



Sectorwatch: Advanced Analytics

December 2018

Advanced Analytics

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Overview

7MA provides Investment Banking & Advisory Services to the Business Services and Technology Industries globally. We advise on M&A and private capital transactions, and provide market assessments and benchmarking. As a close knit team with a long history together and a laser focus on our target markets, we help our clients sell their companies, raise capital, grow through acquisitions, and evaluate new markets. We publish our sectorwatch, a review of M&A and operational trends in the industries we focus.

Dashboard

- Summary metrics on the sector
- Commentary on market momentum by comparing the most recent 12-month performance against the last 3-year averages.



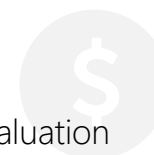
Public Basket Performance

- Summary valuation and operating metrics for a basket of comparable public companies



Valuation Comparison

- Graphical, detailed comparison of valuation multiples for the public basket



Recent Deals

- The most recently announced deals in the sector



Dashboard



Revenue Growth Momentum

↑0.05

1 - year revenue growth compared to revenue growth average for last 3 years

Current revenue growth rate exceeds the average of the last 3 years by this amount, indicating that market momentum is increasing

Pricing / Gross Margin Momentum

↑0.2%

1 - year gross profit % compared to gross profit % average for last 3 years

Current gross profit margin exceeds the average of the last 3 years gross profit margin by this amount, indicating supplier pricing power

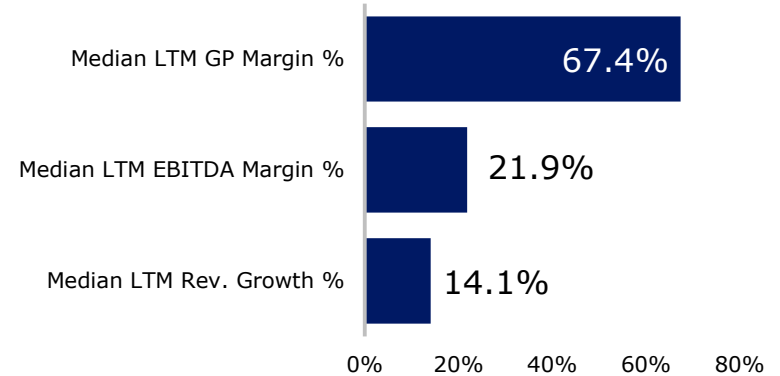
Profitability

↓-0.8%

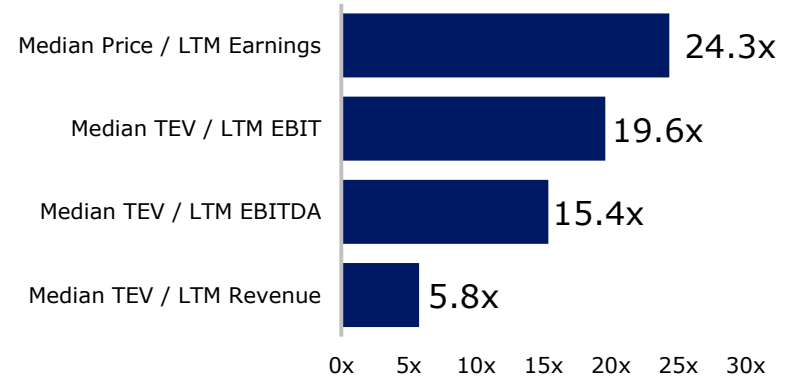
1 - year EBITDA % compared to EBITDA % average for last 3 years

Current EBITDA margin is less than the average of the last 3 years EBITDA margins, which may signal further consolidation

Operating Metrics



Valuation



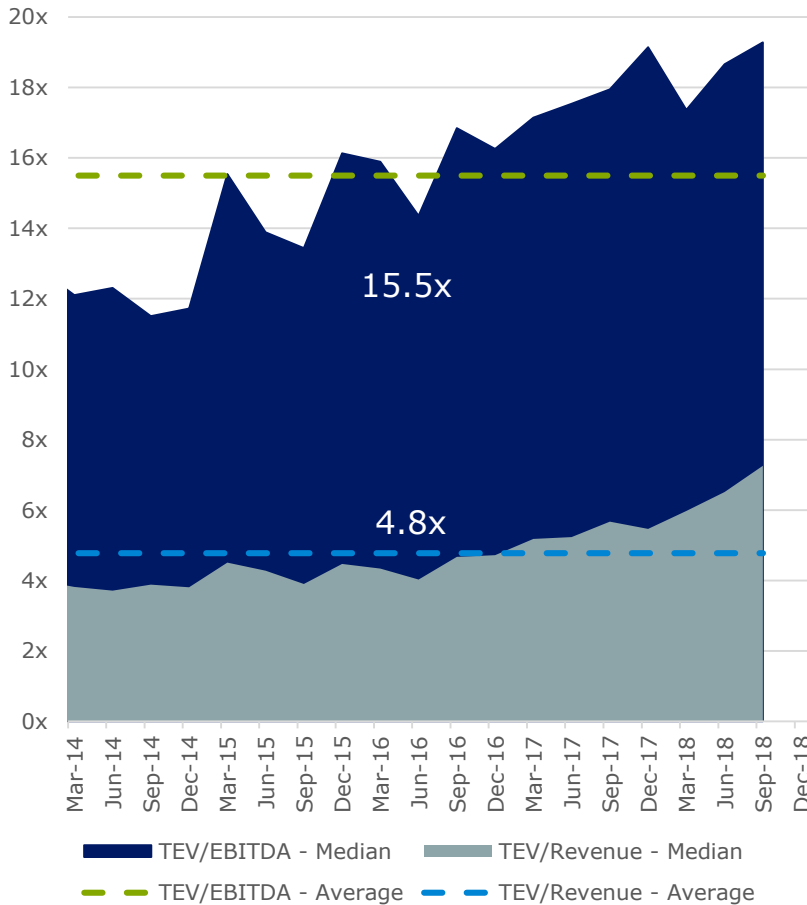
Public Basket



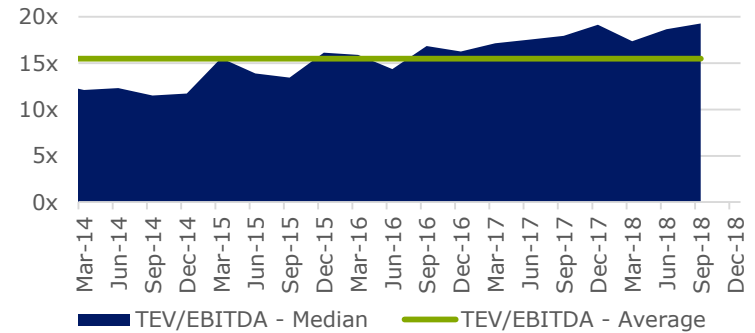
Company	TEV \$m	LTM Rev \$m	Rev Growth YoY	GP %	EBITDA %	TEV / Rev X	TEV / EBITDA X	# FTEs	Rev / FTE \$k
Alteryx, Inc.	3,136	182	55%	88%	-7%	17.2	0.0	555	329
Fair Isaac Corporation	5,953	1,032	11%	70%	23%	5.8	25.4	2,400	430
Tableau Software, Inc.	9,012	1,068	22%	88%	-9%	8.4	0.0	3,489	306
Accenture plc	87,508	40,295	12%	31%	16%	2.2	13.6	459,000	88
Adobe Inc.	107,626	9,030	24%	87%	35%	11.9	34.1	-	NA
SAP SE	121,273	27,983	3%	70%	26%	4.4	17.0	88,543	316
International Business Machines Corporation	135,428	80,373	3%	46%	21%	1.7	8.0	366,600	219
Alphabet Inc.	604,481	129,866	24%	57%	30%	4.7	15.4	80,110	1,621
Microsoft Corporation	731,501	114,906	16%	65%	41%	6.4	15.4	131,000	877
Average	200,658	44,971	19%	67%	20%	7.0	14.3	125,744	523
Median	107,626	27,983	16%	70%	23%	5.8	15.4	80,110	322

