Strategy Espresso: The January effect: what should you expect?

As we enter 2017, we investigate what the 'January effect' means in terms of equity performance and rotations. We find that:

1. **On a long history there is some evidence of stronger equity performance in the month of January – a so-called January effect. However, the effect has diminished over time, with little evidence of it in the past 15 years.**
2. **Investors frequently ask whether picking up underperformers from the previous year works well in January. The answer is 'no', as January does not particularly stand out as a rotation month across sectors.**
3. **However, January has been the month when investors are most likely to rotate across regions, partly depending on end-of-year valuations.**
4. **Stock pickers should have a broader range to choose from in January, as we find that the dispersion of returns across stocks tends to be higher than in all the other months of the year. The reason for this is likely to be portfolio resetting, as we do not find that the dispersion of fundamentals (earnings revisions, for example) is higher in January.**

Lilia Peytavin
+44(20)7774-8340 | lilia.peytavin@gs.com
Goldman Sachs International

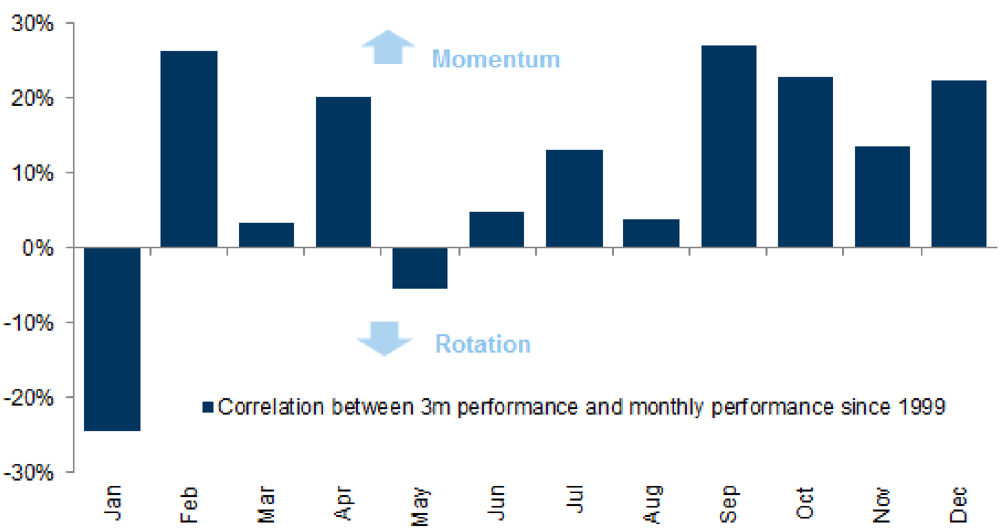
Peter Oppenheimer
+44(20)7552-5782 | peter.oppenheimer@gs.com
Goldman Sachs International

Sharon Bell, CFA
+44(20)7552-1341 | sharon.bell@gs.com
Goldman Sachs International

Jim McGovern
(801) 741-5572 | james.mcgovern@gs.com
Goldman, Sachs & Co.

Alessio Rizzi
+44(20)7552-3976 | alessio.rizzi@gs.com
Goldman Sachs International

Exhibit 1: Rotations across regional indices are more common in January
Average correlation between SX5E, S&P 500, FTSE 100, TOPIX and MSCI EM local returns each month vs. previous 3 months



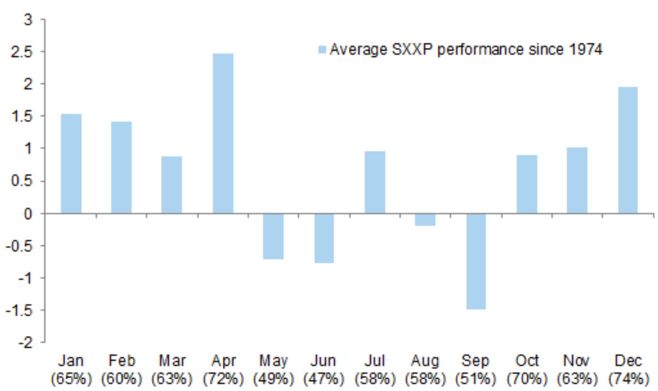
Source: Datastream, Goldman Sachs Global Investment Research

Is there a January effect in terms of equity performance?

While we find evidence of a January effect since 1974 (Exhibit 2), this has not been the case since 1999 (Exhibit 3). On average, the SXXP has risen 1.5% in January since 1974, compared with an average performance of 0.7% for all months. However, more recent data show a different picture and the so-called January effect has faded: the average performance of the SXXP has been negative 0.5% since 1999, vs. +0.2% for all months. Part of the January effect is explained by the sharp recovery of the European equity market in January 1975, when the SXXP rose 27%, but even excluding this year we find evidence of a January effect when our sample starts in the late 1970s.

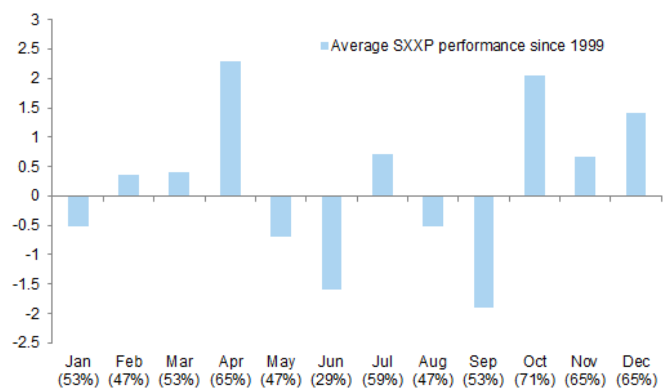
Whether we analyse the equity market over a long or medium history, the 'Sell in May and go away' adage still seems to hold some truth as the average performance of the European equity market tends to be weaker over the Summer and stronger into year-end.

