



Sectorwatch: Software Engineering

December 2019

Software Engineering

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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.



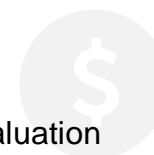
Public Basket Performance

- 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

↑ 2.6%

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

↓ -1.3%

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

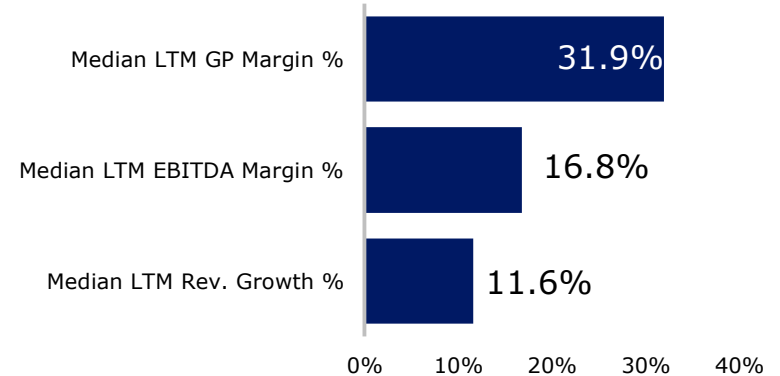
Profitability Momentum

↑ 0.6%

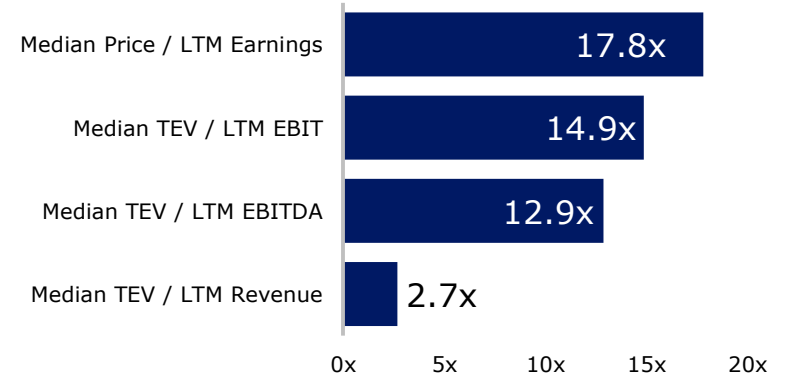
1 - year EBITDA % compared to EBITDA % average for last 3 years

Current EBITDA margin exceeds the average of the last 3 years EBITDA margin by this amount, a condition that may attract new entrants

Operating Metrics



Valuation



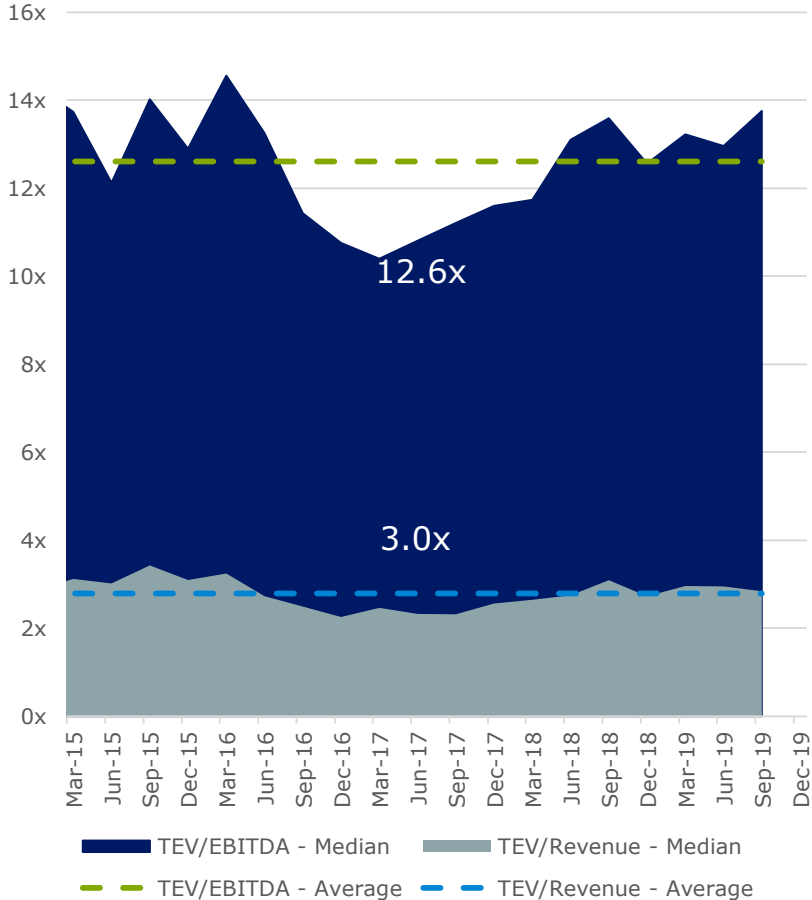
Public Basket



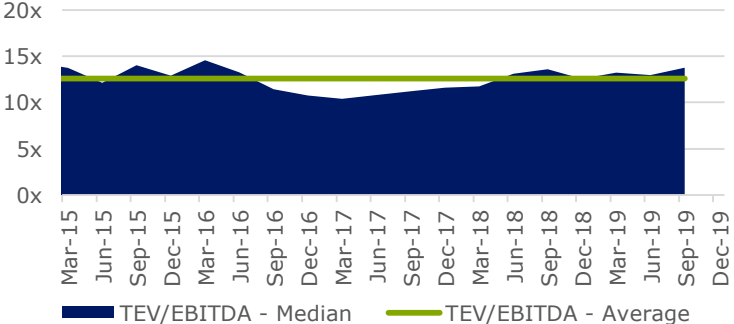
Company	TEV \$m	LTM Rev \$m	Rev Growth YoY	GP %	EBITDA %	TEV / Rev X	TEV / EBITDA X	# FTEs	Rev / FTE \$k
R Systems International Limited	88	112	19%	32%	8%	0.8	9.6	2,753	41
Persistent Systems Limited	612	483	6%	30%	15%	1.3	8.6	6,867	70
Globant S.A.	3,933	615	24%	39%	18%	6.4	35.8	8,384	73
EPAM Systems, Inc.	11,043	2,166	25%	35%	16%	5.1	32.5	30,156	72
Wipro Limited	16,621	8,479	7%	30%	21%	2.0	9.4	170,000	50
Capgemini SE	23,464	15,632	8%	27%	13%	1.5	11.8	211,313	74
Infosys Limited	41,374	12,386	9%	32%	24%	3.4	14.0	228,123	54
Tata Consultancy Services Limited	107,036	21,584	14%	44%	27%	5.0	18.8	424,285	51
Average	25,521	7,682	14%	34%	18%	3.2	17.6	135,235	61
Median	13,832	5,323	12%	32%	17%	2.7	12.9	100,078	62

