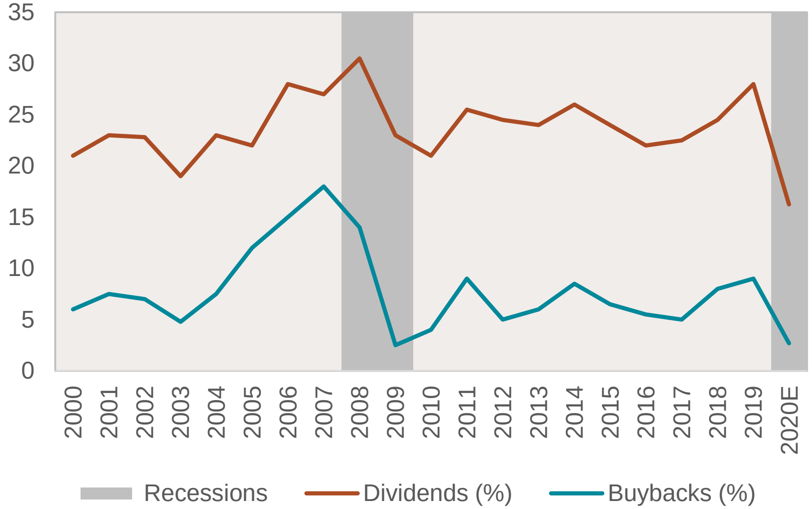
EURO STOXX: Dividend and Buyback Payouts

Dividend and buybacks, as % of cash

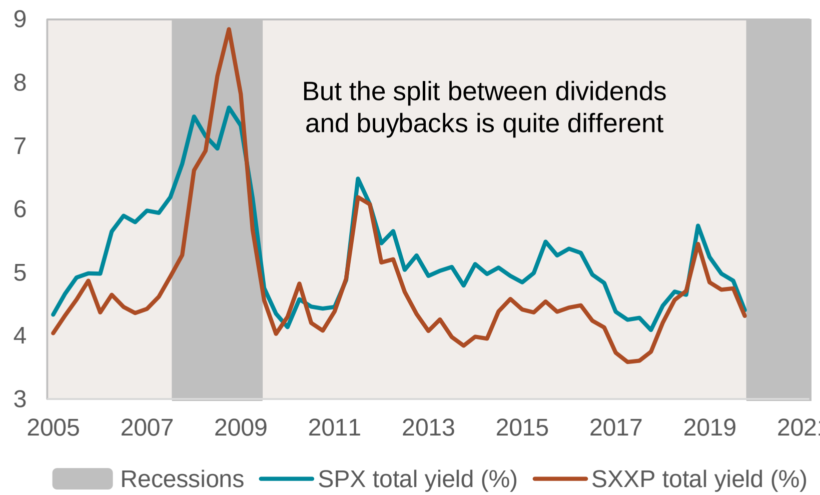


Source: Barclays, Epoch Investment Partners

Dividends as a % of cash: During the last two decades has been in a tight 20-30% range, but expected to dip below this year

Buybacks are a shock absorber: And have been much more variable than dividends

Euro Stoxx and SPX:
Total yield is currently similar



Source: Barclays

Aside on Global Champions

- Europe faces many challenges and has underperformed the U.S. since 2006
- However, much of our investment focus in on finding Global Champions
- Companies that are leaders in their sector and generate sustainable CF globally
- They just happen to be domiciled in a particular country, but their DNA is global

