



Sectorwatch: Software Engineering

May 2018

Software Engineering

May 2018

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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

↓ -0.04

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

Current revenue growth rate is less than the average of the last 3 years, indicating that the market may be flattening or declining

Pricing / Gross Margin Momentum

↓ -0.7%

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

Current gross profit margin is less than the average of the last 3 years gross profit margins, indicating customer pricing power

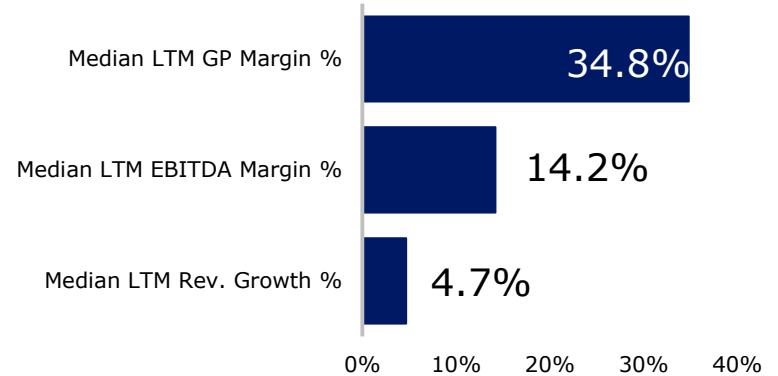
Profitability Momentum

↓ -0.9%

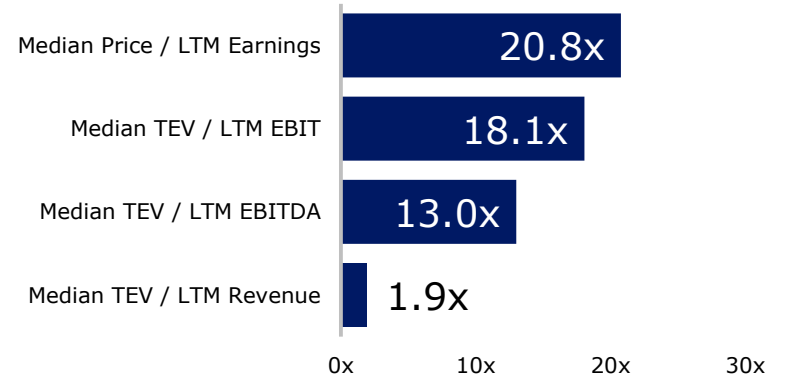
1 - year EBITDA % compared to EBITDA % average for last 3 years

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

Operating Metrics



Valuation



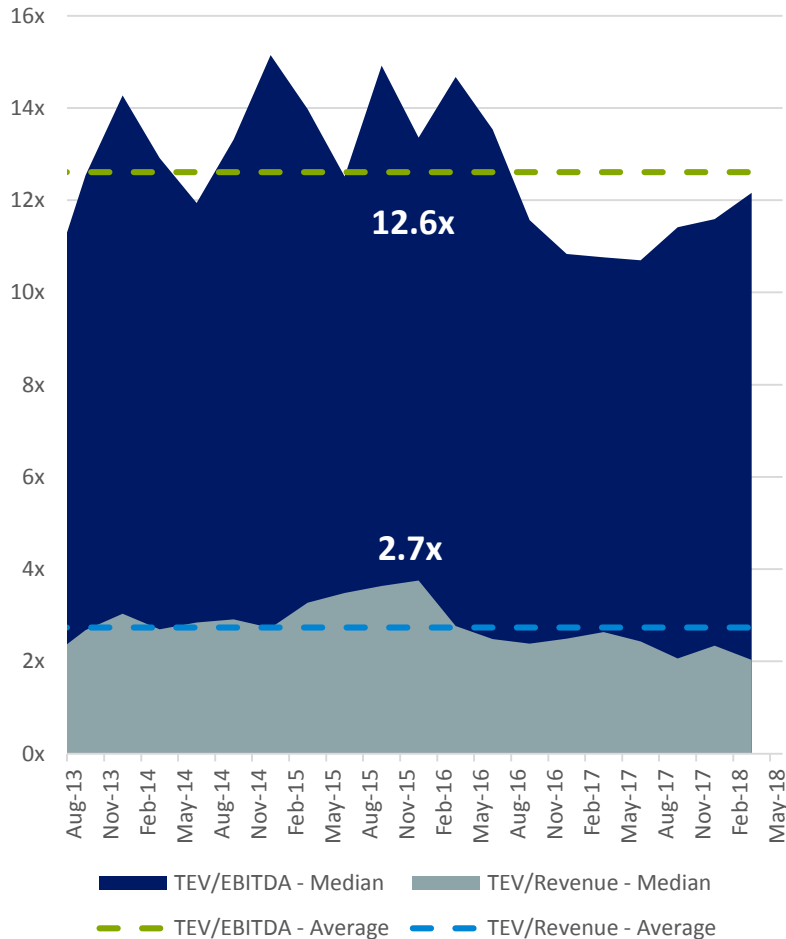
Public Basket



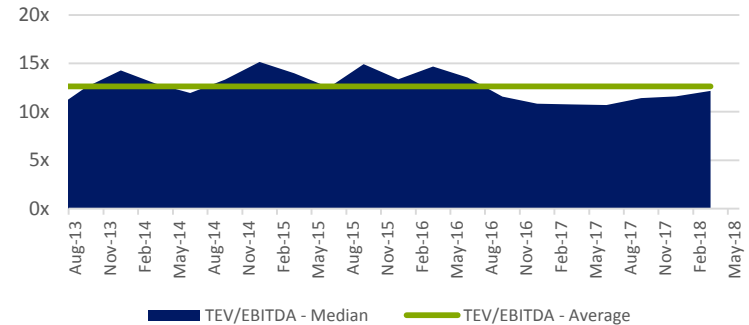
Company	TEV \$m	LTM Rev \$m	Rev Growth YoY	GP %	EBITDA %	TEV / Rev X	TEV / EBITDA X	# FTEs	Rev / FTE \$k
R Systems International Limited	38	92	2%	27%	6%	0.4	7.7	2,353	39
Persistent Systems Limited	821	466	5%	29%	14%	1.8	13.0	-	NA
Luxoft Holding, Inc.	1,392	907	15%	37%	11%	1.5	14.3	-	NA
Globant S.A.	1,758	444	31%	37%	14%	4.0	29.0	6,753	66
EPAM Systems, Inc.	6,127	1,550	27%	36%	14%	4.0	27.3	25,962	60
Wipro Limited	15,151	8,373	-1%	29%	20%	1.9	9.5	163,827	51
Capgemini SE	24,066	15,360	2%	26%	13%	1.6	12.7	199,698	77
Infosys Limited	34,986	10,939	7%	35%	27%	3.4	12.5	204,107	54
Tata Consultancy Services Limited	94,602	18,917	4%	44%	26%	5.3	19.9	394,998	48
Average	19,882	6,339	10%	33%	16%	2.6	16.2	110,855	56
Median	6,127	1,550	5%	35%	14%	1.9	13.0	25,962	54