share price as of 31Dec19

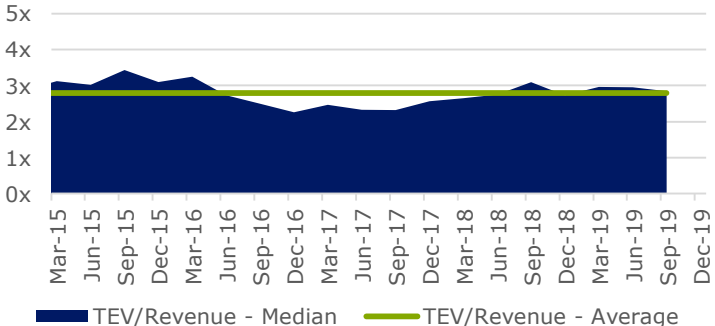
Public Basket Valuation Trends



Public EBITDA Multiples over Time



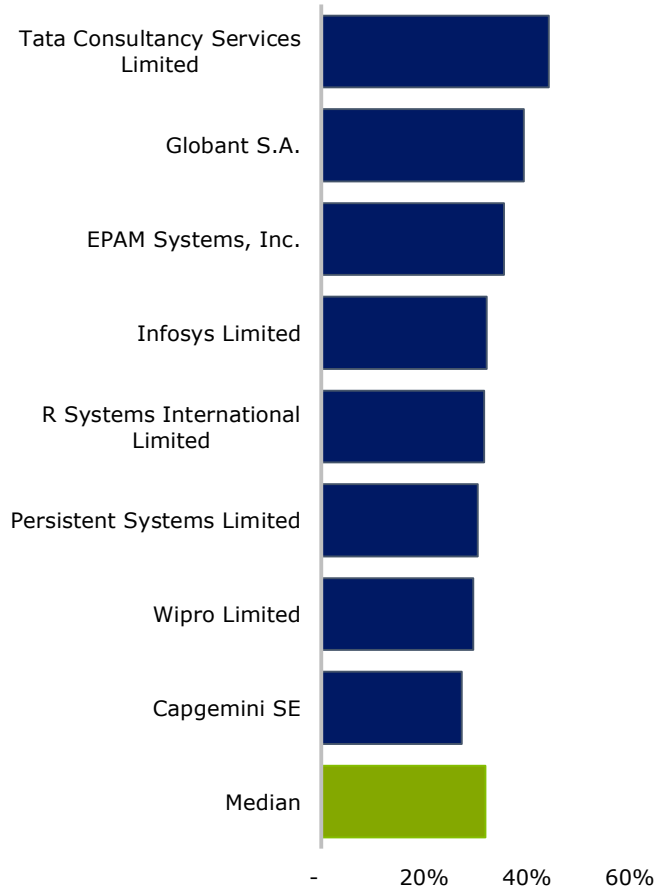
Public Revenue Multiples over Time



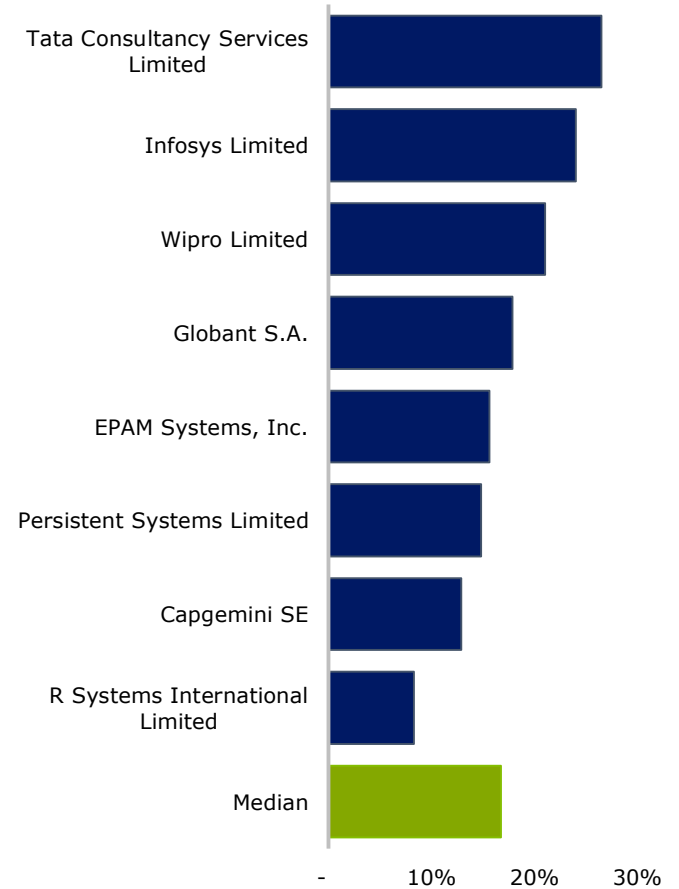
Operational Metrics