share price as of 21Dec18

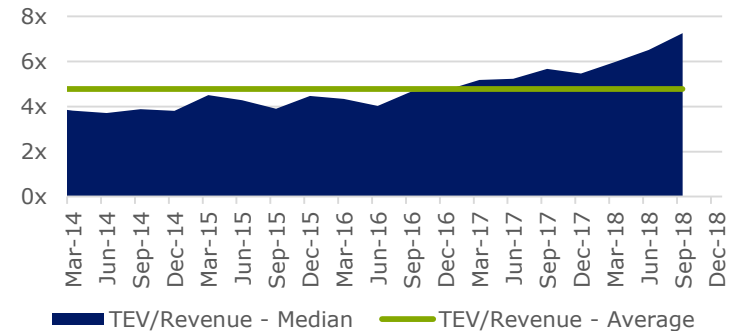
Public Basket Valuation Trends



Public EBITDA Multiples over Time



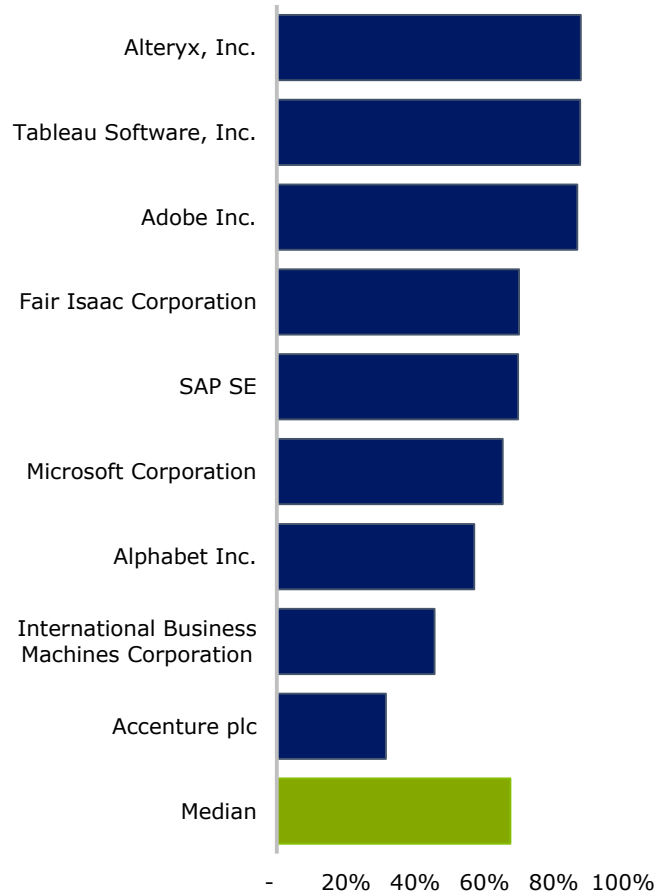
Public Revenue Multiples over Time



Operational Metrics



LTM Gross Profit Margin %



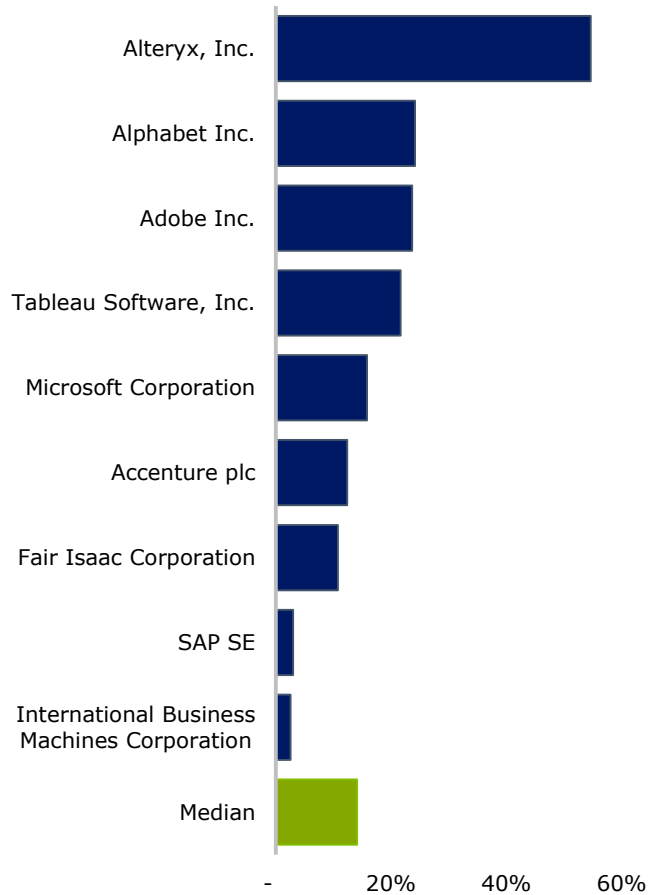
LTM EBITDA %



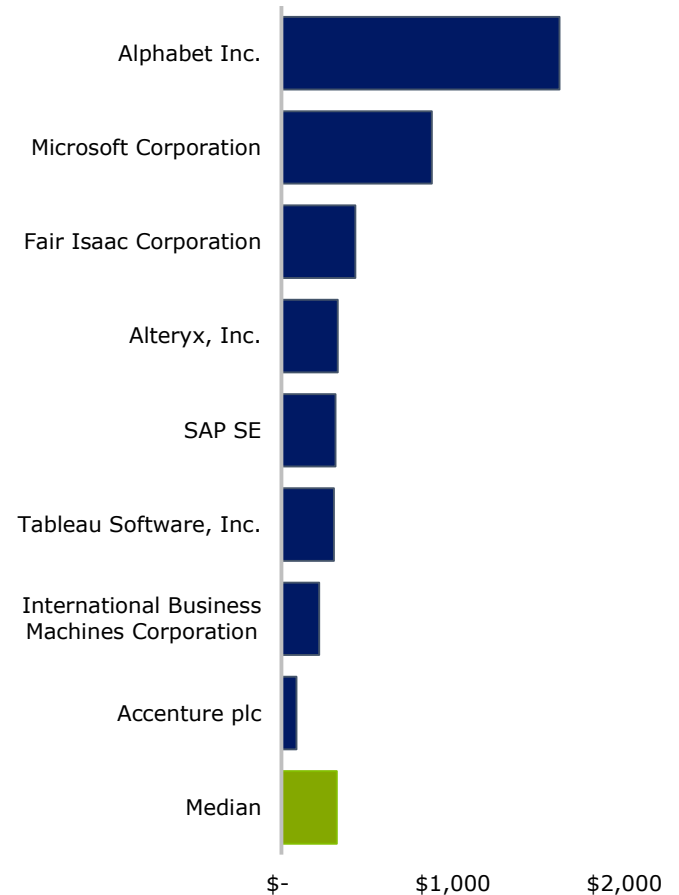
Operational Metrics



LTM Revenue Growth %



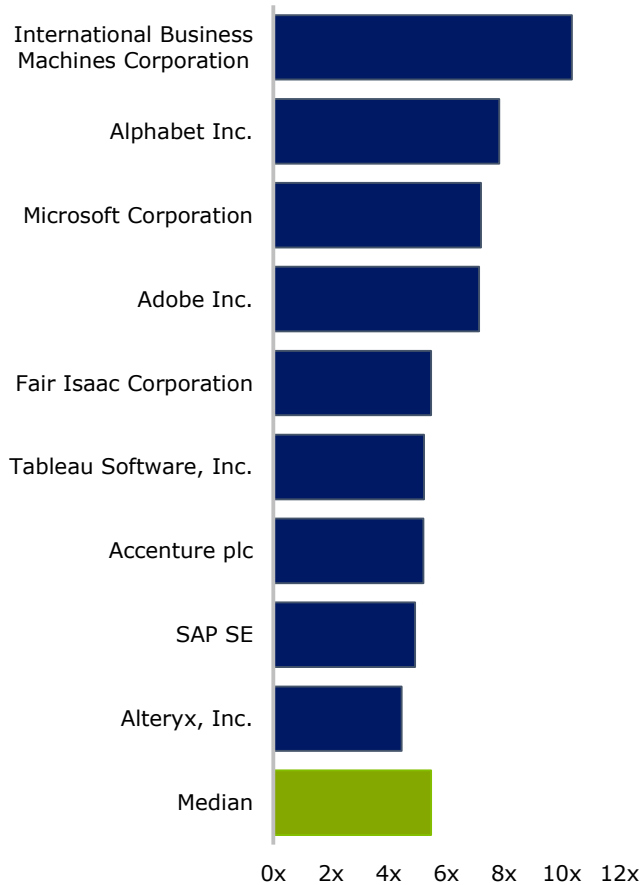
LTM Revenue per Full Time Employee x 000's