Exhibit 2: European markets have generally done well in January...
Average SXXP monthly performance since 1974 (figures in brackets refer to % of months with positive performance)



Source: Datastream, Goldman Sachs Global Investment Research

Exhibit 3: ...although this has been less clear recently
Average SXXP monthly performance since 1999 (figures in brackets refer to % of months with positive performance)



Source: Datastream, Goldman Sachs Global Investment Research

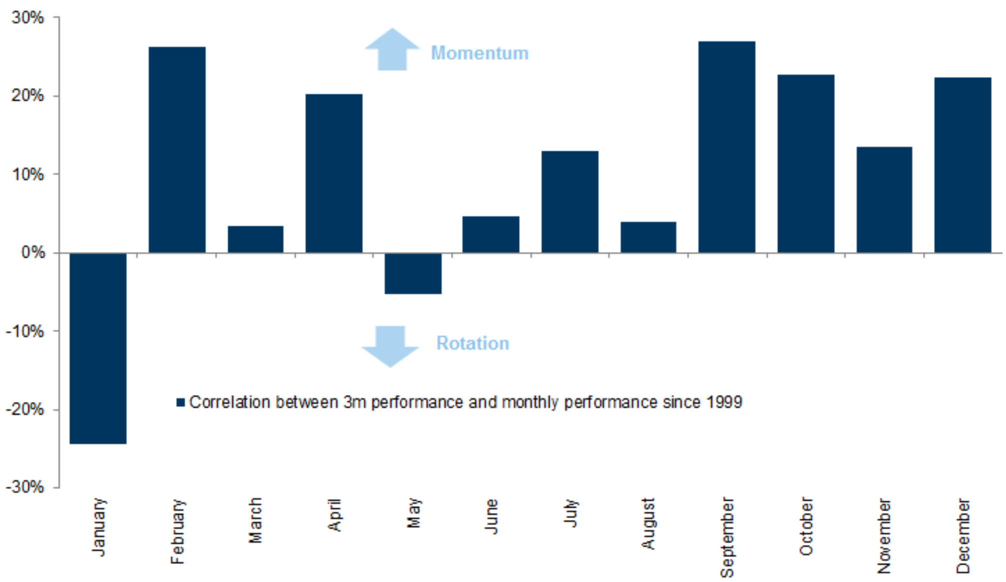
Are rotations more common in January?

In January expect a rotation across regional indices

While January does not particularly stand out as a rotation month across sectors, we find evidence that **rotations across regions are more common in January**. Exhibit 4 shows the correlation between the monthly performance of regional indices and the previous 3 months. January is the only month that stands out as favourable for rotations. A rotation across regional indices occurred in 78% of Januarys since 2007 and 56% of Januarys since 1999.

Exhibit 4: Rotations across regional indices are more common in January

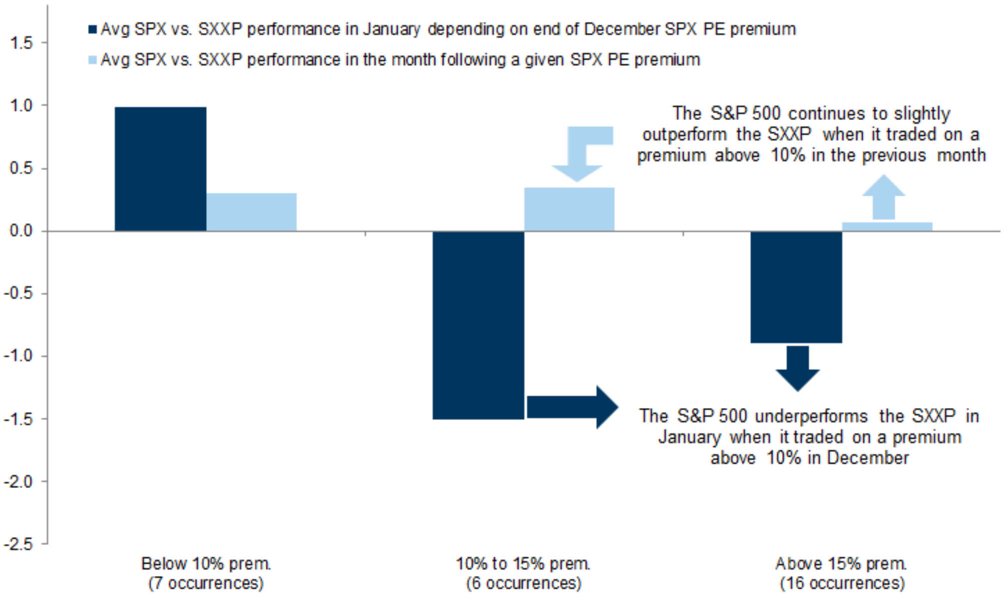
Average correlation between SX5E, S&P 500, FTSE 100, TOPIX and MSCI EM local returns each month vs. previous 3 months



Source: Datastream, Goldman Sachs Global Investment Research

Valuations *per se* are not a reliable indicator of short-term subsequent performance. However, **we find evidence that the S&P 500 is more likely to underperform the SXXP in January when its valuation looked stretched at the end of December, while this is not necessarily the case in any other month of the year.** A possible explanation could be that investors are more likely to shift their regional allocation into markets trading at a discount when starting new mandates at the beginning of the year. Exhibit 5 illustrates this: the light blue bars appear to be randomly distributed, suggesting that valuations are not a good predictor of performance, while the dark blue bars, which are specific to performance in January, show that the relative performance of the S&P 500 vs. Europe has in part depended on how expensive the S&P 500 ended the year vs. European equities.