LTM Gross Profit Margin %



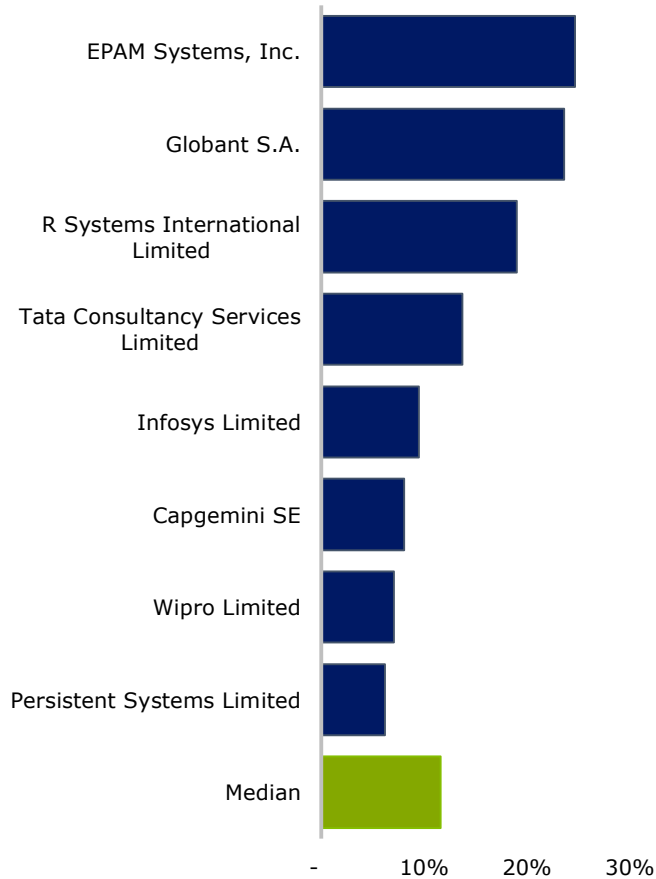
LTM EBITDA %



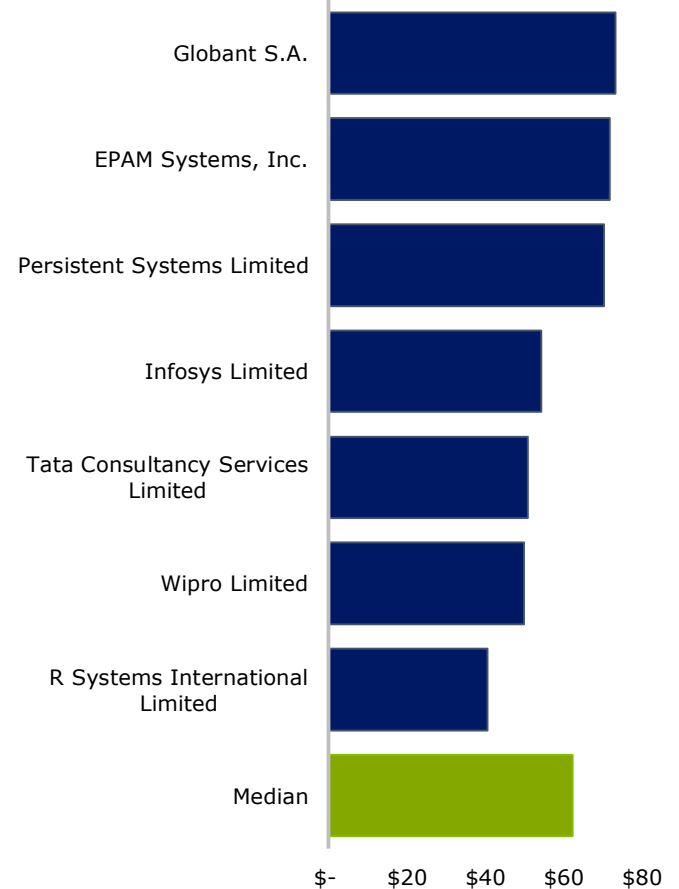
Operational Metrics



LTM Revenue Growth %



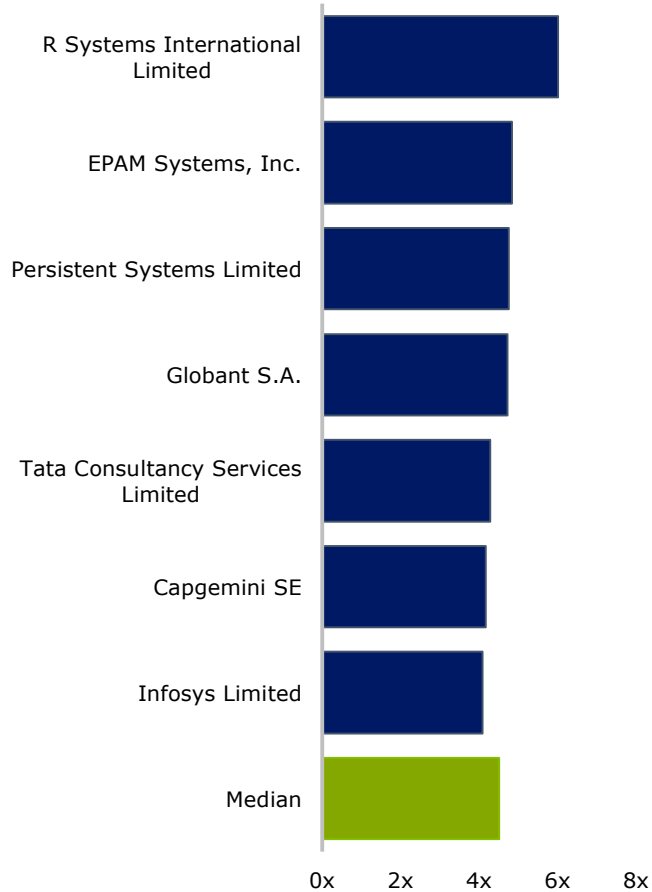
LTM Revenue per Full Time Employee x 000's