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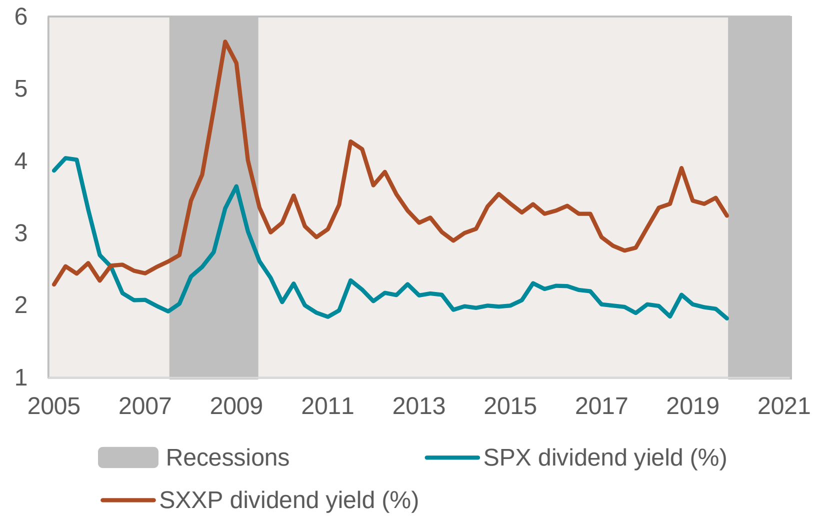
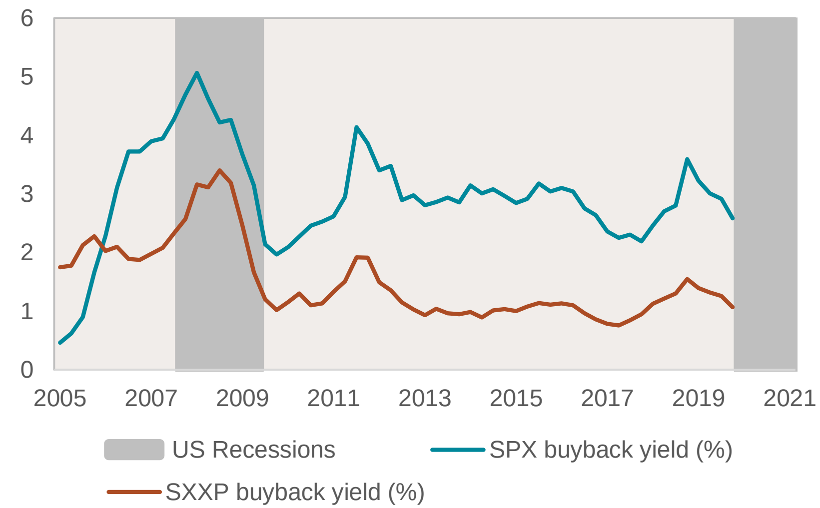
EURO STOXX vs SPX: Dividend and Buyback Yields

Dividend yield much higher in Europe



Source: Barclays

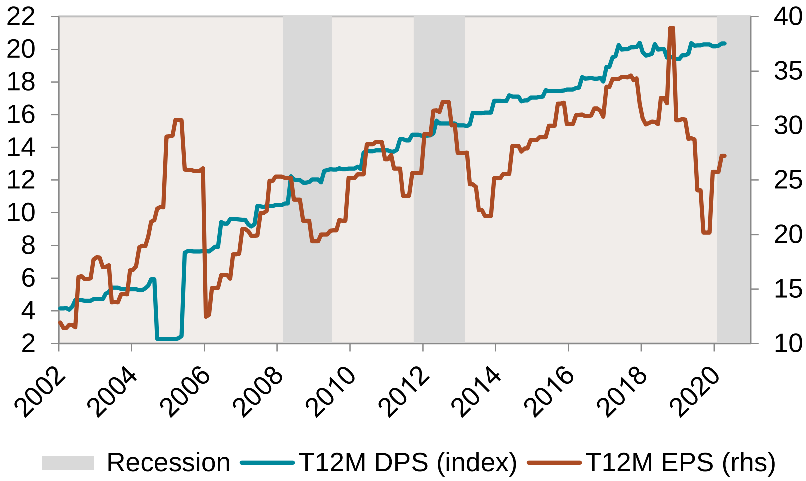
Buyback yield much higher in U.S.



Source: Barclays

EU Health Care & PHHG: Reliable Dividends During Recessions

Euro Stoxx Health Care



Source: Bloomberg, EABCN, Epoch Investment Partners

SXXE Health Care EPS & DPS

- 71% corr since 2002 (vs 99% for SPX HLTH)
- In recession, DPS falls only 10% as much as EPS

Peak-to-trough declines

Recession	EPS (%)	DPS (%)	DPS as % of EPS
2008	23.4	3.3	14.0
2012	32.5	2.2	6.7
Average	**28.0**	**2.7**	**10.3**