Exhibit 5: The S&P 500 tends to underperform the SXXP in January when its valuation looked stretched at the end of the year
Average performance of the S&P 500 vs. SXXP since 1987 given various 12-m fwd PE Prem./Disc. bands

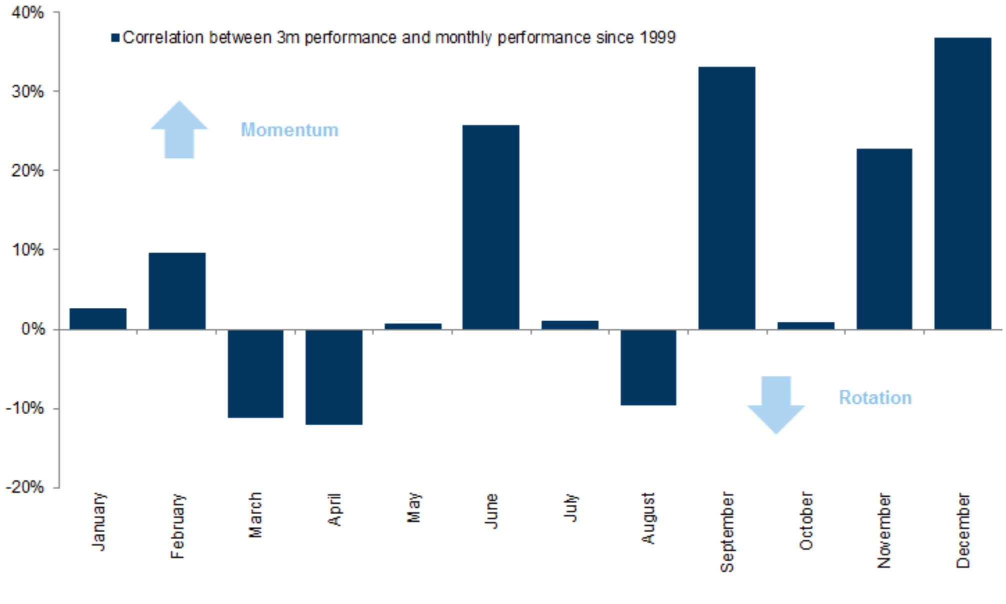


Source: Datastream, I/B/E/S, Goldman Sachs Global Investment Research

Rotations across sectors are not typical in January

In terms of sector leadership, January does not especially stand out, neither as a momentum nor a rotation month (Exhibit 6). **However, we find that June, September and in particular December are favourable for momentum**, implying that investors continue to buy sectors that have been outperformers and sell those that have been underperformers over the past three months. This possibly reflects fund managers' increased focus on their exposure to strongly performing sectors at the end of Q2, Q3 and particularly as the year-end approaches. By contrast, March, April and August tend to be months when we experience sector rotations, although the correlation is only modestly negative (about -10%).

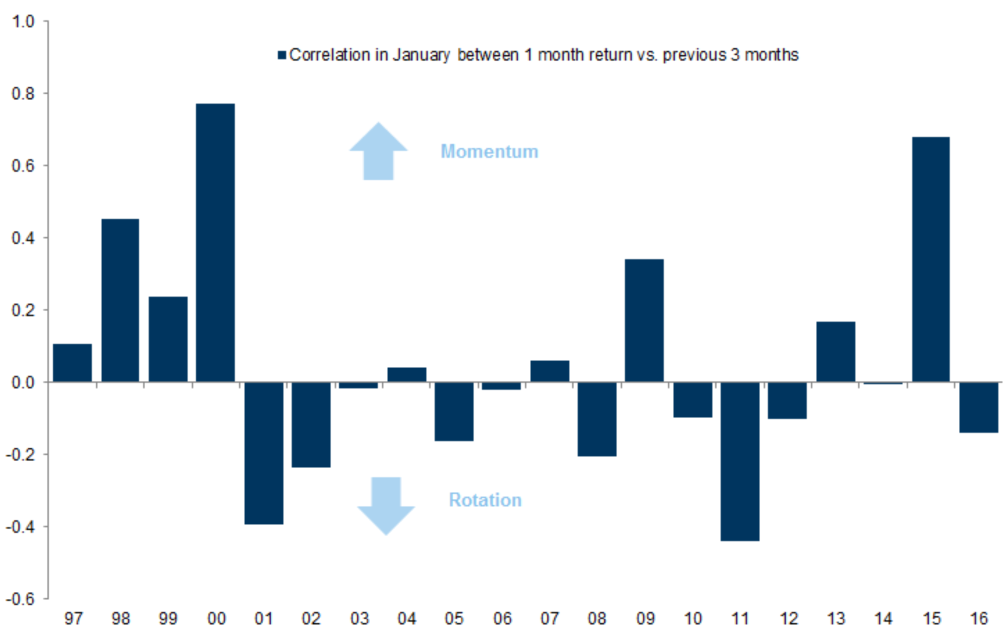
Exhibit 6: June, September and and December are strong momentum months but January is not
Average correlation between SXXP sector returns each month vs. previous 3 months



Source: Datastream, Goldman Sachs Global Investment Research

The fact that August tends to be a 'rotation month' could be partly supported by lower traded volumes in this month. That said, traded volumes are even lower in December, which is the strongest 'momentum month'.

Exhibit 7: January is not a strong momentum or rotation month
Momentum/rotation in January of different years



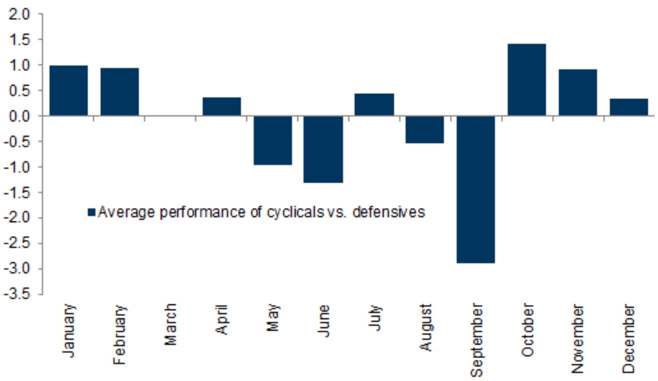
Source: Datastream, Goldman Sachs Global Investment Research

Rotations within Styles depend mainly on the economy

There is very modest evidence that Cyclicals do better at the very end of the year and slightly underperform in the Summer, supporting the adage 'Sell in May and go away'.