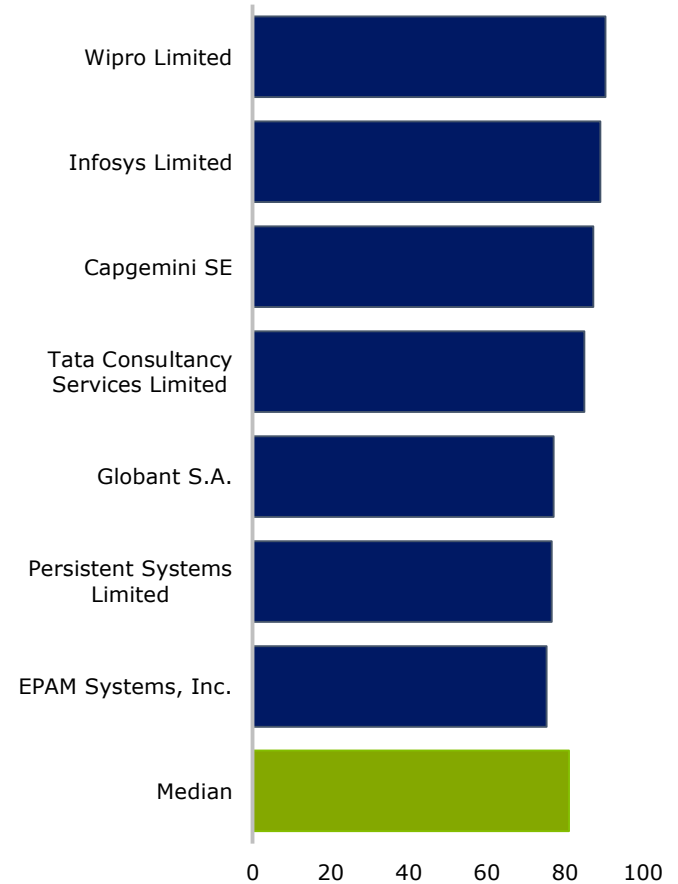
Operational Metrics



Accounts Receivable Turnover



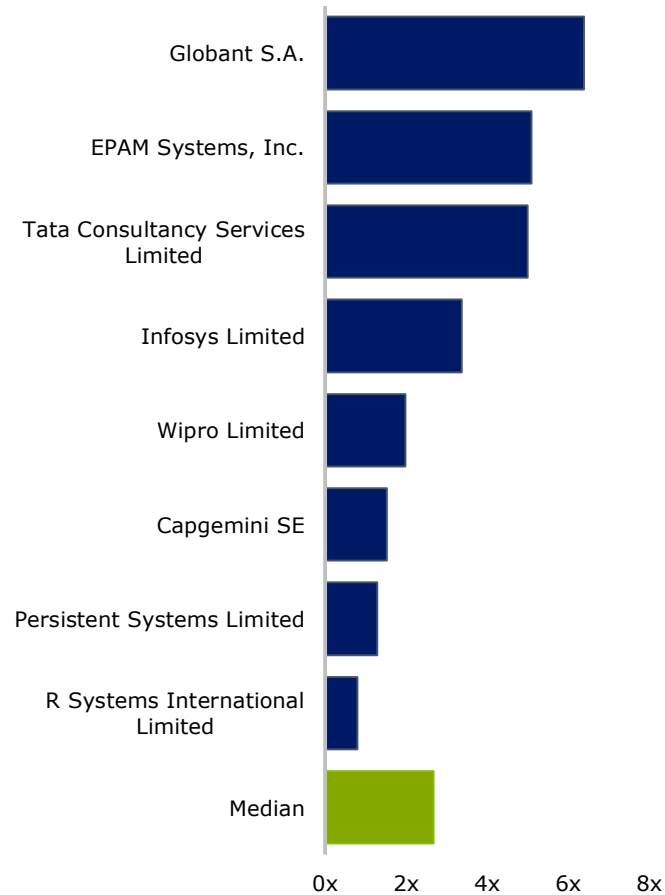
Average Days Sales Outstanding



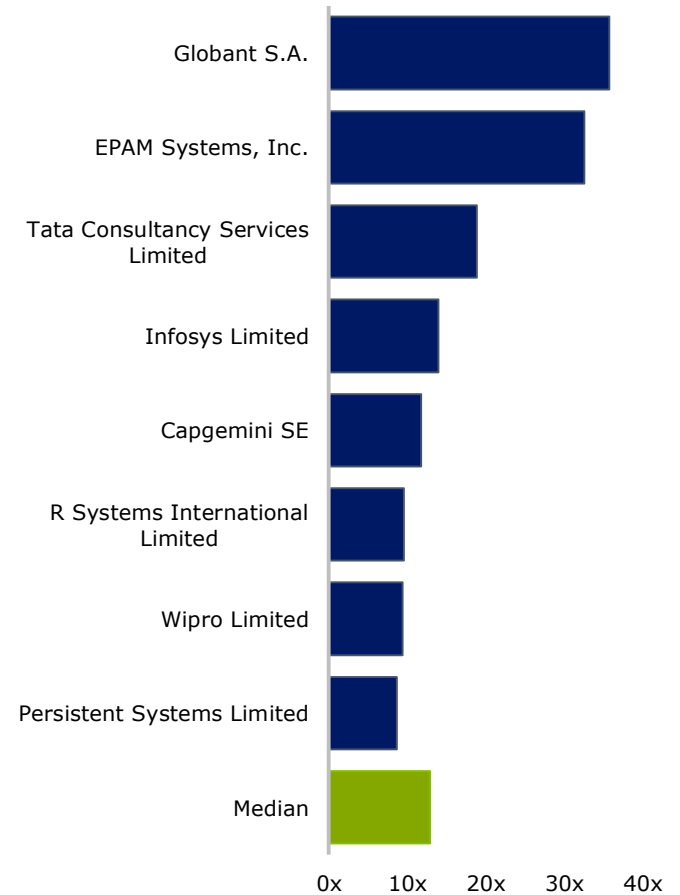
Valuation



TEV / LTM Revenue



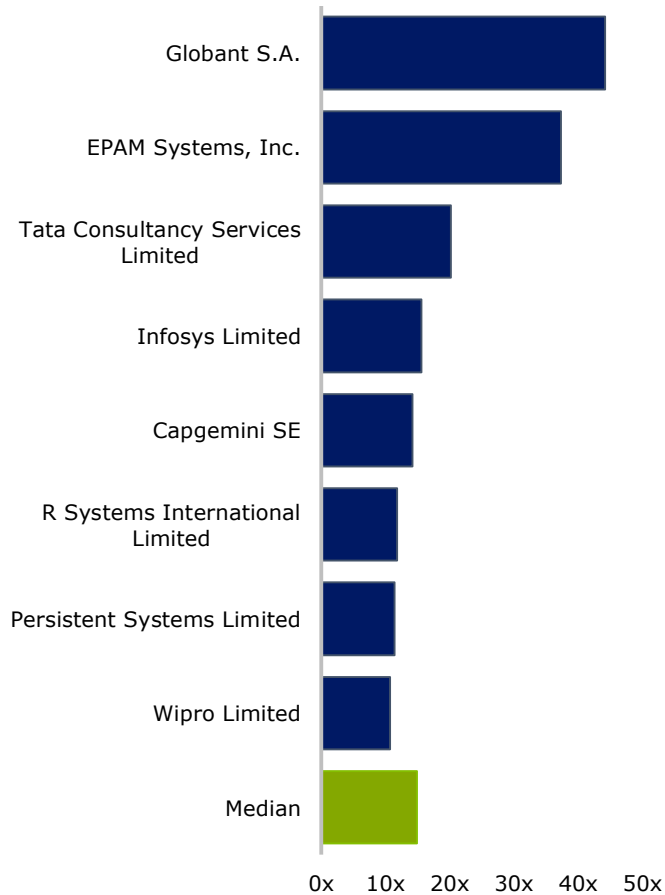
TEV / LTM EBITDA



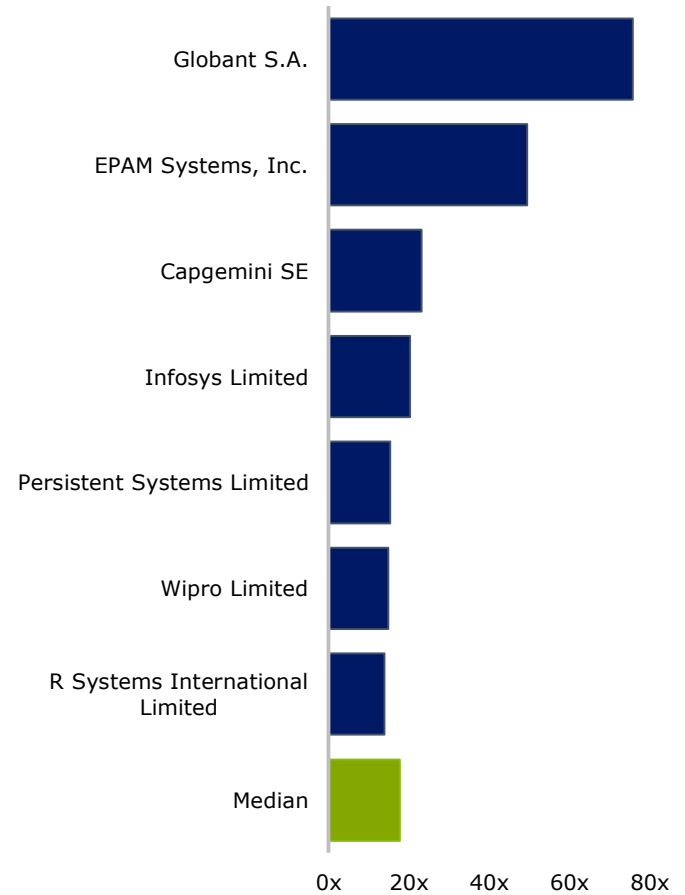
Valuation



TEV / LTM EBIT



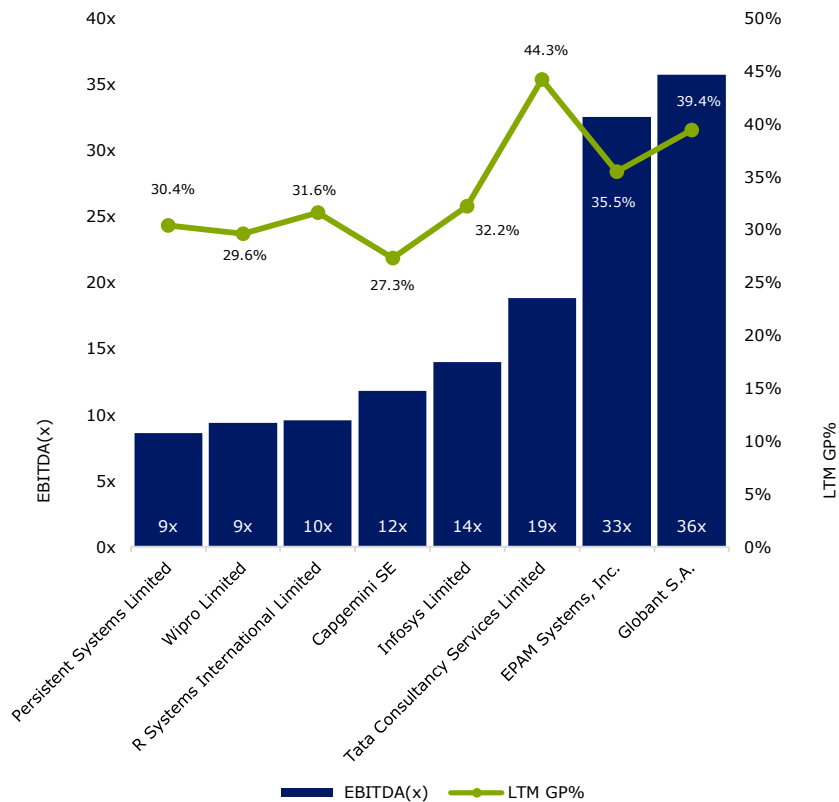
Price / LTM Earnings



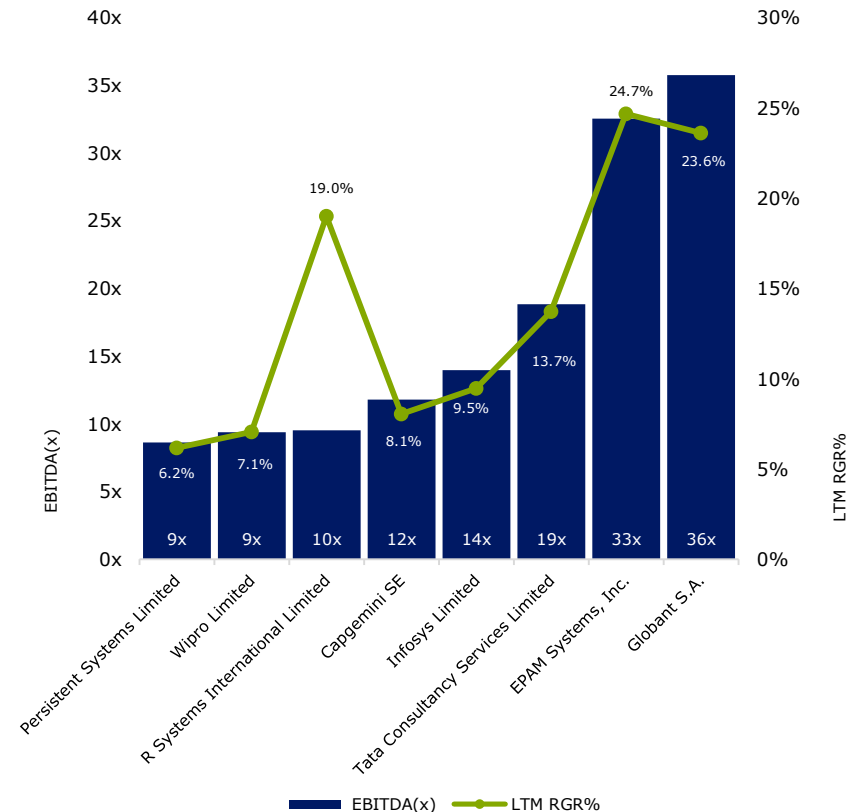
Valuation



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
5Dec19	Ascent Software Limited	Horizon Capital LLP	-	-	-	-
5Dec19	TechHuddle Ltd.	Ascent Software Limited	-	-	-	-
4Dec19	Sila Solutions Group, Inc.	Ernst & Young LLP	-	-	-	-
3Dec19	Flux7 Labs Inc.	NTT DATA, Inc.	-	-	-	-
5Nov19	Naya Pai Technologies Ltd	EPAM Systems, Inc.	-	-	-	-
15Apr19	Minori Solutions Co., Ltd.	SCSK Corporation	191.17	-	-	-
24Oct19	DYNARDO (Dynamic Software and Engineering) GmbH	ANSYS, Inc.	33.29	-	-	-
22Oct19	Partners Associates S.p.A.	Retelit Digital Services S.p.A.	81.33	-	-	-
16Oct19	Contino LTD	Cognizant Technology Solutions Corporation	-	-	-	-