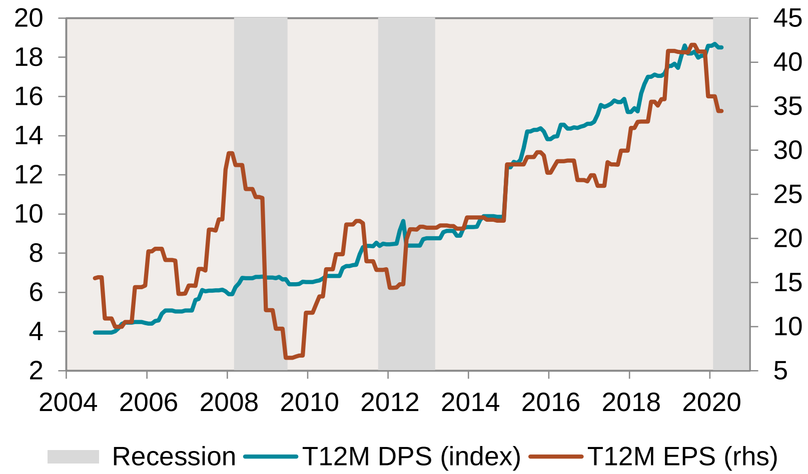
Personal & Household Goods

- 86% corr since 2002 (highest of any sector)
- In recession, DPS falls 23% as much as EPS

Peak-to-trough declines

Recession	EPS (%)	DPS (%)	DPS as % of EPS
2008	78.3	5.6	7.1
2012	34.5	13.2	38.1
Average	**56.4**	**9.4**	**22.6**

Euro Stoxx PHHG



Source: Bloomberg, EABCN, Epoch Investment Partners

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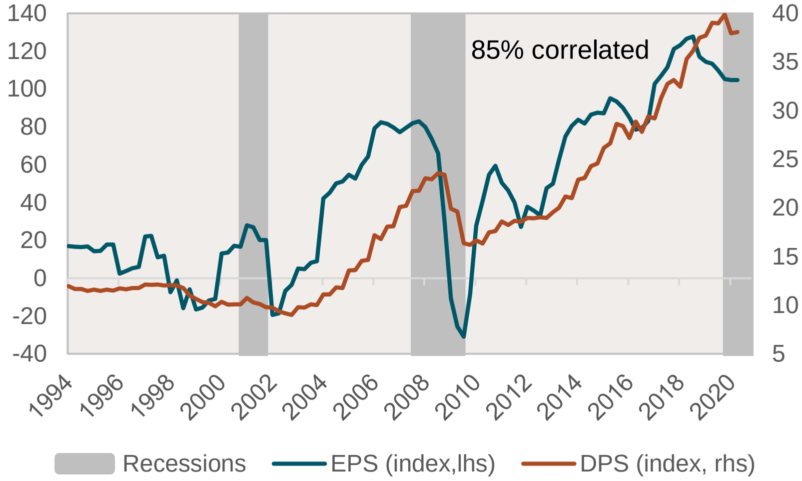
Japan Dividend Outlook: Somewhere Between the U.S. and Europe

A steady increase in DPS since 2010



Source: Bloomberg, Epoch Investment Partners

Consensus expects EPS growth of -15% in FY19 and -20% in FY20

- Japan's earnings have been extremely cyclical
- However, in the past, DPS has been much less volatile and declined by only a fraction of EPS
- Moreover, Japan is cash rich, and has a relatively low payout ratio (38%)

EPS and DPS declines during the last two recessions

Recession	EPS decline (%)	DPS decline (%)	DPS decline: # Qs	DPS rebound: # Qs	DPS decline as % of EPS
2001	156	16	8	5	10
GFC	136	27	5	19	23

