Please note that the opinions discussed below are those of the individual authors and do not reflect a Man Group house view. All market data referenced below sourced from Bloomberg unless otherwise specified.

13 November - 19 November, 2019

The Cost of Antitrust

The spectre of antitrust legislation is rearing its head in the US. Senator Elizabeth Warren, a leading contender to become the presidential nominee for the Democratic Party, has made antitrust action against the tech giants an integral part of her election campaign.

As **anxiety** about tech stocks rises, it's worth pointing out two facts. First, it takes a very long time to go from being a policy proposal, through lawsuits and appeals to a final resolution. Figure 1 shows three technology antitrust cases brought in the US, with the swiftest being resolved in around 2-3 years and the longest taking 13.

Second, antitrust action does undoubtedly have an effect on multiples and reduce sales growth, at least in the short-term (Figure 1). However it is important to recognise the additional context of price moves: for instance the development of the personal computer and the move away from mainframe computing was far more important to the long-term performance of IBM than its antitrust action. The Apple 1 was released a full six years before the resolution of IBM's antitrust case, and had a much greater effect on IBM's competitive moat. Likewise, Microsoft pivoted its entire business model on the completion of consent decree, and now traded at an elevated multiple.

The takeaway? While the prospect of antitrust legislation could cap the multiples of the tech stocks, these actions take time. In the meantime, the sector could still trade on earnings.

Figure 1. Antitrust Cases: Timelines, Sales Growth and Relative Valuation

| | | | | | Average sales growth | | Relative valuation | |
|-----------|-------------------|------------|-------|------------------|----------------------|---------------------|--------------------|------------|
| Company | Lawsuit filing | Resolution | Years | Resolution | Pre- resolution | Post- resolution | Lawsuit filing | Resolution |
| AT&T | 1974 | 1982 | 8 | Breakup | 10% | 4% | 1.3X | 0.9X |
| Microsoft | 1998 | 2000/2001 | 2-3 | Consent decree | 39% | 10% | 1.8X | 0.9X |
| IBM | 1969 | 1982 | 13 | No formal action | 14% | 5% | 4.9X | 1.9X |

Source: Goldman Sachs; as of 5 November 2019.

Note: AT&T and IBM relative valuation based on last 12 months' price-to-book multiples versus the median of the S&P 500 Index. Microsoft relative valuation based on next 12 months' price-to-earnings ratio versus the median of the information technology sector.

A Short History of Precautionary Rate Cuts

Following three Federal Reserve rate cuts in 2019, the Fed funds futures curve was pricing in a 70% probability of a no change in rates when the Federal Open Market Committee meets in March.

Previous Fed easing cycles that occurred without a looming recession were in 1995 (the Tequila crisis) and in 1998 (Asian, Russian and Long Term Capital Management crises). In both instances, the Fed chose to cut rates three times before pausing the interest-rate cutting cycle.

Extending our previous **analysis** of precautionary rate cuts, we examined the performance various asset classes after the Fed enters a precautionary cutting cycle, and make two observations of note: first, US equities, as measured by the S&P 500 Index, perform strongly 12 months after the start of the cuts (Figure 2); and second, the US 10 year-3 month yield curve steepens.

So, history suggests the steepening continues. But already, bearish narratives are emerging arguing that a sharp bear steepening will undermine gains in risk assets. So, we analysed the effect of a 60 basis-point steepening in the 10y-3m (the 'trigger') over a 3-month period on various asset classes. The hit rate post trigger (i.e. the probability that the asset class was up over the next three months following the trigger) is shown in Figure 3, with US value L/S, the S&P 500, EM equity and Brent being the standout asset classes. The average gain post the trigger is most notable for Brent, which increases by more than 12%.

The conclusion? In a nutshell, probabilities favour markets having further to run.

