martinwolf

IT INDEX

A Proprietary Analysis of Market Value for Key Segments in Information Technology

April 2017

Overview

The ***martin****wolf* IT Index is a proprietary analysis of selected securities of global IT companies, with separate indices for IT Services companies in India and China. The securities are weighted according to the market value of their outstanding shares.

Individual indices are composed of companies determined by the ***martin****wolf* staff to be representatives of their space, and are evaluated on a regular basis to ensure ongoing accuracy.

The ***martin****wolf* IT Index is tracked on a 5-year basis and is accompanied by commentary on the latest industry news and trends. ***(See Page 8 for the formula used to calculate the martinwolf IT Index)***

martin*wolf* IT Index Q1 2017 Analysis:

Post-election optimism has continued to buoy the markets in the new year.

Overall

The 2016 election was a turning point for the US economy, with an immediate and significant effect on major markets across industry sectors. The conclusion of a volatile presidential election—and the election of a candidate perceived as more business and growth-oriented—sent waves across the world, ushering in a robust stock performance and further strengthening the dollar. Major indices closed 2016 at or near record heights, which carried over into 2017, with the Dow easily passing 20,000 on January 25 and the more technology-centric Nasdaq hitting 5,600 (compared with its 2016 start of 4,591). The various components of the ***martin****wolf* IT Index echoed this optimism—the Software and SaaS Indices grew 18.15 percent and 21.28 percent from their starting points, while the more mature IT Supply Chain Index and IT Services Index grew 21 percent and 13.26 percent, respectively.

Post-election optimism has continued to buoy the markets in the new year, with the new administration and GOP-led Congress aggressively pledging to back domestic business interests through corporate tax reform and regulatory rollbacks.

Promising statistics continue to support this mindset—the unemployment rate dropped to 4.7 percent for the month of February with growth in wages and consumption, and GDP growth continued to hold steady around 2 percent. Earnings too are reflecting the heath of the economy—the estimated earnings growth rate for the S&P 500 is 9.1 percent for the first quarter, which would be the highest year-over-

M&A deal value is down 7.25 percent from YTD 2016, but the relative stability of the US remains attractive to foreign investors.

year earnings growth since the fourth quarter of 2011 at 11.6 percent. In particular, the technology sector solidified its status as the crown jewel of investors with growth of 10.8 percent on 7 percent higher revenues in the first quarter, which is higher than any other sector.

Perhaps the ultimate endorsement of today's sustained growth climate has been the Fed raising interest rates on March 15—and indicating they expect a total of three hikes in 2017.

Global M&A in 2016 totaled $3.76 trillion, down 13 percent from 2015's record $4.30 trillion, and U.S. M&A activity reflected the downtrend; deal value is down 7.25 percent from YTD 2016 and activity totaled $55.5 billion in the 30-day period of March, compared to $102 billion in the prior period. But the relative stability of the US remains attractive to foreign investors. Global M&A has so far shown indications of rising in 2017, reflective of the steadily growing US economy.

But there are still warning signs and potential trouble spots for 2017. Consumer spending edged up a nominal 0.1 percent for the month of February. While many cite higher domestic confidence and a strong labor market to offset any blips, with an aging demographic profile, fewer new workers in the labor force, and inflation picking up, evidence is mounting that the U.S. is approaching a more mature phase of its economic cycle. In addition, the failure of the GOP-led Obamacare replacement contributed in late March to the growing doubt and the major indices' steepest declines of the year.

Looking abroad, in the first quarter, the Eurozone's economy grew at the fastest pace it had in six years. Expansion and key M&A deals, alongside industrial activity, led to a resurgence of economic growth in China, and India continued its growth in the IT industry, which is the largest private employer in the country. With many multinational tech firms touching base in India—a country where half of the population is younger than 35 years old—expectations for its economy are rising as tech companies are rising in valuation and obtaining high prices for funding rounds.

IT Services and BPO

The IT Services space saw little movement for the majority of 2016. Between October and March, the index underwent a dip hovering between 0.1 to 5 percent in intraday trading. Yet a brief uptick in November and December led to slightly higher shares that carried into 2017, though movement has again slowed.

Consolidation in the IT Services space reflects a trend of investment in higher value cloud applications and products.

Yet there were some notable changes within the space. CSC's merger with HPE has driven shares up over 100 percent in the last 12 months, while strong performance and investor optimism have propelled StarTek and Unisys to similar heights. Conversely, weak performances by IT outsourcing firm Syntel, marketing solutions provider Harte Hanks and customer care leader Convergys represent the lowest-performing components of the IT Services index.