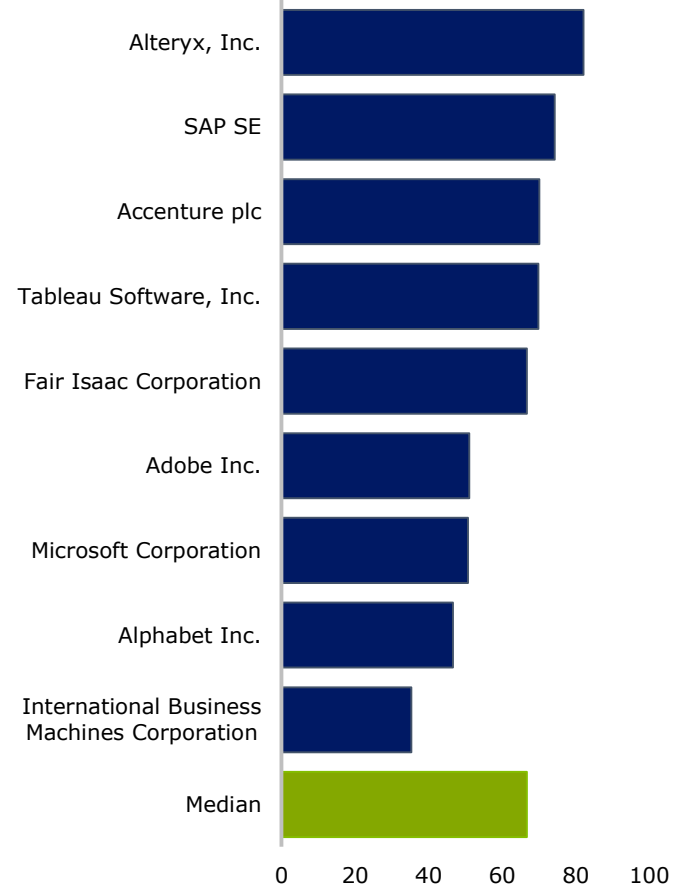
Operational Metrics



Accounts Receivable Turnover



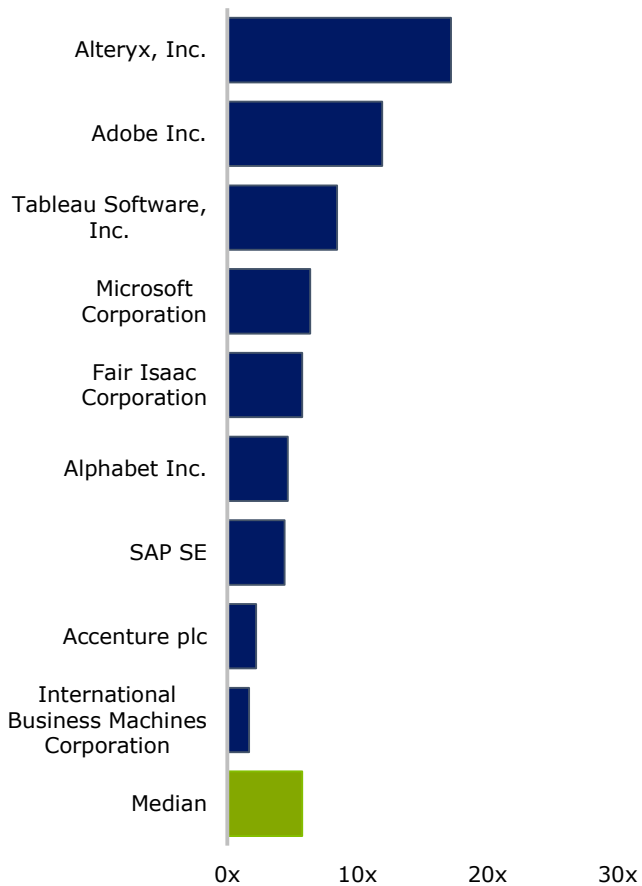
Average Days Sales Outstanding



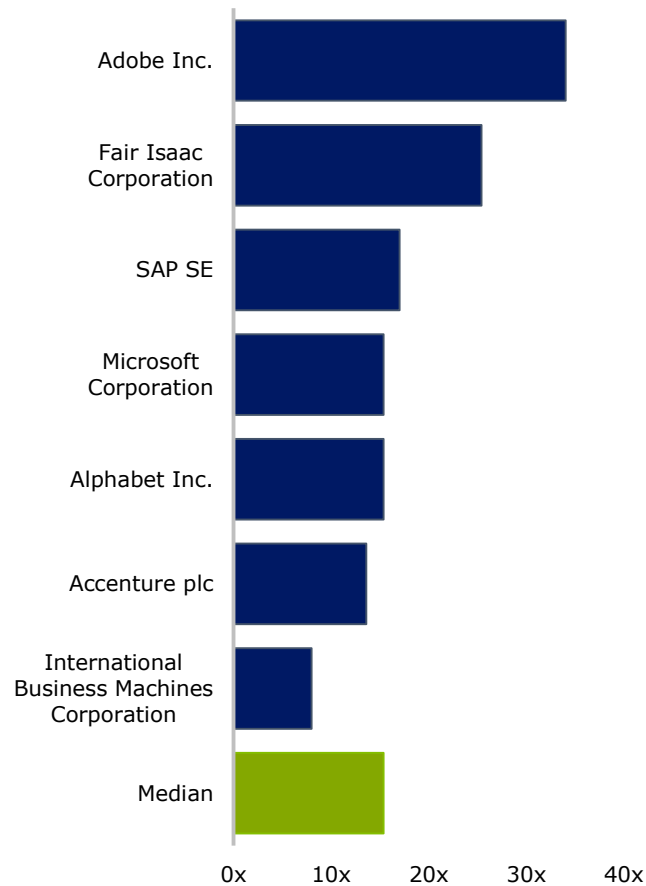
Valuation



TEV / LTM Revenue



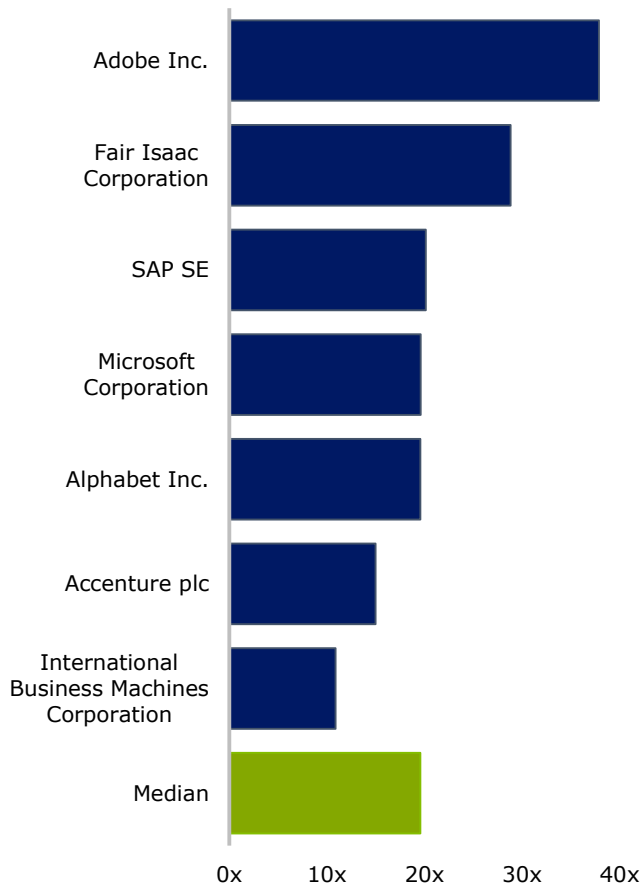
TEV / LTM EBITDA



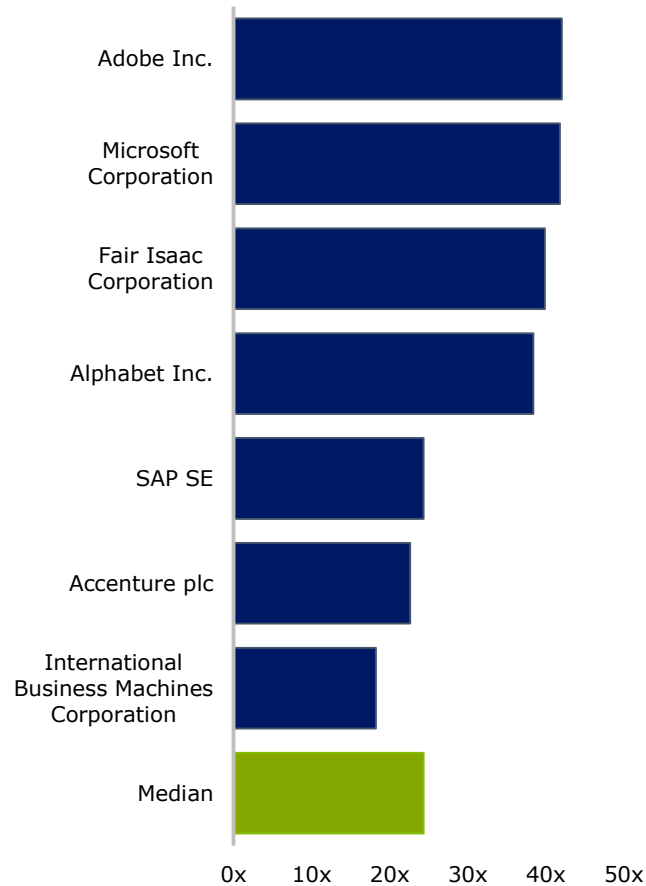
Valuation



TEV / LTM EBIT



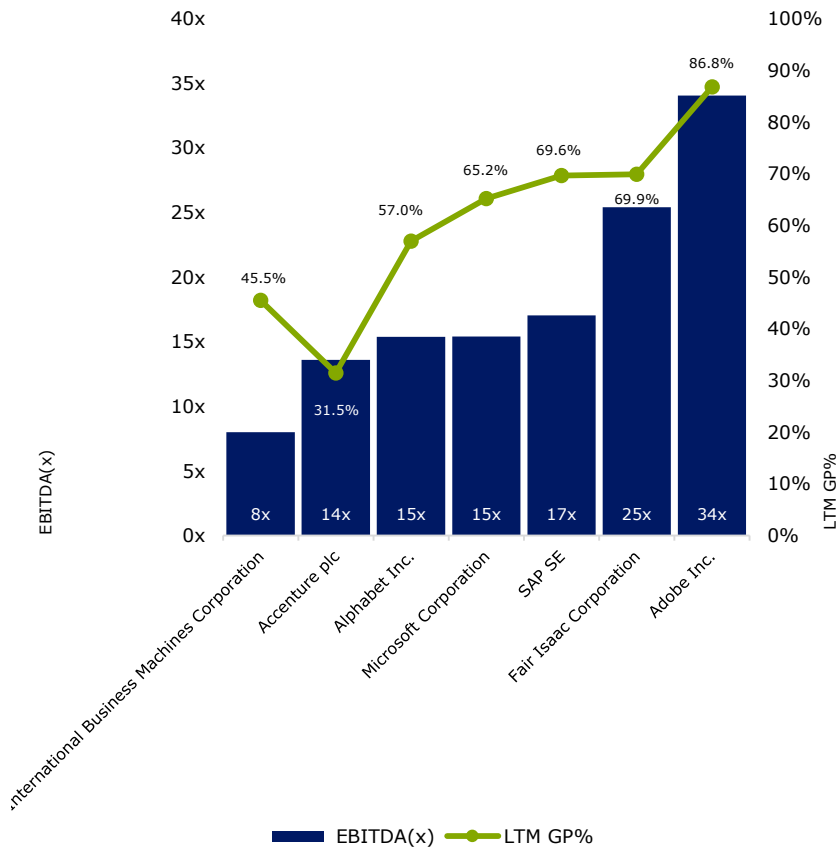
Price / LTM Earnings



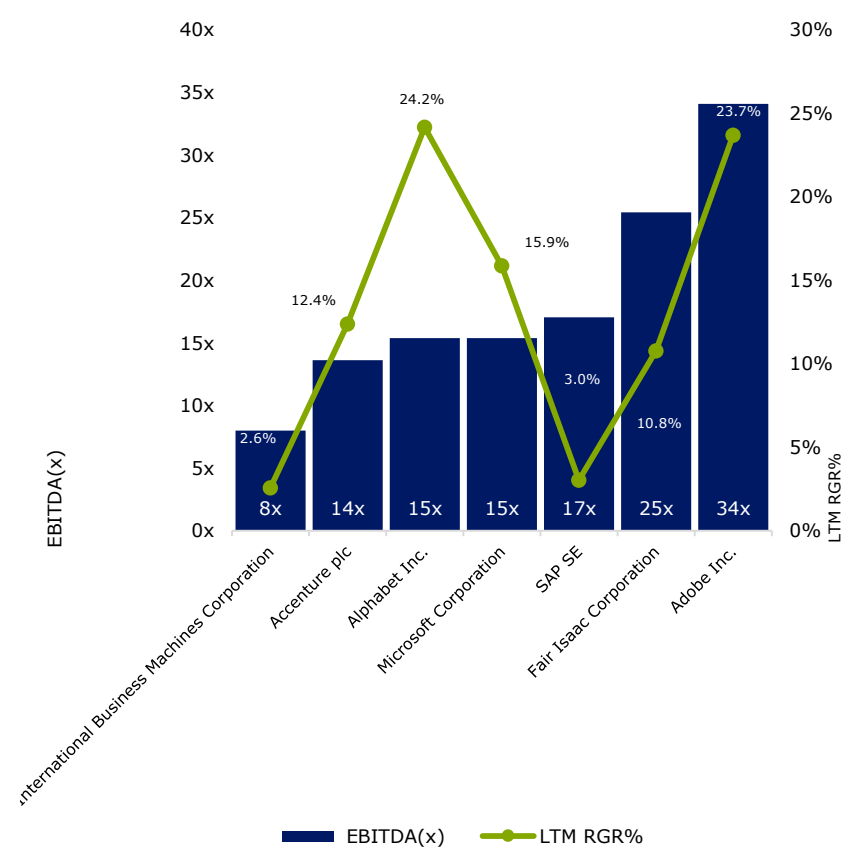
Valuation



Historical Valuation Multiples versus Gross Profit



Historical Valuation Multiples versus Revenue Growth Rate



Recent Transactions



Date	Target	Buyer / Investor	Total Transaction Value	Target Revenue	TEV / Revenue	TEV / EBITDA
11Dec18	IQMS Inc.	Dassault Systèmes SE	425.00	56.00	7.6x	-
22Nov18	Noah Data Technologies Inc.	Indium Software, Inc.	-	-	-	-
8Oct18	Qlouder B.V.	Cloud Technology Solutions Ltd	-	-	-	-
21Aug18	Predikto, Inc.	United Technologies Corporation	-	-	-	-
30Mar18	PeopleDoc SAS	The Ultimate Software Group, Inc.	-	-	-	-
30Jun18	Sift Security, Inc.	Netskope, Inc.	-	-	-	-
21Jun18	Shape Analytics	Reflektive, Inc.	-	-	-	-
23May18	Evolusys SA	Bechtle AG	-	5.03	-	-
15May18	Cyient Insights Private Limited	Cyient Limited	0.52	1.96	0.5x	-
