

Explaining the SPAC IPO boom

Thursday July 30

Markets up yesterday on dovish FOMC, and Key Markets Performance Table ahead of big-tech earnings. Headline grabbing -34% US GDP report and weekly jobless claims stall today to pressure Congress for stimulus deal. HOT TOPICS analyses boom in Special purpose acquisition companies (SPACs). Are 60% US IPO activity vs unknown few years ago, and brought Virgin Galactic, Draftkings, Nikola public in a quicker and cheaper alternative to lower-than-expected -10% Q2 German GDP, traditional IPO. They have unique structures, which can be high cost, but also offer investor downside protections and tradability.

FOMC dovish outlook boosted markets, with tech rallying through top CEO's Congress testimony and ahead of earnings today. 40% S&P 500 now reported Q2, with average 13% 'beat' and 80% above expectations. US Q2 historic weak GDP report today combined with likely rise in weekly new jobless claims to increase pressure on Congress for stimulus deal. US rolling-average new daily virus cases c20% below recent 70k peak. Asian markets rose, but Europe lower on poor results and

Index	Level	1D	1W	YTD
S&P500	3218.4	1.2%	-0.5%	0.9%
ACWI xUS	45.7	1.2%	0.8%	-5.7%
DXY USD	93.5	-0.3%	-1.6%	-3.0%
US 10Y YLD	0.58	0.0%	-2.4%	-69.6%
Brent Spot	44.2	1.1%	1.2%	-35.9%
Gold Spot	1970.4	0.6%	5.3%	29.9%

with US futures down. USD at two-year low.

Fed reassures but focus Congress. FOMC made no policy changes, as expected, but reiterated will use all available policy tools to

Big 4 US Tech Results today

Name	Idx Wt %	US\$ EPSe	YoY	% Chg
Alphabet	3.3%	8.21	14.21	-42%
Amazon 4.7%		1.46	5.22	-72%
Apple	5.7%	2.04	2.18	-6%
Facebook	2.1%	1.39	1.99	-30%
	15.8%			-38%

Source: Refinitiv, S&P, THR

HIGHLIGHTS FROM REST OF DOC

- Hot Topics on SPACs. Are now 60% US IPO activity and brought Virgin Galactic, Draftkings Nikola public in alternative to traditional IPO. But have unique structures, with pros and cons.
- What to watch: Big tech names report AMC. US Q2 GDPe -34% qoq. Jobless claims 1.45m
- Country and Sector 'Eye': We favor US and select EM's, and US Consumer and IT sectors
- <u>Data pages</u>: Performance, valuation, earnings, macro forecasts. See <u>Library</u> for prior dailies

^{*}Sources if not stated are Refinitiv, THR



Index	Level	1D	1W	YTD
S&P500	3218.4	1.2%	-0.5%	0.9%
NASDAQ	10663.0	1.4%	-1.5%	17.5%
Russell 2000	1500.6	2.1%	0.7%	-10.1%
US IT	393.5	1.6%	-1.9%	18.8%
US Healthcare	374.7	1.0%	-0.2%	6.7%
US Financials	156.3	2.0%	1.5%	-20.4%

support economy. Said recovery lost momentum and path tied to virus. Policy framework review, with yield curve control and average inflation target possibilities, coming in 'near future'. Focus remains on Phase 4 fiscal negotiations on US\$1trn republican proposal. Sec. Mnuchin said parties 'far apart', even with extra unemployment payments ending Friday. Ultimately, expect a larger deal given consensus on need and several of programs, along with election and Republican state virus impacts. Is one of our four upside catalysts for Q3. See July 1 *Upside risks for Q3*.

Q2 GDP headline-grabber and jobs stall. Q2 US GDP forecast contracting 34% annualized qoq, after 5% fall in Q1, and three times next largest fall of 10% in 1958, with consumer spending and business investment leading weakness. Weekly new jobless claims also due, seen rising to 1.45m from 1.4m last week, with continuing claims up to 16.2m, as jobs recovery shows further stalling. Both likely to add to fiscal stimulus pressure on politicians.

Tech earnings focus after Congress relief. FAANGM's rallied through Alphabet, Amazon,

FX. Fixed Income. Commodities

1 X, 1 IXCa intollic, Commodities								
Index	Level	1D	1W	YTD				
DXY USD Index	93.5	-0.3%	-1.6%	-3.0%				
EUR/USD	1.18	0.6%	1.9%	5.2%				
US 10Y YLD	0.58	0.0%	-2.4%	-69.6%				
US 10-2 BOND	0.45	9.8%	9.9%	22.2%				
CBOE VIX Index	24.1	-5.3%	-1%	75%				
CRB Index	2634.7	0.8%	1.5%	-14.6%				

Events to Watch

Indicator	Period	Forecast	Last
Retail Sales YY, Japan	June	-5.71	-12.30
GDP YY, Germany	Q2	-10.85	-2.30
Consumer Confidence, Euro	July	-14.99	-15.00
Unemployment Rate, Euro	June	7.73	7.40
Initial Jobless Claims, US	w/e 25/06	1.45 M	1.42 M

Apple, Facebook CEO Congress 6-hr testimony, as were **relatively unscathed from questioning** focused on their use of market power. Committee to complete report on updating federal antitrust rules next month. Focus today on there Q2 reports, with these four 16% of S&P 500, main drivers of YTD outperformance, and average 38% yoy EPS fall forecast.

Sector View

S&P 500 led up by cyclicals, with energy (+2.1%) and financials (+2.0%), while defensives staples (+0.1%) and utilities (+0.4%) lagged. Small caps Russell 2000 outperformed, up 2.1%, and we are positive. See 14th July *The key small cap differences*.

What to Watch

Housing resilience. National Association of Realtors said Pending Home Sales Index rose 16.6% in June, and now highest since 2006, in further evidence of housing resilience, on household deleveraging and historic low mortgage rates. See 17th June *No housing déjà vu*.

Big tech Q2 (see front table), after close: Apple forecast to be impacted by pullback in consumer spending and store closures. Amazon ecommerce revenue rise to be offset by cUS\$4bn extra virus costs. Alphabet and Facebook hit by weaker ad spending. Focus for all will be outlook for consumer and ad spending recovery, and further extra virus costs. We are overweight IT and Communications sectors. See Page 6.