share price as of 24May18

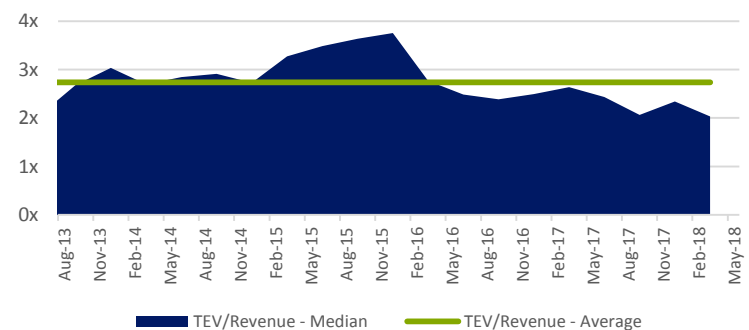
Public Basket Valuation Trends



Public EBITDA Multiples over Time



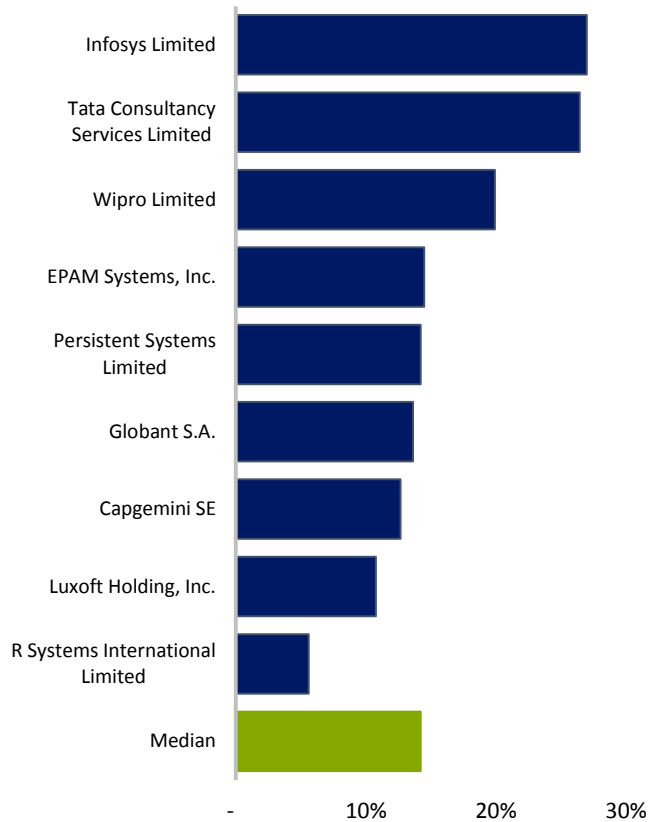
Public Revenue Multiples over Time



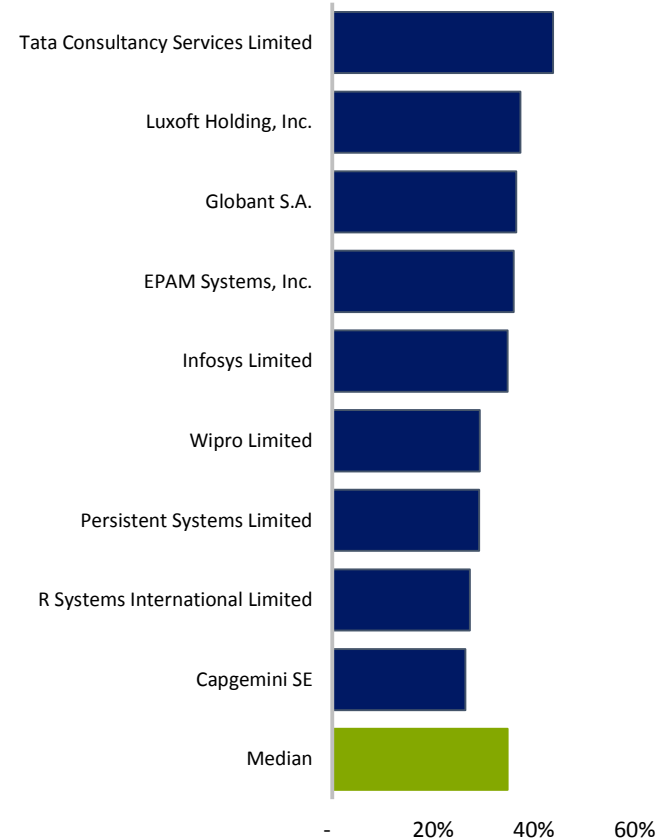
Operational Metrics



LTM Gross Profit Margin %



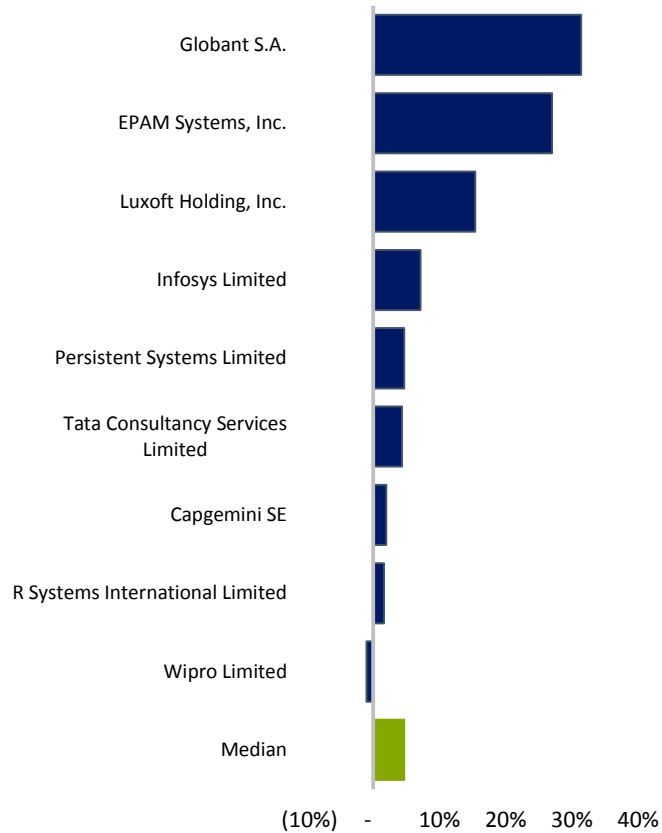
LTM EBITDA %



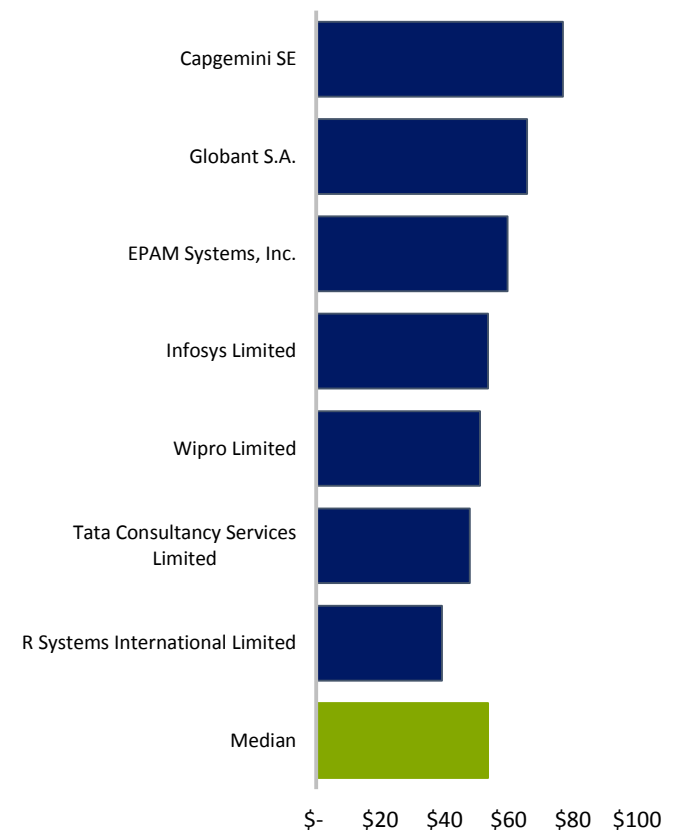
Operational Metrics



LTM Revenue Growth %



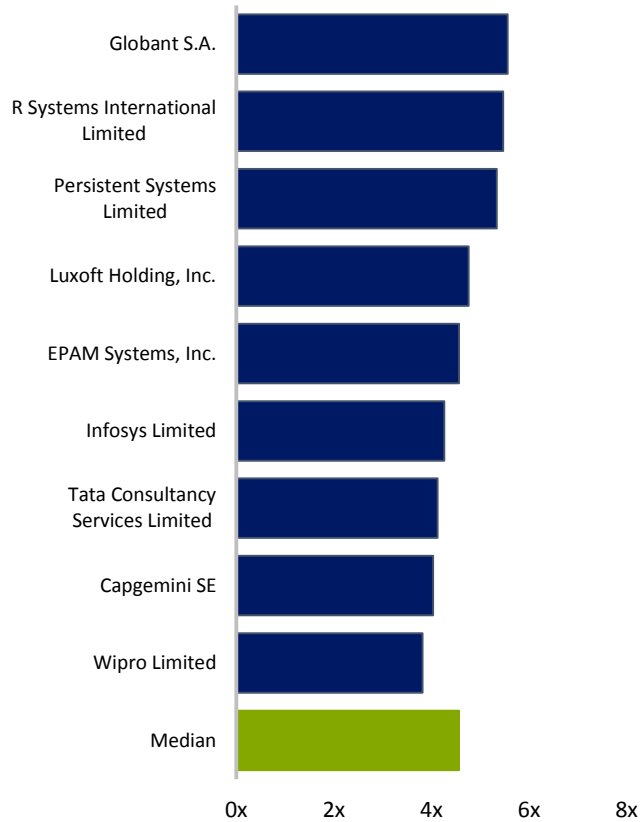
LTM Revenue per Full Time Employee x 000's