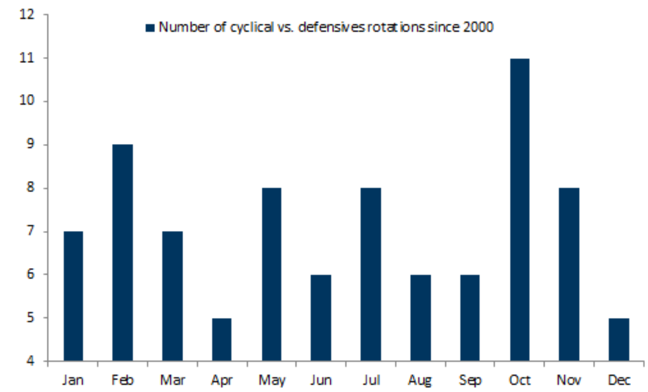
Aside from October, when rotations between Cyclicals and Defensives tend to be more elevated than in other months of the year, rotations are not particularly seasonal (Exhibit 9 shows the number of rotations experienced in each month since 2000).

Exhibit 8: The performance of Cyclicals vs. Defensives is not highly seasonal...
Average performance of Cyclicals vs. Defensives since 2000



Source: Goldman Sachs Global Investment Research

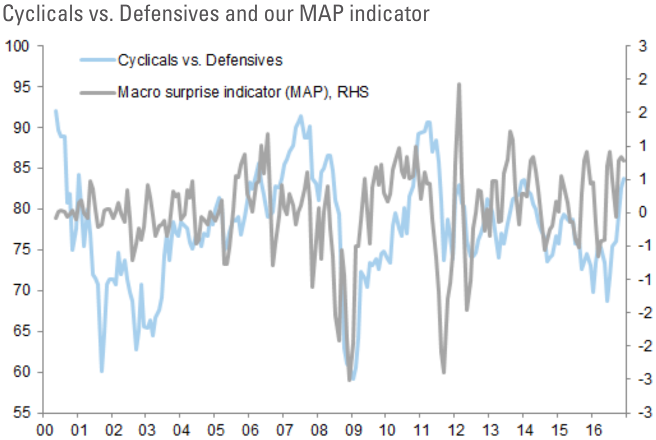
Exhibit 9: ...Nor are rotations between Cyclicals and Defensives
Number of rotations experienced each month since 2000



Source: Goldman Sachs Global Investment Research

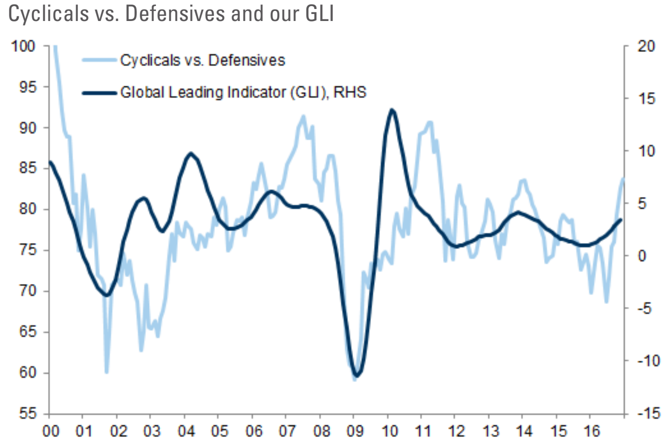
In our view, **this owes to the nature of rotations between Cyclicals and Defensives, which is significantly related to the economy.** As shown in Exhibit 10, macro data surprises tend to trigger rotations between Cyclicals and defensives, and extreme levels in our Global Leading Indicator (GLI) are often associated with rotations in the performance of Cyclicals vs. Defensives (see Exhibit 11).

Exhibit 10: Macro surprises tend to trigger rotations between Cyclicals and Defensives
Cyclicals vs. Defensives and our MAP indicator



Source: Datastream, Goldman Sachs Global Investment Research

Exhibit 11: Cyclicals vs. Defensives rotations coincide with sharp moves in the Global Leading Indicator
Cyclicals vs. Defensives and our GLI

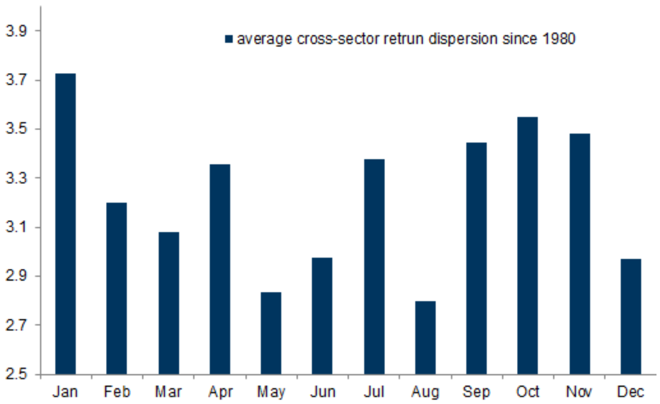


Source: Datastream, Goldman Sachs Global Investment Research

In January, the spike in activity supports higher return dispersion across stocks