Figure 2. The Moves of S&P 500, 10y-3m Yield Curve After Fed Enters a Precautionary Rate-Cutting Cycle

| | | S&P 500 Index | 10 year – 3 month yield curve (change in bps) |
|------|---------------------|---------------|---|
| 1995 | 3 months before cut | 12.3% | -67.0 |
| | 3 months after cut | 7.3% | 18.1 |
| | 12m after cut | 23.1% | 88.1 |
| | 3 months before cut | -3.1% | -16.4 |
| 1998 | 3 months after cut | 20.9% | 0.2 |
| | 12m after cut | 26.1% | 83.4 |
| 2019 | 3 months before cut | -0.7% | -13.1 |
| | 3 months after cut | 1.9% | 19.9 |
| | 12m after cut | 3.6% | 43.6 |

Source: Bloomberg, Man Group; as of 12 November 2019.

Figure 3. Asset Class Moves after 10y-3m Yield Curve Steepens by 60 Basis Points

| | US Value L/S | US Qual L/S | SPX | EM Equity | 10y UST | USD | Brent |
|---|-----------------|----------------|-------|--------------|------------|-------|-------|
| 3m YC trigger | 60 | 60 | 60 | 60 | 60 | 60 | 60 |
| Hit rate post trigger | 82.6% | 59.4% | 95.7% | 82.6% | 58.0% | 5.8% | 81.2% |
| Average gain post trigger | 1.1% | 0.3% | 4.6% | 5.6% | 3.7 | -3.6% | 12.1% |
| Normal % up | 45.3% | 51.3% | 74.8% | 54.5% | 43.2% | 56.1% | 51.5% |
| Average | -0.1% | 0.0% | 2.6% | 0.5% | -5.0 | 0.6% | 0.7% |
| Source: Bloomberg, Man Group; as of 12 November 2019. | | | | | | | |

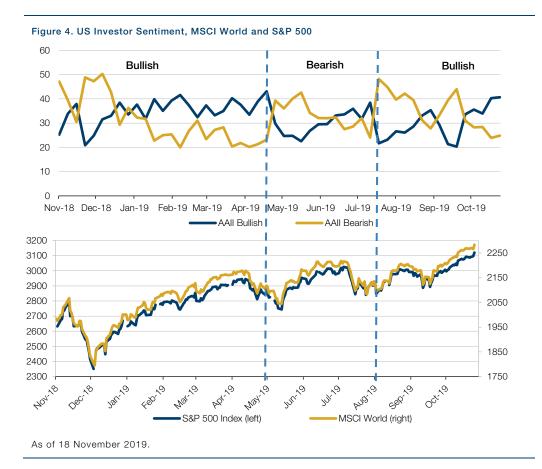
Survey Says... Bullish Sentiment

The American Association of Individual Investors ('AAII') sentiment survey recently hit its highest level of bullishness since May of this year: bullish sentiment, or expectations that stock prices would rise over the next six months, came in at 40.7% for the week ended 13 November.

Since 1987, the survey has asked its respondents the same question every week: do they feel the direction of the stock market over the next six months will be up (bullish), no change (neutral) or down (bearish)?

Figure 4 shows that when bullish sentiment prevailed (top panel) this year, the MSCI World and the S&P 500 Index saw a move upwards. When the bearish sentiment prevailed, the two indexes moved somewhat sideways. Now, with better-than-expected macro data and with progress being made on the US-China trade relations and Brexit negotiations, bullish sentiment is once again prevailing. This is resulting in gradual but consistent increases in the MSCI World and S&P 500 indexes.

Still, a word of caution: this survey is sometimes considered a contrarian indicator.1



With contribution from: Priyan Kodeeswaran (Man GLG Portfolio Manager), Ed Cole (Man GLG, Managing Director) and Otto Van Hemert (Man AHL, Head of Macro Research).

Important Information

This information is communicated and/or distributed by the relevant Man entity identified below (collectively the "Company") subject to the following conditions and restriction in their respective jurisdictions.