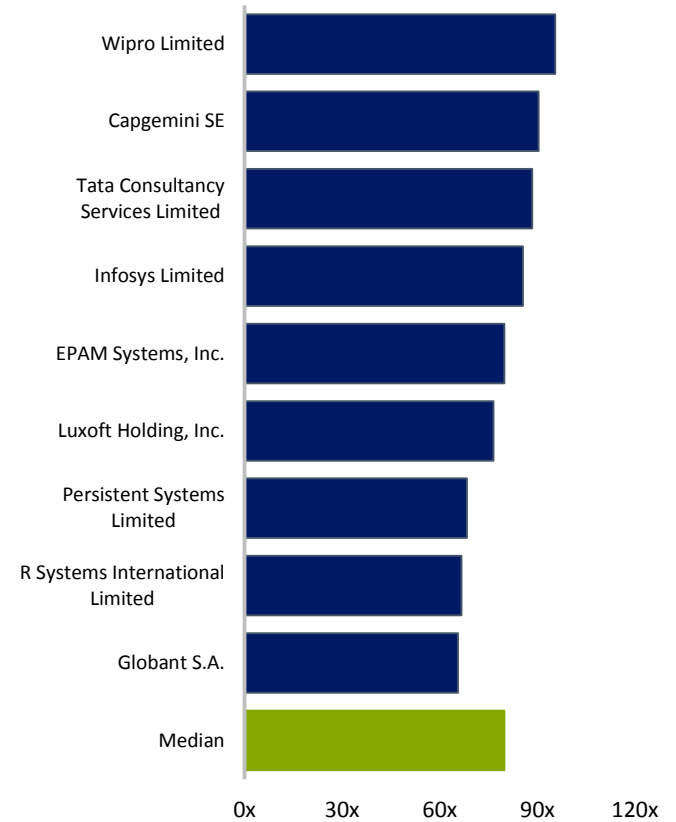
Operational Metrics



Accounts Receivable Turnover



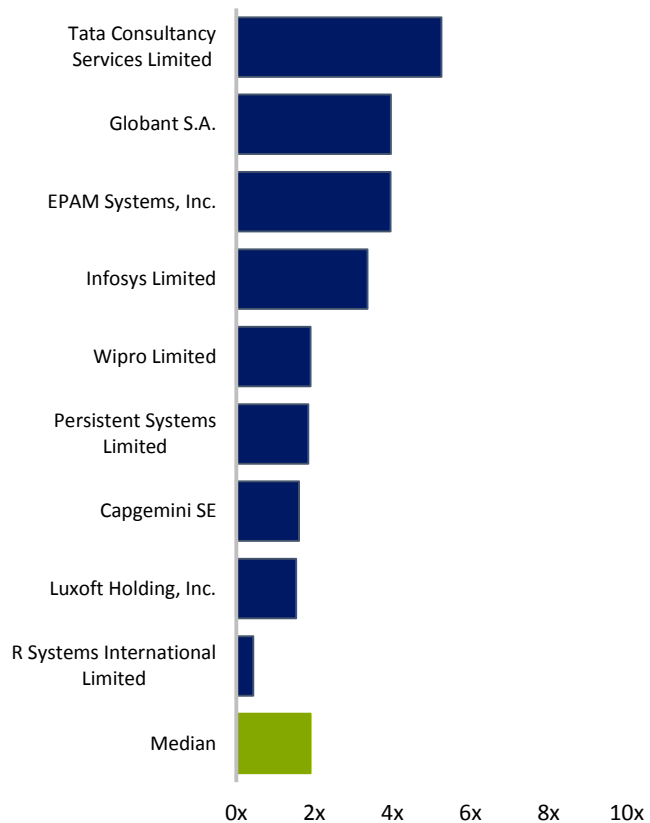
Average Days Sales Outstanding



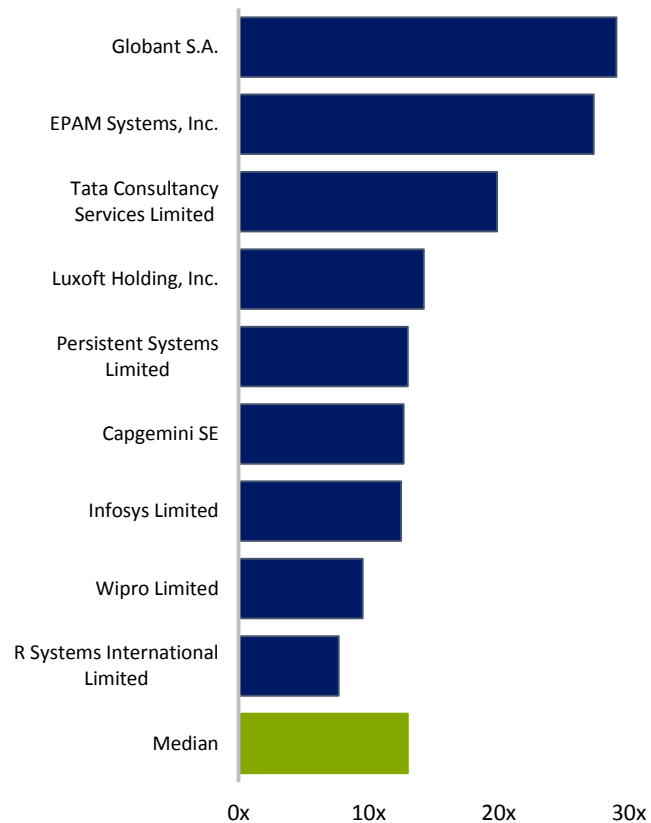
Valuation



TEV / LTM Revenue



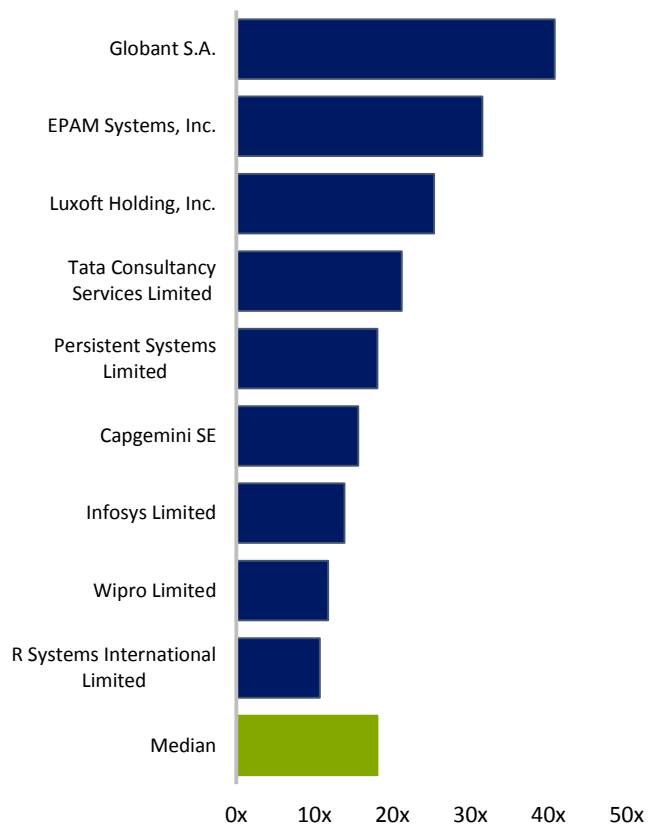
TEV / LTM EBITDA



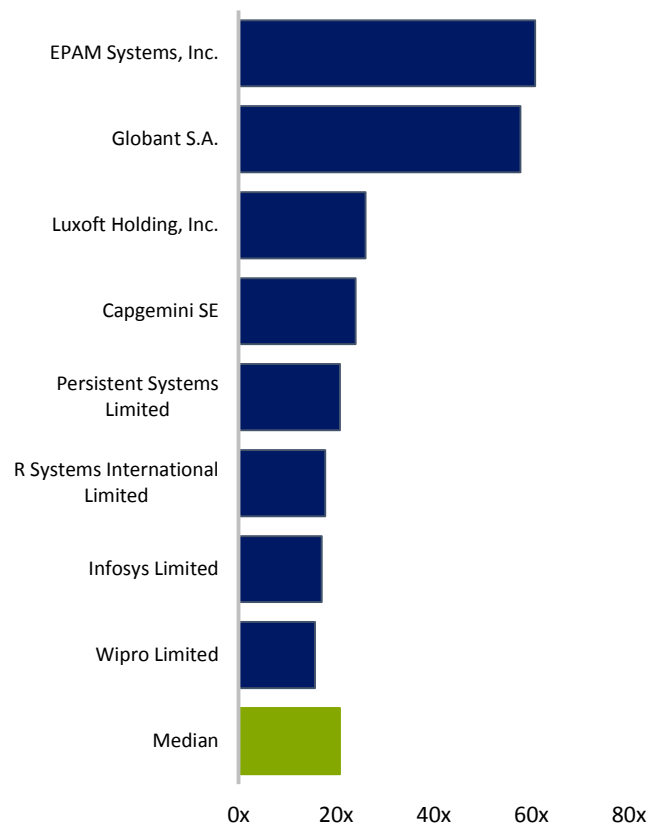
Valuation



TEV / LTM EBIT



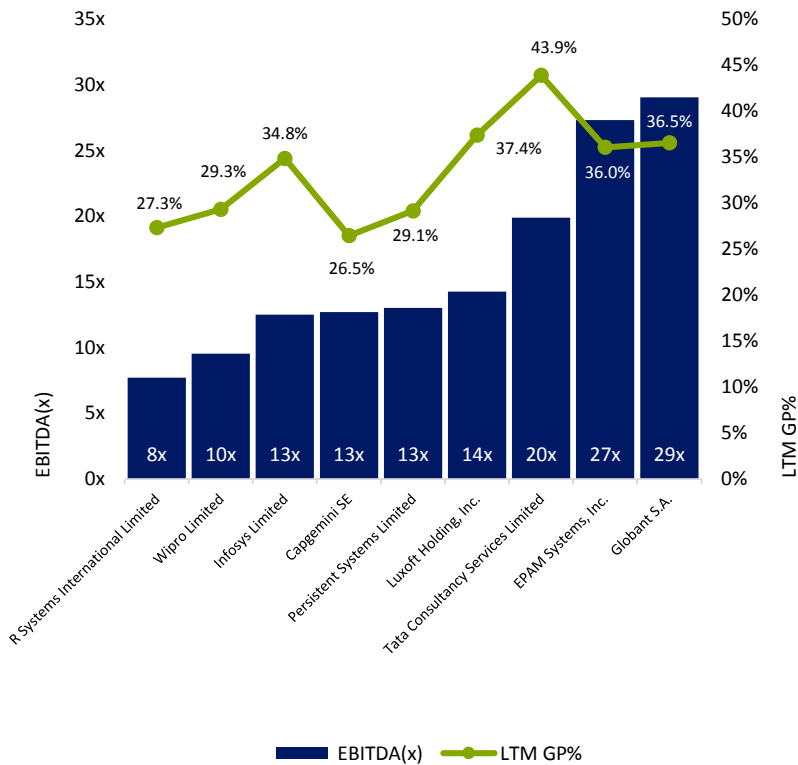
Price / LTM Earnings



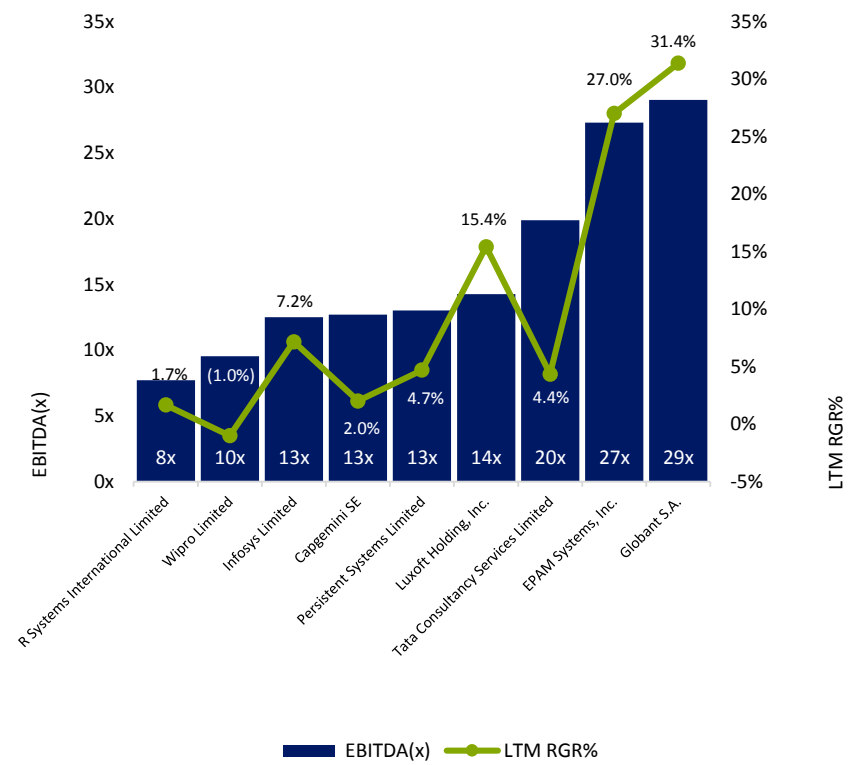
Valuation



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
24May18	Software Testing Business of NCC Group plc	QualiTest Ltd.	4.81	-	-	-
21May18	GlobalLogic Inc.	Canada Pension Plan Investment Board	2,000.00	-	-	-
2Apr18	CATS CO.,LTD.	NTT Data Corporation; NEXTY Electronics Corporation	-	-	-	-
20Mar18	Goyello Group B.V.	Aspire Systems (India) Pvt. Ltd.	-	-	-	-
12Mar18	eTouch Systems Corp.	Virtusa Corporation	132.08	86.96	1.3x	9.1x
18Jan18	Solekai Systems Corporation	Fairway Technologies, Inc.	-	-	-	-
16Jan18	Pillar Technology Group LLC	NewSpring Capital; NewSpring Mezzanine Capital, L.P.	-	-	-	-
8Jan18	Velocity Partners, LLC	Endava Limited	-	-	-	-
6Dec17	Well Placed Cactus Pty Ltd	Deloitte Digital Pty Ltd.	-	-	-	-
24Oct17	VMC Consulting, Inc.	Keywords International Limited	49.80	-	-	-
29Sep17	Telepathy	ServiceNow, Inc.	-	-	-	-
28Aug17	Blue Agility, LLC	cPrime Inc.	-	-	-	-
22Aug17	Summa Technologies, Inc.	CGI Group Inc.	-	-	-	-