In addition, 2016 witnessed several noteworthy transactions. In the BPO sector, The Carlyle Group, a private equity firm, announced its plans to buy a 70 percent stake in VXI Global Solutions, a China-focused BPO and IT outsourcing company. Other transactions saw large services providers turn to M&A to offset declining revenue and obtain access to new customers. In October, CenturyLink announced its agreement to buy Level 3 Communications, which would create the second-largest business-focused communications provider after AT&T. A week later, Windstream Holdings announced a definitive merger agreement with Earthlink Holdings to counteract their year-over-year revenue declines of 10 and 13 percent.

In January, HPE's high-profile agreement to purchase hyper-converged infrastructure startup SimpliVity reflected a trend of investment in higher value cloud applications and products. Third-party IT services giants SMS Systems and Curvature also announced their merger later that month as part of the ongoing race of achieving scale in order to remain competitive. In March, Accenture announced its plans to invest $900 million to retrain all of its tech-focused employees, and bought out OCTO Technology, a consultancy firm specializing in digital transformation services and software development.

IT Supply Chain

The IT Supply Chain sector marked a trend of minimal and gradual growth with a few exceptions. Strong sales propelled PCM to tremendous growth, with the stock up 240 percent in the last 12 months. While PCM reaped the benefits of previous acquisitions and announced a strategic acquisition of cloud solutions company Stratiform to solidify its standing, Black Box Corporation slid into a new 52-week low, falling 33.4 percent in the last twelve months.

As a whole, the sector has continued to experience consolidation. Supply difficulties and a declining PC market have placed pressure on solution providers to develop new products or implement a different end-to-end strategy. As a result, diversification and scale continue to drive acquisitions and growth. In September, HP announced its

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agreement to purchase Samsung's printer business, which would mark the largest ever print acquisition for HP and help the company tap into a larger market and gain access to engine manufacturing capabilities. Similarly, in the IT distribution space, Tech Data acquired the Technology Solutions Business Unit from Avnet to expand its market and achieve scale.

Another relevant case study supporting these trends is the semiconductor space. While the last twelve months have seen more multibillion-dollar consolidations in the form of SoftBank's acquisition of ARM and Qualcomm's acquisition of NXP, they also saw Samsung and Intel push into the growing automotive sector with their respective purchases of HARMAN and Mobileye.

Other notable transactions include Insight's acquisition of Datalink in January. Later transactions also witnessed the increase of private equity involvement, as firms have been taking advantage of the unique opportunities before them: In March, staffing and technology outsourcing provider Volt Information Sciences completed the sale of its IT infrastructure support business Maintech. Toward the end of the month, Systemax closed the sale of its European Technology Products Group units, excluding those in France, to private equity firm Hilco Capital Limited.

But the most significant recent development in the IT Supply Chain space was the IPO of Presidio (Nasdaq: PSDO) in early March. Unlike fellow solution provider Optiv, which filed its S1 at a similar time and was snapped up by private equity giant KKR, Presidio completed its listing on March 10—signifying that the traditional public exit may once again be a viable route for mature companies.

Software and SaaS

Within the past six months, the software space saw prominent declines and nominal growth at the same time. Channel Advisor Corporation witnessed a 26.7 percent decline and ServiceSource International continued on a 36.9 percent decline. On the other hand, key players like Oracle and Adobe experienced prominent increases. Established software players continue to make progress on their cloud pushes, with Oracle's $9.3 billion acquisition of NetSuite exemplifying the trend.

Moving to the cloud has historically meant two competing incentives—while customers are locked in to recurring revenue contracts, the upfront revenue is significantly less. As a result, Oracle has until recently pursued an ambivalent cloud strategy, preserving lucrative licensing revenue while developing new cloud offerings. However, with more customers seeking cloud options, Oracle recently announced a major internal transformation and reprioritization aimed at growing cloud revenues. This is good news for systems integrators—industry estimates place each dollar of SaaS subscription revenue as having the potential to generate $10 in systems integrator revenue.

2017 has shown that it is not just software companies that have an eye on SaaS targets. The 11th hour acquisition of AppDynamics by Cisco for $3.7 billion suggests high-value software targets can slot in to many a portfolio—especially those seeking to compensate for weaknesses in hardware sectors.

Corporations have been responding to the slowing GDP rate of China and increasing industry activity in India accordingly.