HOT TOPICS

EXPLAINING THE SPAC IPO BOOM

Special purpose acquisition companies (SPACs) have quickly moved from a near-unknown investment backwater to being 60% of US IPO's this year, with high quality sponsors, bigger offerings, and bringing co's such as Virgin Galactic, Draftkings and Nikola public in a potentially quicker and cheaper alternative to a traditional IPO. They have unique structures, which can be high cost, but also offer downside protections and tradability.

SPACs surge to 60% of US IPO market

SPACs (Special Purpose Acquisition Company's) interest is surging in US as both an investment and capital raising alternative. What used to be a financial backwater has become a legitimate alternative to a traditional IPO for many. 2019 was already a record year for SPAC issuance, but 2020 is set to be dramatically higher, with cUS\$19bn of capital raised so-far this year, and the number accounting for 60% of total US IPO activity YTD (see chart).

Recent SPAC's have been led by high profile sponsors such as Bill Ackman, Michael Klein, and Dan Loeb, and seen companies such as Draftkings, Virgin Galactic, Nikola, Fisker, and MultiPlan all come to the equity market.

US SPAC IPOs (RHS) & US\$bn Raised (LHS)



The unique SPAC structure

Don't know the acquisition: Special purpose acquisition companies are investment vehicles that raise money through an IPO to specifically merge with another company. They are often referred to as "blank cheque" companies or "lucky dip" deals, as investors fund the SPACs without knowing the ultimate target.

Quicker and easier: SPACs IPOs have the advantage of being relatively quick and cheap to execute vs a traditional IPO, with a lower underwriting fee and quicker time-to-market. Investors get shares of common stock and of warrants, which trade separately in the market. proceeds are held in IPO trust, management not allowed to use until they close a deal. Management are instead allocated founder shares, typically 20% of shares, after completion of the IPO.

Time-limit to find a deal: Management has a predetermined time after IPO, usually two years, to complete a transaction. If not successful, they return the cash to shareholders. Once an acquisition been announced, a shareholder vote or a tender offer process takes place and investors have the option to return their shares in exchange for an amount of cash that is typically equal to the IPO price. Postdeal merged company takes name of acquired.

Some Advantages

Alignment of interests: The SPAC structure aligns interests between management and investors, as the management pay off depends on successful closure of deal, while investors get option to participate in an acquisition. Investors get exposure to a private equity type strategy without some of its disadvantages, notably liquidity, long term commitment and fees.

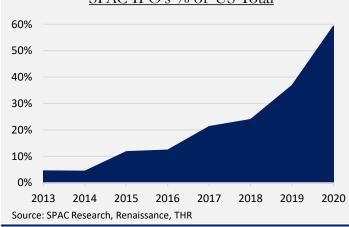
Advantages for targets: SPACs can be a less burdensome alternatives to a traditional IPO for an unlisted company. Once deal is closed, the SPAC takes the identity of acquired co.

Some Disadvantages

Idiosyncratic structures and potential expense: SPACs are often tailor-made, and terms differ. They might be set up so that managements can still profit even if proposed acquisition is not value enhancing. Managements typically pay only a nominal amount for the 20% founder stake, making it potentially expensive and dilutive. However, if investors think a deal is poor, they can redeem their shares. An Oxford University study highlighted that simply observing SPAC's market price action on day of acquisition announcement is helpful in avoiding bad deals.

Historically poor reputation: SPAC's had a bad reputation historically for high fees and steep dilution that has since improved given tighter

SPAC IPO's % of US Total



SPAC's announced acquisition (ARR %)

Name	Symbol	IPO	ROI	ARR
B Riley Principal Mgr Corp II	BMRG	May-20	17.4%	13054%
Tortoise Acquisition Corp	SHLL	Mar-19	199.1%	139%
Landcadia Holdings II	LCA	May-19	57.7%	53%
Forum Merger II Corp	FMCI	Aug-18	112.9%	51%
Insurance Acquisition Corp	INSU	Mar-19	42.6%	34%

Source: SPAC Research, THR

SEC regulation and oversight and a greater institutionalization of both SPAC sponsors and IPO underwriters.

Drivers of target availability

The current environment is benefiting the growth of SPACs, given that:

- 1) Many target companies are facing increased difficulty in pursuing there own IPO's given tougher market conditions.
- 2) There is significant private company availability given the surge in private equity and venture capital funding's the last decade.
- 3) With potentially more realistic valuation objectives given market crash and recession and select 2019 tech IPO disappointments.

Drivers of investor demand

Investor interest has been driven by:

- 1) Performance: Select SPAC performance has been strong, both amongst those with an announced acquisition and even amongst those seeing targets (see tables), and this has helped spark investor interest in the segment.
- 2) Downside protection: Investors are also attracted by the unique SPAC investment structure, with cash support into a deal, the redemption option, and trading opportunities of the separate stock and warrant structure.

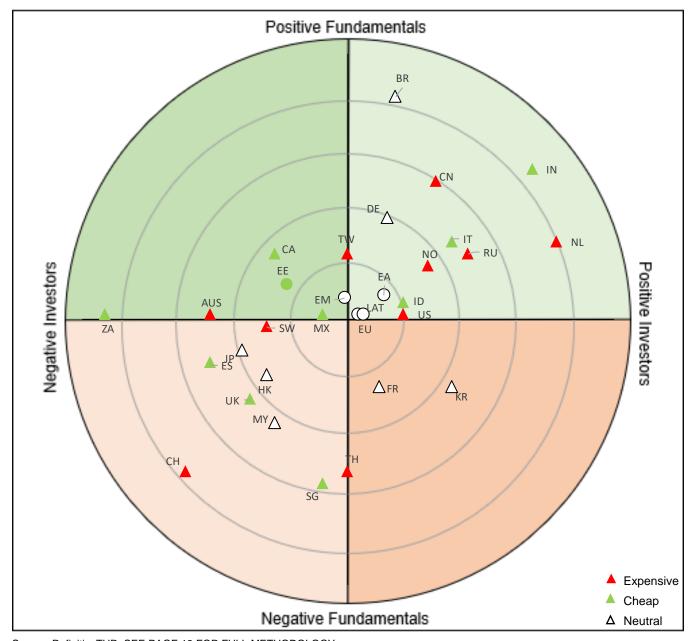
SPAC's seeking target (ARR %)