8Aug17	BAMTECH LLC	The Walt Disney Company	1,580.00	-	-	-
21Jul17	Accel Frontline Limited	-	-	91.51	-	-
1Jul17	TechJini Solutions Private Limited	Datamatics Global Services Limited	6.05	5.42	1.6x	-
30Jun17	Threesixty Logica Testing Services Private Limited	Saksoft Limited	1.08	-	-	-
1Jun17	PointSource, LLC	Globant S.A.	28.00	-	-	-
1May17	AIM Consulting Group, LLC	Addison Group, LLC	-	-	-	-
19Apr17	Computer Technology Solutions, Inc.	CGI Group Inc.	-	-	-	-
28Apr17	ECommerce Systems, Inc.	CGI Group Inc.	-	-	-	-
28Apr17	Grossum	App Solutions LLC	-	-	-	-
21Apr17	EXCELTO Solutions LLC	Trimax Americas	-	-	-	-
18Apr17	InfoReliance Corporation	ECS Federal, LLC	-	-	-	-
13Apr17	Innovative Computer Solutions, Inc.	Jonas Operating Group	-	-	-	-
3Apr17	Zycron, Inc.	BG Staffing, LLC	22.99	38.30	0.6x	-
24Mar17	Big Drop PVT LTD	Appworks Technologies Private Limited	-	-	-	-
23Mar17	derivIT Solutions Pte Ltd.	Luxoft International Company Limited	18.36	-	-	-
28Feb17	Infusion Development Corporation	Avanade Inc.	-	-	-	-
24Jan17	Sequence LLC	salesforce.com, inc.	26.00	-	-	-
22Dec16	Driven, Inc.	Xplenty Ltd.	-	-	-	-
10Nov16	Test Direct Limited	QualiTest Ltd.	-	-	-	-
1Nov16	Boulder Technology LLC	Centerline Solutions, LLC	-	-	-	-
17Oct16	ameria GmbH	CEMA AG	-	-	-	-
12Oct16	ITK Engineering AG	Bosch Engineering GmbH	-	-	-	-
13Oct16	Siradel SAS	ENGIE SA	-	6.62	-	-
10Feb16	Enterprise 24x7 Inc.	e&e IT Consulting Services, Inc.	-	-	-	-
27Sep16	Baynote Inc.	Kibo Software, Inc	-	-	-	-