14Oct19	Smart Edge Software Business of Smart-Edge.com, Inc.	Intel Corporation	27.00	-	-	-
10Oct19	Silicus Technologies, LLC	Infogain Corporation	-	-	-	-
10Oct19	Shadow Financial Systems, Inc.	Broadridge Financial Solutions, Inc.	39.00	-	-	-
24Sep19	Mitrais Pte. Ltd.	CAC Holdings Corporation	26.91	16.31	1.6x	7.3x
19Sep19	Linewell Software Co., Ltd.	China Electronics Technology Investment Holdings Limited	43.49	164.83	4.6x	38.1x
10Sep19	Skookum, Inc.	GlobalLogic Inc.	-	-	-	-
28Aug19	Shanghai Jingtong Information Technology Co.,Ltd.	Sie (Shanghai) Information Technology Co., Ltd.; Guangzhou Energy Box Technology Co., Ltd	17.81	23.11	2.3x	-
28Aug19	Kony, Inc.	Temenos AG	580.00	-	-	-
28Aug19	BASS Systems S.R.L.	S&T AG	6.36	-	-	-
27Aug19	Fairway Technologies, Inc.	Accenture plc	-	-	-	-
22Aug19	Pivotal Software, Inc.	VMware, Inc.	3,349.32	716.06	4.3x	NM
14Aug19	Catalis Plc	Unigestion SA; Pathway Capital Management, LP; MLC Limited; NorthEdge Capital LLP; NorthEdge Capital Fund II Globant S.A.	112.13	48.39	2.2x	14.3x
9Aug19	Belatrix Global Corporation S.A.		65.00	35.00	-	-
10Jul19	QualiTest Ltd.	Bridgepoint Advisers Limited	-	-	-	-
3Jul19	DONAT group GmbH	Data Respons ASA	9.59	10.38	0.9x	-