Name	Symbol	IPO	ROI	ARR
Social Cap Hedosophia II	IPOB	Apr-20	28.3%	1355%
Social Cap Hedosophia III	IPOC	Apr-20	19.5%	409%
Novus Capital Corp	NOVS	May-20	5.7%	229%
Flying Eagle Acquisition	FEAC	Apr-20	17.9%	99%
Chardan Healthcare Acq. 2	CHAQ	Apr-20	7.3%	98%
Source: SPAC Research, THR				

COUNTRY 'EYE' & ALLOCATIONS

Country Allocation Views

Market	Main Index	THR View	Market	Main Index	THR View
US	S&P 500	Overweight	UK	FTSE 100	Underweight
EM	MSCI EM	Neutral	Canada	S&P/TSX	Overweight
Eurozone	EUROSTOXX	Neutral	Switzerland	SMI	Overweight
Japan	TOPIX	Underweight	Australia	S&P/ASX	Neutral



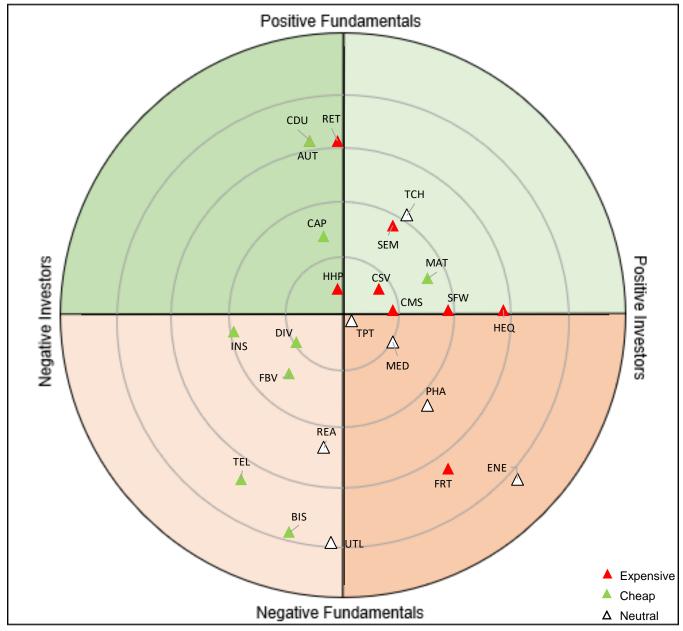
Source: Refinitiv, THR. SEE PAGE 13 FOR FULL METHODOLOGY

AUS=Australia, BR=Brazil, CA=Canada, CN=China, FR=France, DE=Germany, HK=Hong Kong, IN=India, ID=Indonesia, IT=Italy, JP=Japan, KR=Korea, MY=Malaysia, MX=Mexico, NL=Netherlands, NO=Norway, RU=Russia, SG=Singapore, ZA=South Africa, ES=Spain, SE=Sweden, CH=Switzerland, TW=Taiwan, TH=Thailand, UK=United Kingdom, US=United States, EU=Europe, LAT=Latin America, EM=Emerging Markets, EE=Emerging Europe, EA=Emerging Asia.

US SECTOR 'EYE' & ALLOCATION

US Sector Allocation Views

Main ETFs	THR View	Market	Main ETFs	THR View
XLK/VGT	Overweight	Staples	XLP/VDC	Overweight
XLV/VHT	Overweight	Energy	XLE/VDE	Neutral
XLF/VFH	Underweight	Utilties	XLU/VPU	Overweight
XLC/VOX	Overweight	Real Estate	XLRE/VNQ	Overweight
XLY/VCR	Neutral	Materials	XLB/VAW	Underweight
XLI/VIS	Neutral			
	XLK/VGT XLV/VHT XLF/VFH XLC/VOX XLY/VCR	XLK/VGT Overweight XLV/VHT Overweight XLF/VFH Underweight XLC/VOX Overweight XLY/VCR Neutral	XLK/VGTOverweightStaplesXLV/VHTOverweightEnergyXLF/VFHUnderweightUtiltiesXLC/VOXOverweightReal EstateXLY/VCRNeutralMaterials	XLK/VGTOverweightStaplesXLP/VDCXLV/VHTOverweightEnergyXLE/VDEXLF/VFHUnderweightUtiltiesXLU/VPUXLC/VOXOverweightReal EstateXLRE/VNQXLY/VCRNeutralMaterialsXLB/VAW



Source: Refinitiv, THR. SEE PAGE 13 FOR FULL METHODOLOGY

AUT=Auto & Auto parts, BIS=Banking & Investment, CAP=Capital Goods, CMS=Commercial & Prof Svcs, CDU=Consumer Durables & Apparel, CSV=Consumer Svcs, DIV=Diversified Financials, ENE=Energy, FRT=Food Staples & Retail, FBV=Food, Bev. & Tobacco, HEQ=Healthcare Equipt. & Svcs, HHP=Household & Personal Products, INS=Insurance, MAT=Materials, MED=Media & Entertainment, PHA=Pharma, Bio & Life Svcs, REA=Real Estate, RET=Retailing, SEM=Semiconductors & Equipt, SFW=Software and Svcs, TCH=Technology Hardware & Equipt, TEL=Telecoms TPT=Transport, UTL=Utilities