China and India

The ***martin****wolf* China index saw a steep decline over a one-year period, declining over 30 percent, while the India index stabilized a bit more after a dip in December, and is currently down 4 percent. As one of China's most widely used interbank borrowing rates surged to its highest level since late 2014 and the country's central bank tightened monetary conditions as a response, the higher rates cast concerns on China's economy. Economists have widely cited China's growing pile of bad debt as a warning, and in mid-March, the PBOC raised short-term policy rates for the third time in three months, paralleling the U.S. Federal Reserve's implementation.

On the other hand, India has been accelerating as an emerging market, reporting a 7 percent GDP growth and projecting to be the world's third largest consumer market by 2025. Corporations have been responding to the slowing GDP rate of China and increasing industry activity in India accordingly. In addition to Apple's focus on India in response to its declining consumer base in China, the race to tap into the market rose in the telecom industry, as the Vodafone and Idea Cellular merger announced in late March would create the largest telecom company in the country. However, as regulations do not allow a telecom company to have more than 50 percent revenue market share, the third biggest name, Bharti Airtel, may benefit from the consolidation.

About the ***martin****wolf* IT Index

The ***martin****wolf* IT Index includes approximately 100 companies that are a composite representative sampling of enterprise values in the following categories:

1. **IT Services & Business Process Outsourcing (BPO)**
    a. 38 companies, including 16 in BPO

2. **IT Supply Chain Services**
    a. 14 companies
3. **Software**
    a. 11 companies
4. **SaaS**
    a. 32 companies

Below are category descriptions and representative companies:

1. IT SERVICES & BPO

The IT Services category includes companies that provide a range of IT services such as application development, application management, data center operations, testing or quality assurance to organizations on an outsourced basis. Some IT Services companies provide horizontal services to organizations in any industries, while others deliver services by specialized by function or industry. The Business Process Outsourcing (BPO) subcategory includes companies providing both voice (call center) and non-voice based services that are considered "non-core" to an organization's primary business strategy.

IT Services subcategories and representative companies are:

- **Managed Infrastructure Services:** Digital Realty Trust Inc.
- **Commercial IT Professional Services:** Accenture, Unisys
- **IT Staff Augmentation:** Computer Task Group Inc., ManpowerGroup Inc.
- **Governmental IT Professional Services:** MAXIMUS, Inc., ManTech International corporation
- **Business Process Outsourcing – Voice:** Convergys Corp., Harte-Hanks, Inc.
- **Business Process Outsourcing – Non-Voice:** Automatic Data Processing, Inc.

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ADP

2. IT SUPPLY CHAIN SERVICES

The IT Supply Chain Services category includes companies providing one or more services that are directly linked to the flow of products, services, finances and information from a source to a customer.

IT Supply Chain Services subcategories and representative companies are:

PC Connection

- **IT Solution Providers:** PC Connection, Systemax Inc.

- **IT Product Distributors:** Arrow Electronics, Ingram Micro

3. SOFTWARE

The Software category includes companies involved in the development, marketing, sale and maintenance of computer software using various distribution models.

Software subcategories and representative companies are:

- **Enterprise Applications:** Microsoft, SAP
- **IT Management Software:** Check Point Software Technologies, Symantec
- **Business Software:** Adobe

4. SAAS

The Software as a Service (SaaS) category is broken out for further analysis. Software as a Service includes companies delivering software of all types only through an on-demand distribution model in which software and its associated data are hosted centrally by a third party, typically in the cloud and accessed by customers using a web browser over the Internet.

Representative SaaS companies are:

- Salesforce.com
- Workday

***martin**wolf* IT Index *(India Edition)*

The ***martin**wolf* IT Index *(India Edition)* includes 38 IT Services and Business Processing Outsourcing (BPO) companies traded in the U.S. (NYSE and NASDAQ) and Indian (BSE) stock markets that are a composite representative sampling of enterprise values.

Representative companies are:

- Cognizant
- HCL Technologies
- Infosys
- Tata Consultancy Services
- Wipro

***martin**wolf* IT Index *(China Edition)*

The ***martin**wolf* IT Index (*China Edition)* includes 23 IT Services and Business Processing Outsourcing (BPO) companies traded in the U.S. (NYSE, NASDAQ, and OTC), London (LSE AIM), Chinese

(SZSE, SHSE, SEHK) or Taiwanese (TSEC) stock markets that are a composite representative sampling of enterprise values.