Source: Bloomberg, Epoch Investment Partners

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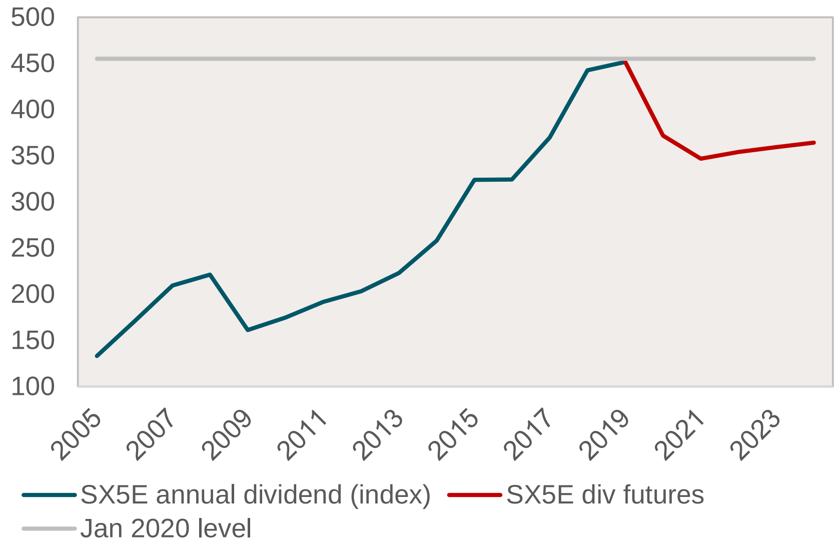
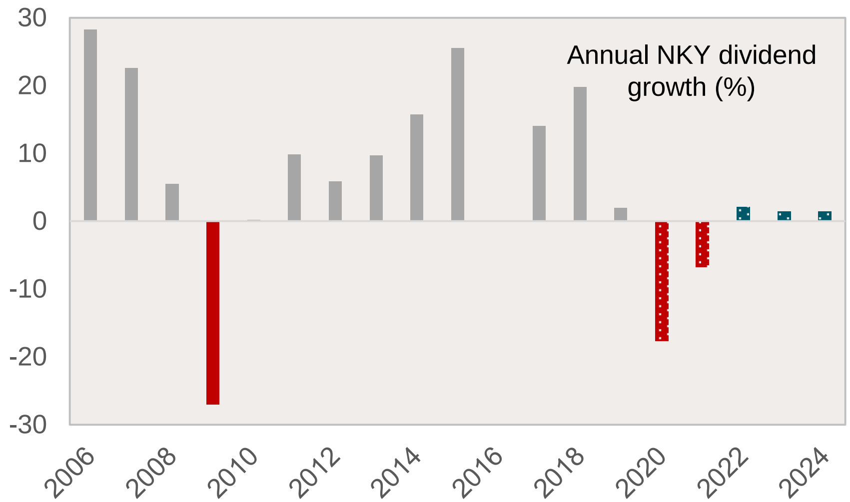
Nikkei Dividend Futures: Implying Declines of 18% in 2020 and 8% in 2021

Sharp drop in 2020: L-shaped recovery



Source: Bloomberg, Epoch Investment Partners

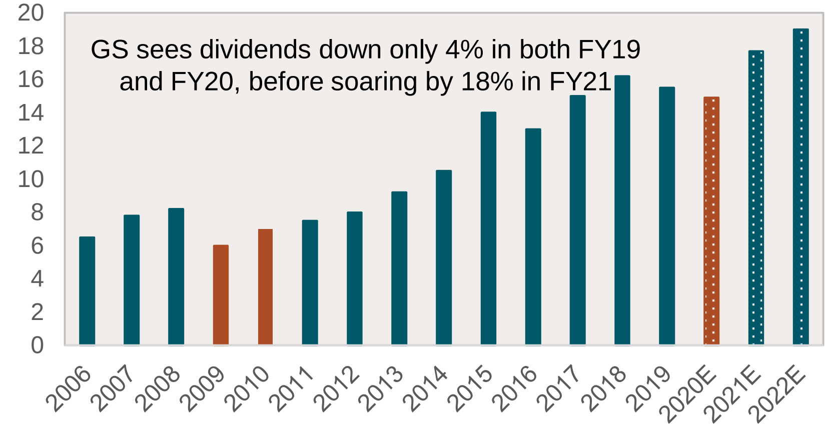
Dividend growth implied by futures: Only 1-3% annually from 2022



Source: Bloomberg, Epoch Investment Partners
Actual to 2019, then based on futures

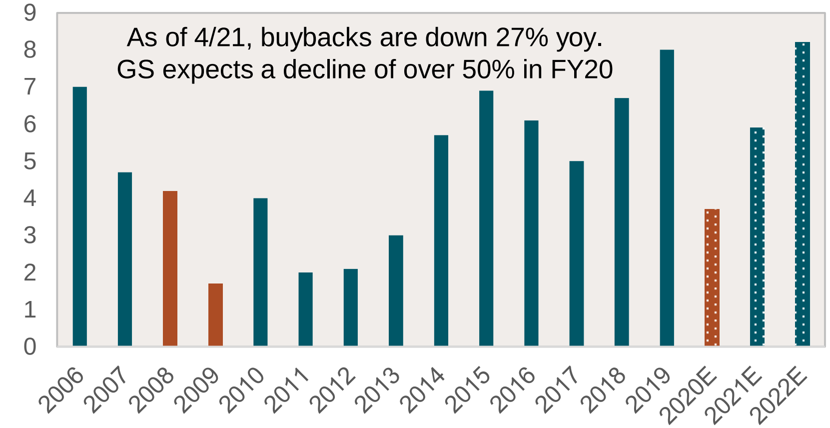
Japan: Buybacks Act as a Safety Valve

Dividends could hold up much better in 2020 (JPY tn)