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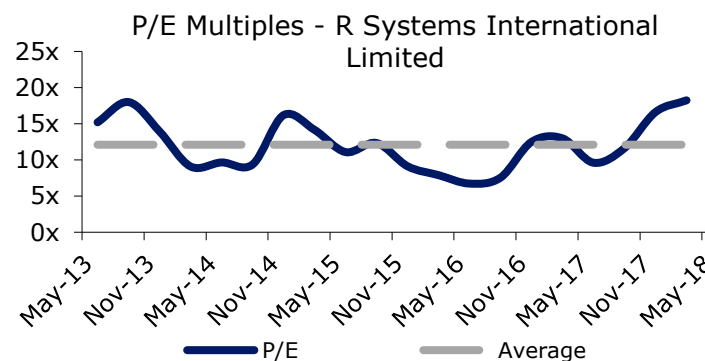
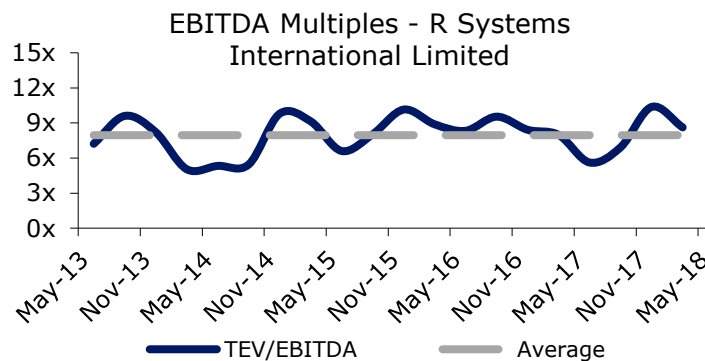
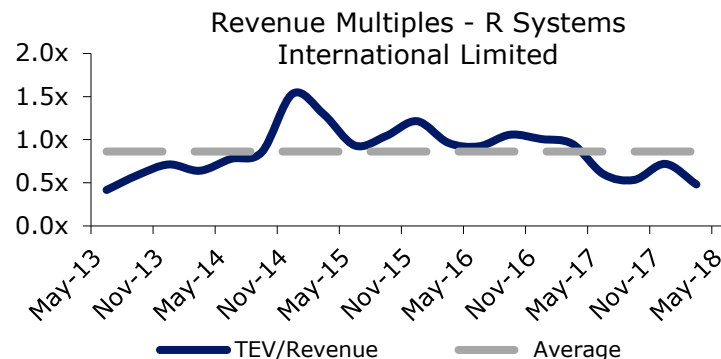
APPENDIX:
Public Basket
Constituents

Public Basket



R Systems International Limited

R Systems International Limited provides information technology (IT) solutions and business process outsourcing (BPO) services worldwide. The company offers Computaris Convergent Charging solution to converge real-time rating, charging, and billing; mobile broadband management solutions; Computaris mobile virtual network operator (MVNO) in a White Box solution for MVNOs business exigencies; and value added services, as well as product development and maintenance, system integration, technical support and managed, BPO, and testing services to the telecom and digital media industries. It also provides services in area of card less/NFC based transactions; mobile/tablet applications; product customization/ maintenance/support; ATM management; third-party and customer relationship management integration; ATM on cloud; deposit automation; and passbook printing solutions to financial institutes and software companies. The company was founded in 1993 and is headquartered in Noida, India.



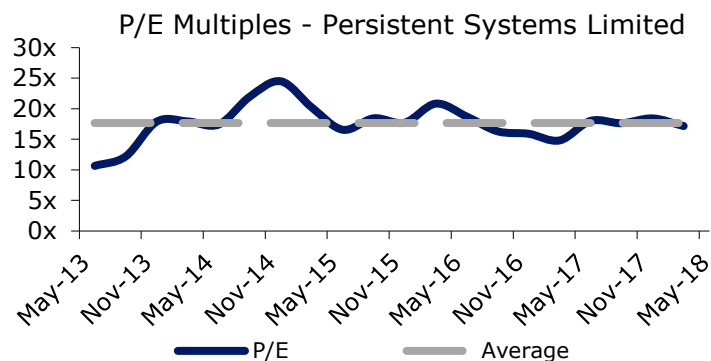
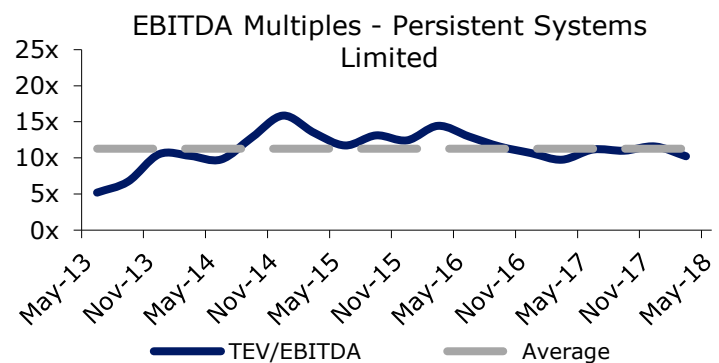
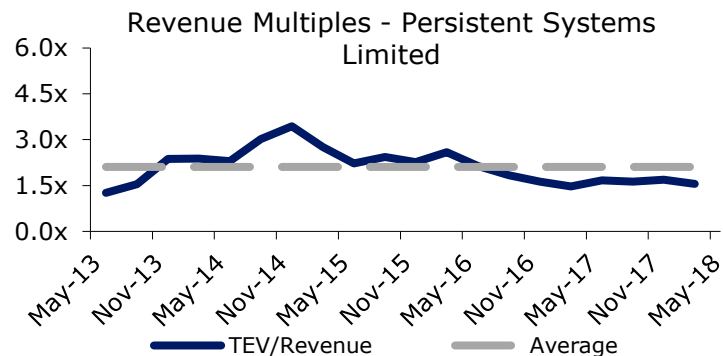
Date	Key Development Headline
9/24/17	R Systems International Limited (BSE:532735) agreed to acquire GM Solutions Private Limited.

Public Basket



Persistent Systems Limited

Persistent Systems Limited provides computer programming, consultancy, and related services in Africa, Asia, Australia, Europe, and North America. The company operates through four segments: Services, Digital, Alliance, and Accelerite. It engages in providing software development, professional, and marketing services; technology solutions in the life sciences, telecom, and product lifecycle management domains; and the maintenance of IT software and services. It also deploys, integrates, and runs social communities on social customer platforms to provide insights; and offers business-critical infrastructure software for enterprises, telecom operators, and the public sector. In addition, the company is involved in the business of a telecommunication API gateway for defining, exposing, controlling, and monetizing telecom services to partners and application developers. The company was incorporated in 1990 and is based in Pune, India.



