



CFA Institute

CFA Institute Research Challenge

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Team R





SS&C Technologies, Inc.	Exchange: NASDAQ	Sector: Technology	Recommendation: Buy
Ticker: SSNC	Industry: Application Software	Current Price: \$51.97	As of: 2/1/2019
Price	Key Stats	Market Data	Profitability LTM 12M
Current Price: \$51.97	Employees: 8,287	Shares O/S (million): 250.8	ROIC: 3.9%
Target Price: \$74.18	Founded: 1986	Market Cap (million): 13034.076	ROA: 3.2%
Upside: 42.7%	CEO: Stone, William C.	Dividend: 0.08	ROE: 6.2%
PEG Ratio: 0.70	Headquarts: Windsor, CT, USA	52-Week Hi: 59.3/42	LTM 12M: 9/30/2018
			Leverage
			Debt / Capital: 61.30%
			Total Debet / EBIDA: 7.6
			EBITDA / Int. Expenses: 4.4
			Fiscal Year End: 31-Dec
			Key Valuation Drivers
			Cost of Equity %:
			Pre-Tax Cost of Debt:
			WACC:
			Long-Run Tax Rate:

INVESTMENT SUMMARY

We issue a **BUY** recommendation on **SS&C Technologies, Inc** with a target price of \$74.18, representing 42.7% upside potential on the closing price of \$51.97 on February 1, 2019. We believe that SS&C should reach the price target within a two-three year horizon. Our recommendation is based on the following:

Efficient distribution channel & Operational performance. To deliver its industry-leading innovations, SS&C has built a "highly motivated" sales team and a robust capability to integrate the acquisitions. Aggressive marketing is the hallmark of the company. SS&C is achieving this success even when spending roughly only 10% of sales on SG&A annually—this is a lot below the industry median of around 30%. SS&C's competitive advantage is demonstrated by its 95% customer retention rate. To understand better SS&C's culture, we contacted ten former SSNC employees and two agreed to talk to us. According to Bob Schwartz, former CTO of SS&C said: "one of the characteristics that differentiate SS&C from the crowd is that SS&C is very sales-oriented firm". He continued, saying that: "they understand very well the business of providing products and services around; they have tons of contacts through that space". Bob continued by saying that customer relationships that SS&C has built over the years is a real intangible asset and a competitive advantage. Overall, we think that, given the competitive landscape in the sector in which SS&C plays, this strong sales function and culture will enable SS&C to continue to capture market segment and continue to deliver an outstanding performance.

Leading and defensible market positioning. SS&C is the largest third-party fund administrator for the Alternative Investments market segment, bigger than even a behemoth like State Street. (Figure 1 shows subs Alternative AUM reported eVestement). Our expectation that Alternative-investment strategies will continue to grow is supported by PwC's forecast a dramatic growth of 8.7% CAGR over the five years from 2020 to 2025 (Appendix 1.2). Considering the leadership of SS&C in the sector supported by brand name recognition, its entrenched customer relationships and more importantly its scale advantages, we believe that SS&C is well positioned to benefit from AUM growth.

Strong Free Cash Flow Generation. SS&C has generated strong and predictable free cash flow for the past 10 years. The strong SS&C business model demonstrated its ability to support a recurring revenue generation which in aggregate posted 29.4% sales CAGR from 2015 indicating SS&C ability to capture industry leading market share. We view this as important given its highly leveraged capital structure. Furthermore, SS&C cash flow has permitted it to repay debt rapidly over the past 5 years. SS&C operates in a niche business with stable customer demand and end markets that features established customer based and long-term sales contracts (1 to 5 years). 94% of SS&C revenues are from recurring sources (Appendix 1.1). All these attributes contribute to increasing. Given its successful history of deleveraging after acquisition due to the predictability of robust cash flow, we contend SS&C can support its strategy under challenging circumstances.

Continued growth driven by acquisition and cross-selling strategy. SS&C is a profitable top-line growth company, with above industry growth. From December 31, 2012, to through December 31, 2017, the cumulative total return of SS&C common stock has beaten the Nasdaq composite index and the Nasdaq Computer and Data Processing Index based on historical results. In 2018, SS&C made three strategic acquisitions: DST Systems, EZ Software, and Intralinks, driving revenue higher by 64.1%. The addition of DST's financial services and healthcare businesses provides SS&C with additional scale across institutional, alternative, wealth management and healthcare segments, comprising 13,000 global clients. This reflects the company's focus on laying the groundwork for future continued growth through both acquisition and organic growth. There are reasons to believe that the synergy will continue to work well, given that the company reported DST annual run rate as of Q3 2018 are approximately \$200 implying 20% of the Q3 2018 revenues.

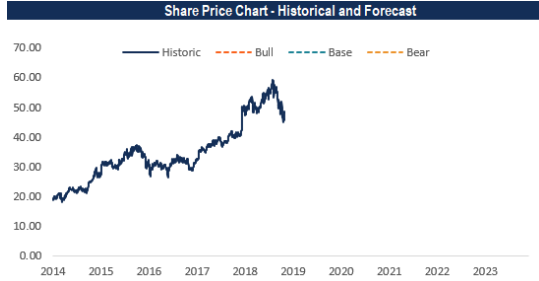


Figure 1 Share Price Historic

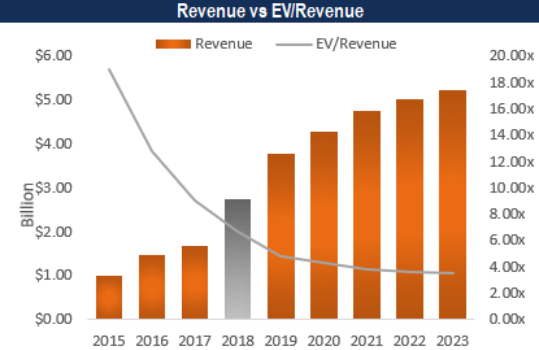


Figure 2 Revenue vs EV/Revenue

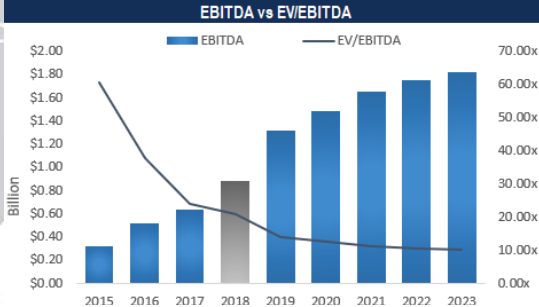


Figure 3 EBITDA vs EV/EBITDA

Key Financials	2015A	2016A	2017A	2018E	2019E	2020E	2021E	2022E	2023E	5Y CAGR
Revenue	1,000	1,481	1,675	2,748	3,779	4,274	4,744	5,029	5,230	14%
EBITDA	313	514	629	883	1,310	1,482	1,645	1,744	1,813	15%
Net Income	43	131	329	210	472	546	616	659	689	27%
Net Profit Margin	4%	9%	20%	8%	12%	13%	13%	13%	13%	
Free Cash Flow	282	432	641	466	1,336	1,119	1,251	1,333	1,401	25%
EPS (Diluted)	0.22	0.64	1.55	0.90	1.92	2.11	2.27	2.30	2.28	20%
CFPS (Diluted)	1.48	2.10	3.03	2.09	5.66	4.47	4.71	4.73	4.69	
Dividends per Share	0.25	0.25	0.27	0.29	0.55	0.60	0.65	0.66	0.65	18%
Payout Ratio %	106%	38%	17%	0%	31%	29%	29%	29%	29%	
EV/Revenue	19.00x	12.80x	9.00x	6.64x	4.83x	4.27x	3.85x	3.63x	3.49x	
EV/EBITDA	60.60x	37.60x	23.90x	20.67x	13.93x	12.31x	11.09x	10.46x	10.06x	

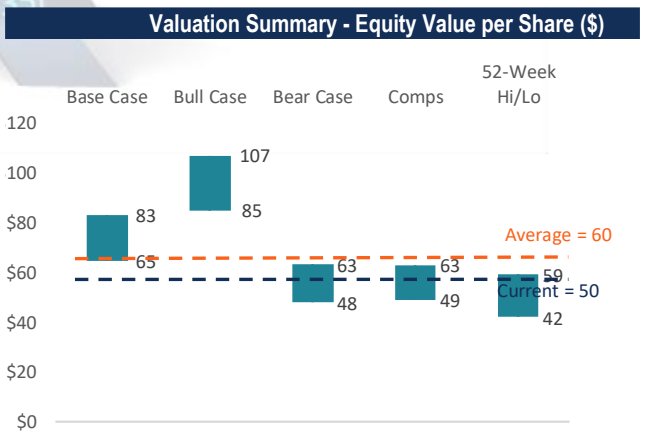


Figure 4 Valuation Summary

Table 1 Key Financials

2018 HIGHLIGHTS

Strong Q3 FY18 and Multiple Catalyst ahead. SS&C reported strong Q3 results on 10-06-18, with \$1.003 billion in adjusted revenue vs \$419.6 million for Q3 of FY17, representing a 135% YoY growth. The Adjusted operating income in the quarter was \$344.7 million, an increase of \$174.6 million approximately 102% over Q3 2017. The Adjusted EBITDA was \$365.9 million or 36.5% of adjusted revenue and increase approximately 105% over Q3 2017. The figures have outperformed consensus and analysts' estimates.

Continued Acquisition strategy with three acquisitions in 2018: DST Systems, EZ Software, and Intralinks, paid down debt to reach a leverage ratio slightly above 4.

An increase of stock price from \$28.94 on December 30, 2017 to \$40.48 on December 29, 2017, an annual return of 43.3%.

BUSINESS DESCRIPTION

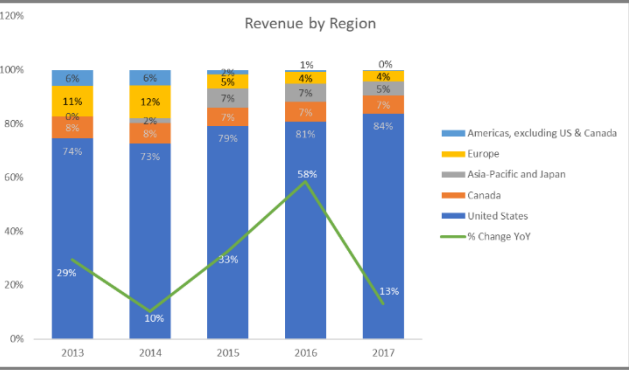


Figure 5 Revenue by region

Founded by charismatic Bill Stone in 1986 and headquartered in Windsor, Connecticut (U.S.A.), SS&C is a leading provider of mission-critical and sophisticated financial software to a range of investment, asset management and financial advisory businesses- both institutional and individual. Over the years it has extended its worldwide reach through a global network of offices by providing mission-critical and sophisticated financial software to a range of investment, asset management and financial advisory businesses. Their offerings include: Front-office functions: Such as trading and modeling, Middle-office functions: such as portfolio management and reporting, and back-office functions: such as accounting, performance measurement, reconciliation, reporting, processing and clearing. SS&C first went public in 1996

and in November 2005, the company was acquired by entities affiliated with The Carlyle Group and taken private. On March 31, 2010, SS&C Technologies Holdings, Inc. began trading on the NASDAQ Global Select Market under the ticker symbol "SSNC". As of November 2018, SS&C global network includes: 71 subsidiaries and more than 7,400 employees working out of 81 offices located across six continents.

Geographical Footprint

When we breakdown the market segment by industry, the first business segment of SS&C is the portfolio management. This segment is a combination of: Alternative Investment Management and Institutional Investment Management. These 2 business segments account for 93% of SS&C revenue in 2017. The solution allows SS&C to generate predictable recurring revenues via 1 to 5 year customer contracts. The main operating sources are:

1. Software-Enabled Services – Services SS&C provides to customers for their regular, mission-critical processes.
2. Maintenance and Term Licenses – Licenses fees for maintenance, which vary based on the number of perpetual licenses, annual fee increases, and customer retention.

Then there is the wealth management business segment. Wealth management is a people business, not a technology business. SS&C solutions and services for wealth managers reduce operational complexity and equip the client to be better at what he does best: building relationships, cultivating prospects and growing your business. This is a recurring based revenue stream through contracts and subscriptions.

In addition to those two segments, there is Commercial Lending which is SS&C Lending Management /Accounting solution for Banking Sectors, which generate revenue also from recurring contracts.

Then there's SS&C Target Application Software & Financial Advisory, that we will use it to compare with computing companies. The Target Application Service includes thing like property management, money market processing and financial Modeling which are pieces of software developed by SS&C that automates and streamlines customer daily accounting and administrative functions, but also give a clear and deep insights into customer operations. Categorized as non-Recurring revenues, these revenues are generated from professional services and perpetual license fees. The contractually recurring revenues, which include SSNC's software-enabled services and maintenance and term licenses revenues, represented 94% of total revenues in the year ended December 31, 2017.

To support and maintain this highly complicated supply chain operations without any disruption, SS&C deploys a high-quality expert in servicing the software-enabled service and the maintenance contracts. It represents the main cost of revenues for the company. On the other hand, cost of non -recurring consisted primarily of the cost related to personal utilized to provide implementation, conversation and training service, as well as integration and programing consulting, is the second leg of the cost of revenues as of Y2017.

SS&C provides customers with accounting services, consisting of portfolio accounting, fund accounting, insurance accounting and commercial, consumer and residential loan accounting. SS&C's portfolio accounting solutions are designed for seamless front-to-back office integration and allow customers to accommodate for unlimited success. Fund accounting enables customers to work with complex and multi-currency strategies. Insurance accounting solutions are tailored for the ever-changing regulations in the insurance industry, and allow customers in this industry to keep up with the fast-pace environment. Lastly, commercial, consumer and residential loan accounting services provide a unique real-time experience that gives customers in this industry the advantage of our products sharp insights.

SS&C provides customers with cutting-edge solutions for data management. SS&C's data management solutions support back-office operations in order for front-office operations to be as efficient as possible. SS&C's data management tools reduce overhead cost by allowing customer to aggregate critical data and allow visibility within the groups and parties involved in the specific projects. The teams and scientists behind the data management tools work with customers to create unique use-cases for each individual customer, so each customer gets the exact use they are looking for from the data management tools.

SS&C also deploys tools and platforms for employee benefits administration, offering flexible platform for employee benefits enrollment and administration. SS&C makes it easy and affordable (reducing unit costs of applications by as much as 74%) for employers to initiate benefits programs with their employees. SS&C is heavily involved with streamlining client communication. These solutions are tailored for front-office customers in order to improve client satisfaction, eliminate dependence on additional resources, increase efficiency and reduce errors. SS&C communication tools are made to give freedom to customers to customize their communications with their clients. Their tools allow or flexibility on how reports are communicated, and presentations are given. The automated factor of SS&C tools provide customers with the luxury to have any one employee set up a customized communication link without the worry of IT error.

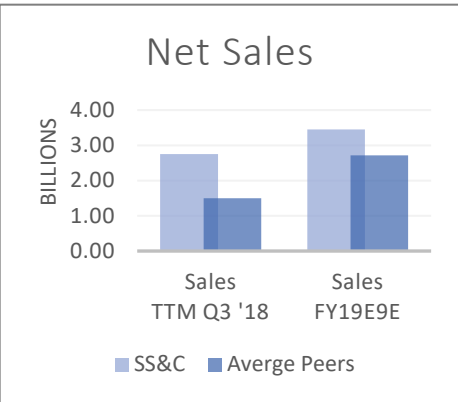


Figure 6 Net Sales. Source: Thomson Reuters, Team Assessment

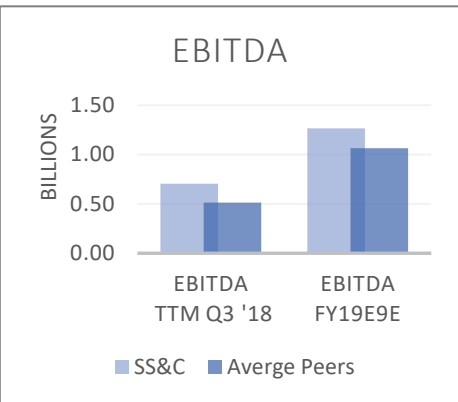


Figure 7 EBITDA. Source: Thomson Reuters, Team Assessment

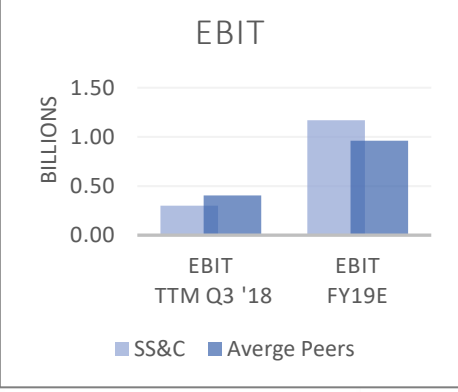


Figure 8 EBIT. Source: Thomson Reuters, Team Assessment

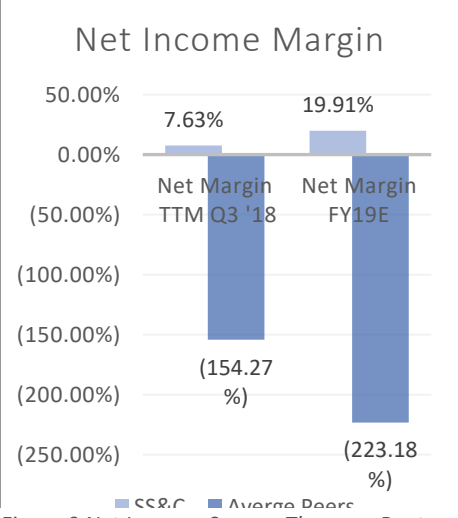


Figure 9 Net Income. Source: Thomson Reuters, Team Assessment

SS&C deploys tools that enable hedge funds to measure and track portfolio success. These tools are used in the back-office, in order to assess the impact of investment decisions across many different asset class or investment strategies. Using these measuring tools customers can better understand their rates of return on different ranges of measurement.

One of SS&C's main business portfolio management. SS&C's management solutions are built size businesses and different These portfolio management to deliver the ability to scale up more efficient, secure data, productivity and improve client-interaction.

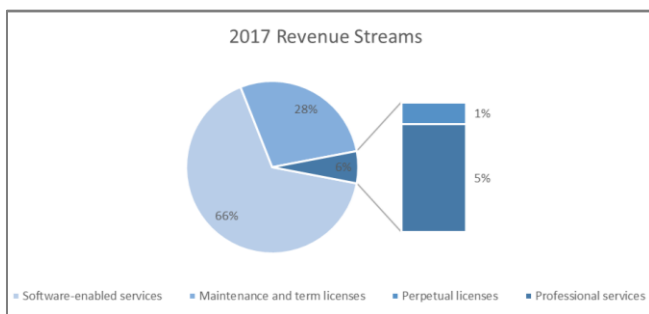
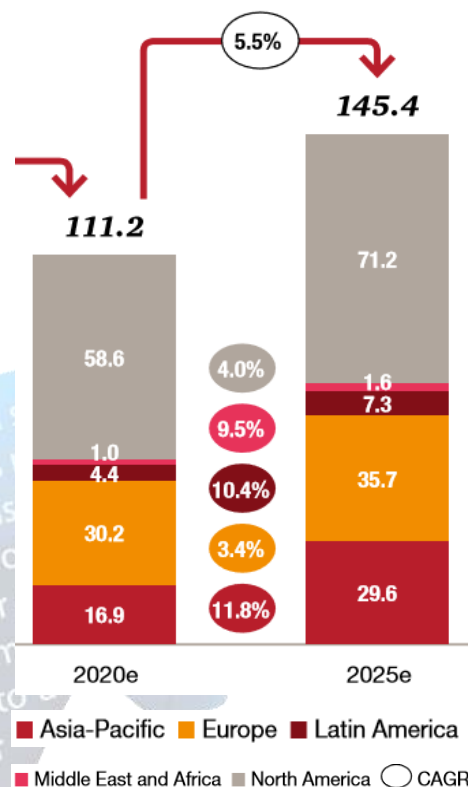


Figure 10 Revenue Streams

solutions involves portfolio to support different budget levels. solutions are meant or down, become increase to-customer

Figure 11 Global AuM by region in USD trillion. Source PwC



INDUSTRY OVERVIEW

SS&C total addressable market (TAM) can be categorized into 2 broad industry segments:

First, the **Portfolio Management industry** that segment that includes:

1. **Alternative Investments**, mainly hedge, private equity, real estate, infrastructure and commodity funds.
2. **Passive Investment**, including ETFs and passively-managed products
3. **Active Investment**, including active equity specialties and fixed income products

These 3 segments of Asset and Wealth Management have been combined into one that SS&C classifies as **Portfolio Management/Accounting**. According to PwC AWM Research Center, the Global Asset Management industry in 2016 was \$84.9 trillion of Account Under Management (AUM), and it is s expected to grow to over 145.4 trillion by 2025, a strong 6.2% CAGR over the 10 years period

Second, we have the **Financial Services IT** spending. Also, very large, the Worldwide spending on information technology (IT) by Financial Services Firms will be nearly \$500 billion in 2021, growing from \$440 billion in 2018, growing an 4.4% CAGR from 2018 to 2021, according to recent data from International Data Corporation (IDC).