14Mar18	Avarea Oy	Digia Oyj	-	4.44	-	-
10Jan18	CBIG Consulting, LLC	Trianz Holdings Pvt. Limited	-	-	-	-
14Dec17	Innowera LLC	Magnitude Software, Inc.	-	-	-	-
25Oct17	Zettafox	Mazars Group	-	-	-	-
7Sep17	Logmatic.io	Datadog, Inc.	-	-	-	-
21Aug17	Affecto Oyj	CGI Nordic Investments Limited	132.94	140.98	0.8x	16.3x
8Jun17	Elite Analytics LLC	Aviana Global Technologies, Inc.	-	-	-	-
1Jun17	4i, Inc.	Fractal Analytics Inc.	-	-	-	-
1Feb17	YourMembership.com, Inc.	Insight Venture Partners LLC; MBP Holdings Limited	-	-	-	-
24Jan17	BlueFlare, LLC	Robots and Pencils Corp.	-	-	-	-
1Dec16	The Encima Group, Inc.	Indegene Lifesystems Pvt Ltd.	16.00	-	-	-
18Aug16	INTELLEGO S.C	Southern Cross Group	-	-	-	-
31May16	Syslogic Technical Services Inc.	Incedo Inc.	-	-	-	-
31Oct15	Bring Focus 2 Group, S.A.	Oxy Capital - Sociedade de Capital de Risco SA; Fundo Revitalizar Centro	1.69	-	-	-
2Jun16	Recommind, Inc.	Open Text Corporation	163.00	-	-	-
11May16	Vestrics, Inc.	The Ultimate Software Group, Inc.	10.10	-	-	-
19May16	ProbaYes SAS	Mediapost Holding SAS	-	-	-	-
17May16	Datalytics Technologies LLC	Magnitude Software, Inc.	-	-	-	-
3Apr16	Mphasis Limited	The Blackstone Group L.P.	892.05	916.3	1.1x	6.3x