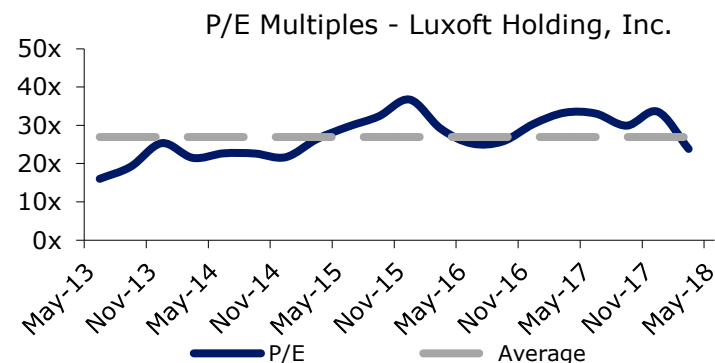
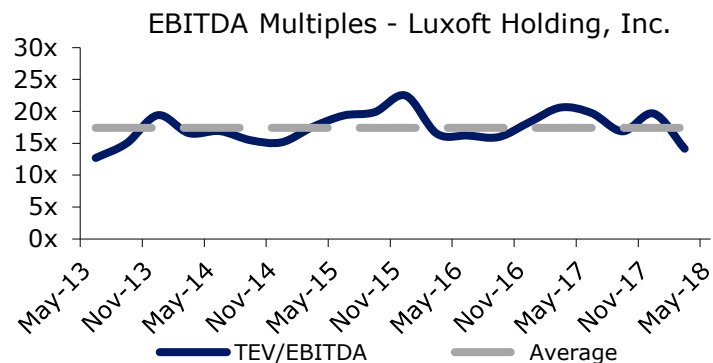
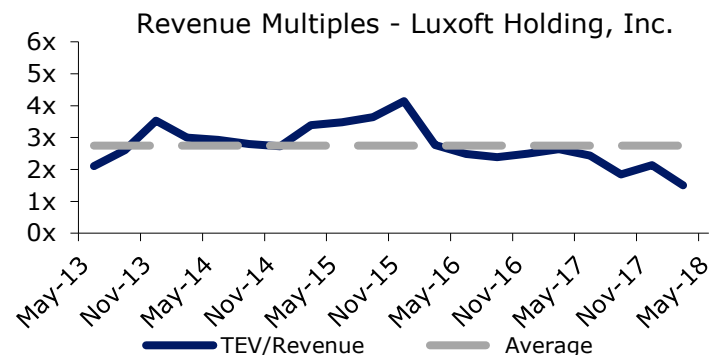
Date	Key Development Headline
1/29/18	Persistent Systems Seeks Acquisition
7/21/17	Persistent Systems Mulls Acquisitions

Public Basket



Luxoft Holding, Inc.

Luxoft Holding, Inc., together with its subsidiaries, provides software development services and IT solutions to multinational corporations primarily in Europe and the United States. It offers application software development, software architecture design, performance engineering, optimization and testing, process consulting, and software quality assurance services; functional specification and mock-up, product design, engineering, automated testing, maintenance, support, and performance engineering services; and IT strategy, software engineering process, and data security consulting services. The company's products and platforms include Teora, a suite of developer tools designed to enable automotive human machine interface (HMI) developers build the logic of their user interface; Populus, a tool chain for HMI design and development, and the deployment of automotive user interfaces for distributed embedded systems; and AllView, a user-experience demonstrator that links instrument cluster, head unit, head-up display, and mobile devices. The company was founded in 2000 and is headquartered in Zug, Switzerland.



Date	Key Development Headline
11/17/17	Luxoft Holding, Inc. Seeks Acquisitions

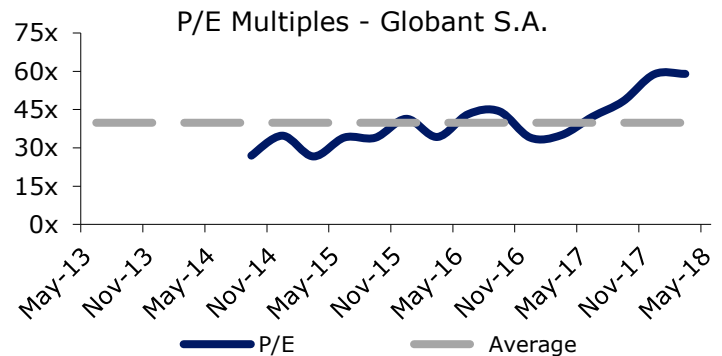
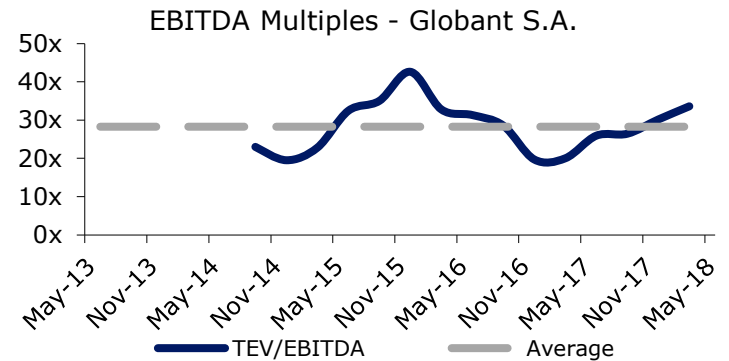
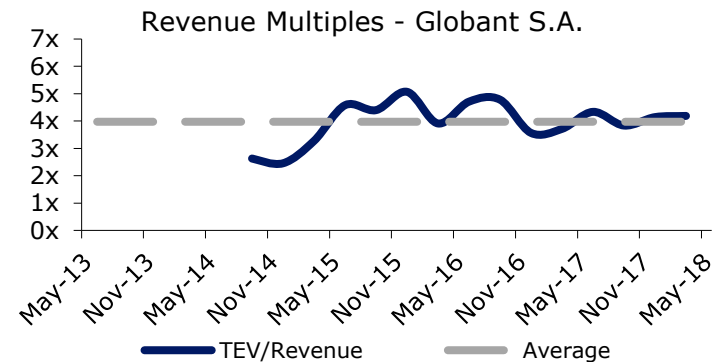
Public Basket



Globant S.A.

Globant S.A. develops and provides software solutions to clients in North America, the Latin America, Europe, and Asia. It offers API management, e-commerce, and digital solutions; graphics engineering, game engineering, gaming experience, VR/AR development, and digital platform services; Big Data services, such as data integration, data architecture, scalable platform, blockchain, data visualization, and data science; testing center, test automation, mobile testing, and load and performance testing services. The company also provides enterprise consumerization services, including enterprise operations, collaboration solutions, cloud development, and talent management; UX design services comprising service, user experience, industrial design, and visual design; and native development, product development, and enterprise mobility services for mobiles. Globant S.A. was founded in 2003 and is based in Luxembourg.

Date	Key Development Headline
2/15/18	Globant Mulls Acquisitions
5/31/17	Globant S.A. (NYSE:GLOB) entered into a definitive stock purchase agreement to acquire PointSource, LLC for \$28 million.