With these two segments representing 95% of SS&C revenue and in doing our top down valuation of the company, we will use these 2 markets to see what SS&C's market share will be.

Macroeconomic Outlook

In 2017, 94% of SS&C revenues came from the United States. The outlook for economic growth in the United States remains a major trend that will drive the Portfolio Management industry.

Favorable US GDP Growth. The outlook for the economy remains favorable: according to the most recent forecast released by the Fed on December 19, 2018, **US GDP growth is expected to be 2.3 percent in 2019**. As US GDP grows, consumption growth will remain strong, supported by wage growth picking up as the labor market tightens further.

Increase Of Interest Rate To 3%. The Federal Open Market Committee raised the current fed funds **interest rate** to 2.5 percent on December 19, 2018. It expects to increase this **interest rate to 3% in 2019**. Increasing interest rates represents a growing cost of borrowing for both individuals and institutions. A greater cost for borrowing has negative effects for the industry. It can reduce the amount of leverage that operators can use when making investments.

Higher Pressure From Market Buyers & Regulators. Increased regulation, competition and new entrants are disrupting traditional value chains and revolutionizing wealth management industry. The rise in fees will be to be pushed down by investors and regulators. To prevent asset managers from paying commissions to incentivize distributors, more regulations are being introduced worldwide leading to lower cost retail products.

Wall Street strategists **forecast the S&P 500 in 2019** to go from a bearish end of **2,750 (Morgan Stanley)** for 2019 to a **bullish side of 3,350 (Credit Suisse's)** due to multiple expansions.

Fast Accumulation Of Personal Wealth In Developing Countries. Personal wealth is accumulating in developing countries, and individual retirement and pension funds are expanding. The Global AUM industry is set to manage a greater share of this wealth. If current growth is sustained, the industry's penetration rate (managed assets, as a proportion of total assets) will expand.

Uncertainty about Geopolitics, potential changes in US fiscal and monetary policy, Brexit, US-China's trade war and potential changes in US policies on regulation, tax and trade. In an event that the before-mentioned events conclude negatively, there could be consequences for financial markets, especially fully valued bond markets, and US equity markets that are currently at a 15-year high on cyclically adjusted price-earnings ratios.



Figure 13 Banking and IT Software Spending. Source Gartner. Team Assessment

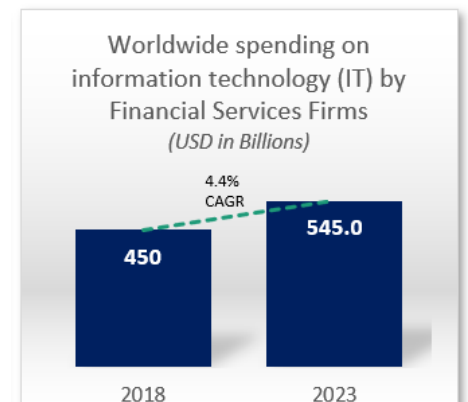


Figure 14 Worldwide Spending on IT by Financial Services. Source: Gartner, Team Assessment

Digital Technologies Change. Technology advances will drive major change across the value chain – including new client acquisition, customization of investment advice, research and portfolio management, middle and back office processes, distribution and client engagement. How well firms embrace technology will help to determine which prosper in the years ahead.

The Financial Service Software Industry is mainly driven by the competitive technology and innovation in the IT industry. The **technology is affecting financial services in a multitude of ways. We believe, SS&C as an IT company will need to continue to address these technological challenges if the company seeks to continue to be competitive.**

Strong Performance of The Computer Software Industry. Over the five years to 2018, software vendors continued to find strong growth from products and services in the IT sector. The outlook for spending on software and related services by corporates indicates health growth for 2019, especially for the following segments:

Move Towards Cloud Architecture and Hosted Services/Software As A Service (SaaS). The move to cloud-based will become the dominant infrastructure model in the next 5 years. Technology in the cloud helps firms reduce their internal infrastructure, system maintenance requirements and operational risk. According to the International Data Corporation (IDC), public cloud investments increased by 32% in 2015 to US \$21.7 billion and private cloud investments grew in 2015 by 17%, reaching US\$11.7 billion. Overall, total cloud IT infrastructure spending grew 26% in 2015, reaching US \$33.4 billion. Cloud software will grow at more than 22% in 2019 compared with 6 percent growth for all other forms of software, according to the latest forecast by Gartner, Inc. by offering the full spectrum of options: from secure, cloud-based technology hosting to co-sourcing specific workflows to full outsourcing of operational processes. SS&C utilizes this technology and has an edge over its competitors by allowing customers to focus on their core business and outsource part of their technology and operations.

New Wave Driven By Advances In Robotics And Artificial Intelligence (AI). Considering the astonishing advances in robotics and AI and machine learning in recent years, we are expecting to see a shift from standalone uses to full integration into a company's business activities over the next five years. The total AI market is expected to growth 54%, compound annually, to \$46.3 billion in 2020, based on IDC data. While there will be nuanced apps of AI, improvements in customer service and operations driven by AI are likely to be visible across industries.

Cyber-Security Will Be One Of The Top Risks Facing Financial Institutions. With the proliferation of physical objects that contain sensors, software and the ability to communicate, Cyber-security has become the leading challenge because insecure interfaces increase the risk of unauthorized access. It is expected that IoT growth introduces a new set of security risks and challenges that will require serious attention.

The long-term prospects for the financial services industry remain sound. Spurred on by recent tax-cuts, the positive employment data and the massive investment by Corporate America, the outlook for the domestic macro economy remain strong.

Market Overview

Analyzing SS&C total addressable market (TAM) by segment, we can consolidate into 2 segments by combining Passive, Active and Alternative Investment into one of Asset and Wealth Management category. That Global Asset and Wealth Management category in 2018 was 84.9 trillion but it is expected to grow to over 129 trillion by 2023. The second industry, IT and Software, has been projected to grow at a slower rate from 450 billion in 2018 to 545 billion in 2023.

These two markets represent the vast majority of SS&C business. In doing our top down valuation, we will be using these two markets to evaluate the market share for SS&C.

The Asset and Wealth Management industry (Portfolio Management) has experienced fluctuating revenue figures over the five years to 2018. Industry operators generate revenue from fees, which are largely calculated as a specific share of total assets under management (AUM). During the 5-year period, revenue is expected to increase at a 6.2% compound annual growth rate globally.

The Global spending trajectory in software by the corporation has remained steep over the past 5 years. The industry grew over the five years to 2018 as businesses and consumers increased their investments in software and computers. The Worldwide spending on IT by Financial Service market is growing, but not quite as quickly at a 4.4% CAGR. So, that's very important to understand as we think about forecasting SS&C's business.

Competitive Positioning

To compete effectively in the served market, SS&C relies primarily on the following core business strengths:

Leading And Defensible Market Positioning. SS&C is a leading provider of software and software as a service to the financial services industry. In the Alternative Investments market segment, the company is the largest third-party fund administrator, a level that leads trails far behind category leader State Street at 1.1billion Alternative Asset Under Administration as of Q1 2017 (Figure 1 shows subs Alternative AUM reported eVestement). With the expectation that AUM in alternative-investment strategies will reach 13.6 trillion in 2020 compared to 7.9 trillion in 2019, SS&C will sustain its leadership through innovation as peers exit the business. These new acquisitions by SS&C increased its footprint by increasing the worldwide customer reach to approximately 13,000 financial services and healthcare organizations. Clients buying more products have increased SS&C's competitive edge to drive higher revenue per customer by cross-selling

additional products. This market positions reflect SS&C entrenched customer relationships, brand name recognition, superior product and services and a scale advantages, among other strengths. These attributes create barriers to entry and increase the stability and predictability of the company cash flow. As noted in the 2017 annual report, 93% of SS&C sales came from recurring revenues.

Private equity and hedge funds assets are expected to reach \$14 trillion under management by the year 2023, according to a new report by Preqin.

The report, which is available on Preqin's website, states the investment industry had \$8.8 trillion in AUM as of Dec. 31, with that figure expected to grow 59% over the next five years.

Strong Free Cash Flow Generation. SS&C has strong and predictable free cash flows that provide resources in the hand of the company to expand into new projects. SS&C is able to support its periodic interest payment and debt principal repayment over the life

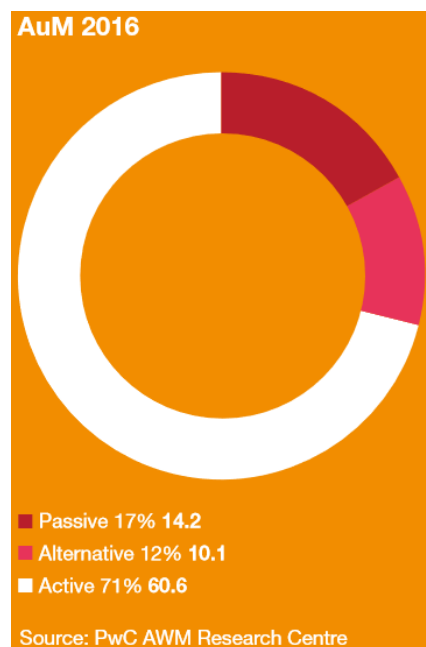


Figure 15 Global AuM in 2016 in USD trillion. Source: PwC



Figure 16 Global AuM projection for 2020 in USD trillion



Figure 17 Global AuM projection for 2025 in USD trillion

of the loans. This strong free cash flow generation is mainly because of the niche business with stable customer demand and end markets. Factors that contribute to increased predictability of SS&C cash flow generation are: strong brand name, an established customer base, and long-term sales contracts (1 - 5 years).

SS&C has long favored a strong sale supported model. SS&C is built upon a strong, centralized sales culture. From its inception, SS&C's business model has differentiated itself from the competitors by creating a sales leadership culture and environment. This efficient sales organization has allowed SS&C to build a reliable distribution network that can reach majority of its potential market. This team is highly paid based on commission and is able to strengthen SS&C Value Chain and differentiate from its competitors.

Efficiency Enhancement Of Operations. Integrating the SaaS platforms has increase SS&C operational excellence. The SaaS Platform automates day-to-day activities, supports disaster recovery efforts by offering quick, remote server access, and delivers database administration and monitoring services, ensuring database and platform integrity at all times. This is an opposing strategy in the case of State Street and Bank of New York. State Street and Bank of America outsource their applications to Software Application firms in the Financial Industry. Using the SaaS technology, SS&C was able to lock its customer base and generate organic growth by cross-selling new products and services. SS&C customer retention rates is one of the lowest in the industry and has long been above 95% on an annual basis (97% retention rate currently). In sum, with strong customer retention alongside the recurring revenue model (subscription/license fees), make cash flows easy to predict and stable.

Scalable And Efficient Delivery Process. SS&C provides a scalable platform to its customers and deploys a efficient service delivery and operation techniques. With industry participants tasked with exceptional performance within a challenging investment climate, investment managers rely on SS&C to provide end-to-end real-time wealth management and administration solution. Because SS&C is a technology company, it also owns all the underlying software tools it uses to deliver services to the customer. This positioning provides SS&C with a competitive advantage to the competitors who use a range of individual third-party products. These third-party products are composed of complicated patchwork technology, preventing them to quickly identify and deploy product improvement and respond to client. This software ownership also enhances SSNC capability to drive efficient operating by reducing any development and maintenance cost related to the life cycle of the product.

Very Strong Integration Track Capabilities Through Mergers & Acquisition. SS&C Technologies has a great history of acquisition-driven growth, along with driving margin expansion within acquired businesses within financial technology. It has successfully integrated a number of technology companies in the past years to streamline its operations and to build a reliable supply chain and enable the firm to realize a flexible, and competitive cost solution. Over the past 20 years, SS&C has made 49 acquisitions, increasing the value of Assets Under Management (AUM) handling by its software applications. The recent acquisition of DST by SS&C for \$5.4 billion materialize SS&C's move into the \$25 trillion US retirement market with DST's retirement and wealth management solutions.

Customer-Centric, Collaborative Approach: To stay competitive in this market, SS&C is also investing a huge portion of its margin into client-facing competencies to support customer book of businesses. There is a tangible collaboration between the associates and customer team members. Such strategy contributed significantly in building better client relationships. And to that end, Rothschild Asset Management has chosen to offshore it operation to SS&C primarily because this staff dedication and customer culture.

Proven Management Team; Trusted provider, SS&C gains talent resulting from its long-lasting relations with a highly diversified and growing client base and a long-lasting reliable software products and services for over 30 years. A range of experienced senior leaders, industry experts in the financial services industry including certified public accountants, chartered financial analysts, mathematicians and information technology professionals contributes significantly in building better client relationships.

The Competitive landscape of SS&C is complex and can be categorized into 2 broad segments. Looking at the comparable companies we can have in each segment, in terms of end-market sales, the companies that we are going to look at as being comparable are the ones shown above.

The first segment includes the companies offering the Asset and Wealth Management solutions for Alternative Investment, Institutional Investment and Asset management. You can see CITCO, State Street, Charles Rivers, BNY Mellon, FIS and StatPro in this category.

Also in the first segment we have Commercial & Investment Banking segment, where we include financial services the major companies offering Commercial and Investment banking software's, like Envestnet, Orion, Raymond James, Addepar, Fidelity and Charles Swabs.

Finally, we will also have the IT and Software application competitors which is the smallest revenue segment for SS&C, less than 4%. In this segment, we have companies like PNC Financials, MISYS, FIS, Other Specialized Financial Vendor and Corporate Internal Organization. When we build our DCF model, and when we perform our comps analysis, we will be keeping things organized into these three segments and these will form our sum of parts valuation analysis of SS&C

FINANCIAL ANALYSIS

The financial analysis uses financial results for fiscal 2013 through TTM 2018 for SS&C Technology, Inc to illustrate basic financial analysis, including common size statements and ratio analysis, that links to SS&C business strategy.

For the past 5 year from 2013 to 2017, SS&C has generated a dramatic growth. Revenue in total increased \$906 million over FY2013, representing a 24% annual CAGR. In 2016, SS&C generated a phenomenal increase in YoY sales of 48.1%, mainly due to the robust sales in SaaS, completed implementations, and a large new client moving to the SS&C full run-rate revenue plan. SS&C also benefited from the

continued delivering of acquisition synergies they have made, specially the acquisitions of DST Global Solutions in 2014, Advent Software in 2015 and other small acquisitions. The acquired differed revenue due to recent acquisitions contributed to growth by lowering SS&C income tax by 16.35% in 2017 and 103.86% for LTM Q32018. Portfolio Management revenues representing the biggest product mix by net sales has increased steadily from 2013 to 2017 achieving a 25% CAGR over the 5 years period. Loan Management business segment revenue experienced an exponential growth during the same period, with a growth spike in year 2016 at 352%, resulting in a 74% CAGR during the 5Y.

Net earnings as a percentage of sales fell in 2013 and steadily increased from 2015 to 2017. This net earnings growth is mostly driven by a revenue growth 48% in 2016 and 13% in 2017, high-income tax return on the bottom line mainly to acquired differed revenue, and



Figure 18 Main Competitors in Asset & Wealth Management Administration. Team Assessment



Figure 19 Main Competitors Commercial Banking Software. Team Assessment



Figure 20 Main Competitors in Other Target Services

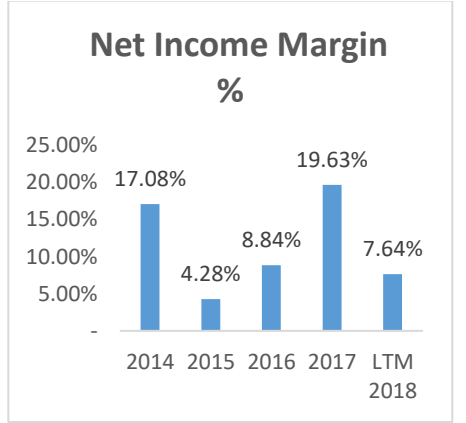


Figure 21 Net Income Margin %

the favorable impact of foreign currency exchange related to the strength of the US currency. SS&C was able to minimize its taxes and maximize profits. The Property Management business segment providing ~1% of SS&C total revenue has experienced a modest growth of 4% CAGR over the 5Y periods. Trading/treasury operations and Money Market processing contributed to less than 1% of SS&C growth over the past 5Y. The lowest-performing business-segment has been the Financial Modeling and Training service with a 5Y negative CAGR. This is due to the non-recurring demand in these two business segments. While revenue contribution for these 2-business areas are insignificant, we believe that there could be areas that the firm could look at to improve performance. It has been very volatile over the past 5 years and anything that can be done to provide more professional services to clients, for example by implementing an online training platform with a subscription business model, could be a significant driver of profitability and return. Net earnings as a percentage of sales fell in 2013 and steadily increased from 2015 to 2017. This net earnings growth is driven by a higher revenue from 2016 to 2017, by a decrease in GOGS, and high-income tax return on the bottom line. This shows the efficiency of SS&C managers to minimize taxes paid to the government in order to maximize profits. The Professional Services area has been very volatile over the past 5 years and anything that can be done to provide more professional services to client could be a significant driver of profitability and return. In the common size balance sheet, we see that "Other" non-current assets increased as a percentage of total assets, especially in 2015 and 2016, most probably another manifestation of the growing emphasis on acquisitions. To unlock the drivers of SS&C operational performance and to better understand what drove the 13.3% ROE in 2017, we have performed an analysis of the key financial ratios (Figure 21 to Figure 30) for FY2013 through FY2017 including LTM Q32018. We conclude our analysis by implementing a Pyramid of Ratios analysis based on Dupont Formula (Appendix 4.10).

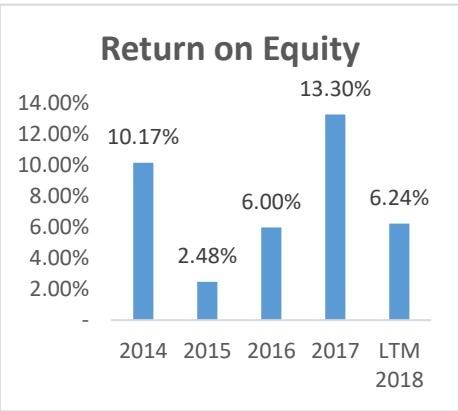


Figure 22 Return on Equity. Team Assessment

Profitability Management Ratios

The first part of the financial ratio illustrates margin for SS&C. Gross Margins are high, increasing in 2013, 2014, 2015, 2016 and 2017. Gross Profit in 2017 was \$789 million, an increase of \$562.53 approximately 19.3% over the 5Y period (2013-2017). This is due to a decrease in organic total operating expenses -\$15.7 million as well as the favorable impact from foreign currency translation of +\$0.8 million resulting from the strength of the U.S. dollar relative to the British pound. Gross Profit margin fell in 2016, primarily due to acquisitions of GFS, Conifer, Citigroup AIS, Primatics, Varden and Advent, which added costs of \$ 251. 8 million.

Operating Margin increased considerably over time from 2015 to 2016 as operating expenses fell as a percentage of revenue. Net Margins mirror the pattern for operating margins with 2013 to 2017. In 2015, net margin fell as SG&A and R&D increased. SG&A increased from 12.95% of the total revenue in 2014 to 19.27% of the revenue in 2015 while for the same period R&D increased from 7.46% of the revenue to 11.04% of the revenue (Ex). This trend appears to reflect the increase in total operating expenses in 2015 due to the acquisitions of Primatics, Advent, Varden and DSTGS, which added expenses of \$127.2 million in the period.