Representative companies are:

- Chinasoft International
- Beyondsoft Corporation
- Hundsun Technologies, Inc.

Description and Formula

The ***martin**wolf* IT Index is a market-value-weighted index. The representation of each security in the index is proportional to its last sales price times the total number of shares outstanding, relative to the total market value of the respective index.

The formula used to determine the index value is as follows:

$$\textbf{Index Level} = \frac{\textbf{Current Market Value}}{\textbf{Adjusted Base Period Market Value}} \times \textbf{Base Value}$$

$$\textbf{Adjusted Period Market Value} = \frac{\textbf{Current Market Value After Adjustments}}{\textbf{Current Market Value}} \times \textbf{Previous Base Period Market Value Before Adjustments}$$

Adjustments for securities being added to or deleted from the index, or capitalization changes, are made periodically. Stock splits and stock dividends are likewise adjusted for during the process. In the case of cash dividends, no adjustment is made.

About ***martin**wolf*

***martin**wolf* is the world's leading middle market IT M&A advisory. With offices in the San Francisco Bay Area and New York, ***martin**wolf* is focused on companies in the IT Services, IT Supply Chain, IT-Enabled Business Process Outsourcing and Software as a Service (SaaS) space. Since 1997, our team has completed more than 140 transactions in nineteen countries and sold seven divisions of Fortune 500 companies.

Member FINRA, SIPC.

For more information, visit http://www.martinwolf.com.

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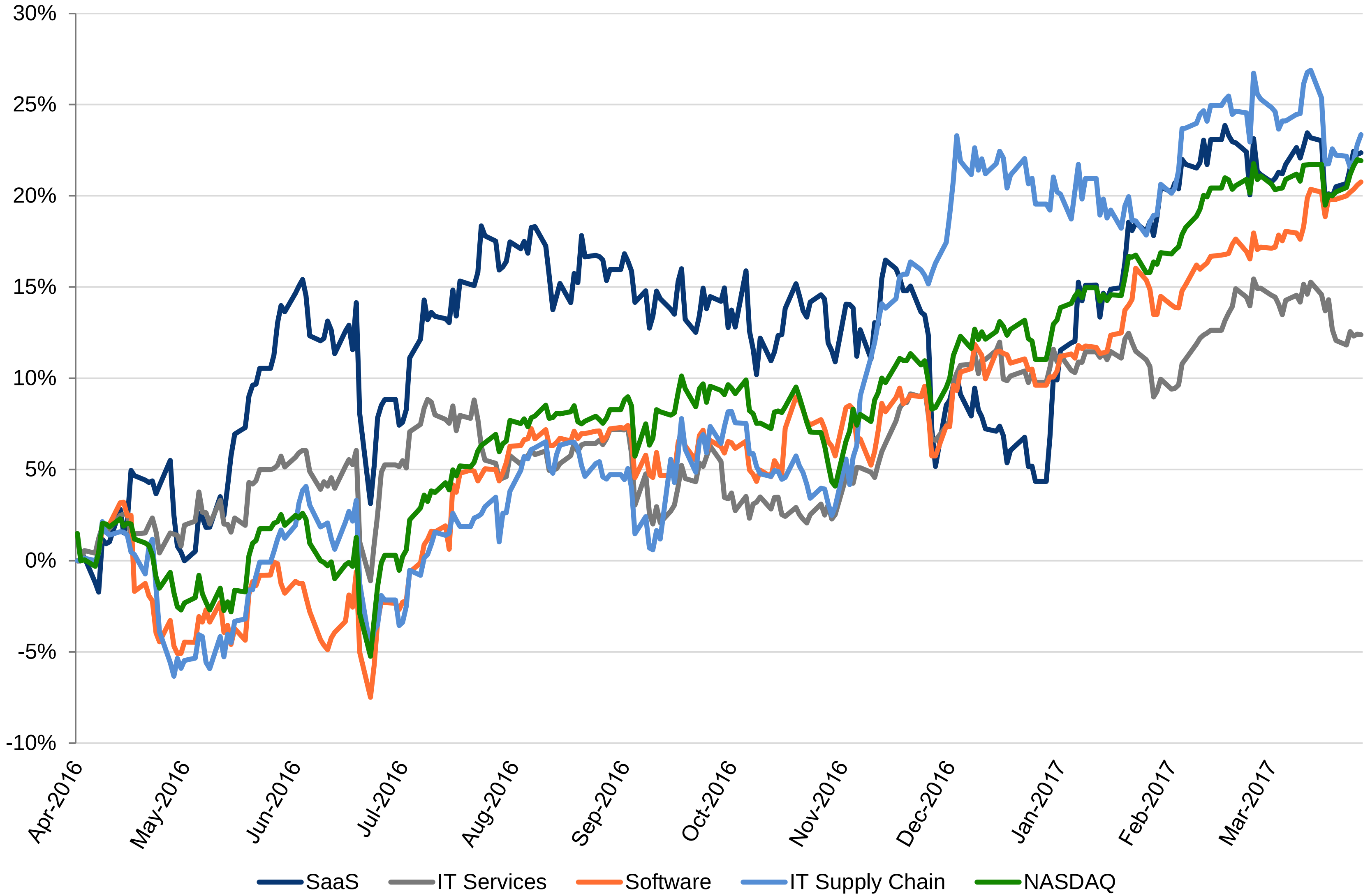
LTM