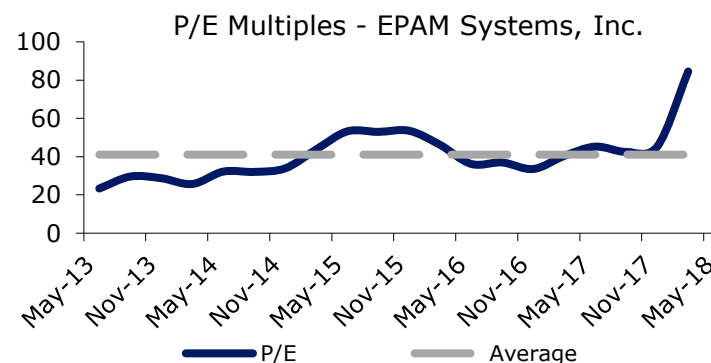
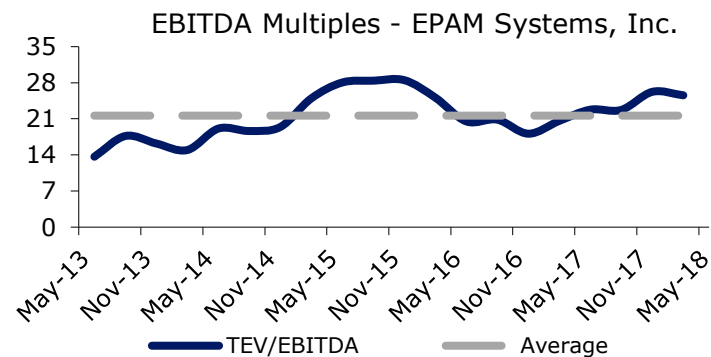
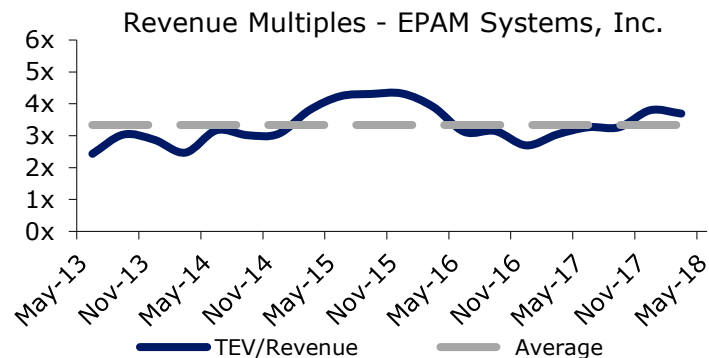


Public Basket



EPAM Systems, Inc.

EPAM Systems, Inc. provides product development and software engineering solutions worldwide. The company offers software product development services, including product research, customer experience design and prototyping, program management, component design and integration, lifecycle software testing, product deployment and end-user customization, performance tuning, product support and maintenance, and managed services, as well as porting and cross-platform migration. It also provides custom application development services, such as business and technical requirement analysis, user experience design, solution architecture creation and validation, development, quality assurance and testing, legacy applications re-engineering/refactoring, porting, and cross-platform migration and documentation. The company was founded in 1993 and is headquartered in Newtown, Pennsylvania.



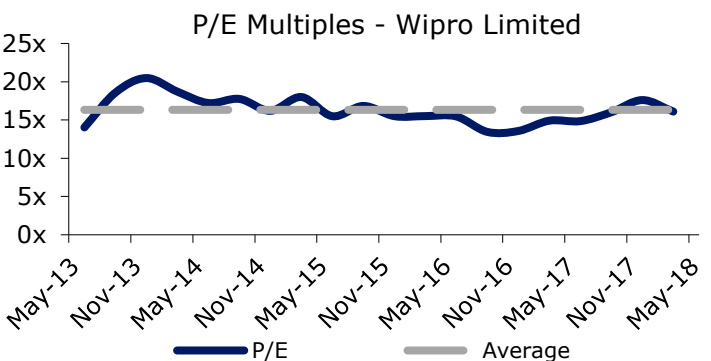
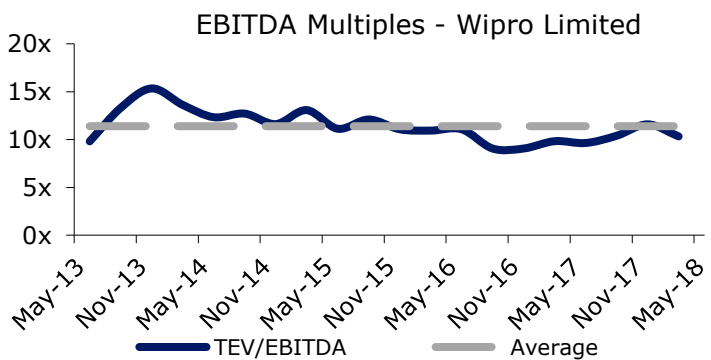
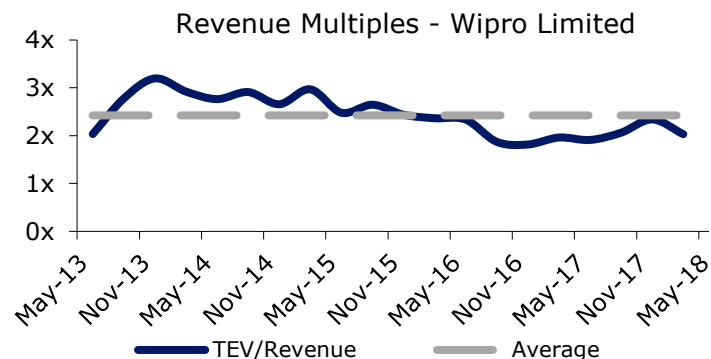
Date	Key Development Headline
3/14/18	EPAM Systems, Inc. (NYSE:EPAM) acquired Continuum LLC.
1/11/18	Epam Systems and Black Box Create In-Store Dynamic Advertising Solution Using Instant Facial Recognition
11/2/17	EPAM Systems Seeks Acquisitions

Public Basket



Wipro Limited

Wipro Limited operates as an information technology (IT), consulting, and business process services company worldwide. The company's IT Services segment provides a range of IT and IT-enabled services, which include digital strategy advisory, customer centric design, technology consulting, IT consulting, custom application design, development, re-engineering and maintenance, systems integration, package implementation, infrastructure services, analytics services and development, and hardware and software design services to enterprises. The company was founded in 1945 and is headquartered in Bengaluru, India.



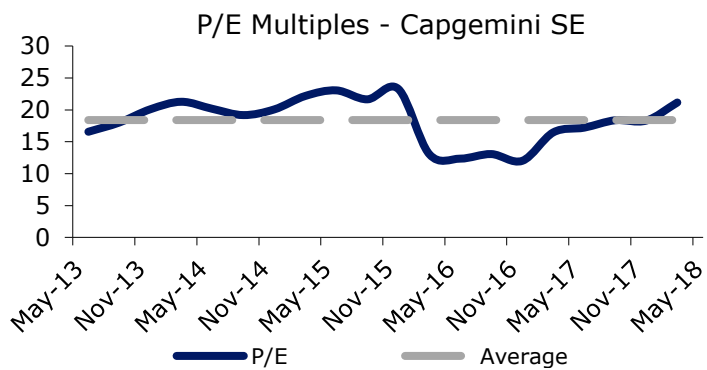
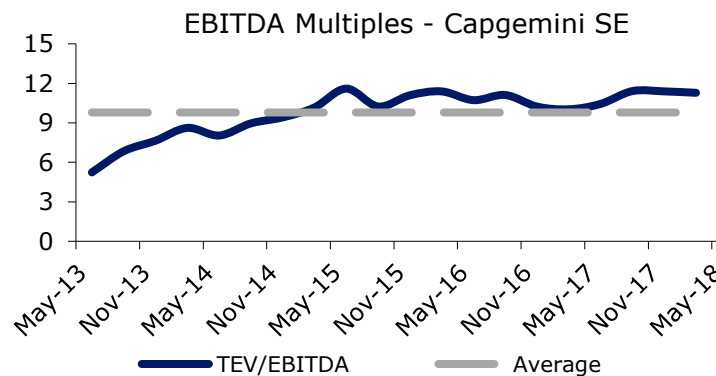
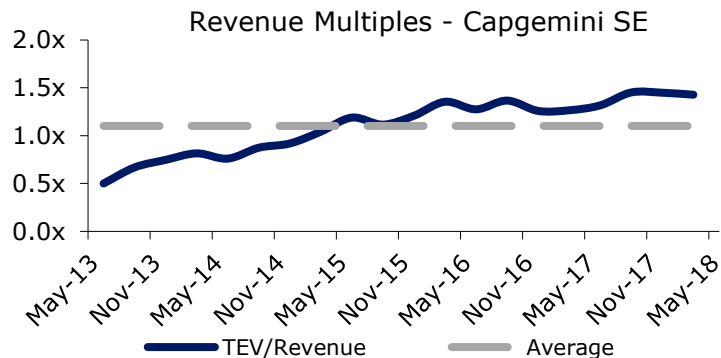
Date	Key Development Headline
4/5/18	Antariksh Softtech Private Limited acquired 63% stake in Wipro Airport IT Services Limited from Wipro Limited (BSE:507685) for INR 31.5 million.
3/14/18	Trintech and Wipro Limited Announces Strategic Partnership to Deliver Digital Solutions to Simplify and Automate Business Finance Functions at Enterprises
3/13/18	Ensono Holdings, LLC signed a definitive agreement to acquire Wipro Data Centre and Cloud Services, Inc. and Portion of Datacenter Business In Germany and UK from Wipro Limited (BSE:507685) for approximately \$410 million.
1/29/18	Harte Hanks, Inc. and Wipro LLC Announces Joint Go-To-Market Strategy
7/4/17	Wipro Limited and Ramot at Tel Aviv University Collaborate for Joint Research in Emerging Technologies