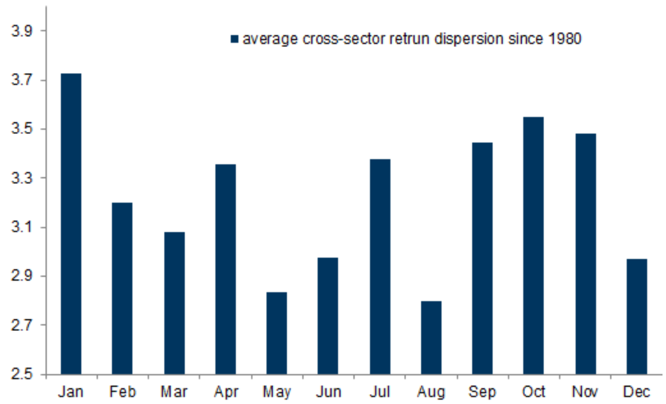
Historically, we find that return dispersion tends to be higher in January, whether we look at return dispersion across sectors (Exhibit 12), countries (Exhibit 13) or stocks (Exhibit 14). By symmetry, average pairwise correlations tend to be low in January (Exhibit 15), as stock idiosyncrasies become more influential.

Exhibit 12: Cross-sector return dispersion tends to be the highest in January
Average cross-sector return dispersion since 1980 (standard dev. of 1m returns)



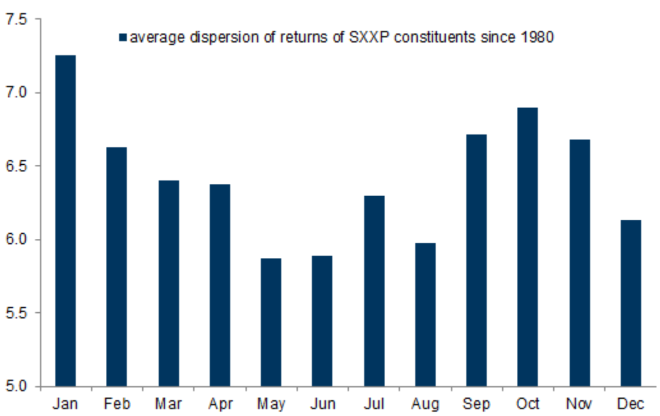
Source: Worldscope, Datastream, Goldman Sachs Global Investment Research

Exhibit 13: Cross-country return dispersion tends to be the highest in January
Average cross-country return dispersion since 1980 (1m returns)



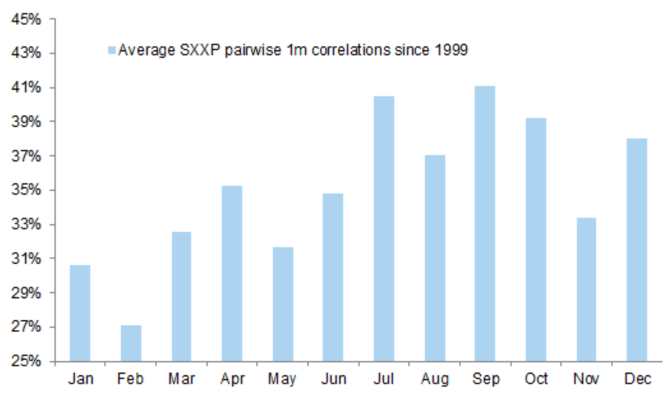
Source: Worldscope, Datastream, Goldman Sachs Global Investment Research

Exhibit 14: Stock dispersion of returns tends to be the highest in January
Average return dispersion of SXXP constituents since 1980 (standard dev. of 1m returns)



Source: Datastream, Goldman Sachs Global Investment Research

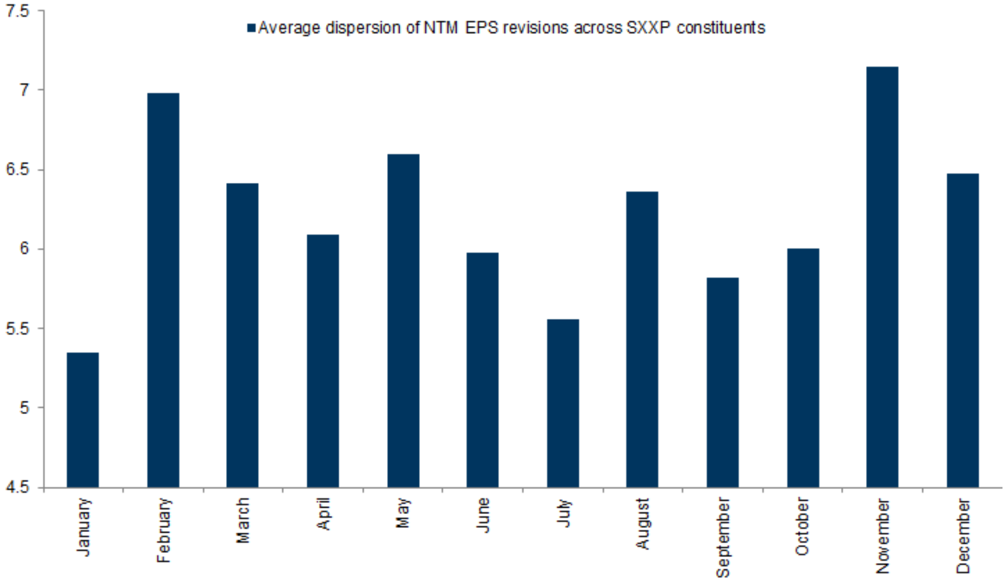
Exhibit 15: Correlation levels across SXXP stocks are low in January
1-month average pairwise correlation for the SXXP since 1999 (correlation approximated as (index vol/Weighted avg single stock vol)^2 until 2003)



Source: Goldman Sachs Global Investment Research

The higher dispersion of returns across stocks does not seem to be supported by higher dispersion across fundamentals, as **January does not particularly stand out as a month with high dispersion of 12-month forward EPS revisions** (see Exhibit 16).