Asset Management Ratios

Total Asset Turnover Ratio. The total asset turnover ration started below one in 2014 and deteriorated from 2014 to 2015 to be 0.2x and slightly improved in 2016 to stabilize at a nearly 0.3x. So, we can see that on a net basis, the company is not getting more out of its fixed assets to generate sales. This deterioration is due to the recent acquisitions of Advent made by SS&C. The SS&C 2015 Annual report discloses that on July 8, 2015, the company completed the acquisition of Advent Software, Inc for gross consideration of 2.031 billion; this acquisition increased the investment in fixed asset. As of December 31st, 2015, the balance sheet shows that Net Property Plant & Equipment is approximately higher in 2015 than in 2014. Even with higher revenue in 2015, this high fix asset increase deteriorated the Asset Turnover ratio in 2015. This is not surprising for a company like SS&C, who has an aggressive growth strategy through acquisition.

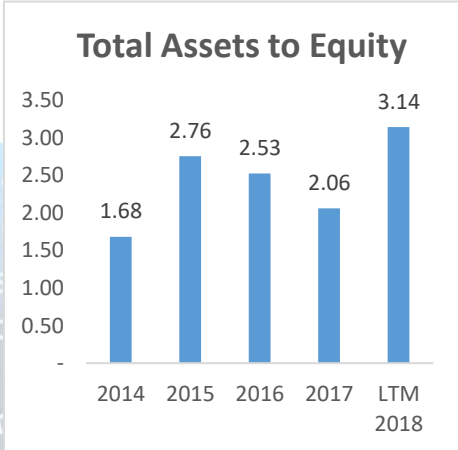


Figure 23 Return on Assets. Team Assessment

Account Receivable. The account receivable ratio has declined steadily from 2013 to 2017, and the account receivable days have gone up slightly from 44.11 in 2014 to 57.33 in LTM Q32018. It is taking longer over time to receive payment for the revenue. The steady increase in this measure is in line with the new acquisition made, given that the majority of Advent's term license clients are billed on an annual cycle, rather than monthly, resulting in a slightly longer collection cycle and corresponding increase in days' sales outstanding.

Account Payable. There is continuous increase of the account payable ratio from 2013 to 2017, associated with a decrease in account payable days. All else being equal, this is not a good sign because the company is paying its supplier and its vendors more quickly, and that is a use of cash for the business. There could be strategic reasons for this, given that SS&C is a highly leverage company and by improving its account payable days, it expects to improve relationships with vendors and receive better terms on the purchases with those vendors. So, it cannot be said that this is not a good sign, but all else being equal, SS&C could delay the payment of it supplier and vendors over a longer period of time and save that cash.

Long-term Debt to Capital Ratio. The debt management ratios shows that long-term debt has increase as a percentage of capital for SS&C between 2013 and LTM Q3 2018. This is because SS&C had 2 major bond issues outstanding over the period. SS&C Quarterly reports Q3 2018 disclose that at September 30, 2018, SS&C debt consisted of 6.729 billion of Senior secured facilities with a weighted-average interest rate of 4.49% and 3.75% 6.25% senior note due in August 2017. As long-term debt has grown and asset has increased in a lower proportion, the long-term debt to total assets measure has declined.

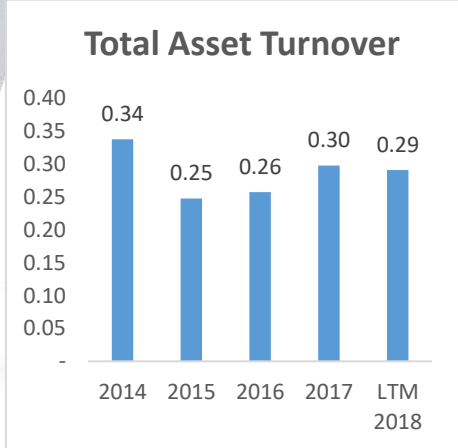


Figure 24 Asset Turnover Ratio. Team Assessment

Quick Ratio. With a quick ratio of higher than 1, from 2013 to 2015, SS&C appeared to be well positioned to cover its current liabilities and has liquid assets available to cover each dollar of short-term debt. However, starting from 2015 to 2016, due to the massive acquisitions made by SS&C, the amount of interest being paid has increased which declined the quick ratio measure. In the LTM Q3 2018 figure shown, there is a dramatic increase in quick ratio of 1.6, outperforming the 1.4 spikes of 2015. This high performance is mainly due to the high synergies of the DST and Advent reflected a higher margin.

Current Ratio. The current ratio tells the same story. It has been declining over time but is improving to reach a current ratio of 1, albeit not as high as in past years.

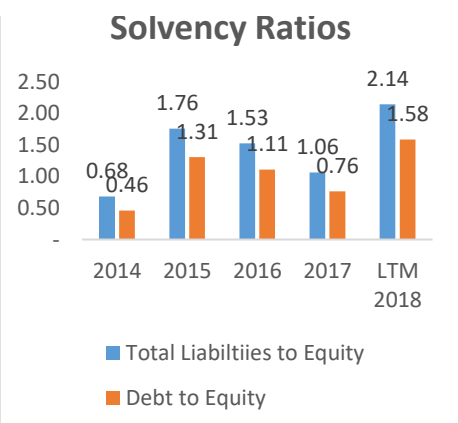


Figure 25 Solvency Ratio. Team Assessment

We summarize our financial analysis by presenting the Dupont analysis of ROE (Dupont pyramid). The Dupont analysis of ROE presented in Appendix 4.10 reveals that SS&C got a steady improvement on return on equity, which increased phenomenal from 9.57% in 2013 to 13.3% in 2017. Great increasing profit margin and an increasing asset leverage mostly drove this return on equity. On the bottom line, the asset turnover ratio stayed constant which is understandable due to the number of recent acquisitions made by the

company. However, we do believe there are areas of improvement for the company. The firm could look at to improve performance in asset turnover; any small improvements 2017 asset turnover ratio would have created even greater return for shareholder.

In the pyramid, we see that the gross profit margin increased substantially from 2013 to 2017, reaching a peak of 47.09% FY2017. This growth was a result of increase in sales and particularly the increase of customer base after the major acquisitions of Wells Fargo's Global Fund Services Business and Citi's Alternative Investor Services Business in 2016, Advent Software in 2015 and DST Global Solutions in 2014.

In particular, our analysis shows that SS&C has some areas for improvement; anything that can be done to lower the cost of sales could be a significant driver of profitability and return on equity.

SS&C also has great room for improvement in SG&A. From 2013 SG&A increased incrementally, due in part to the multiple operational cost after the successive acquisitions, declining partially the operation profit from 2013 to 2017. R&D has been constantly increasing since 2013 reaching a high of 9.15% of the total revenue. This increase results from the strategy of SS&C to build new products to implement its cross-selling strategy. While this strategy has been beneficial for SS&C until now, SS&C needs to control this area because Alternative investment (where the company generate most of its revenue) is quite competitive and spending more on R&D could hurt profitability in the long term. SG&A and R&D are important levers for the business to pull in order to increase its operating profit.

Accounts payable has some room to slow down, meaning that the company could take a little bit longer to pay some of its suppliers creating room to generate cash. As a service company, SS&C does not have inventory cost. Account receivable has deteriorated to an average day's sale out of 58.

And then if we scroll down at the very bottom and look at the solvency ratios, we realize that the company essentially has increased debt in 2015 and 2016, mainly due the Advent Systems, Inc. and smaller acquisitions made by SS&C and therefore, increasing the leverage of the business and boosting ROE. We also noticed that the company has made a drastic reduction of its debt from 2015 to 2017, mainly due to the generated cash available by the company at the end of the fiscal year

VALUATION

We issue a \$74.21 fair value estimate for SS&C Technologies, Inc. representing a 42.8% upside from the closing price of \$51.91 per share as of February 1st, 2019. Our estimate implies an enterprise value/adjusted EBITDA of 16 times, and a 5-year average Free Cash Flow Yield 4.7%.

Two valuation approaches have been used to value SS&C Technology, Inc. These approaches are:

Table 2 Discounted Cash Flow Analysis. Team Assessment

	Historical Period			CAGR ('15-'17)	LMT 9-30-2018			Projection Period					CAGR ('18-'23)
	2015A	2016A	2017A		2018E	2019E	2020E	2021E	2022E	2023E			
Sales	\$1,000.3	\$1,481.4	\$1,675.3	29.4%	\$2,748.5	\$3,779.2	\$4,274.3	\$4,744.4	\$5,029.1	\$5,230.2		13.7%	
% growth	30.3%	48.1%	13.1%		64.1%	37.6%	13.1%	13.0%	6.0%	4.0%			
COGS	532.4	800.5	886.4		1,601.3	2,033.2	2,299.5	2,552.5	2,705.6	2,813.9			
Gross Profit	\$467.9	\$680.9	\$788.9	29.8%	\$1,147.2	\$1,746.0	\$1,974.7	\$2,191.9	\$2,323.4	\$2,416.4		16.1%	
% margin	46.8%	46.0%	47.1%		41.7%	46.2%	46.2%	46.2%	46.2%	46.2%			
SG&A + R&D	303.2	392.3	392.0		662.0	982.6	1,111.3	1,233.5	1,307.6	1,359.9			
EBITDA	\$313.2	\$513.9	\$628.7	41.7%	\$883.0	\$1,310.4	\$1,482.0	\$1,645.0	\$1,743.7	\$1,813.5		15.6%	
% margin	31.3%	34.7%	37.6%		32.1%	34.6%	34.6%	34.6%	34.6%	34.6%			
Depreciation & Amortization	148.4	225.2	231.8		397.8	547.0	618.6	686.7	727.9	757.0			
EBIT	\$164.7	\$288.7	\$396.9	56.2%	\$485.2	\$763.4	\$863.4	\$958.4	\$1,015.9	\$1,056.5		16.8%	
% margin	16.5%	19.5%	23.7%		17.7%	20.2%	20.2%	20.2%	20.2%	20.2%			
Taxes	18.0	32.6	(46.2)		(106.9)	196.5	224.5	249.2	264.1	274.7			
EBIAT	\$146.8	\$256.1	\$443.1	73.8%	\$592.1	\$564.9	\$638.9	\$709.2	\$751.7	\$781.8		5.7%	
Plus: Depreciation & Amortization	148.4	225.2	231.8		397.8	547.0	618.6	686.7	727.9	757.0			
Less: Capital Expenditures	(13.6)	(27.9)	(35.6)		(84.0)	(90.7)	(102.6)	(113.9)	(120.7)	(125.5)			
Less: Increase in Net Working Capital		(21.8)	1.5		(439.9)	315.1	(36.0)	(31.3)	(26.3)	(12.8)			
Unlevered Free Cash Flow	\$281.6	\$431.5	\$640.8		\$466.0	\$1,336.2	\$1,118.9	\$1,250.7	\$1,332.6	\$1,400.5		24.6%	
% growth		53.2%	48.5%		(27.3%)	186.8%	(16.3%)	11.8%	6.6%	5.1%			
Free Cash Flow Yield		8.3%			1.9%	5.4%	4.6%	5.1%	5.4%	5.7%			
WACC													
Discount Period						1.0	2.0	3.0	4.0	5.0			
Discount Factor						0.92	0.85	0.79	0.73	0.67			
Present Value of Free Cash Flow						\$1,233.8	\$954.0	\$984.6	\$968.7	\$940.1			

1) The Income Approach (Discounted Cash Flow)

2) The Market approach (Multiple Analysis).

In the following section, we presented our investment thesis and discussed the methods utilized under each approach and how we reached the fair value of SS&C Technology Inc.

DISCOUNTED CASH FLOW ANALYSIS. To determine the expected future income stream of SS&C, we reviewed articles and public available information provided about SS&C. We also used SS&C historical financials, management projection guidance (Q3 earning calls, Teams Conference call.).

1. Free Cash Flow Projection

Historical Performance Analysis. Our DCF analysis started by laying out the target's historical financial data for the prior 3 years period (2015, 2016 and 2017) and LTM Sept 30, 2018 (Table 2).

We considered that a 5 years horizon (2019 - 2023) as it spans at least one business cycle in the Technology industry. Considering that we had limited guidance of management projections of Financial performance, we used consensus estimates for financial statistics to form the basis for developing a set of projections

Liquidity Ratios

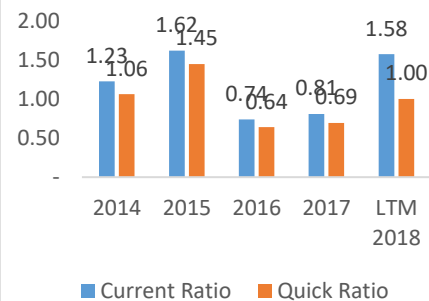


Figure 26 Liquidity Ratio. Team Assessment

R&D Margin %

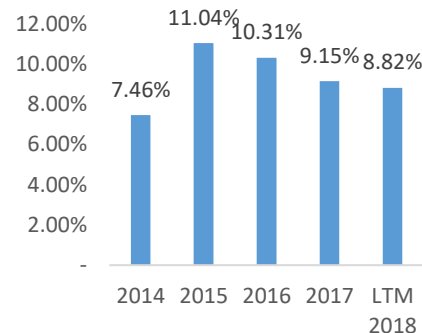


Figure 24 R&D Spending Margin. Team Assessment

EBIT Margin %

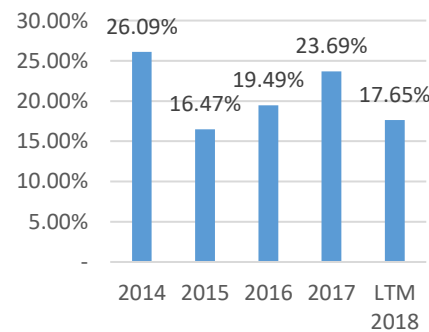


Figure 28 EBIT Margin %. Team Assessment

SG&A Margin %

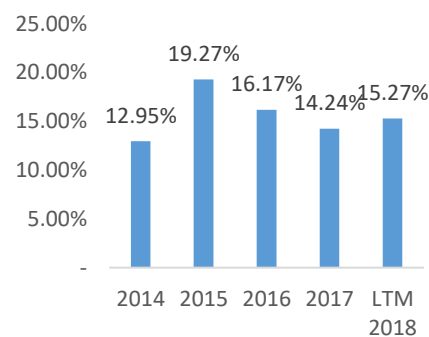


Figure 29 SG&A Margin %. Team Assessment

Sales, EBITDA and EBIT Projection

We projected SS&C top line growth for the first two years of the projection period based on consensus estimates of 14 analyst that follow the company.

Using the management guidance during the Q3 earning call, we arrived at 2018E YoY growth rate of 102.7%. For 2019, our sales growth estimation was based on average projected sales growth for SS&C of 14 analysts. The average projected sales growth rate consensus estimates for the 2019E is 36.90%. As noted, SS&C has a track record of beating analyst estimates, we are confident that this trend will continue considering that SS&C profitability will be boosted by the cross-selling and expansion into the Institutional Investment business segment. We are forecasting a revenue increase of 37.9% over 2018. We also think SS&C revenue growing to increase due to product synergy. Looking to the growth rate patterns of previous SS&C acquisitions, we expect by 2020, the growth rate will decrease to reach the growth of 13.1% prior the massive investment. The following years 2021, 2022 and 2023, we expect to see slight decrease respectively to 11%, 6% and 4% reaching the industry growth.

COGS was held constant at the prior historical years level of 53%. To drive EBIT Projections, we held D&A constant at prior historical year levels. Given that SS&C is a Sale oriented company, currently we anticipate a gradual increase of SG&A expenses to support the cross-selling strategy announced by Bill Stone during the Q3 2018 earning call.

We maintained tax expense projection for each year at SS&C marginal tax rate of 26%. This tax rate was applied on an annual basis of the EBIT to arrive at the EBIT. We projected SS&C Capex as a percentage of sales using the CFO guidance during the Q3 earning call between 2.4% and 2.7%. We expect capex to stay on this range as the firm after recent acquisitions is focus on consolidating the transactions and synergizing to increase their customer base and accelerate business.

Change in Net Working Capital. After the major acquisitions SS&C has made for the past 3 years, NWC reached a picked last year representing a 20% increase compared to 2017. Long-term, our forecast for coming years 2019 to 2023, we forecast that SS&C in order enhance its operation will focus on controlling its Working Capital to reach the average historical level performance of the period 2015 to 2017 of 7%. To be conservative in our Base Case financial projections, we did not assume any improvement in working capital efficiency during the projection period. As such, DSO, DPO, prepaid expenses, other current assets and other current liabilities were at an average percentage level of the sales: DSO: DPO: , prepaid expenses and other current liabilities: accrued liabilities: and other current liabilities:

After computing all the lines (Table 2), Annual projected SS&C FCF (Free Cash Flows) have shown an increase from \$1,078.4 million in 2019E to \$1,271.6 million in 2023. In Table 4, we summarized respectively all the assumption we have considered and the SS&C Projected Cash Flow for our Base Case.

1. Determine Weighted Average Cost of Capital (WACC). In order to find the Weighted Average Cost of Capital of SS&C, we have made a step-b-step procedure by: 1) Determining Target Capital Structure, 2) Estimate SS&C Cost of Debt and the Cost of Equity. Once we have all the component necessary, we calculated the WACC resulting in a 8.3%. Appendix 4.15 displays each of our assumptions and calculations for determining SS&C WACC.

3. Determine Terminal Value

Exit Multiple Method. To determine the Terminal Value of SS&C, we used the Exit Multiple Method instead of the perpetuity approach. The LTM EV/EBITDA trading multiples for SS&C's closest public comparable companies tend to trade on average in a range of 15x to 17x LTM EBITDA. When we multiply the 16x mid-point of this range by SS&C terminal year EBITDA \$1,814.6 million, we found a terminal value of \$25,067.8 million

4. Calculate Present Value and Determine Valuation

Present Value. Using the WACC previously computed, we projected annual SS&C annual FCF by discounting them to the present. The present value calculation drove us the present value of the Terminal Value: \$19,488.9

Determine Valuation. The results of the present value calculations for the projected FCF and terminal value were summed to provide SS&C Enterprise Value of \$24,565.8 million.

Implied Equity Value. By subtracting the net debt from the Enterprise Value, we calculated the implied equity value of ...for SS&C. We then determined the implied share price by dividing the implied equity value the fully diluted shares outstanding

Based on our valuation, we issue a \$74.21 fair value estimate for SS&C, which imply a EV/EBITDA of 16 times, and a free cash flow yield of 4.7% of average for the next 5 years.

We forecast sales to increase at a 13.7% CAGR over the next 5 years. We expect that the ability of SS&C to drive cost synergies from its acquisitions of DST, Eze Software and Intralinks will generate growth for the next few years. We also think SS&C profitability will be boosted by the cross-selling and expansion into the Institutional Investment. We believe that a positive outlook of the economy with new fund to pick up from ground could increase the current organic growth of 5% to near 7%.