'EYE' ALLOCATION BREAKDOWN

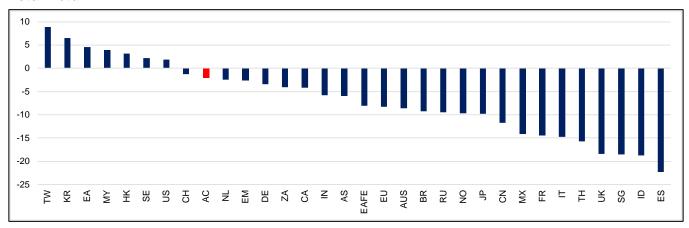
Country/	Rationale	P/E			er. (%)
Region	H 14 10 (4) (0) (1) (1) (1) (1) (1) (1)	2020e	2021e	2020e	2021e
	United States (Overweight): Remains a global equity 'safer haven' despite currently centre				
	of COVID outbreak. Has relatively closed economy and stock market, trend GDP growth into				
	crisis, and seen unprecedented policy response, with unlimited QE and initial 14%/GDP	26.1	20.5	-20.0	27.6
	fiscal stimulus. Valuations fundamentally supported by tech, tax, and UST. Earnings				
	expectations very quickly adjusted. Is in the 'momentum' Eye quadrant, with some of world's				
	strongest relative fundamentals, but also some of the most optimistic investors.				
★ ‡	Emerging Markets (Neutral): Economic growth vulnerable even before COVID outbreak.				
	USD strength and low oil prices have been additional broad headwinds for many. Much of the valuation discount structural and overstated. LatAm and CEEMEA now centre of virus	17.2	12.2	0.0	20.2
		17.2	13.3	-8.0	29.3
	outbreak, after north Asia (60% EM) control. Favor China, EM's largest market, on policy flexibility, resilient GDP/EPS, FIFO on COVID cases, 12x P/E. Underweight rest of EM.				
	Eurozone (Neutral): To lead global GDP and EPS decline, whilst most of valuation discount				
** * *	vs US is just sector composition. Recession has triggered a broader fiscal policy response,				
* *	whilst ECB help extended, and weak EUR been support for Europe's globalised corporates.	21.0	15.7	-29.5	33.6
^	As COVID cases ease and countries reopen, set to be the key beneficiary of cyclical	21.0	13.7	-23.3	33.0
	economic and market upturn. Focus on cheap domestic cyclicals, such as Financials.				
		19.3	14.5	0.3	32.8
,					
	<u> </u>				
		17.7	13.4	-35.7	32.1
				00.1	J 1
	Japan (Underweight): Has been moving out of the value-trap 'Eye' quadrant, but has significant fundamental headwinds on growth, trade, policy flexibility, and longer-term structural issues (demographics, debt). Valuation is attractive vs history, but EPS outlook overstated and vulnerable. Domestic stocks underperformed global-exposed peers. UK (Underweight): In value-trap framework quadrant. Exposed to twin-headwinds of above-average COVID impact (with high infections and relatively low fiscal response) and rising Brexit hard-exit risks (into Dec. 31 cliff edge), and market valuations at long-term average. Risk that lags our preferred recovery cyclicals (Canada, EU Financials, US small caps) despite 50%+ cyclical equity index composition and 60% overseas revenue exposure.			-35.7	

US Sector	Rationale	P/E	(x)	EPS G	Gr. (%)
		2020e	2021e	2020e	2021e
	Information Technology (Overweight): Software in attractive top-right 'momentum' quadrant of the Eye. Are quality growth and attractive at this stage of cycle, reflected in defensiveness vs previous corrections. Valuations average but supported by net-cash and high RoE, giving buyback and M&A flexibility. Tech Hardware (Neutral) less well positioned, with weaker fundamentals, but beneficiary of easing growth concerns.	29.4	25.3	0.0	16.3
	Healthcare (Overweight): Both Healthcare Equipment and Pharma are close to the topright 'momentum' quadrant, liked by the market (with multiple rerating and sell-side conviction), but with good fundamental momentum as quality growth attractive at this stage, with defensive cash flows, less EPS cyclicality and a domestic revenue focus. Seeing Federal support to combat COVID. Similar to Tech, set to come out of crisis more dominant.	18.5	16.0	-0.2	18.1
\$	Financials (Underweight): All three sector components (Banks, Diversified, Insurance) in the negative bottom left 'value trap' quadrant of the 'Eye'. Out of favour with market, with strong fund outflows and valuation derating, but fundamentals remain under pressure from low US bond yields, flat yield curve, and GDP growth collapse, despite stronger capital buffers. Insurance offers the best value, though none of the sector is optically expensive.	16.7	12.1	-36.7	38.8
(V)	Communications (Overweight): Telecoms (AT&T largest sector weight) in most-attractive top-left quadrant, and Media (Facebook, Alphabet largest) in attractive top-right. Both seeing above average fundamentals, with Media led by EPS revisions, and Telecoms by price momentum. Telecoms has average valuation vs history, has derated, and sell-side sentiment especially poor. Media better liked by the market	26.8	21.4	-15.9	25.1
م م	Consumer Discretionary (Neutral): Consumer Services and Retail (Amazon largest stock) best placed of Discretionary sectors, both in top-right quadrant. Services defensive to cycle and seeing positive EPS revisions. Autos poorest placed, in bottom-left quadrant. Whilst the least-in-favour, has some of worst fundamentals and more expensive than perceived. Leisure discretionary industries very COVID exposed.	64.4	32.7	-49.1	97.1