Software Engineering

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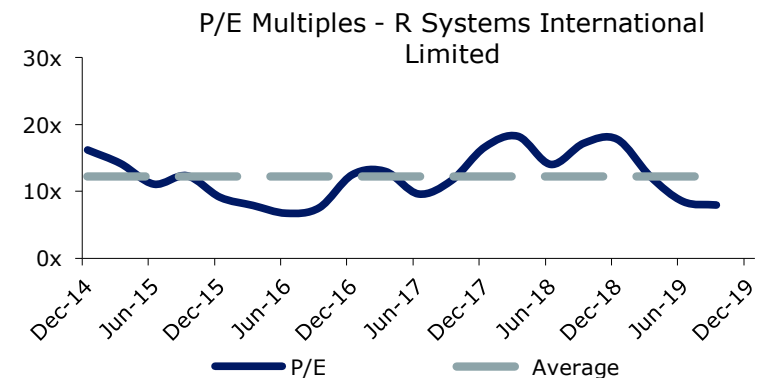
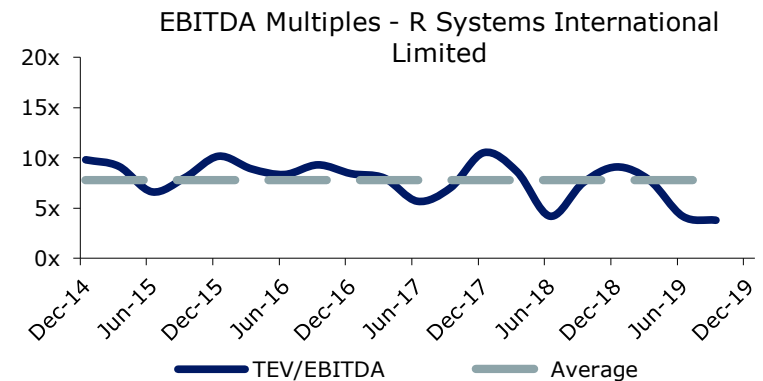
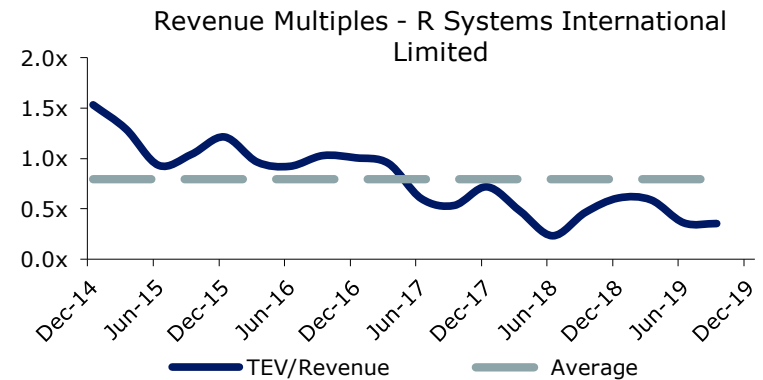
APPENDIX:
Public Basket
Constituents

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. In addition, the company offers OPD-integrated product lifecycle management services, domain consultancy, enterprise application integration, independent testing, implementation, offshore product development, software re-engineering, requirement engineering and GAP analysis. The company was founded in 1993 and is headquartered in Noida, India.



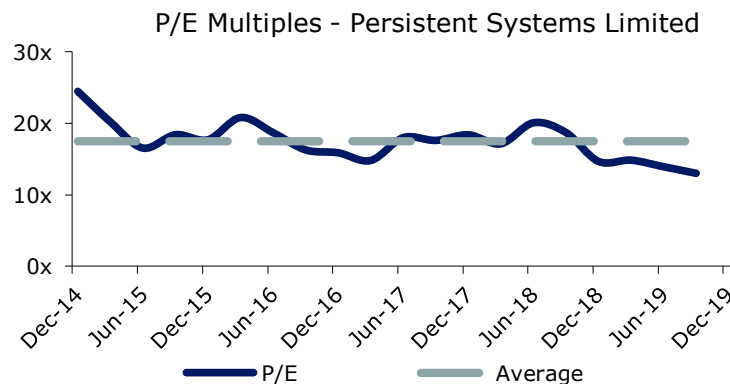
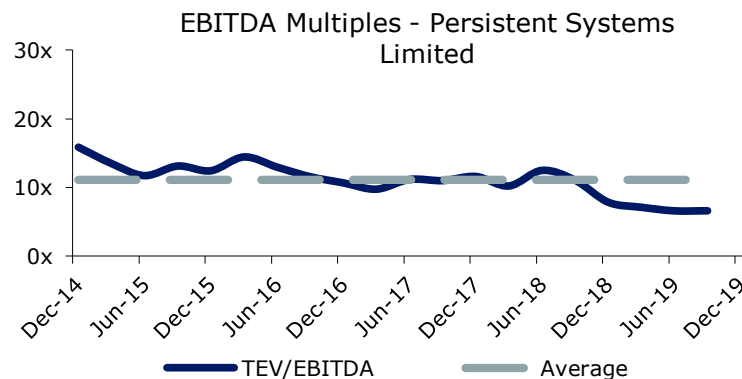
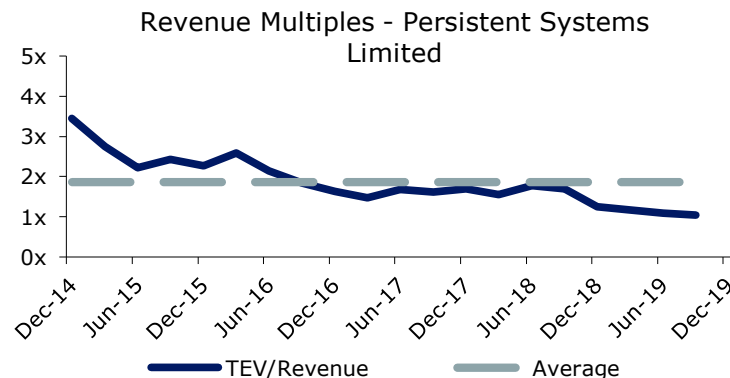
Public Basket



Persistent Systems Limited

Persistent Systems Limited provides computer programming, consultancy, and related services. It operates in four segments: Services, Digital, Alliance, and Accelerite. The company engages in providing software development, professional, and marketing services; technology solutions in the life sciences, telecom, product lifecycle management, and digital practice domains; and the delivery and maintenance of IT software and services. It is also involved in the business of a telecommunication API gateway for defining, exposing, controlling, and monetizing telecom services to partners and application developers; and operating an Internet of Things service creation platform that allows enterprises to add a service layer to the basic APIs exposed to by connected devices, and to expose and monetize these APIs. It serves the banking, financial services, insurance, healthcare and life sciences, and software and technology industries. Persistent Systems Limited was incorporated in 1990 and is based in Pune, India.