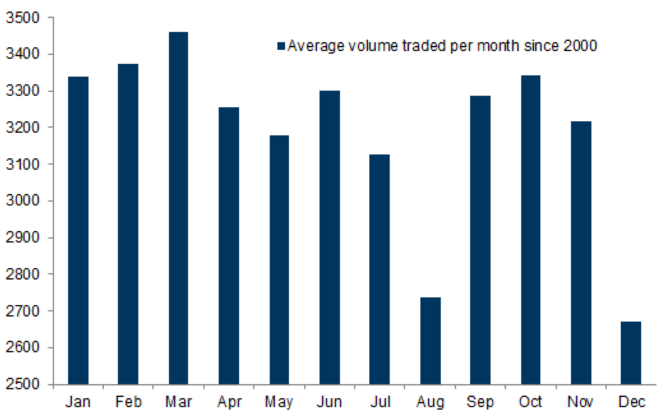
Exhibit 16: 12-month forward EPS revision dispersion tends to be lower in January
Average dispersion (standard deviation) of SXXP NTM EPS since 2000



Source: I/B/E/S, Goldman Sachs Global Investment Research

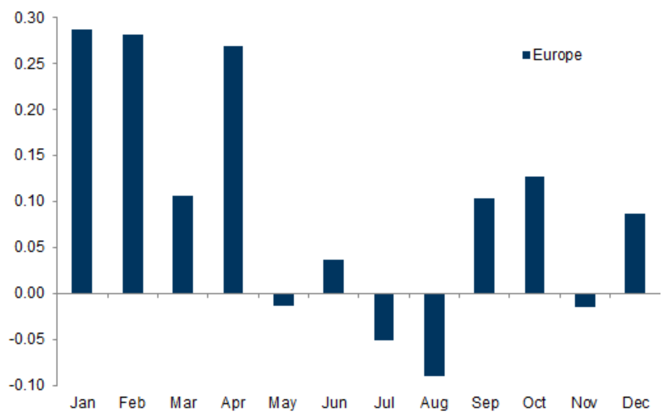
January is a month when activity is in full swing, traded volumes are particularly high (Exhibit 17) and flows from US investors are at their highest levels (Exhibit 18). Portfolio resetting at the beginning of the year is likely to be the main driver of the higher dispersion of returns in January, rather than fundamentals.

Exhibit 17: Traded volumes are high in January
Average volume of SXXP constituents traded per month since 2000



Source: Bloomberg, Goldman Sachs Global Investment Research

Exhibit 18: Flows from US investors into Europe tend to be higher in January
Average flows from US investors in European equities since 1992



Source: AMG, Lipper, Goldman Sachs Global Investment Research

Disclosure Appendix

Reg AC

We, Lilia Peytavin, Peter Oppenheimer, Sharon Bell, CFA, Jim McGovern and Alessio Rizzi, hereby certify that all of the views expressed in this report accurately reflect our personal views about the subject company or companies and its or their securities. We also certify that no part of our compensation was, is or will be, directly or indirectly, related to the specific recommendations or views expressed in this report.

Unless otherwise stated, the individuals listed on the cover page of this report are analysts in Goldman Sachs' Global Investment Research division.

Disclosures

Distribution of ratings/investment banking relationships

Goldman Sachs Investment Research global Equity coverage universe

	Rating Distribution			Investment Banking Relationships		
	Buy	Hold	Sell	Buy	Hold	Sell
Global	31%	55%	14%	64%	59%	53%

As of October 1, 2016, Goldman Sachs Global Investment Research had investment ratings on 2,921 equity securities. Goldman Sachs assigns stocks as Buys and Sells on various regional Investment Lists; stocks not so assigned are deemed Neutral. Such assignments equate to Buy, Hold and Sell for the purposes of the above disclosure required by the FINRA Rules. See 'Ratings, Coverage groups and views and related definitions' below. The Investment Banking Relationships chart reflects the percentage of subject companies within each rating category for whom Goldman Sachs has provided investment banking services within the previous twelve months.

Disclosures required by United States laws and regulations

See company-specific regulatory disclosures above for any of the following disclosures required as to companies referred to in this report: manager or co-manager in a pending transaction; 1% or other ownership; compensation for certain services; types of client relationships; managed/co-managed public offerings in prior periods; directorships; for equity securities, market making and/or specialist role. Goldman Sachs trades or may trade as a principal in debt securities (or in related derivatives) of issuers discussed in this report.

The following are additional required disclosures: **Ownership and material conflicts of interest:** Goldman Sachs policy prohibits its analysts, professionals reporting to analysts and members of their households from owning securities of any company in the analyst's area of coverage. **Analyst compensation:** Analysts are paid in part based on the profitability of Goldman Sachs, which includes investment banking revenues. **Analyst as officer or director:** Goldman Sachs policy prohibits its analysts, persons reporting to analysts or members of their households from serving as an officer, director, advisory board member or employee of any company in the analyst's area of coverage. **Non-U.S. Analysts:** Non-U.S. analysts may not be associated persons of Goldman, Sachs & Co. and therefore may not be subject to FINRA Rule 2241 or FINRA Rule 2242 restrictions on communications with subject company, public appearances and trading securities held by the analysts.