Assumptions	2015A	2016A	2017A	2018E	2019E	2020E	2021E	2022E	2023E
Sales (% growth)	NA	48.1%	13.1%	64.1%	37.5%	13.1%	11.0%	6.0%	4.0%
COGS (% sales)	53.2%	54.0%	52.9%	58.3%	53.8%	53.8%	53.8%	53.8%	53.8%
SG&A (% sales)	30.3%	26.5%	23.4%	24.1%	26.0%	26.0%	26.0%	26.0%	26.0%
Depreciation & Amortization (% sales)	14.8%	15.2%	13.8%	14.5%	14.5%	14.5%	14.5%	14.5%	14.5%
Capital Expenditures (% sales)	1.4%	1.9%	2.1%	3.1%	2.4%	2.4%	2.4%	2.4%	2.4%
Tax Rate	38.0%	38.0%	38.0%	26.0%	26.0%	26.0%	26.0%	26.0%	26.0%
Working Capital (% sales)	8.0%	6.9%	6.0%	19.7%	6.0%	6.0%	6.0%	6.0%	6.0%

We recognize that growth prospects in emerging regions especially Asia will offer the potential for a lifetime of transitions ahead. The

Table 4 Assumptions

market for private wealth management in Asia is huge and growing. According to PwC, Developing Asia-Pacific's dynamism is set to spur growth of 8.7% a year from 2016 to 2020, accelerating to 11.8% from 2020 to 2025. This will lift regional assets from US\$12.1

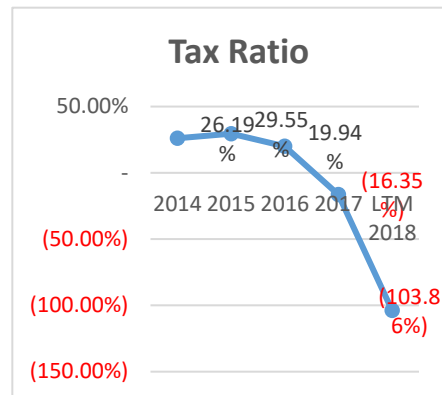


Figure 30 Tax Ratio. Team Assessment

Terminal Value Calculation using Exit Multiple	
Terminal Year EBITDA (2023E)	\$1,813.5
Exit Multiple	16.0x
Terminal Value	\$29,015.7
Discount Factor	0.67
Present Value of Terminal Value	\$19,476.7
% of Enterprise Value	
Enterprise Value	\$24,557.9

Figure 31 Terminal Value. Team Assessment

Implied Equity Value and Share Price	
Enterprise Value	\$24,557.9
Less: Total Debt	(6,686.1)
Less: Preferred Securities	-
Less: Noncontrolling Interest	-
Plus: Cash and Cash Equivalents	732.2
Implied Equity Value	\$18,604.0
Number of diluted Shares Outstanding	250.8
Implied Share Price	\$74.18

Figure 32 Implied Equity Value & Share Price. Team Assessment

Implied Perpetuity Growth Rate	
Terminal Year Free Cash Flow (2023E)	\$1,400.5
WACC	8.3%
Terminal Value Calculation using Exit Multiple	\$29,015.7
Implied Perpetuity Growth Rate	3.1%
Implied EV/EBITDA	
Enterprise Value	\$24,557.9
LTM 9/30/2018 EBITDA	883.0
Implied EV/EBITDA	27.8x

Figure 33 Implied EV/EBIDA. Team Assessment

Calculation of the Share Price	
Enterprise Value	\$24,557.9
(-) Total Debt	(6,686.1)
(-) Preferred Securities	-
(-) Noncontrolling Interest	-
(+) Cash and Cash Equivalents	732.2
Equity Value	\$18,604.0
Fully Diluted Shares Outstanding	250.800
Implied Share Price	\$74.18

trillion to US\$29.6 trillion. the highest growth rates in Asia is expected to have the highest growth rates over the next 5 years (Appendix 5 below)

5. Sensitivity Analysis

Given that SS&C is a highly levered company, we believe that performing a series of sensitivity analyses of WACC and exit multiple for several key outputs, including enterprise value, equity value, perpetuity growth rate, EV/LTM EBITDA and PV of terminal value as a percentage of enterprise value would be useful to the perspective of our assumptions and evaluate the company in different scenarios. See Figure 34 to 39 for the scenario analysis.

SS&C Sales and EBITDA grew at a 29.4% and 41.7% CAGR respectively over the 3Y period 2015, 2016 and 2017. We also noticed for the same period that EBITDA margin ranged between a solid 31.3% and 31% while the average capex as a percentage of sales was 4.3%. Looking at the working capital performance, SS&C average DSO, DIH and DPO for 2014 to 2017 period were 46.0, 102.8 and 40.0 days, respectively. For the LTM period, EBITDA margin was 20.7% and capex as a percentage of sales was 4.5%.

MULTIPLE ANALYSIS.

We also valued SS&C on the basis of 2 multiples (EV/EBITDA and EV/Revenue) using a peer group having similar market capitalization (Large Cap), similar sectors and industry and targeting the similar business segments. We gathered the following data

- Market Data including: Market Capitalization, Cash & Short-Term Investments, Net Debt Minority Interest to find the enterprise Value

SS&C Technologies, Comparable Analysis (\$ in millions)															
Company Name (in millions, except per share data)	Symbol	Period End Date (LTM)	Market Data				Financial Data				EV/Revenue		EV/EBITDA		
			Market Capitaliz	Cash & Short	Net Debt	Minority Interest	Enterprise Value	LTM Total	2019E Total	LTM EBITDA	2019E EBITDA	LTM	2019E	LTM	2019E
Asset and Wealth Management															
ENVENET, INC.	ENV	09/30/2018	\$2,520	\$154	\$456	(\$0)	\$2,823	\$785	\$813	\$93	\$157	3.6x	3.5x	30.2x	18.0x
FIDELITY NATIONAL INFORMATION SERVICE FIS	FIS	09/30/2018	\$35,107	\$632	\$9,038	\$85	\$43,598	\$8,877	\$8,637	\$2,616	\$3,349	4.9x	5.0x	16.7x	13.0x
EURONET WORLDWIDE, INC.	EEFT	09/30/2018	\$5,948	\$1,129	\$889	\$0	\$6,707	\$2,492	\$2,551	\$411	\$495	2.3x	2.2x	13.9x	11.5x
SEI INVESTMENTS COMPANY	SEIC	09/30/2018	\$7,559	\$755	\$0	\$0	\$6,804	\$1,627	\$1,625	\$532	\$516	4.2x	4.2x	12.8x	13.2x
Mean			\$12,783	\$667	\$2,596	\$21	\$14,733	\$3,445	\$3,407	\$913	\$1,129	3.7x	3.7x	18.4x	13.9x
Median			\$6,753	\$693	\$672	\$0	\$6,256	\$2,059	\$2,088	\$472	\$506	3.9x	3.8x	15.3x	13.1x
Min			\$2,520	\$154	\$0	(\$0)	\$2,823	\$785	\$813	\$93	\$157	2.3x	2.2x	12.8x	11.5x
Max			\$35,107	\$1,129	\$9,038	\$85	\$43,598	\$8,877	\$8,637	\$2,616	\$3,349	4.9x	5.0x	30.2x	18.0x
IT & Software Development															
FACTSET RESEARCH SYSTEMS INC.	FDS	09/30/2018	\$8,360	\$198	\$575	\$0	\$8,737	\$1,373	\$1,435	\$435	\$509	6.4x	6.1x	20.1x	17.2x
BROADRIDGE FINANCIAL SOLUTIONS, INC.	BR	09/30/2018	\$12,023	\$205	\$1,144	\$0	\$12,962	\$4,378	\$4,475	\$779	\$972	3.0x	2.9x	16.6x	13.3x
BOTTOMLINE TECHNOLOGIES (DE), INC.	EPAY	12/31/2018	\$1,832	\$96	\$110	\$0	\$1,846	\$405	\$426	\$54	\$102	4.6x	4.3x	34.5x	18.1x
COGNIZANT TECHNOLOGY SOLUTIONS	CTSH	9/30/2018	\$40,613	\$4,763	\$724	\$0	\$36,574	\$15,824	\$16,111	\$3,208	\$3,565	2.3x	2.3x	11.4x	10.3x
Cboe Global Markets, Inc.	CBOE	09/30/2018	\$10,553	\$138	\$1,215	\$9	\$11,639	\$2,642	\$1,204	\$749	\$828	4.4x	9.7x	15.5x	14.1x
Mean			\$14,676	\$1,080	\$753	\$2	\$14,352	\$4,924	\$4,730	\$1,045	\$1,195	4.1x	5.1x	19.6x	14.6x
Median			\$10,553	\$198	\$724	\$0	\$11,639	\$2,642	\$1,435	\$749	\$828	4.4x	4.3x	16.6x	14.1x
Min			\$1,832	\$96	\$110	\$0	\$1,846	\$405	\$426	\$54	\$102	2.3x	2.2x	11.4x	10.3x
Max			\$40,613	\$4,763	\$1,215	\$9	\$36,574	\$15,824	\$16,111	\$3,208	\$3,565	6.4x	9.7x	34.5x	18.1x

- Financial Data including: LTM Total Revenue, 2019E Total Revenue and LTM EBITDA to find the growth ratios

Using the LTM 09/30/2018 EV/EBITDA multiple, we valued SS&C. This approach leads us to establish a multiple range of 15x and 17x LTM EBITDA. By multiplying the endpoints of the range by the value of SS&C LTM 3Q 2018 EBITDA of \$883 million, we were able to calculate SS&C value range of approximately \$13245 and \$15011

INVESTMENT RISKS

Business Risks

SS&C may not achieve the anticipated benefits from acquisitions and may face difficulties in integrating acquisitions (BR1). SS&C has acquired and intend in the future to acquire companies, products or technologies that SS&C believe could complement or expand their business, augment market coverage, enhance technical capabilities or otherwise offer growth opportunities. For example, on January 11, 2018, SS&C entered into a definitive agreement to acquire DST. However, acquisitions could subject SS&C to contingent or unknown liabilities, and SS&C may have to incur debt or severance liabilities or write off investments, infrastructure costs or other assets. SS&C success is also dependent on their ability to complete the integration of the operations of acquired businesses in an efficient and effective manner, which may be difficult to accomplish in the rapidly changing financial services software and services industry.

SS&C is dependent on their senior management and their continued performance and productivity (BR2). SS&C is dependent on the continued efforts of the members of senior management. The loss of any of the members of senior management may cause a significant disruption in business, jeopardize existing customer relationships, impair compliance efforts as a public company, and have a material adverse effect on our business objectives.

Table 5 Multiple Analysis. Team Assessment

SS&C's software-enabled services may be subject to disruptions, attacks or failures that could adversely affect their reputation and business. SS&C's software-enabled services maintain and process confidential data and process trades and perform other back-office functions, including wiring funds, on behalf of clients, some of which is critical to their business operations. For example, the trading systems maintain account and trading information for our clients and their customers. The internal technology infrastructure on which the software-enabled services depend may be subject to disruptions or may otherwise fail to operate properly or become disabled or damaged as a result of a number of factors, including events that are wholly or partially beyond control and that could adversely affect the ability to process transactions, provide services or otherwise appropriately conduct our business activities.

Enterprise Value						
WACC	Exit Multiple					
	15.0x	15.5x	16.0x	16.5x	17.0x	
	7.3%	24,347	24,984	25,622	26,259	26,897
	7.8%	23,837	24,460	25,083	25,706	26,329
	8.3%	23,341	23,950	\$24,559	25,167	25,776
	8.8%	22,859	23,454	24,048	24,643	25,238
9.3%	22,389	22,970	23,551	24,133	24,714	

Figure 34 Share Price Calculation Team Assessment

Implied Equity Value						
WACC	Exit Multiple					
	15.0x	15.5x	16.0x	16.5x	17.0x	
	7.3%	17,388	17,996	\$18,605	19,214	19,822
	7.8%	17,000	17,588	18,179	18,762	19,345
	8.3%	16,613	17,196	17,779	18,362	18,945
	8.8%	16,226	16,800	17,375	17,950	18,525
9.3%	15,840	16,415	16,990	17,565	18,140	

Figure 35 Enterprise Value. Sensitivity Analysis. Team Assessment

Implied Share Price						
WACC	Exit Multiple					
	15.0x	15.5x	16.0x	16.5x	17.0x	
	7.3%	71.31	73.19	75.07	76.95	78.83
	7.8%	71.31	73.19	75.07	76.95	78.83
	8.3%	69.33	71.76	\$74.18	76.61	79.04
	8.8%	67.40	69.78	72.15	74.52	76.89
9.3%	65.53	67.85	70.17	72.48	74.80	

Figure 36 Implied Value Equity Sensitivity Analysis. Team Assessment36

Implied Enterprise Value / LTM EBITDA						
WACC	Exit Multiple					
	15.0x	15.5x	16.0x	16.5x	17.0x	
	7.3%	27.6x	28.3x	29.0x	29.7x	30.5x
	7.8%	27.0x	27.7x	28.4x	29.1x	29.8x
	8.3%	26.4x	27.1x	27.8x	28.5x	29.2x
	8.8%	25.9x	26.6x	27.2x	27.9x	28.6x
9.3%	25.4x	26.0x	26.7x	27.3x	28.0x	

PV of Terminal Value as % of Enterprise Value						
WACC	Exit Multiple					
	15.0x	15.5x	16.0x	16.5x	17.0x	
	7.3%	78.6%	79.1%	79.6%	80.1%	80.6%
	7.8%	78.4%	78.9%	79.5%	80.0%	80.4%
	8.3%	78.2%	78.8%	79.3%	79.8%	80.3%
	8.8%	78.1%	78.6%	79.1%	79.7%	80.1%
9.3%	77.9%	78.5%	79.0%	79.5%	80.0%	

Figure 37 Share Price. Sensitivity Analysis. Team Assessment

Figure 39 Terminal Value % of Enterprise Value. Sensitivity Analysis. Team Assessment

Perpetuity Growth Rate						
WACC	Exit Multiple					
	15.0x	15.5x	16.0x	16.5x	17.0x	
	7.3%	1.9%	2.0%	2.2%	2.3%	2.5%
	7.8%	2.3%	2.5%	2.7%	2.8%	2.9%
	8.3%	2.8%	3.0%	3.1%	3.3%	3.4%
	8.8%	3.3%	3.4%	3.6%	3.7%	3.9%

Figure 38 Enterprise Value / LTM EBITDA. Sensitivity Analysis. Team Assessment

Figure 40 Perpetuity Growth Sensitivity Analysis. Team Assessment

Market Risk

SS&C is greatly affected by changes in the state of the general economy and the financial markets, and uncertainty in the general economy or the financial services industry could disproportionately affect the demand for products and services. In recent years, the global economy has experienced a significant recession, severe disruptions in the credit markets, increased uncertainty about economic, political and market conditions, and periods of heightened volatility in a variety of financial and other markets, including commodity prices and currency rates, all of which have had at times a material and adverse effect on the financial markets and the activity levels of SS&C clients. While the U.S. economy may technically have come out of the recession, the recovery is fragile and may not be sustainable for any specific period of time, and the economy could slip back into an even more significant recession. SS&C clients include a range of organizations in the financial services industry whose success is linked to the health of the economy generally and of the financial markets specifically.

Interest Rate Risk. SS&C receives service revenues from investment earnings related to cash balances maintained in bank accounts on which they are the agent for clients. The balances maintained in the bank accounts will fluctuate. For the nine months ended September 30, 2018, SS&C had average daily cash balances of approximately \$2.1 billion maintained in such accounts. Estimates that a 100 basis point change in the interest earnings rate would equal approximately \$8.9 million of net income on an annual basis. The effect of changes in interest rates attributable to earnings derived from cash balances SS&C holds for clients is partially offset by changes in interest rates on their variable debt.

As of September 30, 2018, SS&C had total debt of \$6.8 billion, which nearly all is variable interest rate debt. As of September 30, 2018, a 1% increase in interest rates would result in an increase in interest expense of approximately \$67.3 million per year.

Foreign Currency Exchange Rate Risk. Approximately 28% of SS&C revenues are from clients located outside the United States. A portion of the revenues from clients located outside the United States is denominated in foreign currencies, the majority being the British pound. While revenues and expenses of SS&C's foreign operations are primarily denominated in their respective local currencies, some subsidiaries do enter into certain transactions in currencies that are different from their local currency. These transactions consist primarily of cross-currency intercompany balances and trade receivables and payables. As a result of these transactions, SS&C has exposure to changes in foreign currency exchange rates that result in foreign currency transaction gains and losses. The amount of these balances can fluctuate in the future as SS&C bills customers and buy products or services in currencies other than their functional currency, which could increase their exposure to foreign currency exchange rates. SS&C continues to monitor their exposure to foreign exchange rates because of their acquisitions and changes in operations. SS&C does not enter into any market risk sensitive instruments for trading purposes.

CORPORATE GOVERNANCE

SS&C has declared good corporate governance and an environment of high ethical standards as important to achieving business success and for creating sustainable value for its stockholders. The Board of Directors have periodically undertaken regular reviews of their corporate governance practices in line with the best regulatory and transparency practices.

Board Structure. SS&C's current board consists of seven directors. The Board has divided itself in three classes. The terms of service of the three classes are staggered such that the term of one class expires each year. This ensures accountability and encourages transparency and performance. The average tenure of the board member is 12.5 years. This tenure is higher than the average 8.4 year for established US companies [Ref]. Ms. Conjeevaram (Independent) has been member for the shortest time (4 years), while Mr. Bill Stone (CEO cum Chairman) has had the longest stint (33 years).

Independence. SS&C has sufficient number of independent directors. None of these directors is a part of more than three other companies, which is a desirable best practice. However, average tenure of these independent directors is 6 year, less than the industry average [Ref]. Also, the fact that SS&C combines the role of the Board Chair and the CEO in Mr. William Stone since its very inception is against the trend of separating

Committees. SS&C's board has organized itself into three committees-Audit, Compensation and Nominating. The committees are all organized according to the SEC policy and comprise of independent directors.

Diversity of the Board. Although the Nominating Committee has not adopted a written policy with regard to the consideration of diversity, it has taken conscious effort to encourage diversity. Ms Conjeevaram's appointment as a woman director is a step in that direction.

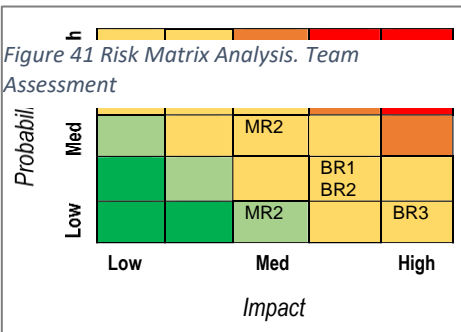
Social Responsibility. SS&C has created many jobs for downtown and nearby areas. Its quick expansion keeps contributing more employment opportunities. In the past SS&C has been a lead donor to UCONN's School of Business and is involved with local charities. SS&C's offices worldwide have regularly donated for local causes and specially for supporting education and learning.

Management. SS&C takes great pride in its management team and with good reason too. This group of senior executives led by CEO Bill Stone have been instrumental in helping SS&C expand its footprints. The management is also seen as central in SS&C ability to identify strategic acquisition opportunities and execute them as demonstrated by the 49 businesses SS&C has acquired since 1995.

Team assessment. Without doubt the management team has had a stellar track record. In addition to nurturing leader within the company, SS&C has also been able to take advantage of the management talent that comes with the acquisitions, as pointed out by Bob Schwartz, in a conversation with our team. Bill Stone is a Charismatic leader and his presence at the top has been a constant driving force. There is, however, the concern as far as future is concerned about Mr. Stone's continuity. According to the latest filing, is almost 63 years of age and may be on the verge of retirement. His departure from the helm may cause some disruption if not properly planned.

Work Culture. Our research found that SS&C is fosters a highly motivated and result oriented work cultures. This is a something that has propelled SS&C ahead of its much larger competitors. However, during our analysis of employer review from websites like glassdoor, LinkedIn, Indeed and Vault, we discovered a sense of burnout and alienation from management goals. This needs to be looked into, although some of it is inevitable in a rapidly growing company like SS&C.