Date	Key Development Headline
4/30/19	Persistent Systems Intends To Seek Acquisitions
1/28/19	Persistent Systems Intends To Seek Acquisitions
10/22/18	Outsystems, Inc. Recognizes Persistent Systems as Global Partner
10/17/18	Partners Healthcare Launches New Center of Excellence in Collaboration with Persistent Systems Limited, Partners Healthcare Pivot Labs
8/13/18	Persistent Systems Seeks Acquisitions



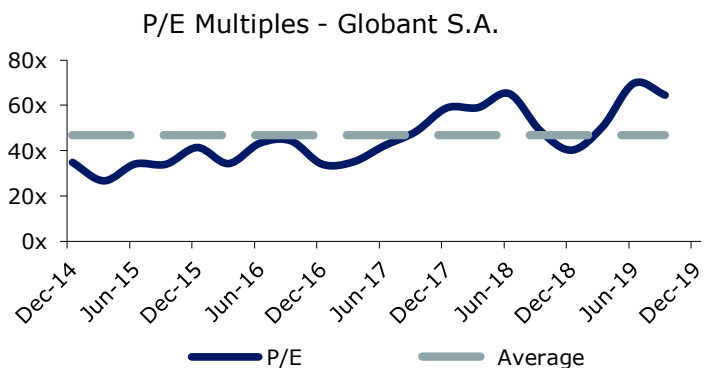
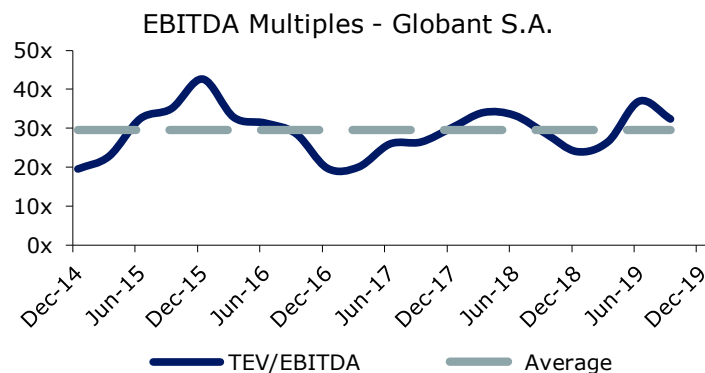
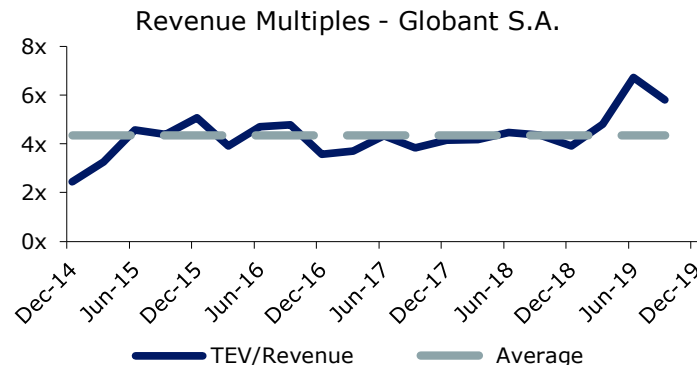
Public Basket



Globant S.A.

Globant S.A. operates as a technology services company worldwide. The company offers machine learning, pattern recognition, natural language understanding, future of organizations, customer insight, behavioral change, product innovation, design thinking, product management discovery and delivery, and product coaching services. It also provides process appraisal, automated, process evolution, delivery management, agile consultancy, management consulting, user experience, visual and service, industrial design, consultancy, fast prototyping, app evolution, platform integration, and hardware integration services. In addition, the company offers game engineering and experience, digital platform, virtual and augmented reality, graphics engineering, 3D and 2D art, e-Sports, data architecture, data science, distributed platform, data integration, data visualization, and blockchain services. Globant S.A. was founded in 2003 and is based in Luxembourg City, Luxembourg.

Date	Key Development Headline
8/11/19	Globant S.A. (NYSE:GLOB) acquired Belatrix Global Corporation S.A. for \$65 million.
1/31/19	Globant S.A. (NYSE:GLOB) completed the acquisition of Avanxo (Bermuda) Limited.
1/17/19	Globant S.A. (NYSE:GLOB) entered into a binding agreement to acquire Avanxo Colombia for \$48.6 million.



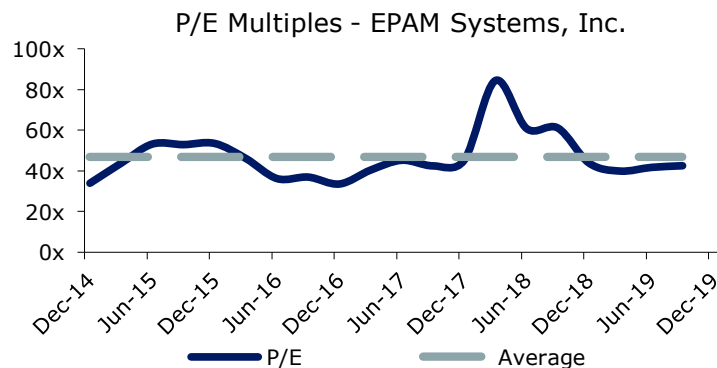
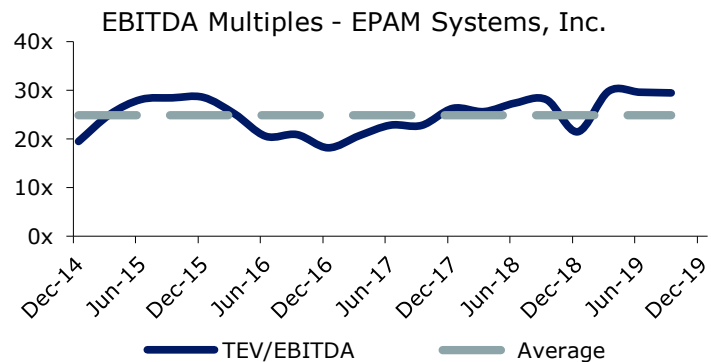
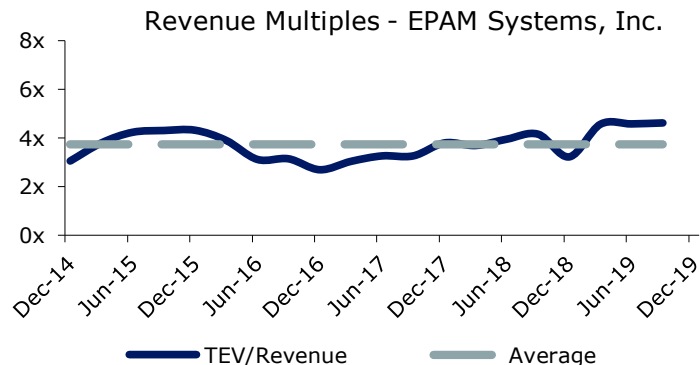
Public Basket



EPAM Systems, Inc.

EPAM Systems, Inc. provides software product development and digital platform engineering services primarily in North America, Europe, Asia, and Australia. It offers software product development services, including product research, customer experience design, prototyping, program management, component design and integration, lifecycle software testing, product deployment, end-user customization, performance tuning, product support and maintenance, managed services, and porting and cross-platform migration. The company provides custom application development services, such as business and technical requirement analysis, user experience design, solution architecture creation and validation, development, component design and integration, quality assurance and testing, deployment, performance tuning, support and maintenance, 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
11/4/19	EPAM Systems, Inc. (NYSE:EPAM) acquired NAYA
7/1/19	EPAM Systems, Inc. acquired Competentum Group.
5/9/19	EPAM To Seek Investments
5/8/19	EPAM Systems, Inc. (NYSE:EPAM) acquired testCloud.de GmbH for approximately \$17.3 million.