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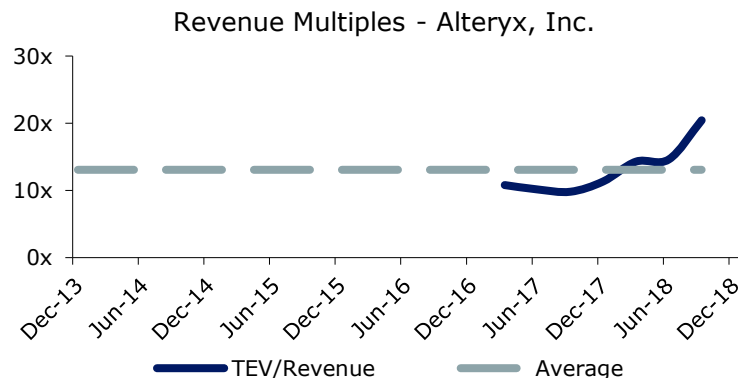
APPENDIX:
Public Basket
Constituents

Public Basket



Alteryx, Inc.

Alteryx, Inc. operates a self-service data analytics software platform that enables organizations to enhance business outcomes and the productivity of their business analysts. Its software platform includes Alteryx Designer for data preparation, blending, and analytics that could be deployable in the cloud and on premise; Alteryx Server, a secure and scalable server-based product for scheduling, sharing, and running analytic processes and applications in a Web-based environment; Alteryx Connect, a collaborative data exploration platform for discovering information assets and sharing recommendations across the enterprise; Alteryx Promote, an analytics model management product for data scientists and analytics teams to build, manage, monitor, and deploy predictive models to production; and Alteryx Analytics Gallery, a cloud-based collaboration offering that allows users to share workflows in a centralized repository. The company also provides technical support, instruction, and customer services. Alteryx, Inc. was founded in 1997 and is headquartered in Irvine, California.



Date	Key Development Headline
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5/14/18	Alteryx Mulls Acquisitions
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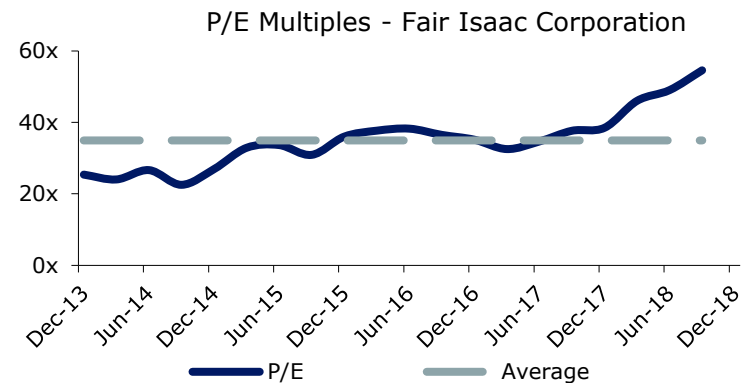
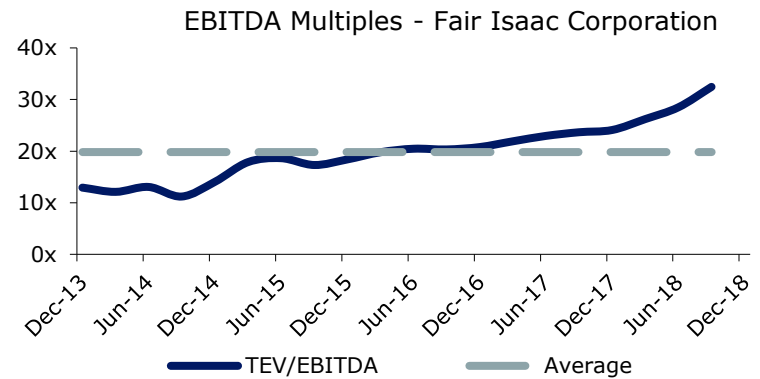
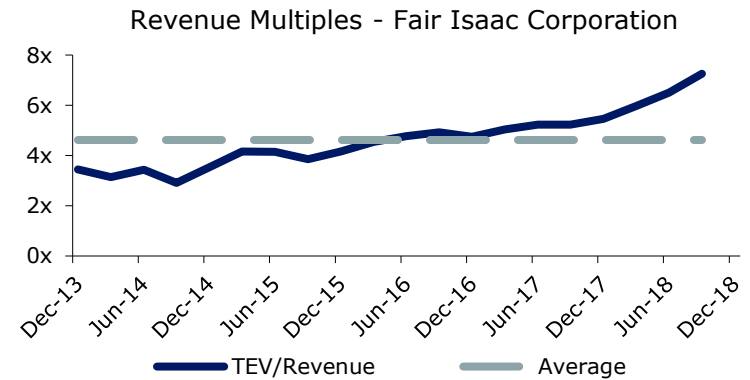
Public Basket



Fair Isaac Corporation

Fair Isaac Corporation develops analytic, software, and data management products and services that enable businesses to automate, enhance, and connect decisions. The company offers analytical solutions, credit scoring, and credit account management products and services to banks, credit reporting agencies, credit card processing agencies, insurers, retailers, healthcare organizations, and public agencies. It operates through three segments: Applications, Scores, and Decision Management Software. The Applications segment offers pre-configured decision management applications designed for various business problem or process, such as marketing, account origination, customer management, fraud, collection, and insurance claims management, as well as associated professional services. The Scores segment provides business-to-business scoring solutions and services, including myFICO solutions for consumers that give clients access to analytics to be integrated into their transaction streams and decision-making processes, as well as associated professional services. Fair Isaac Corporation was founded in 1956 and is headquartered in San Jose, California.

Date	Key Development Headline
12/11/18	Fair Isaac Corporation (NYSE:FICO) acquired GoOn - Evolucao em Gestao de Riscos Ltda.
7/26/18	Fair Isaac Seeks Acquisitions

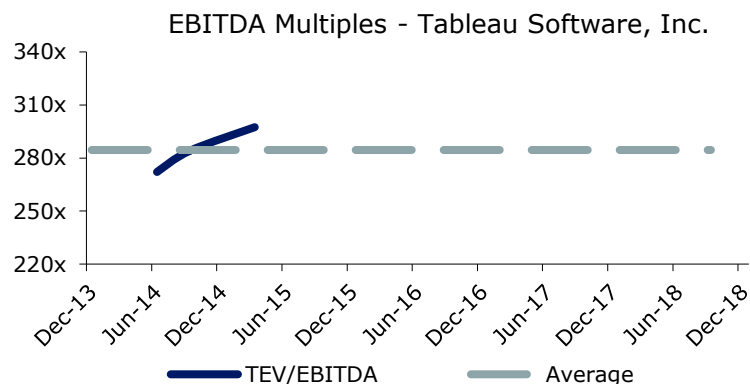
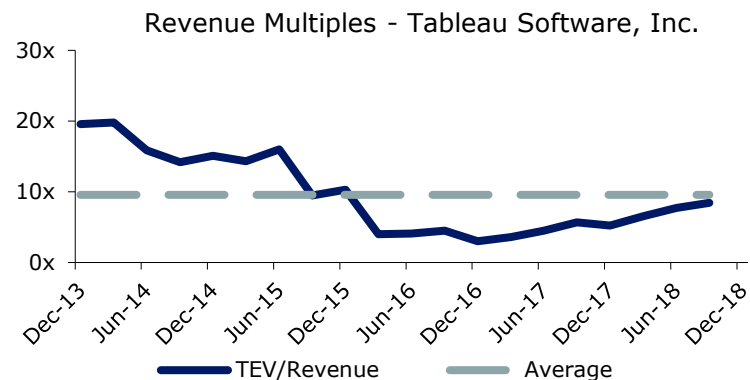


Public Basket



Tableau Software, Inc.