Source: Capital IQ

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Last 5 Years

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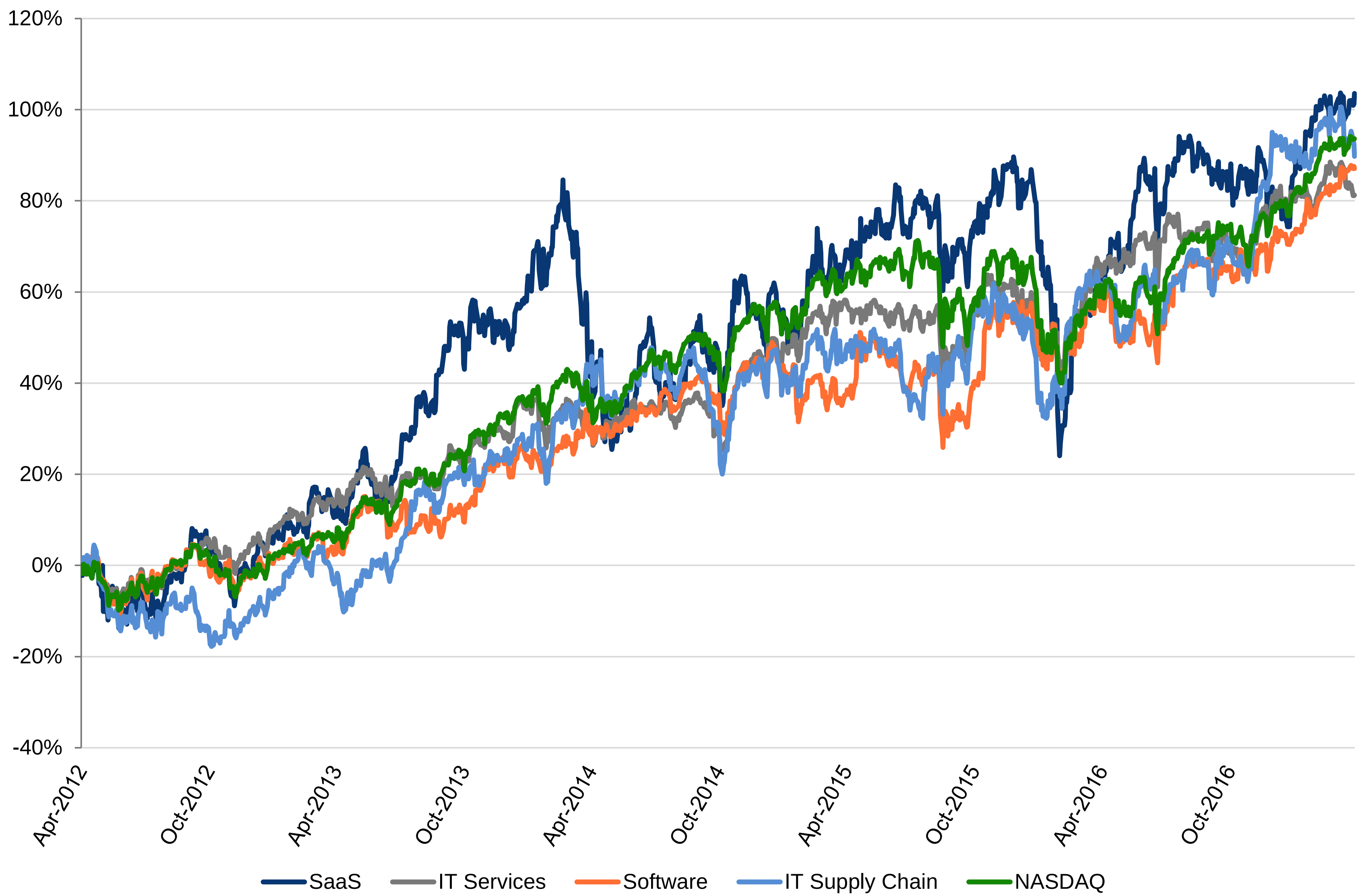