Public Basket



Capgemini SE

Capgemini SE provides consulting, technology, and outsourcing services. It operates through Consulting Services, Technology & Engineering Services, Application Services, and Other Managed Services segments. The company offers consulting services in the areas of digital transformation, strategy and transformation, supply chain management, finance transformation, people and performance, CIO strategy and transformation, accelerated solutions environment, and big data and analytics, as well as marketing, sales, and services. It also designs, develops, and implements technology projects; and provides system integration, and IT application development and maintenance services. Capgemini SE was founded in 1967 and is based in Paris, France.



Date	Key Development Headline
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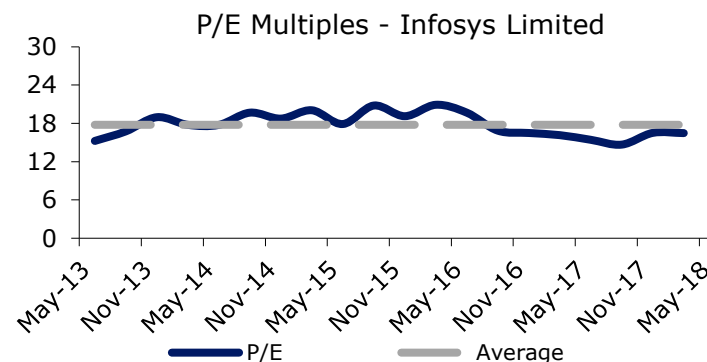
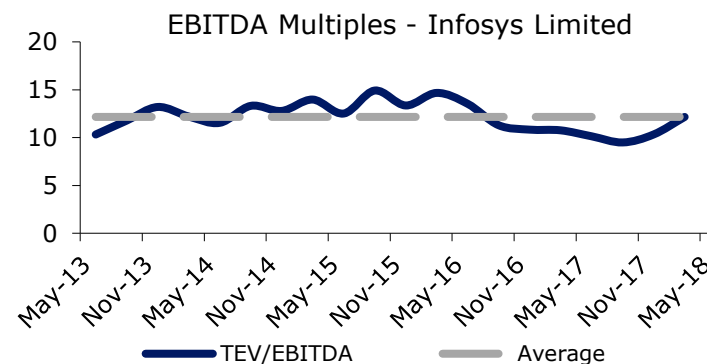
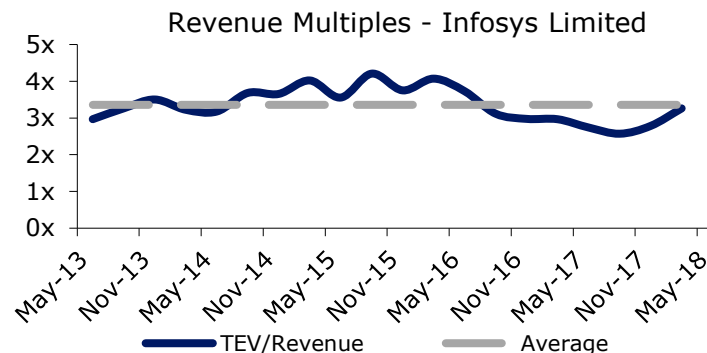
3/8/18	Indosuez Wealth Management and Capgemini Collaborate on Wealth Platform
3/7/18	Capgemini Seeks Acquisitions
2/27/18	Capgemini Seeks Acquisitions
2/4/18	Capgemini SE (ENXTPA:CAP) agreed to acquire LiquidHub, Inc. from ChrysCapital and others for \$500 million.
9/25/17	Capgemini Seeks Investments

Public Basket



Infosys Limited

Infosys Limited, together with its subsidiaries, provides consulting, technology, and outsourcing services in North America, Europe, India, and internationally. It provides business information technology services, including application development and maintenance, independent validation, infrastructure management, and business process management services, as well as engineering services, such as engineering and life cycle solutions; and consulting and systems integration services comprising consulting, enterprise solutions, systems integration, and advanced technologies. Infosys Limited was founded in 1981 and is headquartered in Bengaluru, India.



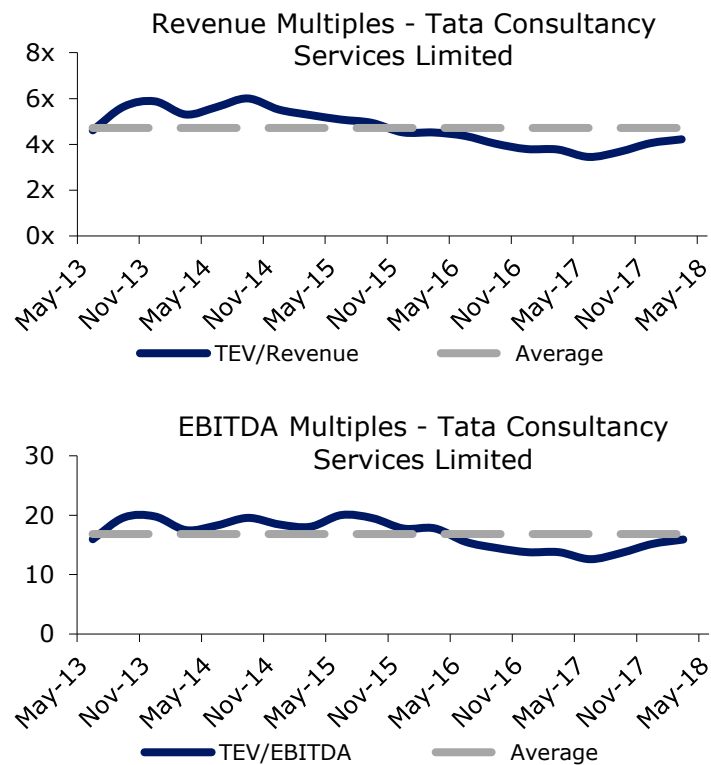
Date	Key Development Headline
5/2/18	Infosys and Astound Partner to Deliver Better Service Experience Through an AI Enhanced Enterprise Service Management Café
4/18/18	Infosys Mulls Acquisitions
4/13/18	Infosys Seeks Sell Of Panaya and Skava
4/12/18	Infosys Limited (NSEI:INFY) entered into a definitive agreement to acquire Wongdoody Holding Company, Inc. for \$75 million.
2/20/18	Infosys and PTC Launch Industrial IoT Center of Excellence

Public Basket



Tata Consultancy Services Limited

Tata Consultancy Services Limited provides information technology (IT) and IT enabled services worldwide. It offers CHROMA, a cloud-based talent management platform for enterprises to drive next generation employee experiences across the requisition-to-retain employee lifecycle; ignio, a cognitive automation system for IT operations in enterprises; iON, an assessment solution; TAP, an accounts payable platform; and TCS MasterCraft, a digital platform to automate and manage IT processes. Tata Consultancy Services Limited is a subsidiary of Tata Sons Limited.



Date	Key Development Headline
4/22/18	Tata Consultancy Services Open To Acquisitions In Digital Space
3/5/18	Virgin Atlantic Extends Strategic Partnership with Tata Consultancy Services Limited
10/26/17	Tata Consultancy Services and ACORD Collaborate on Digital Transformation Enhancements for the Insurance Industry
10/25/17	National University Signs Pact with Tata Consultancy Services to Enhance Filipinos' Employability Skills
6/12/17	Tata Consultancy Services Collaborates with Intel Corporation to Drive Digital Transformations
6/5/17	Tata Consultancy Services and Siemens Unveil New Collaboration Around Internet of Things Innovation

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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