Risks	Impact	Probability
Business and Operational		
Integration Acquisitions	4	2
Dependability on Senior Management	4	2
Software Services Attacks	5	1
Market		
Interest Rate Risk	3	1
Foreign Exchange Rate Risk	3	3



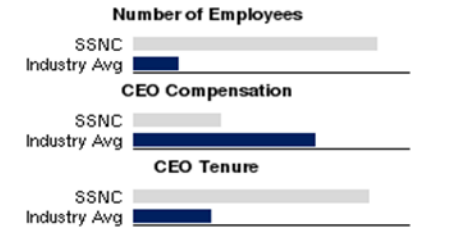
	Audit	Compensation	Nominating
Smita Conjeevaram	⬇️		
David Varsano	⬇️	⬇️	⬇️
Jonathan E. Michael	⬇️		⬇️
Michael Daniels		⬇️	⬇️
Michael J. Zamkow		⬇️	

Category	Weight	No of Questions	Max Score	SS&C
Treatment of	30%	3	6	0.25

Figure 43 Board Committee Structure

Disclosure & Responsibility	10%	2	4	0.1
	30%	2	4	0.225
TOTAL				0.775
			Out Of	1

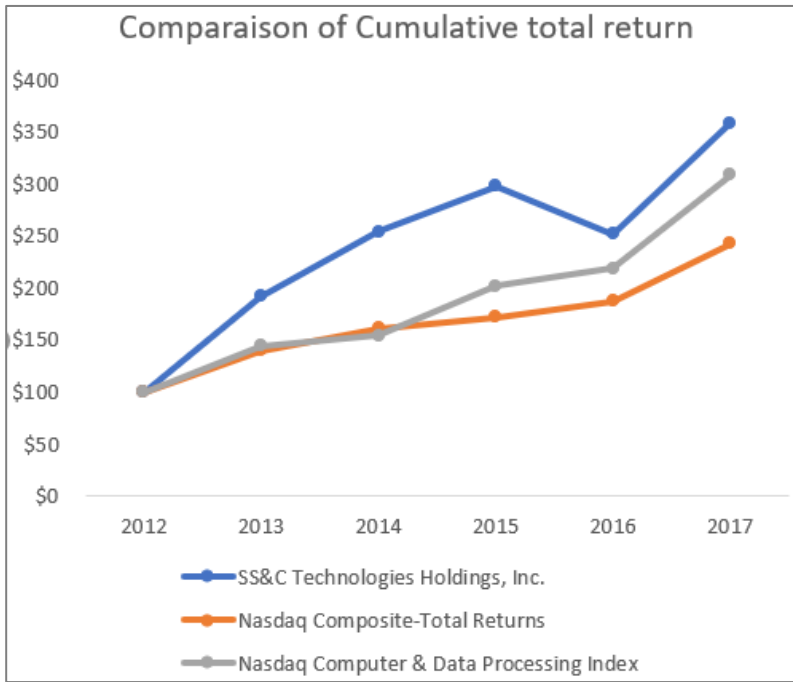
Name	Title	Role
<u>William C. Stone</u>	Chairman & CEO	Internal
<u>N. Boulanger</u>	Vice Chairman	External
<u>Michael Daniels</u>	Director	External
<u>Jonathan Michael</u>	Director	External
<u>David A. Varsano</u>	Director	External
<u>Smita Conjeevaram</u>	Director	External
<u>Michael J. Zamkow</u>	Director	External



APPENDIX

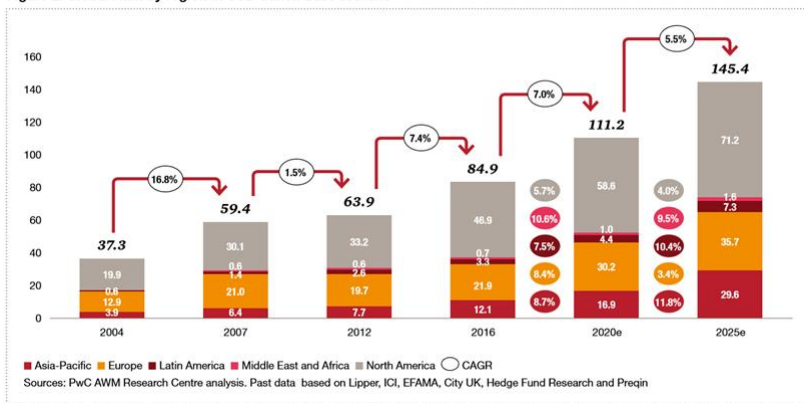
APPENDIX

Appendix 1.1: Business Description



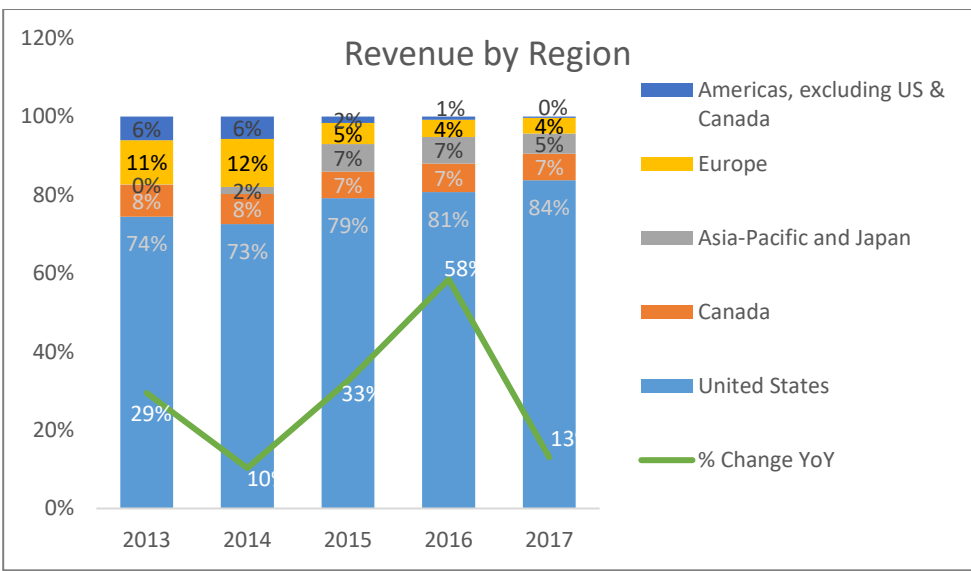
Appendix 1.2

Figure 2: Global AuM by region in USD trillion Base scenario

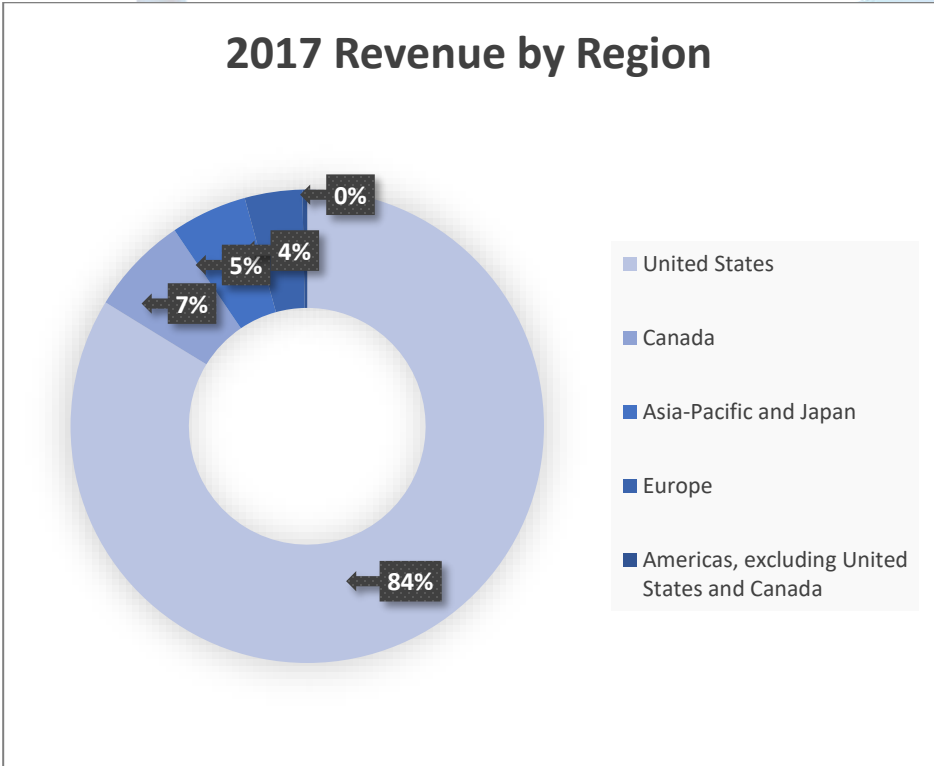


Appendix 1.3

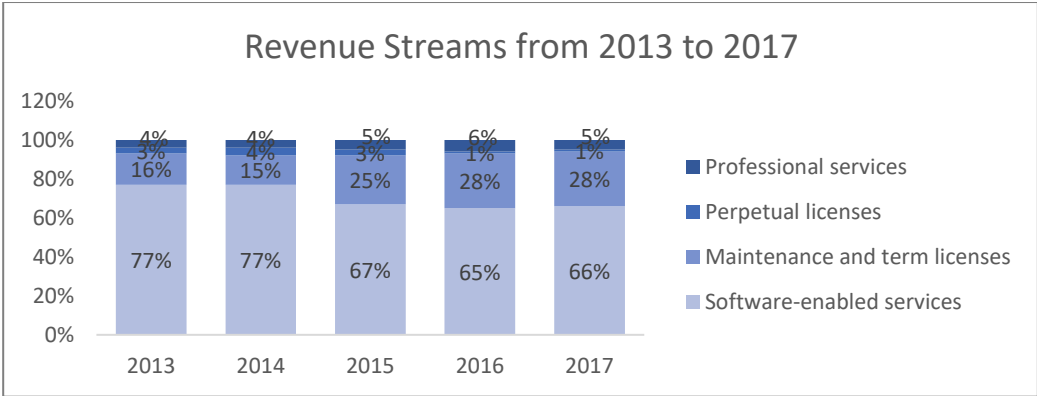




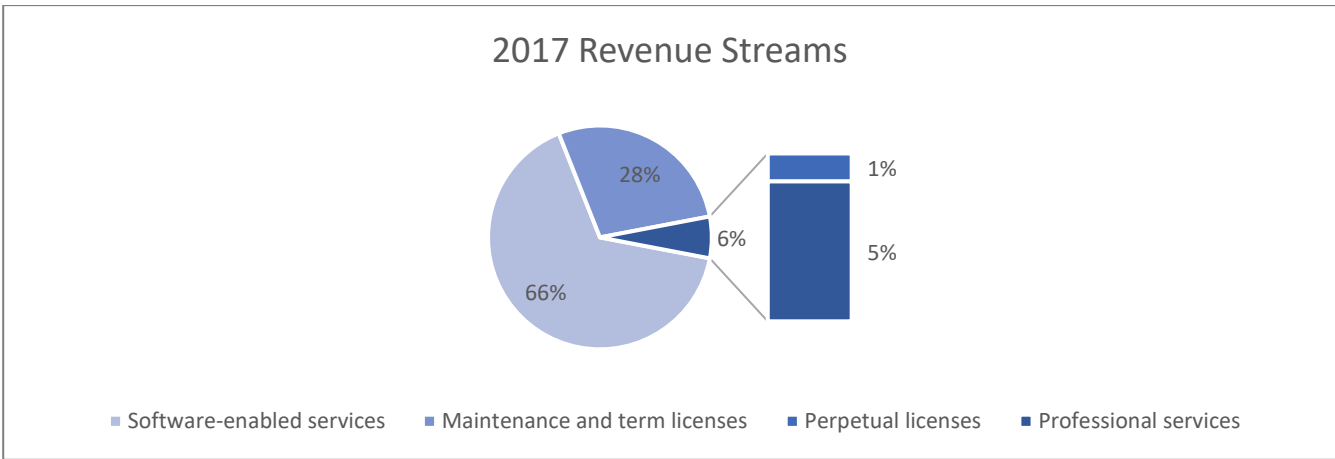
Appendix 1.4



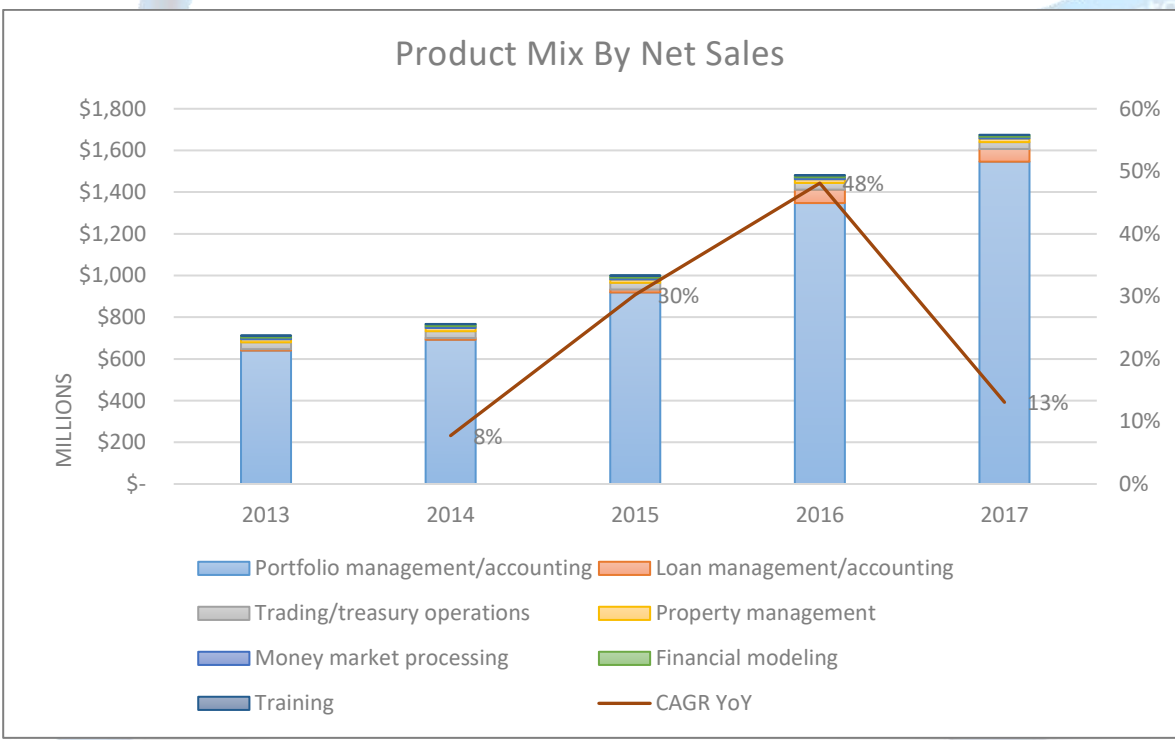
Appendix 1.5



Appendix 1.6



Appendix 1.7



Appendix 1.8

Products: Everything for Every Need

SS&C's R&D engineers partner with its marketing and support personnel to ensure that product evolution reflects developments in the marketplace and trends in client requirements.

Relentless focus on R&D. R&D Expenditure ~10% of Revenue

Ever growing collection of intellectual property and industry experts including CPAs, CFAs and Actuarial to pre-empt market customer needs.

Largest SaaS Provider

Since 2002, SS&C is also a fund administrator itself..

One of the strongest portfolios of intellectual property in investment systems and services with ability to service all through the value chain.

A robust "methodically opportunistic" acquisition strategy which has helped SS&C regularly bolster its technology rack.

Highly motivated Sales Team overseen by CEO Bill Stone.

Worldwide presence through more than 70 offices across geographies. Adds speed.

Brand & Reliability

A formidable brand which services to over 13,000 clients. This brings reliability and quality assurance

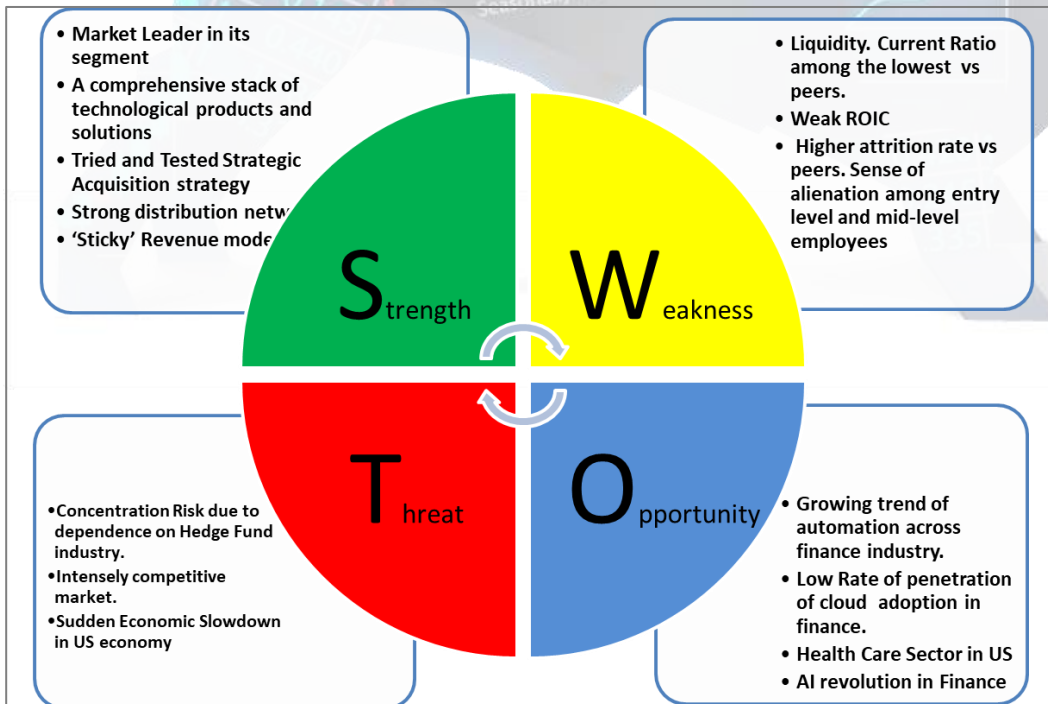
Services > \$45 Tn in AuM. 9/10 Prime brokers. 99% of all of all US Commercial Paper, and 95% of Municipal Bond structuring.

Ability to scale up services.

Service: Anywhere, Anytime

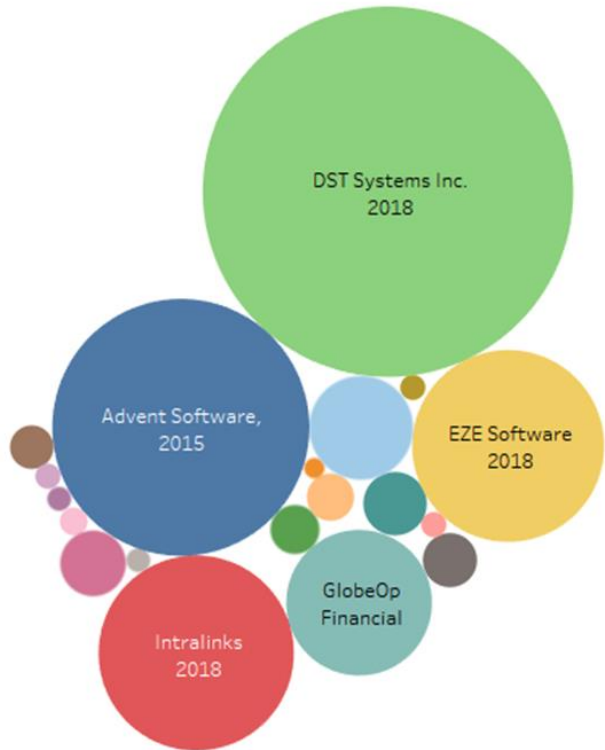


Appendix 1.9



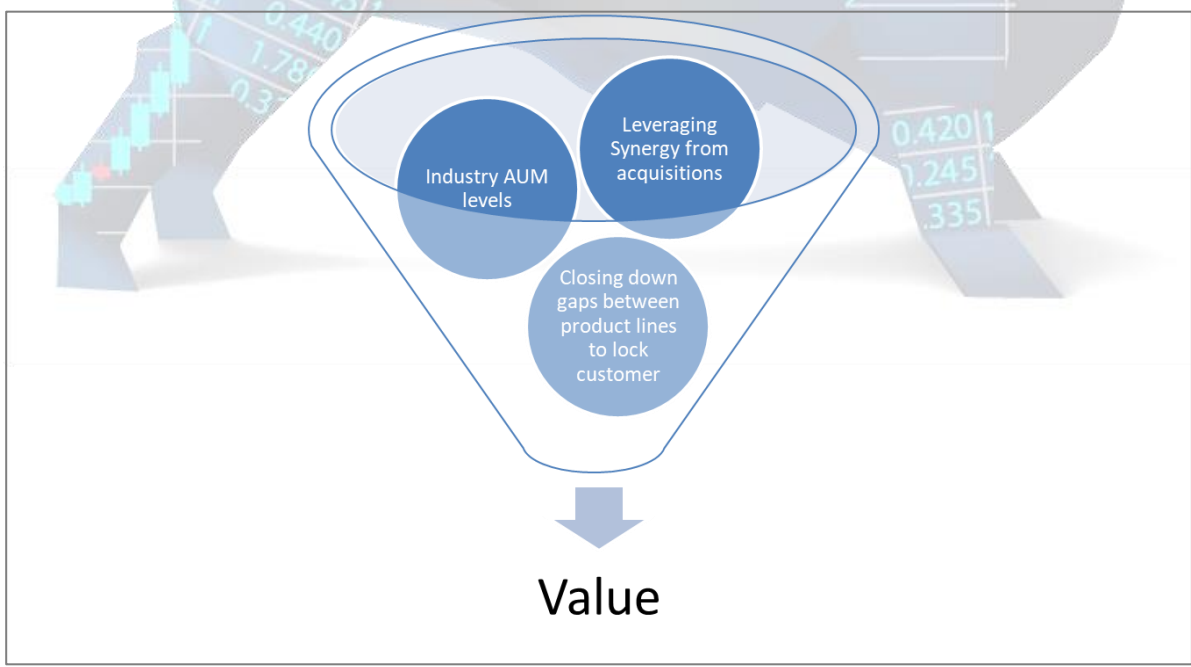
Appendix 1.10

Comparative Size of Recent Acquisitions

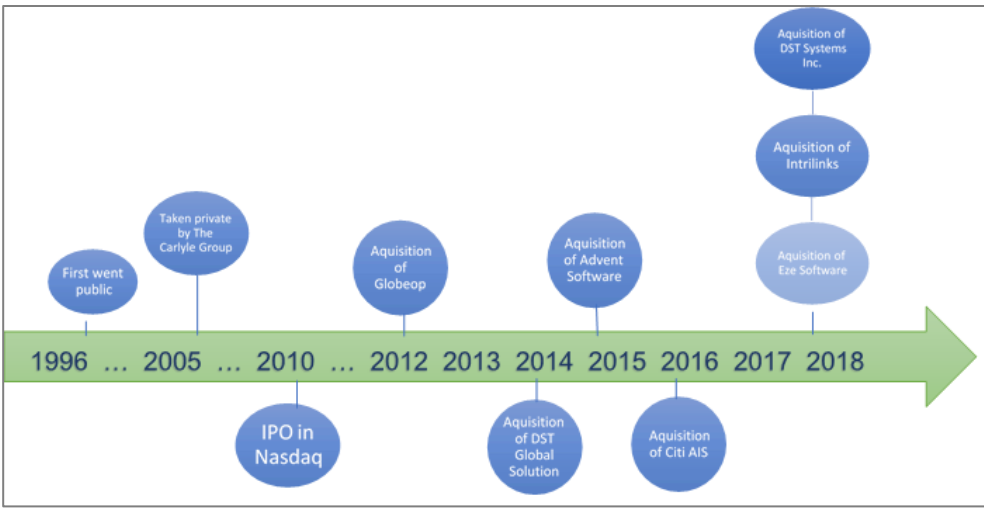


- Acquired Business
- Advent Software,
 - Citigroup's AI Servicing
 - CommonWealth Fund
 - Conifer Financial
 - DST Global
 - DST Systems Inc.
 - EisnerFast
 - EZE Software
 - Financial Models Co.
 - GlobeOp Financial
 - Intralinks
 - Open Information
 - Primatics
 - TheNextRound
 - Thomson Reuters' P.
 - TimeShareWare
 - Tradeware
 - Varden
 - Wells Fargo's Global ..