Source: Capital IQ

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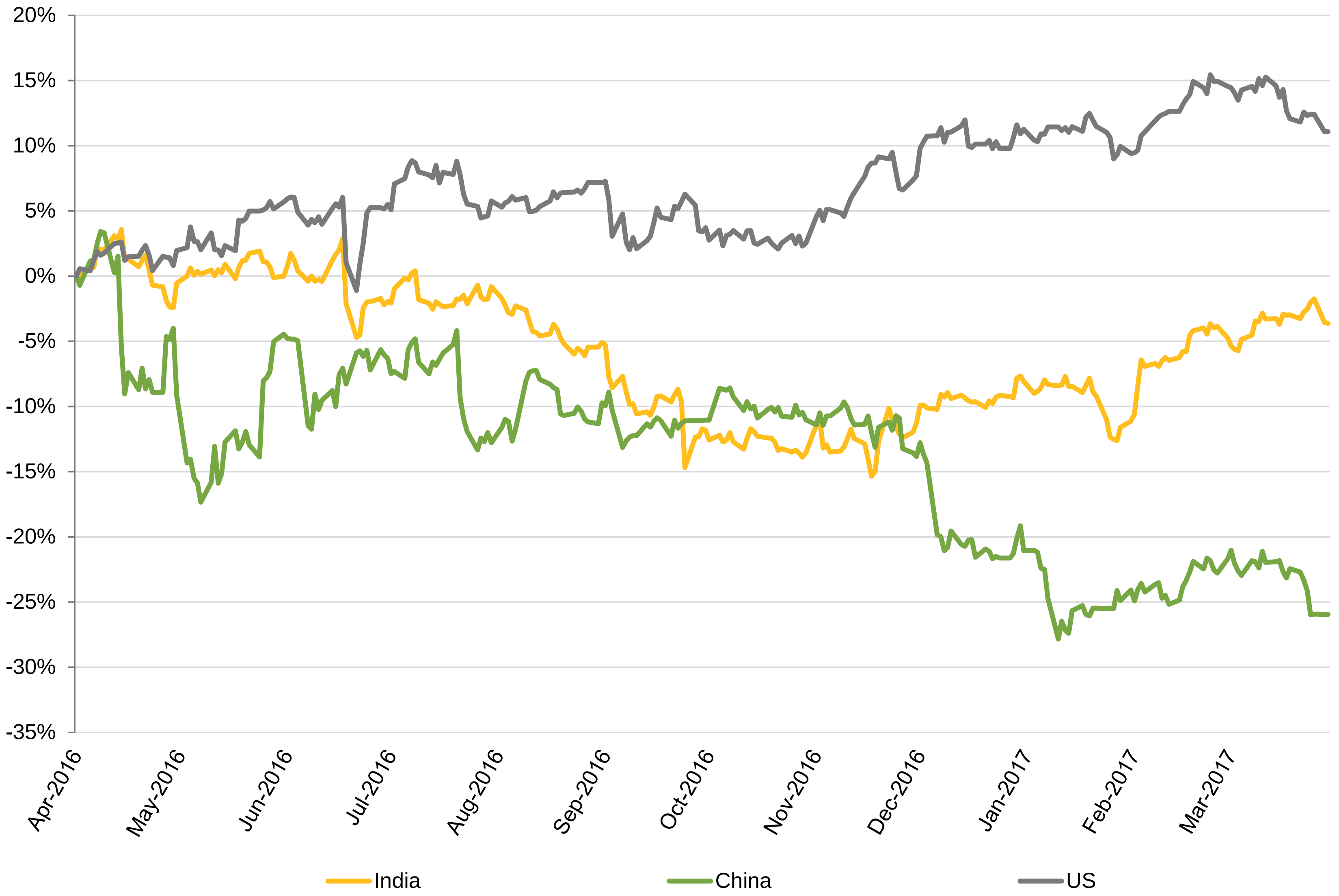

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