Source: Refinitiv, THR

REGION/COUNTRY PERFORMANCE & VALUATION

Total Return YTD

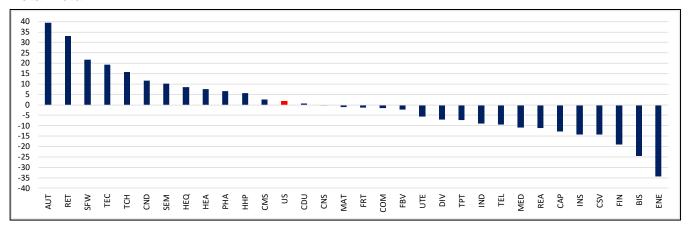


			Price Per	formance	<u> </u>		PE		EPS G	rowth
Index	Abbreviation	1D (%)	1W (%)	3M(%)	YTD (%)	2019A	2020E	2021E	2020E	2021E
World	AC	0.8	1.2	16.5	-2.0	17.8	21.7	17.0	-18.1%	27.8%
EAFE	EAFE	-0.1	0.7	14.5	-8.1	15.5	19.0	14.9	-18.4%	27.2%
Europe	EU	0.3	1.3	15.9	-8.3	14.4	19.9	15.1	-27.7%	31.6%
Asia	AS	-0.4	0.5	12.8	-5.9	16.9	16.3	13.2	4.0%	23.4%
Emerging Global Markets	EM	0.4	2.5	18.5	-2.5	14.5	15.3	12.1	-5.4%	26.9%
Emerging Asia	EA	0.4	2.5	18.1	4.5	16.0	15.7	12.7	1.6%	24.0%
Australia	AUS	-0.2	-0.7	10.3	-8.6	15.5	18.5	19.0	-16.0%	-2.6%
Brazil	BR	1.5	1.4	25.9	-9.2	12.0	20.8	11.6	-42.2%	78.7%
Canada	CA	1.0	0.7	7.5	-4.2	13.9	21.3	15.4	-34.9%	39.0%
China	CN	0.7	-1.4	0.6	-11.7	14.8	14.7	12.2	1.1%	19.9%
France	FR	0.6	-1.5	8.1	-14.4	14.0	20.5	14.8	-31.8%	38.9%
Germany	DE	0.1	-2.2	15.0	-3.5	15.4	20.3	14.1	-24.3%	43.9%
Hong Kong	HK	0.5	-1.6	12.6	3.2	13.9	16.6	13.2	-16.5%	26.0%
India	IN	-0.5	0.5	14.6	-5.8	20.8	21.6	16.3	-3.3%	32.0%
Indonesia	ID	-0.4	-0.5	13.2	-18.8	13.6	15.7	13.2	-13.1%	19.3%
Italy	IT	0.0	-3.2	12.2	-14.7	10.4	19.2	13.0	-46.0%	47.5%
Japan	JP	-1.3	-2.2	5.3	-9.8	19.4	17.0	13.9	14.1%	22.5%
Korea	KR	0.3	2.6	18.1	6.6	16.8	14.3	10.0	18.1%	42.6%
Malaysia	MY	0.0	0.1	19.4	3.9	17.0	20.5	17.3	-16.8%	18.1%
Mexico	MX	0.1	0.5	3.0	-14.1	14.8	16.1	12.4	-8.5%	29.5%
Netherlands	NL	-0.6	-1.5	13.0	-2.5	19.8	21.7	18.4	-8.9%	18.0%
Norway	NO	0.3	-0.9	10.0	-9.7	13.0	21.6	14.5	-39.6%	48.7%
Russia	RU	0.9	2.0	8.7	-9.5	5.7	9.1	6.7	-36.7%	35.6%
Singapore	SG	-0.2	-3.0	-0.6	-18.5	11.7	15.1	12.8	-22.9%	18.3%
South Africa	ZA	0.4	1.8	14.0	-4.1	14.2	12.9	10.3	9.5%	25.4%
Spain	ES	-0.7	-2.7	3.5	-22.3	10.9	16.4	12.8	-33.7%	28.2%
Sweden	SE	0.6	-1.2	13.3	2.2	15.6	22.1	16.8	-29.4%	32.0%
Switzerland	СН	0.0	-1.7	4.3	-1.3	18.9	20.4	17.6	-7.7%	15.7%
Taiwan	TW	-0.4	2.7	18.9	8.9	17.4	16.9	14.7	2.6%	15.5%
Thailand	TH	-0.3	-1.9	3.0	-15.7	15.5	20.5	16.6	-24.5%	23.6%
United Kingdom	UK	0.0	-1.2	0.5	-18.5	11.5	17.8	13.4	-35.6%	32.7%
United States	US	1.4	-0.4	12.3	1.9	20.4	25.7	20.1	-20.3%	27.8%

Source: MSCI, Refinitiv, THR

US SECTOR PERFORMANCE & VALUATION

Total Return YTD

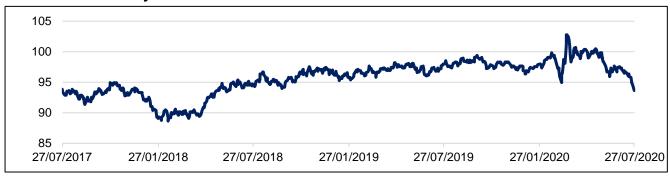


			Price Per	formance)		PE	EPS Growth		
Index	Abbreviation	1D (%)	1W (%)	3M(%)	YTD (%)	2019A	2020E	2021E	2020E	2021E
United States	US	1.4	-0.4	12.3	1.9	20.9	26.1	20.5	-20.0%	27.6%
Communications	СОМ	1.4	0.0	7.8	-1.5	22.5	26.8	21.4	-15.9%	25.1%
Media & Entertainment	MED	0.6	0.0	8.3	-10.9	28.7	36.3	26.2	-21.0%	38.7%
Telecommunication Svcs	TEL	0.0	0.7	-0.7	-9.4	11.1	11.9	11.4	-6.4%	3.8%
Consumer Discretionary	CND	1.3	-0.6	19.4	11.6	32.8	64.4	32.7	-49.1%	97.1%
Autos & Components	AUT	1.2	-2.3	46.4	39.4	20.8	NA	26.4	-112.8%	712.6%
Consumer Durables & App	CDU	2.2	2.0	24.2	0.6	23.8	26.4	20.9	-9.8%	26.6%
Consumer Svcs	CSV	1.2	-0.4	7.0	-14.2	19.9	351.1	30.3	-94.3%	1058.5%
Retailing	RET	1.1	-1.0	22.9	33.1	43.2	56.1	37.1	-23.0%	51.5%
Consumer Staples	CNS	0.3	1.3	7.3	0.0	20.4	20.8	19.2	-2.1%	8.4%
Food & Staples Retailing	FRT	-0.1	-0.9	4.3	-1.4	21.5	22.1	20.7	-2.6%	6.8%
Food, Bev & Tobacco	FBV	0.4	1.5	6.5	-2.3	17.6	18.6	16.9	-5.0%	10.0%
Household Products	HHP	0.4	2.1	10.8	5.5	26.8	24.7	23.5	8.4%	4.9%
Energy	ENE	2.1	0.7	0.4	-34.4	13.3	NA	31.5	-101.7%	2638.9%
Financials	FIN	2.0	1.5	5.2	-19.0	10.6	16.7	12.1	-36.7%	38.8%
Banks	BIS	2.3	1.0	2.5	-24.6	7.7	17.3	10.4	-55.2%	66.7%
Diversified Financials	DIV	1.5	0.3	9.6	-7.0	14.4	19.1	15.0	-24.9%	27.8%
Insurance	INS	1.4	0.6	7.6	-14.2	10.9	12.6	10.4	-13.1%	20.7%
Health Care	HEA	1.0	-0.2	8.3	7.6	18.9	18.9	16.0	-0.2%	18.1%
Health Care Equipment	HEQ	2.3	1.3	11.8	8.6	29.6	35.4	25.8	-16.5%	37.1%
Pharmaceuticals	PHA	-0.4	-1.8	4.8	6.6	15.5	15.3	13.3	1.2%	14.9%
Industrials	IND	1.7	0.2	11.0	-8.9	18.5	26.2	19.2	-29.1%	35.9%
Capital Goods	CAP	1.2	-0.1	10.6	-12.9	16.1	23.7	18.0	-32.3%	32.0%
Commercial & Prof Svcs	CMS	2.7	0.8	12.8	2.4	29.7	33.0	28.4	-10.1%	16.2%
Transportation	TPT	2.2	0.7	14.2	-7.2	25.1	32.9	20.0	-23.8%	65.0%
Information Technology	TEC	1.6	-1.9	18.5	19.4	29.4	29.4	25.3	0.0%	16.3%
Semiconductors	SEM	1.7	-3.4	10.1	10.3	20.3	21.6	18.2	-6.0%	18.8%
Software & Svcs	SFW	1.4	-1.6	18.0	21.6	38.3	36.4	31.9	5.0%	14.3%
Technology Hardware	TCH	1.8	-2.3	19.6	15.6	24.7	25.2	21.4	-2.0%	17.4%
Materials	MAT	1.1	-0.1	16.4	-1.1	19.2	24.3	18.8	-21.1%	29.3%
Real Estate	REA	1.9	3.4	8.2	-11.2	33.4	46.5	41.8	-28.0%	11.0%
Utilities	UTE	0.5	0.1	3.7	-5.5	18.2	18.1	17.1	0.1%	6.1%