Appendix 1.11



Appendix 1.12



Appendix 2.1: Industry and Competitive Positioning



Appendix 2.2: Porter 5 Forces Analysis

PORTER'S FIVE FORCES:

Force	Product Assessment
Supplier Power	<p>Bargaining Power of Suppliers: Low to Moderate</p> <p>The main inputs into the value chain of SS&C are Skilled Labors for R&D and raw materials for data center. > As IT company, SS&C outsources part of its operations in India. SS&C benefit the favorable labor price from India. By outsourcing their operation in India, SS&C benefits competitive service from numerous IT services suppliers. There are a significant number of suppliers relative to buyers. Therefore, supplier power is low.</p> <p>> The raw materials used to build its data center comes from Cisco and Oracle which are the major suppliers in dominant position in this sector. These Powerful suppliers in Technology sector use their negotiating power to extract higher prices from the firms in Software & IT Services field.</p> <p>> By building an efficient supply chain with multiple suppliers, SS&C has tackled the bargaining power of these suppliers. Also, experimenting with product designs using different materials could also have positive impact on the spending of SS&C in O&M so that if the prices go up of one material then there is a shift potential to another. Overall, reducing the supplier bargaining power could increase the overall profitability of SS&C.</p>
Buyer Power	<p>Bargaining Power of Buyers: Moderate to Low</p> <p>Buyers want to buy the best offerings available by paying the minimum price as possible. This put pressure on SS&C profitability in the long run. However, in this specialized niche segment that SS&C operates, the power of buyers is pretty moderate to low.</p> <p>> There are many different buyers in the financial service industry and as far SS&C is concerned, there is no single buyer that contributes to more than 10% its revenues. As of September 2017, SS&C count around 13,000 customers globally. This make it difficult for the buyers to demand price concession.</p> <p>> SS&C offers vertically differentiated products with a diverse consumer base (Alternative investor, Traditional investor, Commercial and investment Banking, Health industry, Real State, ...), which make relatively low volume purchases (less than 10%), which erodes the buyer's power. By building a large base of customers, SS&C reduces the bargaining power of the buyers and also provide an opportunity to SS&C to streamline its sales and production process.</p> <p>> Rapid innovation of new products plays a tremendous role in SS&C strategy to reduce the bargaining power of buyers. As customers often seek discounts and offerings on established products, by keep on coming up with new products, SS&C succeeds to limit the bargaining power of buyers and reduce the defection of existing customers to its competitors</p>
New Market Entrants	<p>Threat of New Entrants: Moderate</p> <p>> There is a moderate threat of new entrants into the financial service industry as the barriers to entry are high enough to discourage new competitors to enter the market. Certainly, new entrants in Software & IT Services brings innovation, new ways of doing things and put pressure on SS&C through lower pricing strategy, reducing costs, and providing new value propositions to the customers.</p> <p>> Even though Software and IT industry 's a competitive industry, we consider the possibility of new entrants to be successful in the industry is moderate due to the nature of the services, the Intellectual Property of the products being offered and most importantly the high regulation that the operator evolving in the segments are subject to. SS&C must manage all these challenges and build effective barriers to safeguard its competitive edge.</p> <p>> By innovating new products and services and doing the right acquisitions, SS&C has built a dynamic environment where new entrants are less likely to enter. SS&C building capacities and spending money on research and development is impressive, for the past 10 years SS&C has spent 6% to 8% of its revenue on R&D. SS&C Technologies acquired a variety of companies to bring products and talent into the company. From 1986 to 2017 SS&C has completed more than 47 acquisitions with the largest acquisitions to date, Advent Software (estimated \$2.7 billion) which was a competitor in the financial services industry.</p>
Substitutes	<p>Threats of Substitute Products or Services: Moderate</p> <p>The threat of a substitute product or service is moderate.</p> <p>> SS&C offers value proposition that uniquely addresses its customer needs in this industry. By being service oriented rather than just product oriented, puts SS&C in a better position to tackle the treat of substitute. SS&C understands the core need of the customers rather than what the customer is buying.</p> <p>> Moreover, there are high switching costs for the consumers for switching to substitutes due to the high cost and risk f such operation, which makes the threat low. Overall, the established players in this segment such as SS&C, State Street CITOC and BNY Mellon keep defining the standards regularly. It significantly reduces the window of extraordinary profits for the new firms thus discourage new players in the industry.</p>
Competitive Rivalry	<p>Intensity of Competitive Rivalry: High to Moderate</p> <p>> The rivalry among the existing players in the financial Services Software industry is generally intense. However, SS&C by deciding to operate in a niche market less competitive in the global sector has protect himself from the significant pressure of this industry.</p> <p>> SS&C operates in a niche segment by providing Software and IT services for Portfolio Managers. This segment has high switching cost in case a customer decides to switch to other competitors due to the massive cost of migration, which ultimately crates low intensity in rivalry.</p> <p>> Moreover, SS&C has built a sustainable differentiation of its products with premium products and services, which cause a moderate level of intensity in competition. SS&C has a portfolio of XXX software application and a customer base of 13,000. By building scale, SS&C can compete better in order to increase the market size.</p>

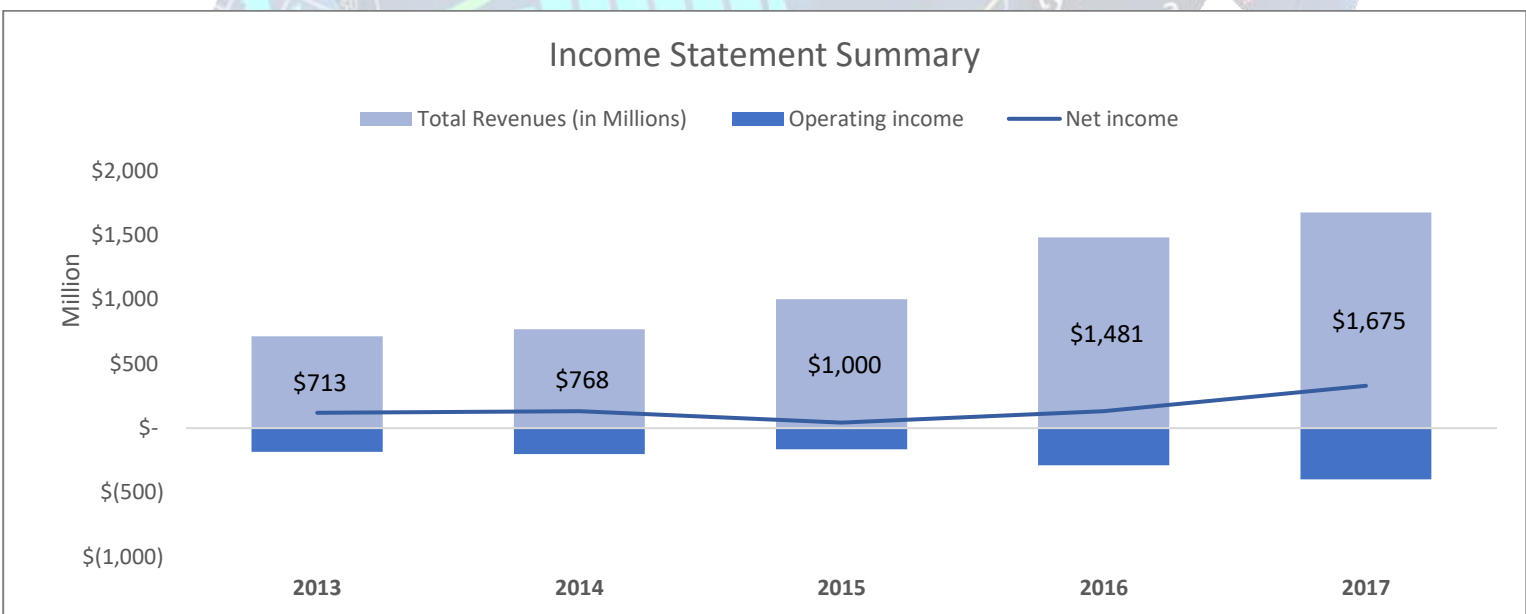
Appendix 3: Financial Analysis



SS&C Technologies, Income Statement Analysis
 (\$ in millions, fiscal year ending December 31)

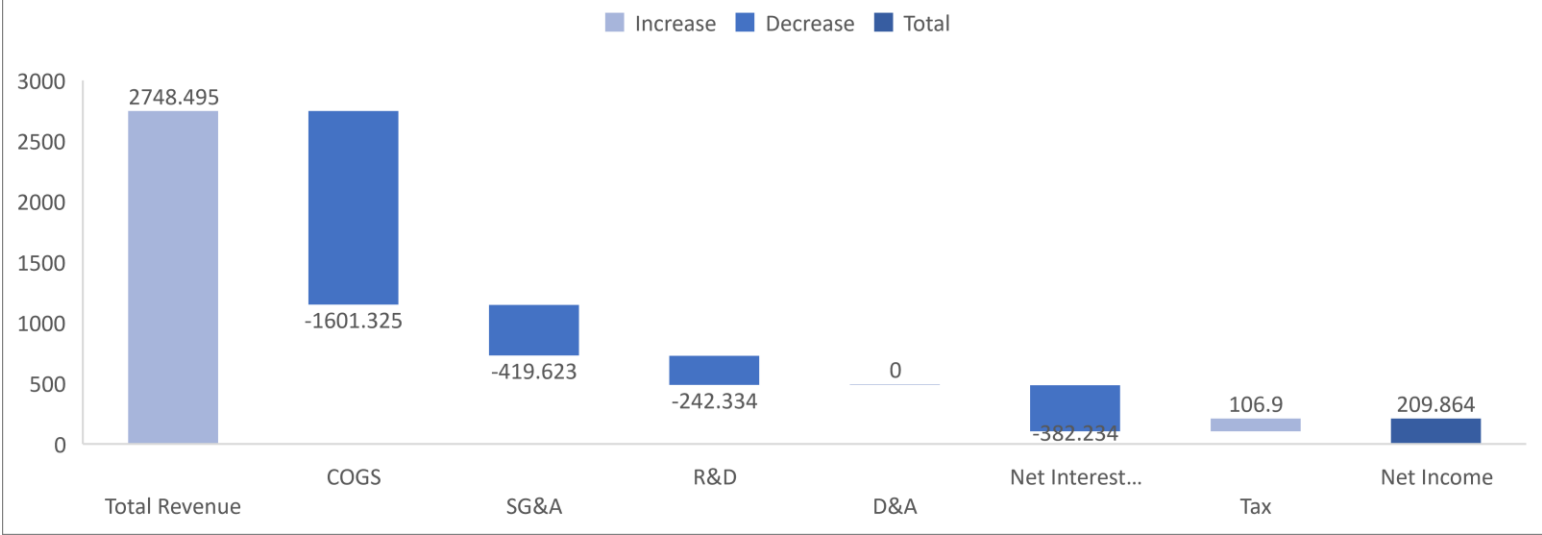
	Historical Period			3Y CAGR ('15 - '17)	LMT 9-30-2018		Projection Period				5Y CAGR ('18 - '23)
	2015A	2016A	2017A		2018E	2019E	2020E	2021E	2022E	2023E	
Sales	\$1,000.3	\$1,481.4	\$1,675.3	29.4%	\$2,748.5	\$3,751.7	\$4,352.0	\$4,874.2	\$5,312.9	\$5,525.4	15.0%
% growth	30.3%	48.1%	13.1%		64.1%	36.5%	16.0%	13.0%	9.0%	4.0%	
COGS	532.4	800.5	886.4		1,601.3	2,018.4	2,341.4	2,622.3	2,858.3	2,972.7	
Gross Profit	\$467.9	\$680.9	\$788.9	29.8%	\$1,147.2	\$1,733.3	\$2,010.6	\$2,251.9	\$2,454.6	\$2,552.7	17.3%
% margin	46.8%	46.0%	47.1%		41.7%	46.2%	46.2%	46.2%	46.2%	46.2%	
SG&A + R&D	303.2	392.3	392.0		662.0	975.4	1,131.5	1,267.3	1,381.3	1,436.6	
EBITDA	\$313.2	\$513.9	\$628.7	41.7%	\$883.0	\$1,300.8	\$1,509.0	\$1,690.0	\$1,842.1	\$1,915.8	16.8%
% margin	31.3%	34.7%	37.5%		32.1%	34.5%	34.5%	34.5%	34.5%	34.5%	
Depreciation & Amortization	148.4	225.2	231.8		397.8	543.0	629.9	705.4	788.9	799.7	
EBIT	\$164.7	\$288.7	\$396.9	55.2%	\$485.2	\$757.8	\$879.1	\$984.6	\$1,073.2	\$1,116.1	18.1%
% margin	16.5%	19.5%	23.7%		17.7%	20.2%	20.2%	20.2%	20.2%	20.2%	
Interest Expenses and Others	(77.3)	(128.4)	(107.4)		(190.8)	(126.0)	(126.0)	(126.0)	(126.0)	(126.0)	
EBT	\$87.4	\$160.3	\$289.5	82.0%	\$294.4	\$631.8	\$753.1	\$858.6	\$947.2	\$990.1	27.5%
% margin	8.7%	10.8%	17.3%		10.7%	16.8%	17.3%	17.6%	17.8%	17.9%	
Unusual Items	(26.5)	3.4	(6.8)		(191.4)						
EBT Excl. Unusual Items	\$60.9	\$163.7	\$282.7	115.4%	\$103.0	\$631.8	\$753.1	\$858.6	\$947.2	\$990.1	
	13.0%	24.0%	36.8%								
Taxes	18.0	32.6	(46.2)		(106.9)	164.3	195.8	223.2	246.3	257.4	
Net Income	\$42.9	\$131.0	\$328.9	176.8%	\$209.9	\$467.6	\$557.3	\$635.4	\$700.9	\$732.7	28.4%
	4.3%	8.8%	19.6%		7.6%	12.6%	12.8%	13.0%	13.2%	13.3%	
Basic EPS	0.24	0.65	1.60	161.0%	0.94	1.98	2.23	2.39	2.49	2.45	21.1%
Weighted Avg. Basic Shares Out.	182.20	200.25	204.92	6.1%	222.62	236.10	250.39	265.55	281.63	298.68	6.1%
Diluted EPS	0.22	0.64	1.55		0.90	1.91	2.16	2.34	2.45	2.43	22.0%
Weighted Avg. Diluted Shares Out.	190.90	205.79	211.63	5.3%	232.93	245.26	258.23	271.90	286.28	301.43	5.3%
Dividends per Share	0.25	0.25	0.27		0.29	0.55	0.62	0.67	0.70	0.70	19.1%
Payout Ratio %	106.0%	38.3%	16.5%		31.0%	28.6%	28.6%	28.6%	28.6%	28.6%	
Assumptions											
Sales (% growth)	NA	48.1%	13.1%		64.1%	36.5%	16.0%	12.0%	9.0%	4.0%	
COGS (% sales)	53.2%	54.0%	52.9%		58.3%	53.8%	53.8%	53.8%	53.8%	53.8%	
SG&A (% sales)	30.3%	26.5%	23.4%		24.1%	26.0%	26.0%	26.0%	26.0%	26.0%	
Depreciation & Amortization (% sales)	14.8%	15.2%	13.8%		14.5%	14.5%	14.5%	14.5%	14.5%	14.5%	
Capital Expenditures (% sales)	(0.0%)	(0.0%)	(0.1%)		(0.0%)	2.4%	2.4%	2.4%	2.4%	2.4%	
Tax Rate	28.0%	28.0%	28.0%		26.0%	26.0%	26.0%	26.0%	26.0%	26.0%	
Working Capital (% sales)	8.0%	6.9%	6.0%		19.7%	6.0%	6.0%	6.0%	6.0%	6.0%	