Tableau Software, Inc. provides business analytics software products. It offers Tableau Desktop, an analytics product that empowers people to access and analyze data; and Tableau Server, a business intelligence platform with data management and scalability to foster sharing of analytics, as well as to enhance the dissemination of information in an organization and promote decision-making. The company also provides Tableau Online, a hosted software-as-a-service version of Tableau Server; and Tableau Public, a cloud-based platform that allows various users, such as bloggers, journalists, researchers, and government workers to visualize public data on their Websites. In addition, it offers Visual Query Language (VizQL) for databases, which is a computer language for describing pictures of data, including graphs, charts, maps, time series, and tables of visualizations; Live Query Engine that interprets abstract queries generated by VizQL into syntax understandable by various database systems. Tableau Software, Inc. was founded in 2003 and is headquartered in Seattle, Washington.



Date	Key Development Headline
6/12/18	Tableau Software, Inc. (NYSE:DATA) acquired Empirical Systems, Inc.

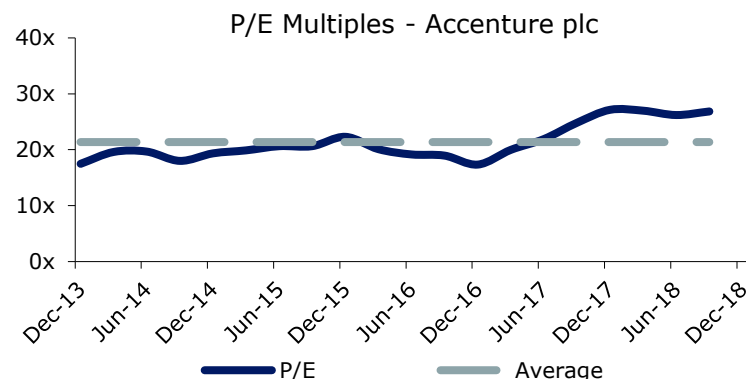
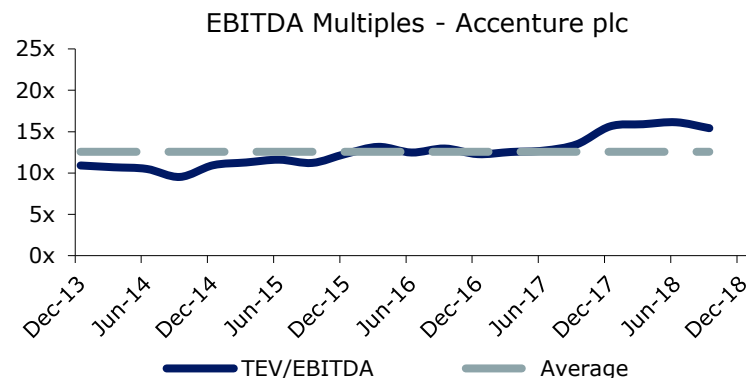
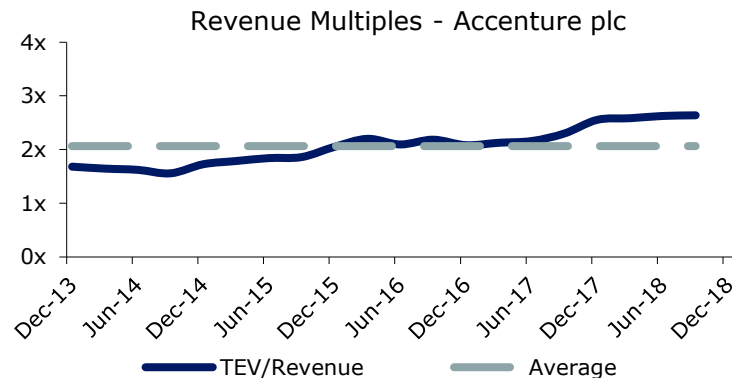
Public Basket



Accenture plc

Accenture plc provides consulting, technology, and outsourcing services worldwide. Its Communications, Media & Technology segment provides professional services that help clients accelerate and deliver digital transformation, and enhance business results through industry-specific solutions for communications, media, and high tech industries, as well as for software platforms. The company's Financial Services segment offers services that address profitability pressures, industry consolidation, regulatory changes, and the need to continually adapt to new digital technologies. This segment serves clients in banking, capital markets, and insurance industries. Accenture plc was founded in 1989 and is based in Dublin, Ireland.

Date	Key Development Headline
12/19/18	Accenture plc (NYSE:ACN) entered into an agreement to acquire Knowledge Group Inc.
12/12/18	Accenture plc Enters into an Agreement to Form a Strategic Alliance with Zafin Global Holdings Corp
12/11/18	Accenture plc (NYSE:ACN) entered into an agreement to acquire professional services assets from Zafin Labs Technologies Ltd.
12/11/18	Accenture plc (NYSE:ACN) entered into an agreement to acquire Adaptly, Inc.
12/9/18	Accenture plc (NYSE:ACN) acquired PrimeQ Pty Ltd. from Andrew McAdams and four other founders and few families for AUD 31 million.



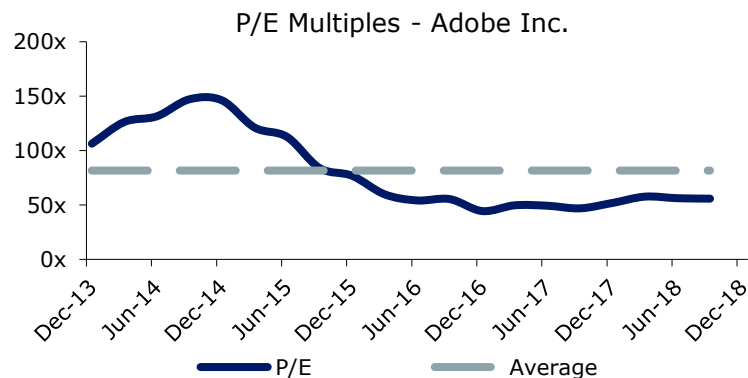
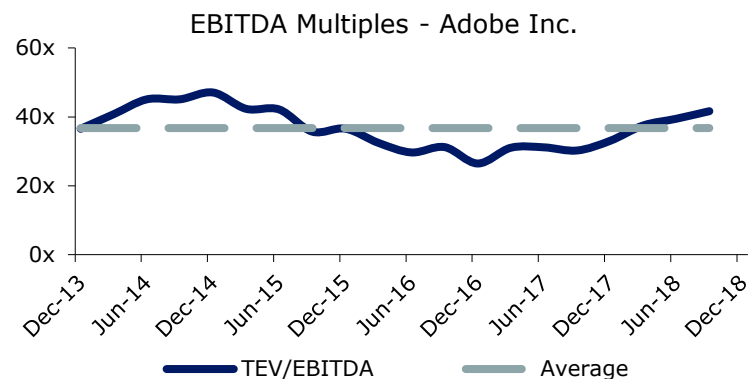
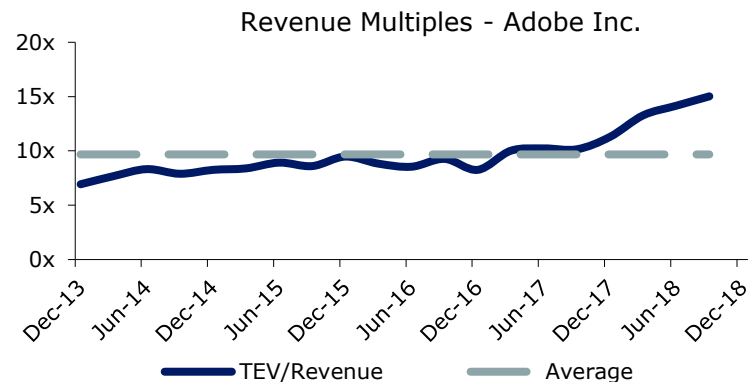
Public Basket



Adobe Systems Incorporated

Adobe Systems Incorporated operates as a diversified software company worldwide. Its Digital Media segment provides tools and solutions that enable individuals, small and medium businesses, and enterprises to create, publish, promote, and monetize their digital content. Its flagship product is Creative Cloud, a subscription service that allows customers to download and install the latest versions of its creative products. This segment serves traditional content creators, Web application developers, and digital media professionals, as well as their management in marketing departments and agencies, companies, and publishers. The company was founded in 1982 and is headquartered in San Jose, California.

Date	Key Development Headline
10/30/18	Adobe Inc. (NasdaqGS:ADBE) completed the acquisition of Marketo, Inc. from Vista Equity Partners LLC.
10/9/18	Adobe Accelerates Experience-Driven Commerce with Major Advancements to Magento Commerce Cloud
9/20/18	Adobe Systems Incorporated, Marketo, Inc. - M&A Call
9/19/18	Adobe Systems Incorporated (NasdaqGS:ADBE) entered into a definitive agreement to acquire Marketo, Inc. from Vista Equity Partners LLC for \$4.8 billion.
6/18/18	Adobe Systems Incorporated (NasdaqGS:ADBE) completed the acquisition of Magento, Inc. from Permira Advisers Ltd. and Hillhouse Capital Management, Ltd.