Source: Bloomberg, Epoch Investment Partners, Goldman Sachs

With buybacks being the shock absorber (JPY tn)

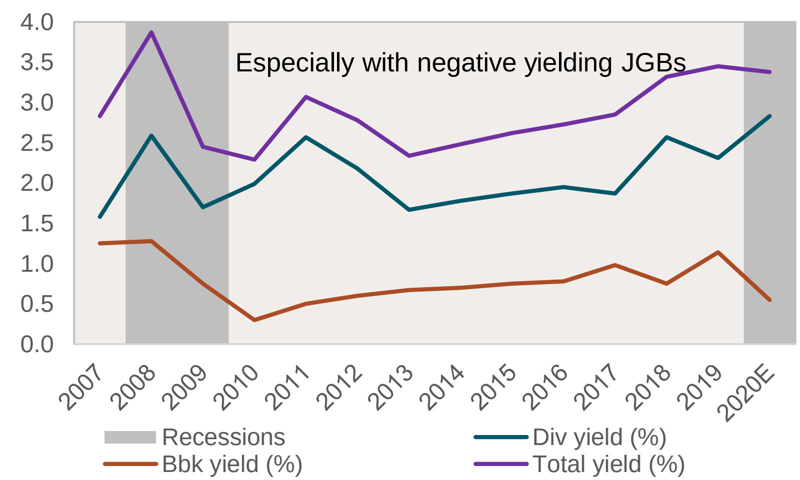


Source: Bloomberg, Epoch Investment Partners, Goldman Sachs, CLSA

Challenges investing in Japan

- In spite of attractive total yield and many global champions
- Japan faces numerous macro challenges (poor demographics, weak policy)
- Historically, many companies have been poor capital allocators
- However, corporate governance and capital allocation policies have improved since 2014 under Abenomics

Attractive total yield in Japan



Source: Bloomberg, Epoch Investment Partners, Goldman Sachs

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CONCLUSIONS

Companies Will Not Abandon Sound Capital Allocation Policies

- Sustainable growth for any nation requires the efficient allocation of "land, labor, and capital" (the factors of production in economic terminology) among all possible uses. With respect to capital allocation within a business, there are two choices: return excess capital (free cash flow) generated by the business to the business owners or reinvest that capital into the business in order to grow the business.
- Businesses should always reinvest operating cash flow if they can generate a return on investment above their cost of capital. Similarly, businesses should return capital to their owners via dividends if they cannot generate a return equal to their cost of capital. Dividends matter not only for the income paid to shareholders, they are also a conduit for capital to flow where it can be deployed most efficiently.
- Do desperate times call for desperate measures? Many current articles call for comprehensive suspension of dividends and share repurchases. During COVID-19 induced recession, many businesses will cut dividends and buybacks. Those businesses receiving government assistance should not return capital by any means to their shareholders.
- However, there are many firms that possess solid balance sheets and resilient business models and are reassuring investors today of their capital allocation policies. They occur across sectors and within sectors.
- It is important to note that dividends exhibit greater stability than earnings in downturns and have been remarkably stable for decades. This will not change in our view.
- Reports of the death of the dividend have been greatly exaggerated: this is a challenging period, but like previous recession, it will not lead to companies to abandon sound capital allocation policies.
- America may "run on Dunkin," but businesses run on cash flow, and the most successful businesses make wise capital allocations – investing only when a premium over their cost of capital can be earned and returning excess cash flow to investors via dividends when that condition does not exist. Abandoning this policy will ultimately lead to reduced innovation, an increased number of zombie companies, and less wealth for future generations.

Appendix

MAR. 2020
[Paper: Not All Dividend Cuts are Equal]

APR. 2020
[Podcast: Not All Dividend Cuts are Equal]

OCT. 2018
[Global Equity Shareholder Yield: A Solution-Oriented Strategy]

JUL. 2015
[Shareholder Yield: The Case for the Next Decade]

DEC. 2005
[The Case for Shareholder Yield]

Epoch Thought Leadership

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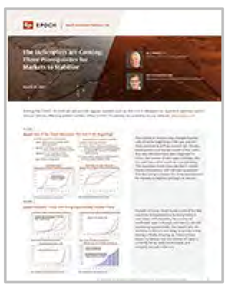

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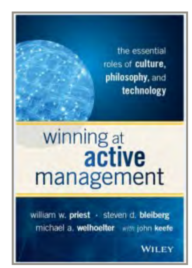

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