Appendix 3.10



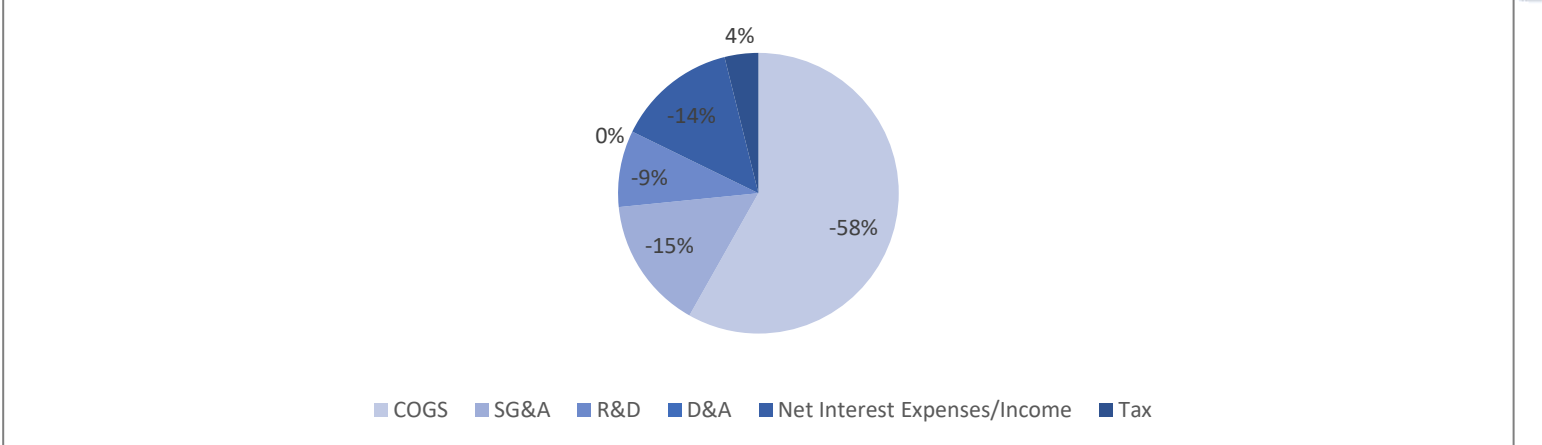
Appendix 3.11

2018 Income Statement Waterfall Chart

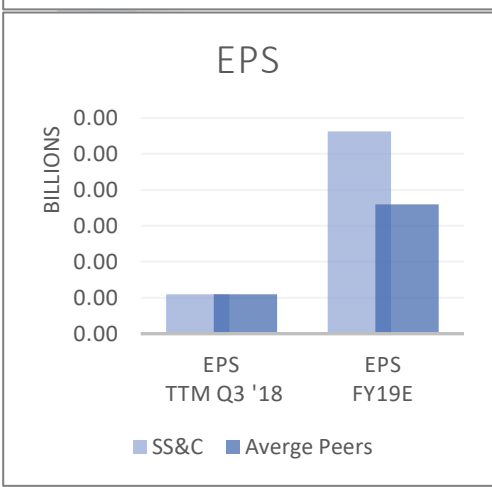
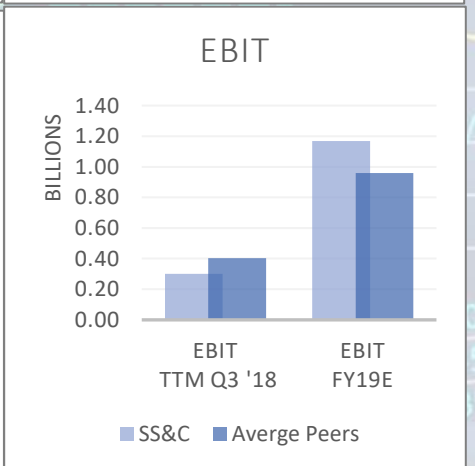
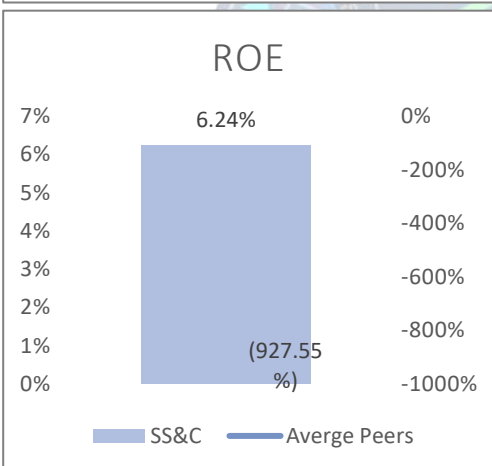
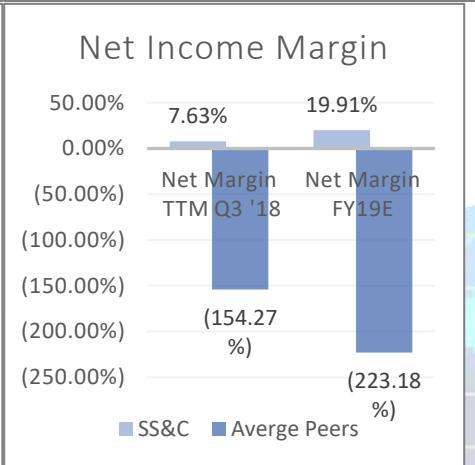
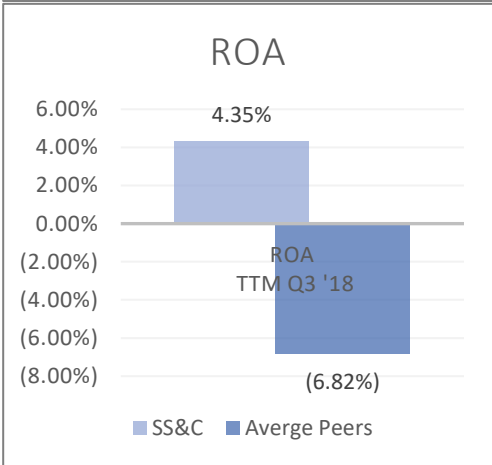
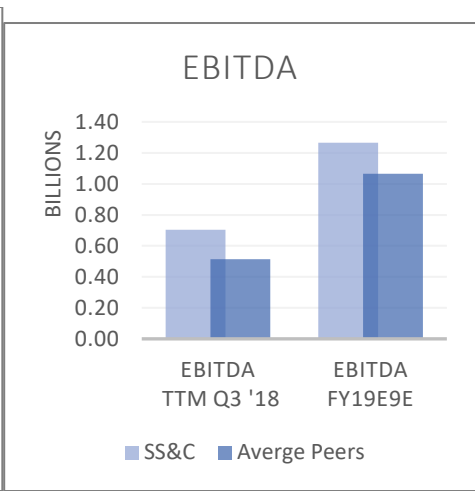
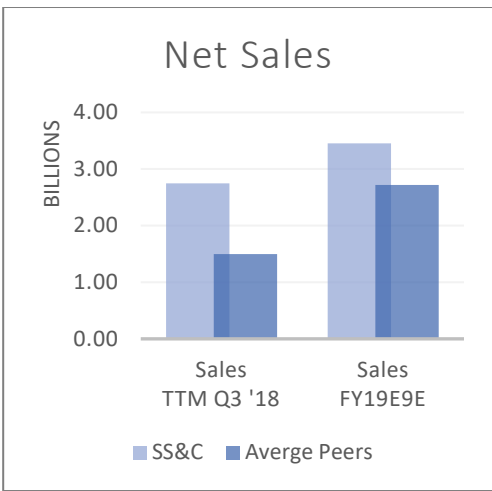


Appendix 3.12

2018E Operating Cost



Appendix 3.13



Ratios					
For the Fiscal	2014	2015	2016	2017	LTM 9-30-'18
Profitability					
Return on Assets %	5.5%	2.6%	3.1%	4.4%	3.2%
Return on Capital %	6.3%	3.0%	3.8%	5.2%	3.9%
Return on Equity %	10.2%	2.5%	6.0%	13.3%	6.2%
Return on Common	10.2%	2.5%	6.0%	13.3%	6.2%
Margin Analysis					
Gross Margin %	46.5%	46.8%	46.0%	47.1%	41.7%
SG&A Margin %	13.0%	19.3%	16.2%	14.2%	15.3%
R&D Margin %	13.0%	19.3%	16.2%	14.2%	15.3%
EBITDA Margin %	38.9%	31.3%	34.7%	37.5%	32.1%
EBITA Margin %	37.0%	29.4%	33.1%	36.0%	25.1%
EBIT Margin %	26.1%	16.5%	19.5%	23.7%	17.7%
Earnings from Cont.	17.1%	4.3%	8.8%	19.6%	7.6%
Earnings from Cont.	17.1%	4.3%	8.8%	19.6%	7.6%
Net Income Margin	17.1%	4.3%	8.8%	19.6%	7.6%
Net Income Avail. for	17.1%	4.3%	8.8%	19.6%	7.6%
Normalized Net Inc	14.2%	5.5%	6.8%	10.8%	6.7%
Levered Free Cash	31.9%	33.6%	23.3%	23.7%	15.0%
Unlevered Free Ca	33.4%	37.8%	28.0%	27.1%	19.1%
Net Interest Exp. M	0.2%	(0.2%)	(0.1%)	(0.1%)	(0.1%)
Other Income Margin	0.0%	0.0%	0.0%	0.0%	0.2%
Unusual Items Margin	(0.1%)	0.0%	0.0%	0.0%	(5.2%)
Income Tax Margin	0.0%	0.0%	0.0%	0.0%	0.0%
Discontinued Oper	0.0%	0.0%	0.0%	0.0%	0.0%
Efficiency - Asset Turnover					
Total Asset Turnover	0.3x	0.2x	0.3x	0.3x	0.3x
Fixed Asset Turnover	14.5x	16.5x	20.1x	18.5x	8.3x
Accounts Receivable	8.3x	7.6x	7.2x	6.9x	6.4x
Inventory Turnover	NA	NA	NA	NA	NA
Working Capital Turnover	9.3x	6.3x	6.6x	7.7x	4.7x
Cash Turnover	7.0x	2.3x	12.6x	26.2x	3.8x
Tax Ratio	0.0%	0.0%	0.0%	0.0%	0.0%
Short Term Liquidity					
Current Ratio	1.2x	1.6x	0.7x	0.8x	1.6x
Quick Ratio	1.1x	1.4x	0.6x	0.7x	1.0x
Cash from Ops. to Total	1.3x	0.6x	0.7x	1.1x	0.4x
Avg. Days Sales Outstanding	44.1	48.2	50.8	52.9	57.3
Avg. Days Inventory	NA	NA	NA	NA	NA
Avg. Days Payable	9.1	8.2	6.5	9.0	7.3
Avg. Cash Conversion Cycle	NA	NA	NA	NA	NA
Long Term Solvency					
Total Debt/Equity	46.0%	130.7%	110.7%	76.1%	158.3%
Total Debt/Capital	31.5%	56.6%	52.5%	43.2%	61.3%
LT Debt/Equity	44.5%	129.1%	105.2%	74.7%	156.6%
LT Debt/Capital	30.5%	56.0%	49.9%	42.4%	60.6%
Total Liabilities/Total	40.6%	63.7%	60.4%	51.5%	68.2%
Total Liabilities to Equity	0.7x	1.8x	1.5x	1.1x	2.1x
Total Assets to Equity	1.7x	2.8x	2.5x	2.1x	3.1x
Capital Structure Index	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#DIV/0!
EBIT / Interest Exp.	7.4x	2.1x	2.2x	3.7x	2.4x
EBITDA / Interest E	11.0x	3.9x	4.0x	5.8x	4.4x
(EBITDA-CAPEX) /	10.4x	3.8x	3.7x	5.5x	4.2x
Total Debt/EBITDA	2.1x	8.8x	4.9x	3.3x	7.6x
Net Debt/EBITDA	1.7x	7.4x	4.6x	3.2x	6.7x
Total Debt/(EBITDA)	2.2x	9.2x	5.1x	3.4x	7.9x
Net Debt/(EBITDA)	1.8x	7.7x	4.9x	3.3x	7.0x



	Historical Period			3Y CAGR (*15-'17)	LMT 9-30-2018			Projection Period				5Y CAGR (*18-'23)
	2015A	2016A	2017A		2018E	2019E	2020E	2021E	2022E	2023E		
Sales	\$1,000.3	\$1,481.4	\$1,675.3		\$2,748.5	\$3,779.2	\$4,274.3	\$4,744.4	\$5,029.1	\$5,230.2	13.7%	
% growth	30.3%	48.1%	13.1%	29.4%	64.1%	37.5%	13.1%	13.0%	6.0%	4.0%		
COGS	532.4	800.5	886.4		1,601.3	2,033.2	2,299.5	2,552.5	2,705.6	2,813.9		
Gross Profit	\$467.9	\$680.9	\$788.9	29.8%	\$1,147.2	\$1,746.0	\$1,974.7	\$2,191.9	\$2,323.4	\$2,416.4	16.1%	
% margin	46.8%	46.0%	47.1%	41.7%	41.7%	46.2%	46.2%	46.2%	46.2%	46.2%		
SG&A + R&D	303.2	392.3	392.0		662.0	982.6	1,111.3	1,233.5	1,307.6	1,359.9		
EBITDA	\$313.2	\$513.9	\$628.7	41.7%	\$883.0	\$1,310.4	\$1,482.0	\$1,645.0	\$1,743.7	\$1,813.5	15.5%	
% margin	31.3%	34.7%	37.5%	32.1%	31.6%	34.5%	34.5%	34.5%	34.5%	34.5%		
Depreciation & Amortization	148.4	225.2	231.8		397.8	547.0	618.6	686.7	727.9	757.0		
EBIT	\$164.7	\$288.7	\$396.9	55.2%	\$485.2	\$763.4	\$863.4	\$958.4	\$1,015.9	\$1,056.5	16.8%	
% margin	16.5%	19.5%	23.7%	17.7%	17.7%	20.2%	20.2%	20.2%	20.2%	20.2%		
Interest Expenses and Others	(77.3)	(128.4)	(107.4)		(190.8)	(126.0)	(126.0)	(126.0)	(126.0)	(126.0)		
EBT	\$87.4	\$160.3	\$289.5	82.0%	\$294.4	\$637.4	\$737.4	\$832.4	\$889.9	\$930.5	25.9%	
% margin	8.7%	10.8%	17.3%	10.7%	10.7%	16.9%	17.3%	17.5%	17.7%	17.8%		
Unusual Items	(26.5)	3.4	(6.8)		(191.4)							
EBT Excl. Unusual Items	\$60.9	\$163.7	\$282.7	115.4%	\$103.0	\$637.4	\$737.4	\$832.4	\$889.9	\$930.5	\$0.3	
Taxes	18.0	32.6	(46.2)		(106.9)	165.7	191.7	216.4	231.4	241.9		
Net Income	\$42.9	\$131.0	\$328.9	176.8%	\$209.9	\$471.7	\$545.7	\$616.0	\$658.5	\$688.6	26.8%	
	4.3%	8.8%	19.6%	7.6%	7.6%	12.6%	12.8%	13.0%	13.1%	13.2%		
Basic EPS	0.24	0.65	1.60	161.0%	0.94	2.00	2.18	2.32	2.34	2.31	19.6%	
Weighted Avg. Basic Shares Out	182.20	200.25	204.92	6.1%	222.62	236.10	250.39	265.55	281.63	298.68	6.1%	
Diluted EPS	0.22	0.64	1.55		0.90	1.92	2.11	2.27	2.30	2.28	20.4%	
Weighted Avg. Diluted Shares Out	190.90	205.79	211.63	5.3%	232.93	245.26	258.23	271.90	286.28	301.43	5.3%	
Dividends per Share	0.25	0.25	0.27		0.29	0.55	0.60	0.65	0.66	0.65	17.7%	
Payout Ratio %	106.0%	38.3%	16.5%		31.0%	28.6%	28.6%	28.6%	28.6%	28.6%		

Assumptions	2015A	2016A	2017A	2018E	2019E	2020E	2021E	2022E	2023E
Sales (% growth)	NA	48.1%	13.1%	64.1%	37.5%	13.1%	11.0%	6.0%	4.0%
COGS (% sales)	53.2%	54.0%	52.9%	58.3%	53.8%	53.8%	53.8%	53.8%	53.8%
SG&A (% sales)	30.3%	26.5%	23.4%	24.1%	26.0%	26.0%	26.0%	26.0%	26.0%
Depreciation & Amortization (% sales)	14.8%	15.2%	13.8%	14.5%	14.5%	14.5%	14.5%	14.5%	14.5%
Capital Expenditures (% sales)	(0.0%)	(0.0%)	(0.1%)	(0.0%)	2.4%	2.4%	2.4%	2.4%	2.4%
Tax Rate	28.0%	28.0%	28.0%	26.0%	26.0%	26.0%	26.0%	26.0%	26.0%
Working Capital (% sales)	8.0%	6.9%	6.0%	19.7%	6.0%	6.0%	6.0%	6.0%	6.0%

Appendix 4: Valuation

Comps Analysis																		
<i>(in millions, except per share data)</i>																		
Company Name	Symbol	Period End Date (LTM)	Market Data					Financial Data					EV/Revenue		EV/EBITDA			
			Market Capitalization	Cash & Short Term Investments	Net Debt	Minority Interest	Enterprise Value	LTM Total Revenue	2019E Total Revenue	LTM EBITDA	2019E EBITDA	2019E Revenue Growth	2019E EBITDA Growth	2019E EBITDA Margin	LTM	2019E	LTM	2019E
Asset and Wealth Management																		
SS&C TECHNOLOGIES HOLDINGS, INC.	SSNC	09/30/2018	\$13,034	\$732	\$6,686	\$0	\$18,988	\$2,748	\$3,455	\$704	\$1,268	25.7%	80.1%	36.7%	6.9x	5.5x	27.0x	15.0x
ENVESTNET, INC.	ENW	09/30/2018	\$2,520	\$154	\$456	(\$0)	\$2,823	\$785	\$813	\$93	\$157	3.5%	67.9%	19.3%	3.6x	3.5x	30.2x	18.0x
FIDELITY NATIONAL INFORMATION SERVICES	FIS	09/30/2018	\$35,107	\$632	\$9,038	\$85	\$43,598	\$8,877	\$8,637	\$2,616	\$3,349	-2.7%	28.0%	38.8%	4.8x	5.0x	16.7x	13.0x
EURONET WORLDWIDE, INC.	EETF	09/30/2018	\$5,948	\$1,129	\$889	\$0	\$5,707	\$2,492	\$2,551	\$411	\$495	2.4%	20.3%	19.4%	2.3x	2.2x	13.9x	11.5x
SEI INVESTMENTS COMPANY	SEIC	09/30/2018	\$7,559	\$755	\$0	\$0	\$6,804	\$1,627	\$1,625	\$532	\$516	-0.1%	-3.0%	31.8%	4.2x	4.2x	12.8x	13.2x
Mean			\$12,834	\$680	\$3,414	\$17	\$15,584	\$3,306	\$3,416	\$871	\$1,157	5.8%	38.7%	29.2%	4.4x	4.1x	20.1x	14.1x
Median			\$7,559	\$732	\$889	\$0	\$6,804	\$2,492	\$2,551	\$532	\$516	2.4%	28.0%	31.8%	4.2x	4.2x	16.7x	13.2x
IT & Software Development																		
FACTSET RESEARCH SYSTEMS INC.	FDS	09/30/2018	\$8,360	\$198	\$575	\$0	\$8,737	\$1,373	\$1,435	\$435	\$509	4.5%	16.9%	35.4%	6.4x	6.1x	20.1x	17.2x
BROADRIDGE FINANCIAL SOLUTIONS, INC.	BR	09/30/2018	\$12,023	\$205	\$1,144	\$0	\$12,962	\$4,378	\$4,475	\$779	\$972	2.2%	24.9%	21.7%	3.0x	2.9x	16.6x	13.3x
BOTTOMLINE TECHNOLOGIES (DE), INC.	EPAY	12/31/2018	\$1,832	\$96	\$110	\$0	\$1,846	\$405	\$426	\$54	\$102	5.0%	90.6%	24.0%	4.6x	4.3x	34.5x	18.1x
COGNIZANT TECHNOLOGY SOLUTIONS	CTSH	9/30/2018	\$40,813	\$4,763	\$724	\$0	\$36,574	\$15,824	\$16,111	\$3,208	\$3,565	1.8%	11.1%	22.1%	2.3x	2.3x	11.4x	10.3x
Clou Global Markets, Inc.	CBOE	09/30/2018	\$10,553	\$138	\$1,215	\$8	\$11,839	\$2,842	\$1,204	\$749	\$828	-5.4%	10.5%	68.8%	4.4x	9.7x	15.5x	14.1x
Mean			\$14,676	\$1,080	\$753	\$2	\$14,352	\$4,924	\$4,730	\$1,045	\$1,195	-8.2%	30.8%	34.4%	4.1x	5.1x	19.6x	14.6x
Median			\$10,553	\$198	\$724	\$0	\$11,839	\$2,842	\$1,435	\$749	\$828	2.2%	16.9%	24.0%	4.4x	4.3x	16.6x	14.1x