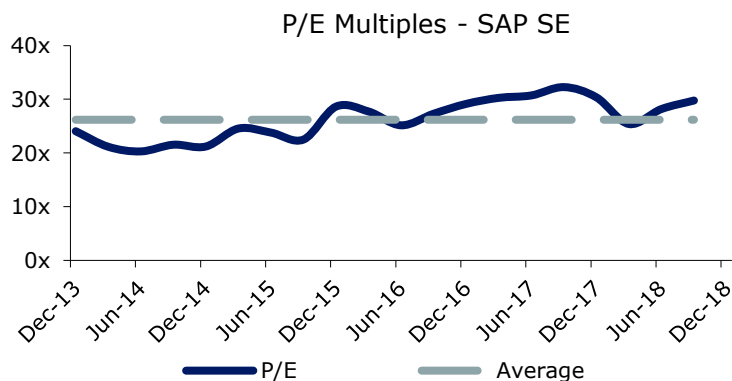
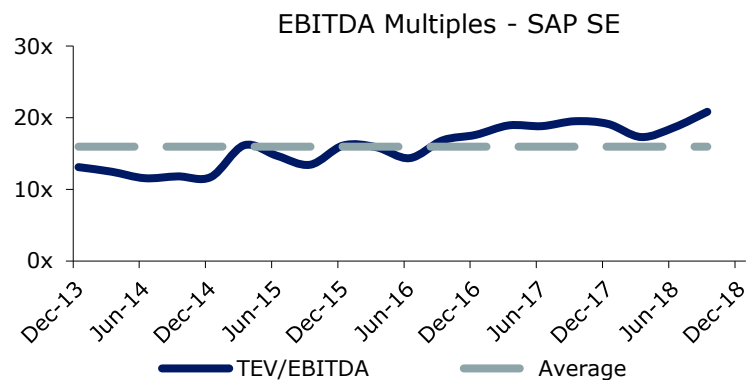
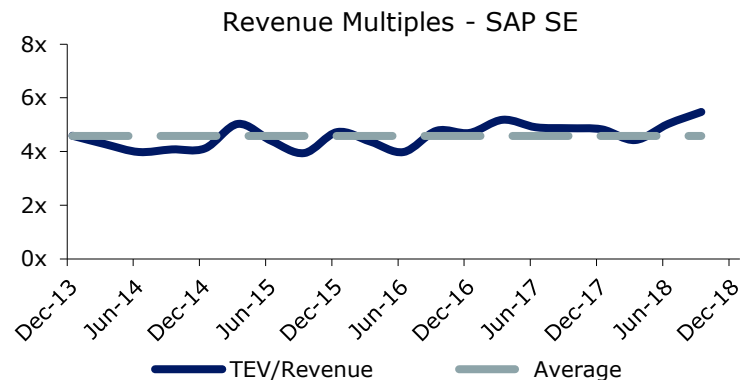
Public Basket



SAP SE

SAP SE operates as an enterprise application software, and analytics and business intelligence company worldwide. It offers SAP HANA, which enables businesses to process and analyze live data; SAP Data Hub, a solution that enables businesses to manage data from various sources; SAP Cloud Platform, which enables businesses to connect and integrate applications; SAP BW/4HANA, a data warehouse solution; SAP Leonardo, a system that enables customers to make business sense and opportunity of disruptive technologies; and SAP Analytics Cloud, which leverages the intersection of business intelligence, planning, and predictive analytics. SAP SE was founded in 1972 and is headquartered in Walldorf, Germany.

Date	Key Development Headline
12/17/18	SAP and Software AG Launch Joint Platform for Smart Cities
12/17/18	Lition Signs a Co-Innovation Agreement with SAP SE
11/20/18	Tata Consultancy Services Partners with SAP to Build Intelligent Rail Digital Maintenance
11/18/18	SAP SE (DB:SAP) acquired Contextor SAS.
11/16/18	SAP To Seek Acquisitions



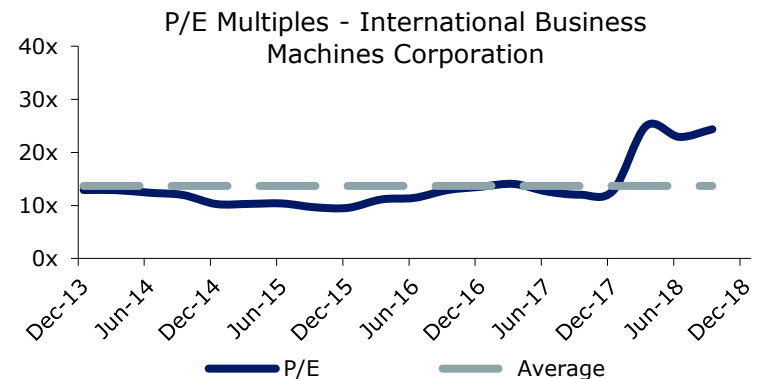
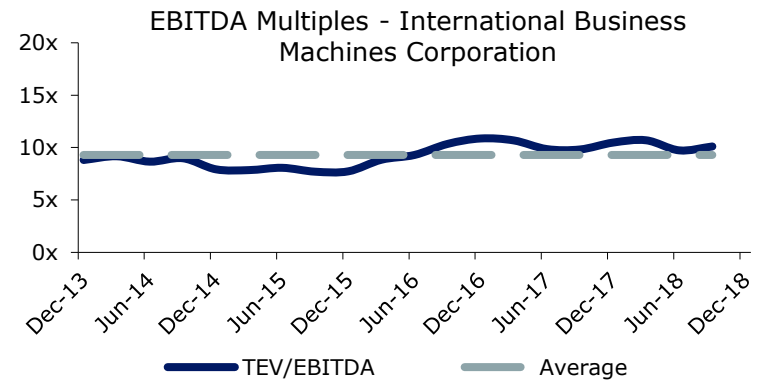
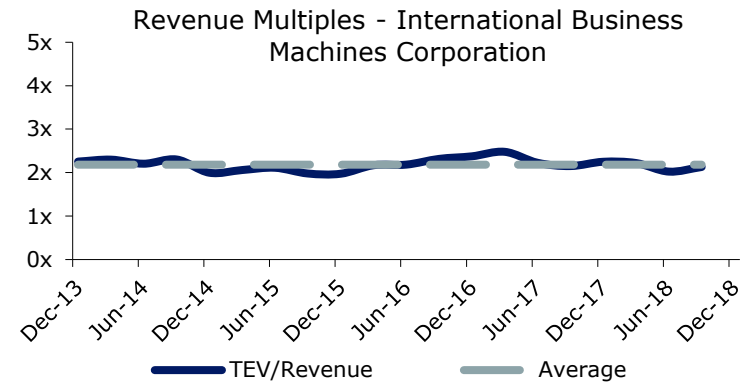
Public Basket



International Business Machines Corporation

International Business Machines Corporation operates as an integrated technology and services company worldwide. Its Cognitive Solutions segment offers Watson, a cognitive computing platform that interacts in natural language, processes big data, and learns from interactions with people and computers. This segment also offers data and analytics solutions, including analytics and data management platforms, cloud data services, enterprise social software, talent management solutions, and solutions tailored by industry; and transaction processing software that runs mission-critical systems in banking, airlines, and retail industries. International Business Machines Corporation was founded in 1911 and is headquartered in Armonk, New York.

Date	Key Development Headline
12/20/18	IBM Expands Strategic Partnership with Samsung to Include 7nm Chip Manufacturing
12/6/18	HCL Technologies Limited (NSEI:HCLTECH) entered into a definitive agreement to acquire Software Portfolio from International Business Machines Corporation (NYSE:IBM) for \$1.8 billion.
11/26/18	IBM Partners with IVADO to Combine Research and Industry Expertise in Artificial Intelligence
11/13/18	Seagate Technology plc and IBM Work Together to Help Reduce Global Hard Drive Counterfeiting with Blockchain Technology
11/8/18	TruSTAR Technology, LLC Announces Partnership with IBM and Rackspace for the Development of Cloud Fraud Exchange



Public Basket

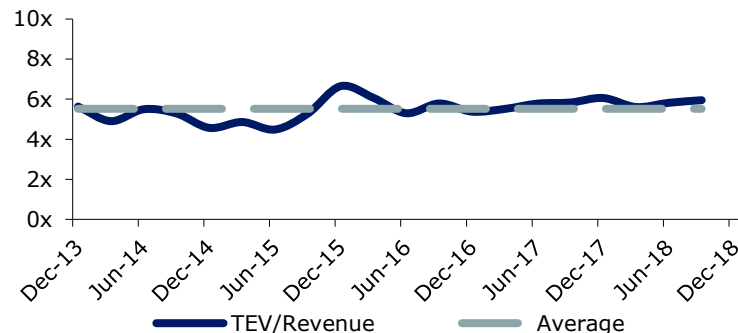


Alphabet Inc.