Opinions expressed are those of the author and may not be shared by all personnel of Man Group plc ('Man'). These opinions are subject to change without notice, are for information purposes only and do not constitute an offer or invitation to make an investment in any financial instrument or in any product to which the Company and/or its affiliates provides investment advisory or any other financial services. Any organisations, financial instrument or products described in this material are mentioned for reference purposes only which should not be considered a recommendation for their purchase or sale. Neither the Company nor the authors shall be liable to any person for any action taken on the basis of the information provided. Some statements contained in this material concerning goals, strategies, outlook or other non-historical matters may be forward-looking statements and are based on current indicators and expectations. These forward-looking statements speak only as of the date on which they are made, and the Company undertakes no obligation to update or revise any forward-looking statements. These forward-looking statements are subject to risks and uncertainties that may cause actual results to differ materially from those contained in the statements. The Company and/or its affiliates may or may not have a position in any financial instrument mentioned and may or may not be actively trading in any such securities. This material is proprietary information of the Company and its affiliates and may not be reproduced or otherwise disseminated in whole or in part without prior written consent from the Company. The Company believes the content to be accurate. However accuracy is not warranted or guaranteed. The Company does not assume any liability in the case of incorrectly reported or incomplete information. Unless stated otherwise all information is provided by the Company. Past performance is not indicative of future results.

Unless stated otherwise this information is communicated by the relevant entity listed below.

Australia: To the extent this material is distributed in Australia it is communicated by Man Investments Australia Limited ABN 47 002 747 480 AFSL 240581, which is regulated by the Australian Securities & Investments Commission (ASIC). This information has been prepared without taking into account anyone's objectives, financial situation or needs.

Austria/Germany/Liechtenstein: To the extent this material is distributed in Austria, Germany and/or Liechtenstein it is communicated by Man (Europe) AG, which is authorised and regulated by the Liechtenstein Financial Market Authority (FMA). Man (Europe) AG is registered in the Principality of Liechtenstein no. FL-0002.420.371-2. Man (Europe) AG is an associated participant in the investor compensation scheme, which is operated by the Deposit Guarantee and Investor Compensation Foundation PCC (FL-0002.039.614-1) and corresponds with EU law. Further information is available on the Foundation's website under www.eas-liechtenstein.li. This material is of a promotional nature.

European Economic Area: Unless indicated otherwise this material is communicated in the European Economic Area by Man Asset Management (Ireland) Limited ('MAMIL') which is registered in Ireland under company number 250493 and has its registered office at 70 Sir John Rogerson's Quay, Grand Canal Dock, Dublin 2, Ireland. MAMIL is authorised and regulated by the Central Bank of Ireland under number C22513.

Hong Kong: To the extent this material is distributed in Hong Kong, this material is communicated by Man Investments (Hong Kong) Limited and has not been reviewed by the Securities and Futures Commission in Hong Kong. This material can only be communicated to intermediaries, and professional clients who are within one of the professional investor exemptions contained in the Securities and Futures Ordinance and must not be relied upon by any other person(s).

Switzerland: To the extent this material is distributed in Switzerland, this material is communicated by Man Investments AG, which is regulated by the Swiss Financial Market Authority FINMA.

United Kingdom: Unless indicated otherwise this material is communicated in the United Kingdom by Man Solutions Limited ('MSL') which is an investment company as defined in section 833 of the Companies Act 2006. MSL is registered in England and Wales under number 3385362 and has its registered office at Riverbank House, 2 Swan Lane, London, EC4R 3AD, United Kingdom. MSL is authorised and regulated by the UK Financial Conduct Authority (the 'FCA') under number 185637.

United States: To the extent this material is distributed in the United States, it is communicated and distributed by Man Investments, Inc. ('Man Investments'). Man Investments is registered as a broker-dealer with the SEC and is a member of the Financial Industry Regulatory Authority ('FINRA'). Man Investments is also a member of the Securities Investor Protection Corporation ('SIPC'). Man Investments is a wholly owned subsidiary of Man Group plc. The registration and memberships described above in no way imply a certain level of skill or expertise or that the SEC, FINRA or the SIPC have endorsed Man Investments. Man Investments, 452 Fifth Avenue, 27th fl., New York, NY 10018.

This material is proprietary information and may not be reproduced or otherwise disseminated in whole or in part without prior written consent. Any data services and information available from public sources used in the creation of this material are believed to be reliable. However accuracy is not warranted or guaranteed. © Man 2019.

2019/1720944/S/US/GL/I/A