Additional disclosures required under the laws and regulations of jurisdictions other than the United States

The following disclosures are those required by the jurisdiction indicated, except to the extent already made above pursuant to United States laws and regulations. **Australia:** Goldman Sachs Australia Pty Ltd and its affiliates are not authorised deposit-taking institutions (as that term is defined in the Banking Act 1959 (Cth)) in Australia and do not provide banking services, nor carry on a banking business, in Australia. This research, and any access to it, is intended only for "wholesale clients" within the meaning of the Australian Corporations Act, unless otherwise agreed by Goldman Sachs. In producing research reports, members of the Global Investment Research Division of Goldman Sachs Australia may attend site visits and other meetings hosted by the issuers the subject of its research reports. In some instances the costs of such site visits or meetings may be met in part or in whole by the issuers concerned if Goldman Sachs Australia considers it is appropriate and reasonable in the specific circumstances relating to the site visit or meeting. **Brazil:** Disclosure information in relation to CVM Instruction 483 is available at http://www.gs.com/worldwide/brazil/area/gir/index.html. Where applicable, the Brazil-registered analyst primarily responsible for the content of this research report, as defined in Article 16 of CVM Instruction 483, is the first author named at the beginning of this report, unless indicated otherwise at the end of the text. **Canada:** Goldman Sachs Canada Inc. is an affiliate of The Goldman Sachs Group Inc. and therefore is included in the company specific disclosures relating to Goldman Sachs (as defined above). Goldman Sachs Canada Inc. has approved of, and agreed to take responsibility for, this research report in Canada if and to the extent that Goldman Sachs Canada Inc. disseminates this research report to its clients. **Hong Kong:** Further information on the securities of covered companies referred to in this research may be obtained on request from Goldman Sachs (Asia) L.L.C. **India:** Further information on the subject company or companies referred to in this research may be obtained from Goldman Sachs (India) Securities Private Limited, Research Analyst - SEBI Registration Number INH000001493, 951-A, Rational House, Appasaheb Marathe Marg, Prabhadevi, Mumbai 400 025, India, Corporate Identity Number U74140MH2006FTC160634, Phone +91 22 6616 9000, Fax +91 22 6616 9001. Goldman Sachs may beneficially own 1% or more of the securities (as such term is defined in clause 2 (h) the Indian Securities Contracts (Regulation) Act, 1956) of the subject company or companies referred to in this research report. **Japan:** See below. **Korea:** Further information on the subject company or companies referred to in this research may be obtained from Goldman Sachs (Asia) L.L.C., Seoul Branch. **New Zealand:** Goldman Sachs New Zealand Limited and its affiliates are neither "registered banks" nor "deposit takers" (as defined in the Reserve Bank of New Zealand Act 1989) in New Zealand. This research, and any access to it, is intended for "wholesale clients" (as defined in the Financial Advisers Act 2008) unless otherwise agreed by Goldman Sachs. **Russia:** Research reports distributed in the Russian Federation are not advertising as defined in the Russian legislation, but are information and analysis not having product promotion as their main purpose and do not provide appraisal within the meaning of the Russian legislation on appraisal activity. **Singapore:** Further information on the covered companies referred to in this research may be obtained from Goldman Sachs (Singapore) Pte. (Company Number: 198602165W). **Taiwan:** This material is for reference only and must not be reprinted without permission. Investors should carefully consider their own investment risk. Investment results are the responsibility of the individual investor. **United Kingdom:** Persons who would be categorized as retail clients in the United Kingdom, as such term is defined in the rules of the Financial Conduct Authority, should read this research in conjunction with prior Goldman Sachs research on the covered companies referred to herein and should refer to the risk warnings that have been sent to them by Goldman Sachs International. A copy of these risks warnings, and a glossary of certain financial terms used in this report, are available from Goldman Sachs International on request.

European Union: Disclosure information in relation to Article 4 (1) (d) and Article 6 (2) of the European Commission Directive 2003/125/EC is available at http://www.gs.com/disclosures/europeanpolicy.html which states the European Policy for Managing Conflicts of Interest in Connection with Investment Research.

Japan: Goldman Sachs Japan Co., Ltd. is a Financial Instrument Dealer registered with the Kanto Financial Bureau under registration number Kinsho 69, and a member of Japan Securities Dealers Association, Financial Futures Association of Japan and Type II Financial Instruments Firms Association. Sales and purchase of equities are subject to commission pre-determined with clients plus consumption tax. See company-specific disclosures as to any applicable disclosures required by Japanese stock exchanges, the Japanese Securities Dealers Association or the Japanese Securities Finance Company.

Ratings, coverage groups and views and related definitions

Buy (B), Neutral (N), Sell (S) -Analysts recommend stocks as Buys or Sells for inclusion on various regional Investment Lists. Being assigned a Buy or Sell on an Investment List is determined by a stock's return potential relative to its coverage group as described below. Any stock not assigned as a Buy or a Sell on an Investment List is deemed Neutral. Each regional Investment Review Committee manages various regional Investment Lists to a global guideline of 25%-35% of stocks as Buy and 10%-15% of stocks as Sell; however, the distribution of Buys and Sells in any particular coverage group may vary as determined by the regional Investment Review Committee. Regional Conviction Buy and Sell lists represent investment recommendations focused on either the size of the potential return or the likelihood of the realization of the return.

Return potential represents the price differential between the current share price and the price target expected during the time horizon associated with the price target. Price targets are required for all covered stocks. The return potential, price target and associated time horizon are stated in each report adding or reiterating an Investment List membership.

Coverage groups and views: A list of all stocks in each coverage group is available by primary analyst, stock and coverage group at http://www.gs.com/research/hedge.html. The analyst assigns one of the following coverage views which represents the analyst's investment outlook on the coverage group relative to the group's historical fundamentals and/or valuation. **Attractive (A).** The investment outlook over the following 12 months is favorable relative to the coverage group's historical fundamentals and/or valuation. **Neutral (N).** The investment outlook over the following 12 months is neutral relative to the coverage group's historical fundamentals and/or valuation. **Cautious (C).** The investment outlook over the following 12 months is unfavorable relative to the coverage group's historical fundamentals and/or valuation.