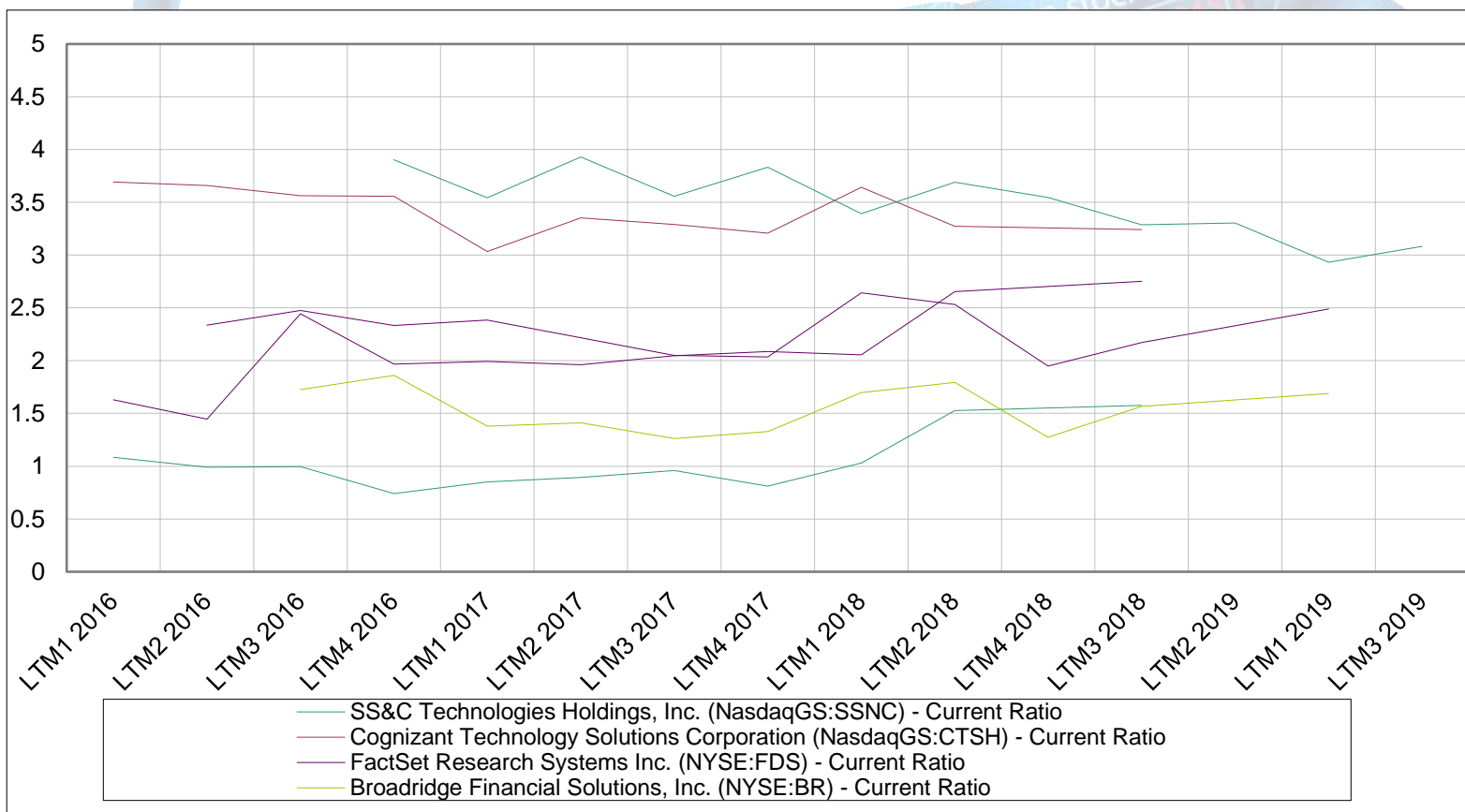
Appendix 4.10 Dupont Pyramid of Ratio Analysis

Pyramid Analysis																								
Return on Equity																								
2014 2015 2016 2017 LTM 9-30-'18																								
10.17% 2.48% 6.00% 13.30% 6.24%																								
Net Income Margin %					Total Assets to Equity					Total Asset Turnover														
2014 2015 2016 2017 LTM 9-30-'18					2014 2015 2016 2017 LTM 9-30-'18					2014 2015 2016 2017 LTM 9-30-'18														
17.08% 4.28% 8.84% 19.63% 7.64%					1.68 2.76 2.53 2.06 3.14					0.34 0.25 0.26 0.30 0.29														
Capital Structure Impact on Operating Income					Tax Ratio					Fixed Asset Turnover					Working Capital Turnover									
2014 2015 2016 2017 LTM 9-30-'18					2014 2015 2016 2017 LTM 9-30-'18					2014 2015 2016 2017 LTM 9-30-'18					2014 2015 2016 2017 LTM 9-30-'18									
#/VALUE! #/VALUE! #/VALUE! #/VALUE! #/DIV/0!					-					14.49 16.48 20.08 18.48 8.33					9.32 6.33 6.59 7.73 4.67									
EBIT Margin %					Gross Margin %					SG&A Margin %					R&D Margin %									
2014 2015 2016 2017 LTM 9-30-'18					2014 2015 2016 2017 LTM 9-30-'18					2014 2015 2016 2017 LTM 9-30-'18					2014 2015 2016 2017 LTM 9-30-'18									
26.09% 16.47% 19.49% 23.66% 17.65%					46.51% 46.78% 45.97% 47.09% 41.74%					12.95% 19.27% 16.17% 14.24% 15.27%					12.95% 19.27% 16.17% 14.24% 15.27%									
D & A %					Net Interest Exp. Margin %					Other Income Margin %					Avg. Days Payable Out.					Inventory Turnover				
2014 2015 2016 2017 LTM 9-30-'18					2014 2015 2016 2017 LTM 9-30-'18					2014 2015 2016 2017 LTM 9-30-'18					2014 2015 2016 2017 LTM 9-30-'18					2014 2015 2016 2017 LTM 9-30-'18				
12.77% 14.84% 15.20% 13.84% 14.47%					0.22% (0.20%) (0.10%) (0.07%) (0.07%)					-					9.05 8.21 6.50 8.97 7.33					NA NA NA NA NA				
Unusual Items Margin %					Discontinued Operation Margin %					Avg. Days Sales Out.					Cash Turnover									
2014 2015 2016 2017 LTM 9-30-'18					2014 2015 2016 2017 LTM 9-30-'18					2014 2015 2016 2017 LTM 9-30-'18					2014 2015 2016 2017 LTM 9-30-'18									
(0.09%)					-					44.11 48.22 50.80 52.86 57.33					7.01 2.30 12.60 26.15 3.75									
Solvency Ratios					Liquidity Ratios																			
2014 2015 2016 2017 LTM 9-30-'18					2014 2015 2016 2017 LTM 9-30-'18																			
Total Liabilities to Equity					0.68 1.76 1.53 1.06 2.14																			
Debt to Equity					0.46 1.31 1.11 0.76 1.58																			
										2014 2015 2016 2017 LTM 9-30-'18														
										1.23 1.62 0.74 0.81 1.58														
										1.06 1.45 0.64 0.69 1.00														

Appendix 4.11. Working Capital Calculation

	Historical Period			2018	Projection Period				
	2015	2016	2017		2019	2020	2021	2022	2023
Sales	\$1,000.3	\$1,481.4	\$1,675.3	\$2,748.5	\$3,779.2	\$4,274.3	\$4,744.4	\$5,029.1	\$5,230.2
Cost of Goods Sold	532.4	800.5	886.4	1,601.3	2,033.2	2,299.5	2,552.5	2,705.6	2,813.9
Current Assets									
Accounts Receivable	170.0	241.3	243.9	400.1	623.6	705.3	782.8	829.8	863.0
Inventories	-	-	-	-	-	-	-	-	-
Prepaid Expenses	71.0	56.2	51.5	464.7	37.8	42.7	47.4	50.3	52.3
Total Current Assets	\$240.9	\$297.6	\$295.4	\$864.8	\$661.4	\$748.0	\$830.3	\$880.1	\$915.3
Current Liabilities									
Accounts Payable	12.0	16.5	27.1	48.9	254.1	287.4	319.1	338.2	351.7
Accrued Liabilities	149.0	179.3	168.1	275.7	377.9	235.1	260.9	276.6	287.7
Other Current Liabilities	-	-	-	-	94.5	106.9	118.6	125.7	130.8
Total Current Liabilities	\$161.0	\$195.8	\$195.2	\$324.7	\$726.5	\$629.4	\$698.6	\$740.5	\$770.2
Net Working Capital	\$79.9	\$101.8	\$100.2	\$540.2	\$226.8	\$256.5	\$284.7	\$301.7	\$313.8
% sales	8.0%	6.9%	6.0%	19.7%	6.0%	6.0%	6.0%	6.0%	6.0%
(Increase) / Decrease in NWC		(\$21.8)	\$1.5	(\$439.9)	\$313.4	(\$29.7)	(\$28.2)	(\$17.1)	(\$12.1)
Assumptions									
Days Sales Outstanding	62.0	59.5	53.1	53.1	60.2	60.2	60.2	60.2	60.2
Days Inventory Held	-	-	-	-	-	-	-	-	-
Prepays and Other	7.1%	3.8%	3.1%	16.9%	1.0%	1.0%	1.0%	1.0%	1.0%
Days Payable Outstanding	8.2	7.5	11.2	11.2	45.6	45.6	45.6	45.6	45.6
Accrued Liabilities (%)	14.9%	12.1%	10.0%	10.0%	10.0%	5.5%	5.5%	5.5%	5.5%
Other Current Liabilities (%)	-	-	-	-	2.5%	2.5%	2.5%	2.5%	2.5%

Appendix 4.12. Current Ratio Comparison

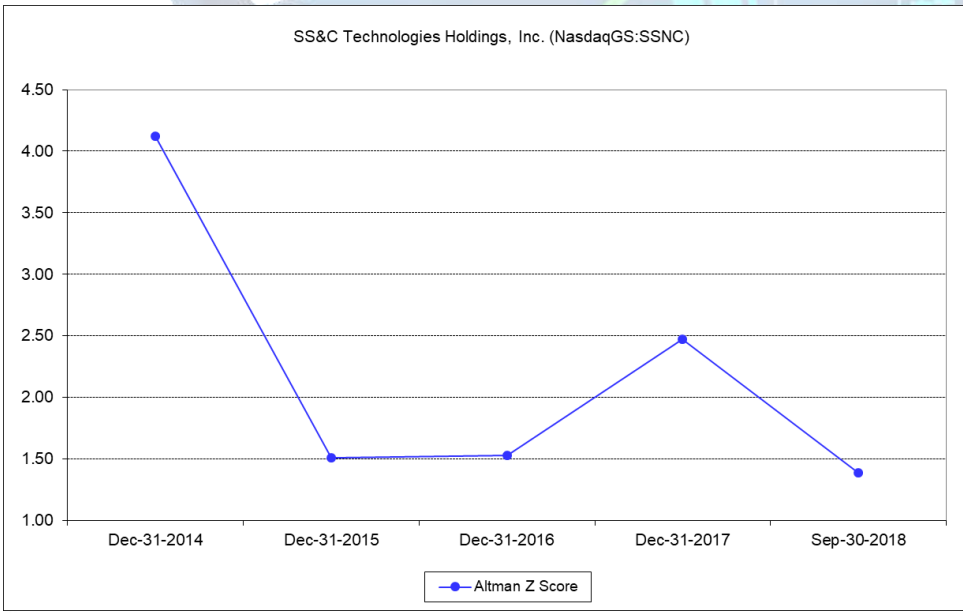


Appendix 4.13. Q- Factor Valuation



Period	Total Assets	Total Market Value	Q-Score
Dec-31-2015	5802.242	6783.218432	1.169069
Dec-31-2016	5706.971	5726.732223	1.003463
Dec-31-2017	5539.516	10290.40665	1.857636
Sep-30-2018	13279	13506.93365	1.017165

Appendix 4.14. Z-Altman Score



WACC Calculation

Capital Structure

Debt-to-Total Capitalization	35.7%
Equity-to-Total Capitalization	64.3%

Cost of Debt

Cost of Debt	5.2%
Tax Rate (5 Year Average)	26.0%
After-tax Cost of Debt	3.8%

Cost of Equity

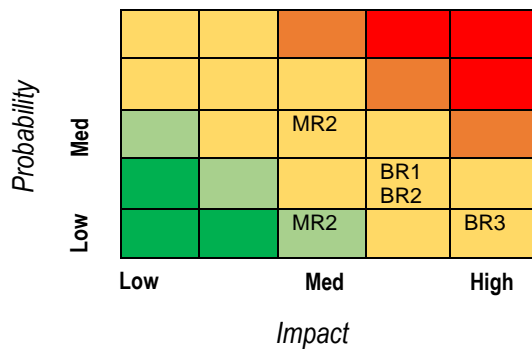
Risk-free Rate ⁽¹⁾	2.7%
Market Risk Premium ⁽²⁾	6.0%
Levered Beta	1.34
Size Premium ⁽³⁾	- %
Cost of Equity	10.8%

WACC	8.3%
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Appendix 4.15 WACC Calculation

Appendix 5: Investment Risks

Risks	Impact	Probability
Business and Operational		
Integration Acquisitions	4	2
Dependability on Senior Management	4	2
Software Services Attacks	5	1
Market		
Interest Rate Risk	3	1
Foreign Exchange Rate Risk	3	3



Appendix 5.11. Threats to values

- Market driven deterioration of core organic Business leading to an organic growth <4.0%
- Failure to leverage the synergy from DST acquisition, by far SS&C's biggest bet.
- Margin impact from increased need for spending on growth initiatives.
- Inability to deleverage at the 0.7X annual target.

Appendix 6: Corporate Governance

Methodology of Corporate Governance Scorecard:

The goal of the Scorecard: by scoring listed items to provide a detailed and comprehensive assessment of SS&C's corporate governance performance.

Scale of scores: Score scales from 1 to 5, 1 means the lowest quality, 2 means not as good as peers, 3 means average level, 4 means little above peers, 5 means the highest quality.

The total score is the weighted sum of individual section score out of 100.

index	Corporate Governance Performance	Score (scale 1-5)
	Shareholder Rights (30%)	

1	disclose shareholders' rights clearly and unequivocally	5
2	allow sufficient time for shareholder engagement	4
3	offer access to several directors or separate resolutions	3
4	provide facilities/opportunities to submit questions	4
5	disclose annual general meetings in detail	2
6	give shareholders the rights of voting for nomination and compensation	3
8	have procedures to facilitate disclosures of conflicts of interest by shareholders	4
9	debt/investments have been written-off or classified as doubtful	2
10	not violate minority shareholder rights	3
	Role of Stakeholders (10%)	
11	commit towards developing stakeholder relationships	3
12	disclose policies to address health, safety and welfare of employees	4
13	relationship with suppliers	3
14	ESG score	1
15	commit to strong ethical practices and anti-corruption and anti-bribery	5
16	have effective mechanism for stakeholders to report complaints and suspected or illegal activities	5
	Responsibilities of Board (30%)	
17	All directors fully engaged in and commit to corporate governance	5
18	the Board meet sufficiently to exercise due diligence	4
19	separation of roles between chairperson and CEO	1
20	the Board members have sufficient skills, competence and expertise	5
21	the Board has gender diversity	2
22	the Board committees have adequate independent representation	2
23	effective composition and meeting frequency in audit committee	4
24	strong and robust internal audit framework	3
25	no violation of ethical or behavioral norms in company directors or key managerial personnel	5
26	executive directors pay align with personal performance	2
27	executive directors pay align with company performance	3
28	succession plan for its directors and senior leadership	2
29	disclosure details on succession planning	2
30	Board evaluation policy and process effectiveness	2
	Transparency and Disclosure (30%)	
31	have a policy of disclosing material information	3
32	be transparent and timely in disclosing financial performance	5
33	be transparent in disclosing segmental and non-financial information	5
34	provide comprehensive disclosure on foreseeable risks	3
35	develop and disclose a comprehensive related party transaction policy	4
36	provide timely, accessible and comprehensive information and detailed minutes for annual meetings	2
37	clearly disclose its shareholding pattern	2
38	disclose shareholding of individual board members and key managerial personnel in the latest annual report	2
39	articulate a dividend policy for shareholders	4

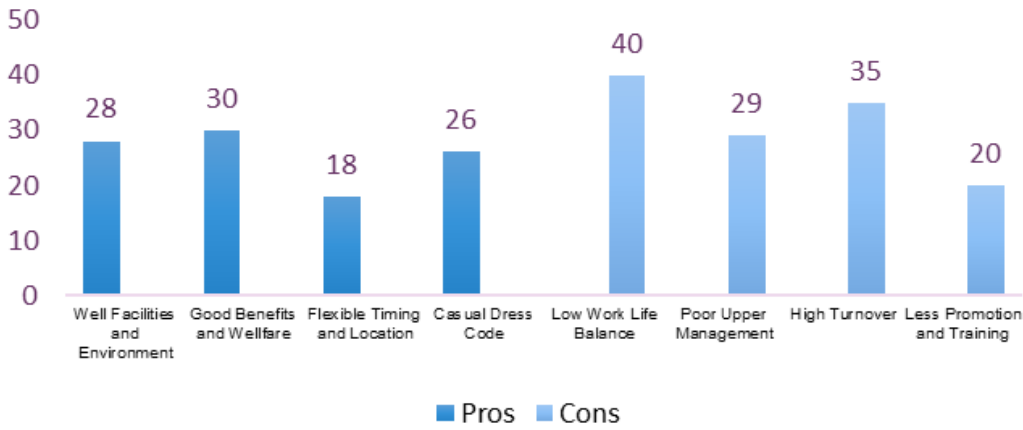
40	provide comprehensive and assessable information on company website	2
41	have a dedicated investor relation person/team whose contact details are publicly available	5
42	provide information about independence, competence and experience of the external auditor	2
43	periodically rotate its auditor (firm and partner)	4
44	contain a statement confirming company's compliance with the regulatory requirements	5
45	identify its executives, responsibilities and experiences	4
46	clearly identify its independent directors in the annual report and website	5
47	fully disclose the process and criteria for appointing new directors	4
48	disclose details on its training, development and orientation program for directors	2
49	disclose fairness opinion and independent valuation report transparently during M&A and restructuring	3

individual section	weight	score	maximum score
Shareholder Rights	30%	30	50
Role of Stakeholders	10%	21	30
Responsibilities of Board	30%	42	70
Transparency and Disclosure	30%	66	95
Total	100%	64	100

Rating Standards	
80-100	Excellent
70-79	Good
60-69	Fair
50-59	Average

Appendix 6.11. Employee Feedback Review based on Glassdor

Employee Reviews



Appendix 6.12. ESG Performance of SS&C

ESG Performance vs 103 Peer Companies

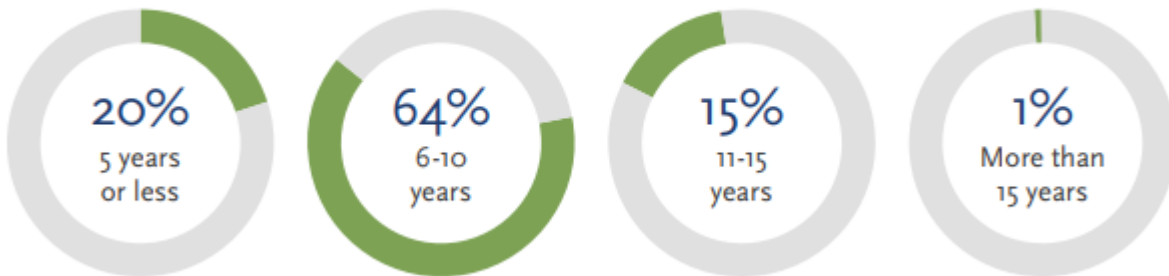
ESG PERFORMANCE



ESG data provided by Sustainalytics, Inc. Last updated on 1/2019

Appendix 6.13. Stuart US Board Index

Board Average Tenure for Independent Directors



Appendix 6.13

Figure b: Corporate Governance Scorecard Methodology.

Since SS&C has a global footprint, we used the OCED corporate governance ranking framework and devised our own ranking methodology.

Methodology: The Scorecard is developed on the basis of four principles for Corporate Governance namely:

- Enforcing rights and Equitable treatment of shareholders
- Independence of Directors.
- Disclosures and Transparency
- Responsibilities of the Board

We then allotted following questions to each one of the criteria.

Treatment of Shareholders	
1) Disclose shareholders' rights clearly and unequivocally	
2) Disclose annual general meetings in detail	
3) Not violate minority shareholder rights	
Independence of Directors	
1) Meet NASDAQ criteria	
2) Independent Directors are sufficient in number	
3) Independent Directors are not on >3 other boards	
Disclosure & Transparency	
1) Have a policy of disclosing material information	
2) Have filed all the reports in time	
Responsibilities of Board	
Board meets sufficiently enough	
Board members have sufficient skills	

Questions used:

Category	Weight	No of Qs	Max Score	SS&C
Treatment of shareholders	30%	3	6	0.25
Board Independence	30%	3	6	0.2
Disclosure & Transparency	10%	2	4	0.1
Responsibilities of Board	30%	2	4	0.225
TOTAL				0.775
			Out Of	1

Formula Used:

$(R/M)*W$ - where
 R = Marks received based on Response to the questions under the Principle
 M = Maximum Possible score for the questions under the Principle
 W = Weightage assigned to the Principle

Ranking:

0-0.25	Poor
0-0.50	Satisfactory
0.50-0.75	Good
0.75-1.0	Very Good