Source: MSCI, Refinitiv, THR

GLOBAL FX, BONDS AND COMMODITIES

DXY USD Index - 3 years



CRB Major Commodity Index* - 3 Years

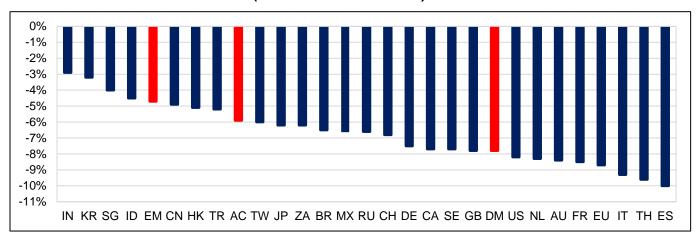


Name	Currency	Close Price	1 Day	1 Week	1 Month	3 Months	1 Year	MTD	QTD	YTD
Commodoties	-									
CRB Commodity Index	USD	2634.68	0.8%	1.5%	8.3%	10.4%	-11.5%	7.2%	7.2%	-14.6%
Gold Spot	USD	1970.37	0.6%	5.3%	11.2%	15.1%	38.1%	10.7%	10.7%	29.9%
Copper Spot	USD	2.91	0.0%	-0.1%	8.4%	22.4%	7.2%	7.1%	7.1%	4.0%
Brent Crude Spot	USD	44.21	1.1%	1.2%	5.0%	212.9%	-28.2%	4.0%	4.0%	-35.9%
CRB Agricultural Index	USD	5038.40	1.2%	2.0%	8.9%	11.7%	-9.2%	8.1%	8.1%	-12.1%
Currencies	-									
DXY USD Index	USD	93.45	-0.3%	-1.6%	-4.2%	-6.1%	-4.7%	-4.0%	-4.0%	-3.0%
EUR/USD	USD	1.18	0.6%	1.9%	4.9%	8.4%	5.8%	5.0%	5.0%	5.2%
USD/JPY	JPY	104.91	-0.2%	-2.1%	-2.5%	-1.7%	-3.5%	-2.8%	-2.8%	-3.4%
GBP/USD	USD	1.30	0.5%	2.1%	5.7%	4.3%	6.4%	4.8%	4.8%	-2.0%
USD/CNY	CNY	7.00	0.0%	0.0%	-1.1%	-1.0%	1.6%	-0.9%	-0.9%	0.6%
Bond Yields	-									
DE 10Y BUND	EUR	-0.50	-2.3%	1.2%	5.9%	3.1%	27.6%	8.5%	8.5%	166.8%
GB 10Y GILT	GBP	0.12	9.1%	-1.6%	-26.4%	-57.9%	-81.6%	-30.2%	-30.2%	-85.5%
JP 10Y JGB	JPY	0.02	-9.5%	18.8%	72.7%	-145.2%	-113.2%	-29.6%	-29.6%	-186.4%
US 10Y BILL	USD	0.58	0.0%	-2.4%	-8.6%	-7.3%	-71.7%	-11.0%	-11.0%	-69.6%
US 30Y BOND	USD	1.24	1.7%	-3.6%	-10.5%	0.1%	-51.8%	-11.8%	-11.8%	-47.7%
US 10-2 BOND	-	0.45	9.8%	9.9%	10.7%	27.8%	21.3%	5.2%	5.2%	22.2%
Volatility	-									
CBOE VIX Index	USD	24.10	-0.05	-0.01	-0.24	-0.23	0.88	-0.21	-0.21	0.75

Source: Refinitiv, THR

MACRO INDICATORS: HISTORIC AND FORECASTS

Forecast Real GDP Growth 'Delta' (2020E % Growth – 2019)