Not Rated (NR). The investment rating and target price have been removed pursuant to Goldman Sachs policy when Goldman Sachs is acting in an advisory capacity in a merger or strategic transaction involving this company and in certain other circumstances. **Rating Suspended (RS).** Goldman Sachs Research has suspended the investment rating and price target for this stock, because there is not a sufficient fundamental basis for determining, or there are legal, regulatory or policy constraints around publishing, an investment rating or target. The previous investment rating and price target, if any, are no longer in effect for this stock and should not be relied upon. **Coverage Suspended (CS).** Goldman Sachs has suspended coverage of this company. **Not Covered (NC).** Goldman Sachs does not cover this company. **Not Available or Not Applicable (NA).** The information is not available for display or is not applicable. **Not Meaningful (NM).** The information is not meaningful and is therefore excluded.

Global product; distributing entities

The Global Investment Research Division of Goldman Sachs produces and distributes research products for clients of Goldman Sachs on a global basis. Analysts based in Goldman Sachs offices around the world produce equity research on industries and companies, and research on macroeconomics, currencies, commodities and portfolio strategy. This research is disseminated in Australia by Goldman Sachs Australia Pty Ltd (ABN 21 006 797 897); in Brazil by Goldman Sachs do Brasil Corretora de Títulos e Valores Mobiliários S.A.; in Canada by either Goldman Sachs Canada Inc. or Goldman, Sachs & Co.; in Hong Kong by Goldman Sachs (Asia) L.L.C.; in India by Goldman Sachs (India) Securities Private Ltd.; in Japan by Goldman Sachs Japan Co., Ltd.; in the Republic of Korea by Goldman Sachs (Asia) L.L.C., Seoul Branch; in New Zealand by Goldman Sachs New Zealand Limited; in Russia by OOO Goldman Sachs; in Singapore by Goldman Sachs (Singapore) Pte. (Company Number: 198602165W); and in the United States of America by Goldman, Sachs & Co. Goldman Sachs International has approved this research in connection with its distribution in the United Kingdom and European Union.

European Union: Goldman Sachs International authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority, has approved this research in connection with its distribution in the European Union and United Kingdom; Goldman Sachs AG and Goldman Sachs International Zweigniederlassung Frankfurt, regulated by the Bundesanstalt für Finanzdienstleistungsaufsicht, may also distribute research in Germany.

General disclosures

This research is for our clients only. Other than disclosures relating to Goldman Sachs, this research is based on current public information that we consider reliable, but we do not represent it is accurate or complete, and it should not be relied on as such. The information, opinions, estimates and forecasts contained herein are as of the date hereof and are subject to change without prior notification. We seek to update our research as appropriate, but various regulations may prevent us from doing so. Other than certain industry reports published on a periodic basis, the large majority of reports are published at irregular intervals as appropriate in the analyst's judgment.

Goldman Sachs conducts a global full-service, integrated investment banking, investment management, and brokerage business. We have investment banking and other business relationships with a substantial percentage of the companies covered by our Global Investment Research Division. Goldman, Sachs & Co., the United States broker dealer, is a member of SIPC (http://www.sipc.org).

Our salespeople, traders, and other professionals may provide oral or written market commentary or trading strategies to our clients and principal trading desks that reflect opinions that are contrary to the opinions expressed in this research. Our asset management area, principal trading desks and investing businesses may make investment decisions that are inconsistent with the recommendations or views expressed in this research.

The analysts named in this report may have from time to time discussed with our clients, including Goldman Sachs salespersons and traders, or may discuss in this report, trading strategies that reference catalysts or events that may have a near-term impact on the market price of the equity securities discussed in this report, which impact may be directionally counter to the analyst's published price target expectations for such stocks. Any such trading strategies are distinct from and do not affect the analyst's fundamental equity rating for such stocks, which rating reflects a stock's return potential relative to its coverage group as described herein.

We and our affiliates, officers, directors, and employees, excluding equity and credit analysts, will from time to time have long or short positions in, act as principal in, and buy or sell, the securities or derivatives, if any, referred to in this research.

The views attributed to third party presenters at Goldman Sachs arranged conferences, including individuals from other parts of Goldman Sachs, do not necessarily reflect those of Global Investment Research and are not an official view of Goldman Sachs.

Any third party referenced herein, including any salespeople, traders and other professionals or members of their household, may have positions in the products mentioned that are inconsistent with the views expressed by analysts named in this report.

This research is not an offer to sell or the solicitation of an offer to buy any security in any jurisdiction where such an offer or solicitation would be illegal. It does not constitute a personal recommendation or take into account the particular investment objectives, financial situations, or needs of individual clients. Clients should consider whether any advice or recommendation in this research is suitable for their particular circumstances and, if appropriate, seek professional advice, including tax advice. The price and value of investments referred to in this research and the income from them may fluctuate. Past performance is not a guide to future performance, future returns are not guaranteed, and a loss of original capital may occur. Fluctuations in exchange rates could have adverse effects on the value or price of, or income derived from, certain investments.

Certain transactions, including those involving futures, options, and other derivatives, give rise to substantial risk and are not suitable for all investors. Investors should review current options disclosure documents which are available from Goldman Sachs sales representatives or at http://www.theocc.com/about/publications/character-risks.jsp. Transaction costs may be significant in option strategies calling for multiple purchase and sales of options such as spreads. Supporting documentation will be supplied upon request.

All research reports are disseminated and available to all clients simultaneously through electronic publication to our internal client websites. Not all research content is redistributed to our clients or available to third-party aggregators, nor is Goldman Sachs responsible for the redistribution of our research by third party aggregators. For research, models or other data available on a particular security, please contact your sales representative or go to http://360.gs.com.

Disclosure information is also available at http://www.gs.com/research/hedge.html or from Research Compliance, 200 West Street, New York, NY 10282.