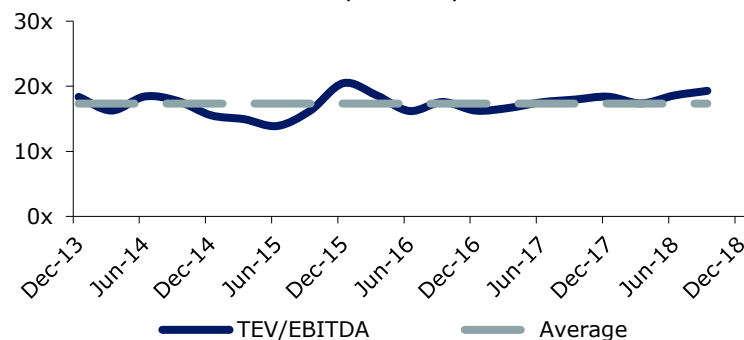
Alphabet Inc., through its subsidiaries, provides online advertising services in the United States and internationally. The company offers performance and brand advertising services. It operates through Google and Other Bets segments. The Google segment includes principal Internet products, such as Ads, Android, Chrome, Commerce, Google Cloud, Google Maps, Google Play, Hardware, Search, and YouTube, as well as technical infrastructure and newer efforts, including Virtual Reality. This segment also offers digital content, enterprise cloud services, and hardware products, as well as other miscellaneous products and services. Alphabet Inc. was founded in 1998 and is headquartered in Mountain View, California.

Date	Key Development Headline
12/4/18	QSR Automations and Google Integrate DineTime Restaurants to Reserve with Google
11/26/18	Alphabet Inc. (NasdaqGS:GOOG.L) acquired cwist, Inc.
11/7/18	CommScope Holding Company, Inc. (NasdaqGS:COMM) entered into a bid conduct agreement to acquire ARRIS International plc (NasdaqGS:ARRS) from Alphabet Inc. (NasdaqGS:GOOG.L), BlackRock, Inc. (NYSE:BLK), The Vanguard Group, Inc., Hotchkis and Wiley Capital Management, LLC and other shareholders for \$5.8 billion
10/10/18	accesso Technology Group plc Partners with Google to Connect Accesso Clients with Google Users
10/1/18	Alphabet Inc. (NasdaqGS:GOOG.L) acquired Terraform Labs Incorporated.

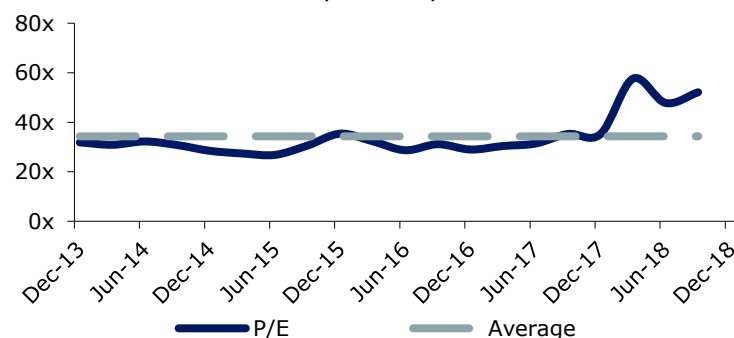
Revenue Multiples - Alphabet Inc.



EBITDA Multiples - Alphabet Inc.



P/E Multiples - Alphabet Inc.



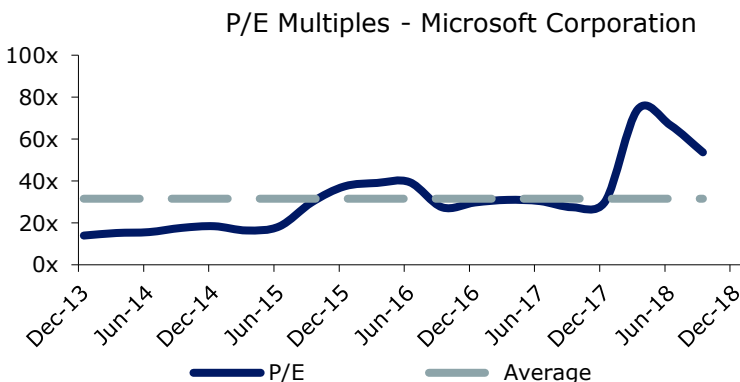
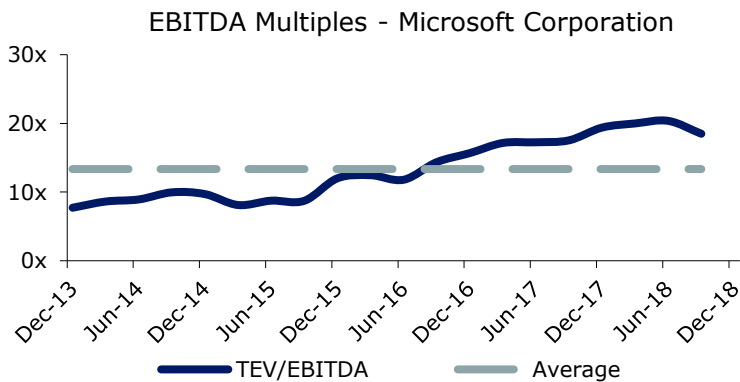
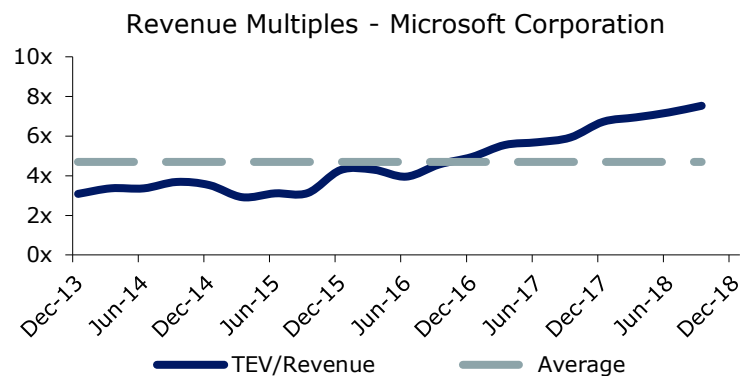
Public Basket



Microsoft Corporation

Microsoft Corporation develops, licenses, and supports software products, services, and devices worldwide. The company's Productivity and Business Processes segment offers Office 365 commercial products and services for businesses, including Office, Exchange, SharePoint, Skype for Business, and related Client Access Licenses (CALs); Office 365 consumer services, such as Skype, Outlook.com, and OneDrive; Dynamics business solutions, such as financial management, enterprise resource planning, customer relationship management, supply chain management, and analytics applications for small and mid-size businesses, large organizations, and divisions of enterprises; and LinkedIn online professional network. The company was founded in 1975 and is headquartered in Redmond, Washington.

Date	Key Development Headline
12/3/18	Mastercard and Microsoft Join Forces to Advance Digital Identity Innovations
11/18/18	Microsoft Corporation (NasdaqGS:MSFT) acquired FSLogix, Inc.
11/13/18	Microsoft Corporation (NasdaqGS:MSFT) signed an agreement to acquire XOXCO, Inc.
11/13/18	Microsoft and Nielsen Announce Strategic Alliance
11/9/18	Microsoft Corporation (NasdaqGS:MSFT) acquired Obsidian Entertainment, Inc. and inXile entertainment, Inc. from gumi Inc. (TSE:3903) and others.
11/5/18	Walmart and Microsoft Announce Extension of Strategic Partnership



Contact Information

7MA provides Investment Banking & Advisory Services to the Business Services and Technology Industries globally. We advise on M&A and private capital transactions, and provide market assessments and benchmarking. As a close-knit team with a long history together and a laser focus on our target markets, we help our clients sell their companies, raise capital, grow through acquisitions, and evaluate new markets. Securities offered through 7M Securities LLC.

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