			R	eal GDP (%)	lı	nflation (%	%)	Current	Account	(% GDP)	Gov Debt (% GDP)	
	Codes	Nominal GDP 2019 US\$trn	2018	2019	2020E	2018	2019	2020E	2018	2019	2020E	2019	2020E
Americas		,											
US	US	21.4	2.9	2.3	-5.9	2.4	1.8	0.6	-2.4	-2.5	-2.6	106	110
Canada	CA	1.7	1.9	1.5	-6.2	2.2	2.0	0.6	-2.6	-1.9	-3.7	88	83
Brazil	BR	1.9	1.1	1.2	-5.3	3.7	3.8	3.6	-0.8	-1.2	-1.8	92	95
Mexico	MX	1.3	2.0	0.0	-6.6	4.9	3.8	2.7	-1.8	-1.2	-0.3	54	55
Europe													
Eurozone	EU	18.3	2.2	1.2	-7.5	1.9	1.5	2.0	2.0	2.0	1.6	80	78
Germany	DE	3.9	1.5	0.5	-7.0	1.9	1.5	0.3	7.3	7.0	6.6	59	53
UK	GB	2.7	1.4	1.3	-6.5	2.5	1.8	1.2	-3.9	-3.5	-4.4	86	85
France	FR	2.7	1.7	1.3	-7.2	2.1	1.2	0.3	-0.6	-0.5	10.4	99	99
Italy	IT	2.0	0.9	0.2	-9.1	1.2	0.7	0.2	2.5	2.9	3.2	133	134
Spain	ES	1.4	2.6	2.0	-8.0	1.7	0.7	-0.3	0.9	0.9	2.2	96	94
Netherlands	NL	0.9	2.6	1.8	-6.5	1.6	2.5	0.5	10.9	9.8	9.0	49	46
Switzerland	CH	0.7	2.8	0.8	-6.0	0.9	0.6	-0.4	10.2	9.6	7.2	39	36
Sweden	SE	0.5	2.3	0.9	-6.8	2.0	1.7	0.5	1.7	2.9	2.2	37	34
Russia	RU	1.6	2.3	1.1	-5.5	2.9	4.7	3.1	6.8	5.7	0.7	17	18
Turkey	TR	0.7	2.8	0.2	-5.0	16.3	15.7	12.0	-3.5	-0.6	0.4	30	32
Asia													
China	CN	14.1	6.6	6.1	1.2	2.1	2.3	3.0	0.4	1.0	0.5	56	65
Hong Kong	HK	0.4	3.0	0.3	-4.8	2.4	3.0	2.0	4.3	5.5	6.0	0	0
Japan	JP	5.2	0.8	1.0	-5.2	1.0	1.0	0.2	3.5	3.3	1.7	238	238
India	IN	2.9	6.8	4.8	1.9	3.4	3.4	3.3	-2.1	-2.0	-0.6	69	68
Korea	KR	1.6	2.7	2.0	-1.2	1.5	0.5	0.3	4.4	3.2	4.9	40	46
Australia	AU	1.4	2.7	1.7	-6.7	2.0	1.6	1.4	-2.1	-0.3	-0.6	42	41
Indonesia	ID	1.1	5.2	5.0	0.5	3.2	3.2	2.9	-3.0	-2.9	-3.2	30	30
Taiwan	TW	0.6	2.6	2.0	-4.0	1.5	0.8	0.5	12.2	11.4	8.2	34	31
Thailand	TH	0.5	4.1	2.9	-6.7	1.1	0.9	-1.1	6.4	6.0	5.2	42	44
Singapore	SG	0.4	3.1	0.5	-3.5	0.4	0.7	-0.2	17.9	16.5	14.8	114	115
Other													
South Africa	ZA	0.4	0.8	0.4	-5.8	4.6	4.4	2.4	-3.5	-3.1	0.2	60	68
World													
Developed Markets	DM	51.7	2.3	1.7	-6.1	2.0	1.5	0.5	0.7	0.6	0.1	103	104
Emerging Markets	EM	34.9	4.5	3.7	-1.0	4.8	4.7	4.6	0.0	0.0	-0.9	53	58
World	AC	86.6	3.6	2.9	-3.0	3.6	3.4	3.0					

Source: IMF, THR

GLOBAL MACRO & FORECAST TABLES

Provides historic data, and consensus forecasts, for key macro-economic indicators in the major economies of US, Germany, and China. Forecasts highlighted in green and red indicate whether the latest change in the consensus forecast was an increase or decrease.

		Historic										
United States	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020E	2021E
Production												
Real GDP, Growth	2.6	1.6	2.2	1.8	2.5	2.9	1.6	2.4	2.9	2.3	-5.7	4.0
Industrial Production, Growth	5.5	3.1	3.0	2.0	3.1	-1.0	-1.9	2.3	3.9	0.8	-9.1	2.6
Labour Markets and Income												
Unemployment Rate	9.6	8.9	8.1	7.4	6.2	5.3	4.9	4.3	3.9	3.7	10.5	8.0
Average Earnings, Growth	1.9	2.0	1.9	2.1	2.1	2.2	2.6	2.6	3.0	3.3	2.8	2.4
Prices												
CPI	1.6	3.2	2.1	1.5	1.6	0.1	1.3	2.1	2.4	1.8	1.6	1.6
PCE, excluding energy	1.4	1.6	1.9	1.5	1.6	1.2	1.6	1.6	1.9	1.6	1.3	1.4
Government												
Budget Balance, Growth	-0.2	-0.2	0.0	-0.9	-0.2	0.0	0.2	0.1	0.2	0.1	0.6	-0.4
Current Account, % of GDP	-2.9	-2.9	-2.6	-2.1	-2.1	-2.2	-2.3	-2.3	-2.4	-2.5	-2.2	-2.4

	_	Historic										
Germany	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020E	2021E
Production												
Real GDP, Growth	4.2	3.9	0.4	0.4	2.2	1.7	2.2	2.5	1.5	0.6	-5.3	4.4
Industrial Production, Growth	11.6	8.8	-0.6	0.3	1.9	0.4	1.4	3.6	1.2	-4.5	-7.0	5.9
Labour Markets and Income												
Unemployment Rate	7.6	7.1	6.8	6.9	6.7	6.4	6.1	5.7	5.2	5.0	5.4	5.2
Prices												
CPI	1.1	2.1	2.0	1.5	1.0	0.2	0.4	1.7	2.0	1.4	0.8	1.4
Government												
Current Account, % of GDP	5.7	6.2	7.1	6.6	7.2	8.6	8.5	8.1	7.3	7.0	6.5	6.4

		Forecasts										
China	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020E	2021E
Production												
Real GDP, Growth	9.9	8.8	8.1	7.7	7.3	6.9	6.9	6.8	6.5	6.0	1.8	8.2
Prices												
CPI	3.5	5.5	2.6	2.7	2.0	1.4	2.0	1.5	2.1	2.8	3.3	2.3
Government												
Current Account, % of GDP	3.9	1.8	2.5	1.5	2.2	2.7	1.8	1.6	0.4	1.0	0.5	0.8

Source: Refinitiv, THR

TOWER HUDSON 'EYE': HOW IT WORKS

The 'eye' methodology helps identify relative buy and sell signals for countries, regions and US sectors, by comparing market sentiment vs fundamentals, with a valuation overlay. The more out-of-favor, with better relative fundamentals the better.

We compare: 1) **sentiment:** to understand whether markets are optimistic or pessimistic, and 2) **fundamentals:** focusing on earnings and business cycle fundamentals and price momentum. The output is also color-coded with a valuation overlay. This combines to give a relative allocation view

How to read the quadrants

Top left – Pessimistic sentiment/Positive fundamentals: The best place to be. Market expectations are low, but fundamentals are relatively good. As sentiment catches up to the better fundamentals, assets may outperform.

Top right – Optimistic sentiment/Positive fundamentals: The 2nd best place to be. The fundamentals are good, but so is market sentiment. This is a momentum quadrant that may deliver outperformance, but investors must be sensitive to relative fundamentals easing.

Bottom right – Optimistic sentiment/Negative fundamentals: Worst place to be. Fundamentals are poor but sentiment still positive. As sentiment catches up, assets may underperform.

Bottom left – Negative sentiment/Negative fundamentals: The second worst place to be. Can be a 'value trap'. Fundamentals are weak but sentiment is equally subdued. Investors need to be sensitive to any improvement in relative fundamentals, that can lead to a move up and rerating.

Sentiment	Indicator
Buy-side	Net ETF and Mutual Fund Flows vs average
Sell-side	Sell-side recommendation consensus score (RCS)
Re-rating/De-rating	Trailling P/E ratio vs average
Fundamentals	
Earnings revisions	Rolling earnings revisions ratio
Price momentum	Change in trailing P/E ratio
Business cycle	Correlation to this business cycle stage (rising, neutral, falling)
Overlay	
Valuation	Average of P/E, P/BV, and P/CF vs history

LIBRARY

RECENT 'EYE ON THE WORLD' DAILIES

These reports available to **DAILY subscribers-only** through our website Library

Please let us know if you need help accessing

JULY 29: HOW VALUATIONS ARE JUSTIFIED

JULY 27: BIGGEST WEEK FOR EARNINGS

JULY 24: DON'T FEAR THE ZOMBIES

JULY 23: COMPARING BOOMING ESG FUNDS

JULY 22: CASE FOR A REIT REBOUND

JULY 21: THE GLOBAL EARNINGS GAP

JULY 20: VIRUS AND VACCINES

JULY 17: ALL TIME HIGH CORPORATE DEBT

JULY 16: SIDE EFFECTS OF PASSIVE GROWTH

JULY 15: EUROPE'S HAMILTON MOMENT

JULY 14: THE KEY SMALL CAP DIFFERENCES

JLUY 13: IMPACT OF SURGING NEW CASES

JULY 10: SENTIMENT A CONTRARIAN SUPPORT

JULY 09: UNDERSTANDING WHO OWNS WHAT

Subscriptions can be made, and example Daily issues seen, at www.towerhudson.com

ABOUT US

'EYE ON THE WORLD' DAILY

One idea or insight a year, or a client relationship gained or maintained, or an hour of your time saved daily. These can individually be worth many times the subscription price

US and Global investment trends and actionable views in your inbox at 7 am ET daily Each day we include:

- Multi-asset market recap
- What to watch for outlook
- Hot topic analysis and view
- 31 Countries & Regions allocation model
- 24 US sector industries allocation model
- Our key country and sector investment views
- Data on market performance, earnings, valuation, and macro-economics

Subscription also includes:

- Weekly conference call and Q&A, as well as audio replay
- Quarterly market recap and performance data, for client reporting
- Open line email and Q&A for us to answer your key questions
- Access to back catalogue of hot topic reports and weekly call audio

Subscriptions can be made, and example Daily issues seen, at www.towerhudson.com

TOWER HUDSON RESEARCH

Tower Hudson Research Ltd is an UK FCA registered firm providing investment strategy research globally. Our multi-disciplinary team of financial and investment strategy analysts provides an in-depth and global perspective and capability.

Visit us at <u>www.towerhudson.com</u> or contact us at directly <u>ben@towerhudson.com</u> or on (US) +1 917 539 0541 or (UK +44 (0) 7444 392506, with any questions.



Important Disclosure Statement from Tower Hudson Research Ltd

This document is issued by Tower Hudson Research Ltd solely for its clients. It may not be reproduced, redistributed or passed to any other person in whole or in part without written consent of Tower Hudson Research Ltd. This material is not directed at you if Tower Hudson is prohibited or restricted by any legislation in any jurisdiction from making it available to you.

This document **is provided for information purposes only** and should not be regarded as an offer, solicitation, invitation, inducement or recommendation relating to any security or other financial instrument. This document does not constitute, and should not be interpreted as, investment advice. You should seek independent advice from a suitably qualified professional advisor before taking any decisions in relation to the investments detailed herein. All expressions of opinions and estimates constitute a judgement and are those of the author and Tower Hudson Research Ltd only and are subject to change without notice. Tower Hudson is under no obligation to update information contained. Whilst we have taken all reasonable care to ensure information is not untrue or misleading at the time of publication, we cannot guarantee its accuracy or completeness.

This document is not guaranteed to be a complete statement or summary of any securities, markets, or developments referred to herein. No representation or warranty is made, nor responsibility of any kind is accepted, by Tower Hudson Research Ltd either as to the accuracy or completeness of any information contained in this document. No liability whatsoever is accepted by Tower Hudson Research Ltd for any loss, whether direct or consequential, arising whether directly or indirectly as a result of the recipient acting on the content of this document, including, without limitation, lost profits arising from the use of this document or any of its contents.

This document is provided with the understanding that Tower Hudson Research Ltd is **not acting in a fiduciary capacity** and it is not a personal recommendation to you. Investing in securities entails risks. The value of and the income produced by products may fluctuate, so that an investor may get back less than he invested. Investments referred to are not suitable for all investors and this document should not be relied upon in substitution for the exercise of independent judgment. The stated price of any securities mentioned herein will generally be the closing price at the end of any of the three business days immediately prior to the publication date on this document.

Tower Hudson Research Ltd and respective analysts are remunerated for providing investment research to professional investors, corporations, other research institutions and consultancy houses. **Our analysts are not censored in any way** and are free to express their personal opinions. We may have issued other documents inconsistent with conclusions from the information contained here. Those reflect different assumptions, views and analytical methods of authors at the time.

Tower Hudson Research Ltd is an **appointed representative of Messels Ltd.**, **authorised and regulated by the Financial Conduct Authority** for the provision of investment advice. Residents of the UK should seek specific professional financial and investment advice from a professional adviser authorised pursuant to the Financial Services and Markets Act 2000. This report is intended only for investors who are 'professional clients' as defined by the FCA, and may not, therefore, be redistributed to other classes of investors.

Analysts' Certification

The analysts involved in the production of this document certify that the views expressed accurately reflect their personal views about the securities mentioned. The analysts may buy, sell or already have taken positions in the securities, and related financial instruments, mentioned.