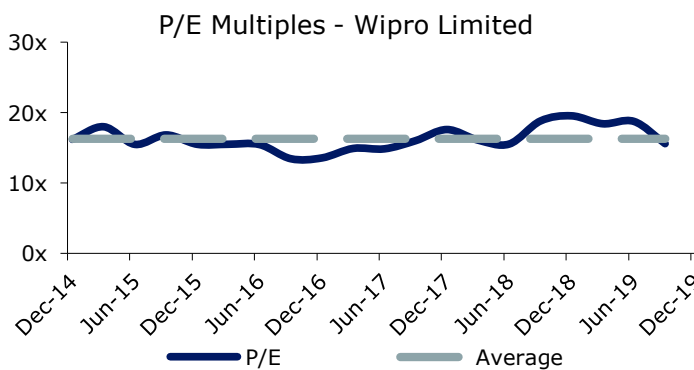
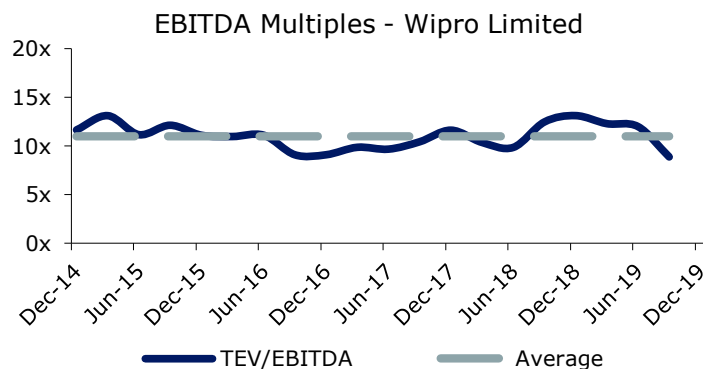
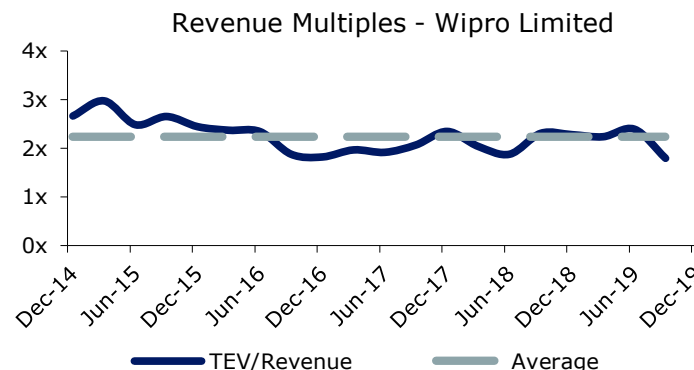
Public Basket



Wipro Limited

Wipro Limited operates as an information technology (IT), consulting, and business process services (BPS) company worldwide. The company's IT Services segment offers a range of IT and IT-enabled services, including 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, BPS, research and development services, and hardware and software design services to various enterprises. Wipro Limited was founded in 1945 and is headquartered in Bengaluru, India.

Date	Key Development Headline
12/10/19	Ministry of Technology and Communications and Wipro Sign MoU MoU to Launch Open Source CoE
11/19/19	University of Oulu, Wipro Sign MoU to Collaborate on 5G/6G Technologies
11/13/19	Wipro Limited Announces 5G Collaboration with Telecom Infra Project
10/2/19	Wipro Limited (BSE:507685) completed the acquisition of International TechneGroup Incorporated.
9/3/19	Wipro Limited (BSE:507685) entered into a business transfer agreement to acquire Vara Infotech for INR 3.21 billion.



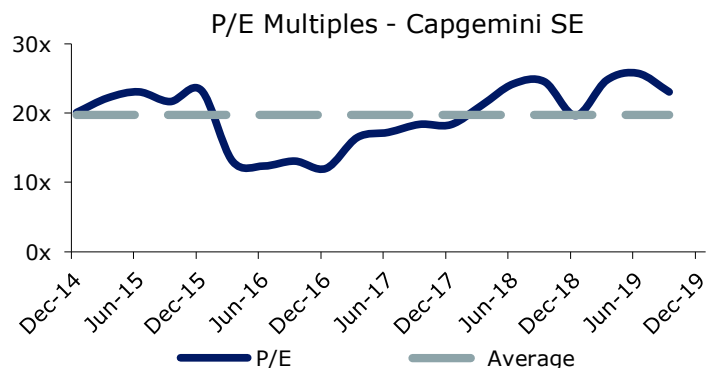
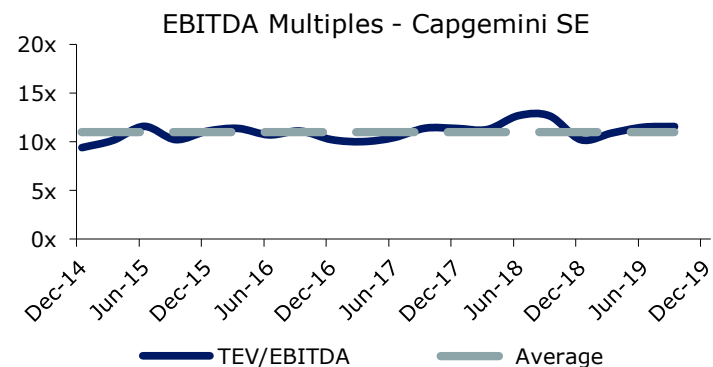
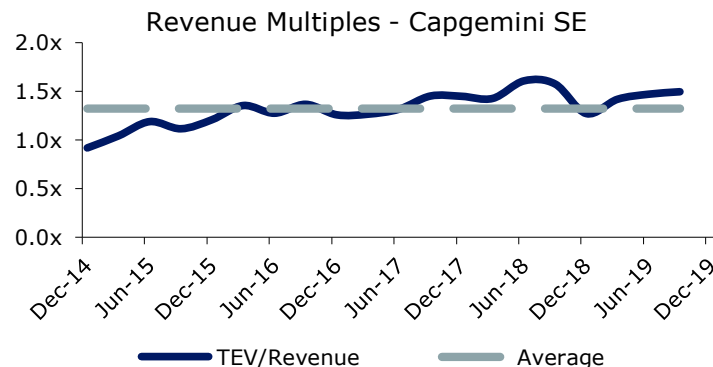
Public Basket



Capgemini SE

Capgemini SE provides consulting, technology, and digital transformation services. It addresses clients' opportunities in the world of cloud, digital, and platforms, as well as enables organizations to realize business ambitions through an array of services from strategy to operations. The company's Consulting Services segment offers strategy and transformation consulting services primarily in digital transformation that enhance the performance of organizations based on intimate client relationships, and the knowledge of client industries and processes. Its Technology & Engineering Services segment provides assistance and support to internal IT teams of client companies. Capgemini SE was founded in 1967 and is based in Paris, France.

Date	Key Development Headline
6/24/19	Altran Technologies S.A., Capgemini SE - M&A Call
6/23/19	Capgemini SE (ENXTPA:CAP) entered into an agreement to acquire Altran Technologies S.A. (ENXTPA:ALT) from Altamir SCA (ENXTPA:LTA), Apax Partners SAS and others for €3.6 billion.
2/20/19	Capgemini SE (ENXTPA:CAP) completed the acquisition of Leidos Cyber, Inc. from Leidos Intermediate Holdings, Inc. and others.
2/14/19	Capgemini To Seek Acquisitions



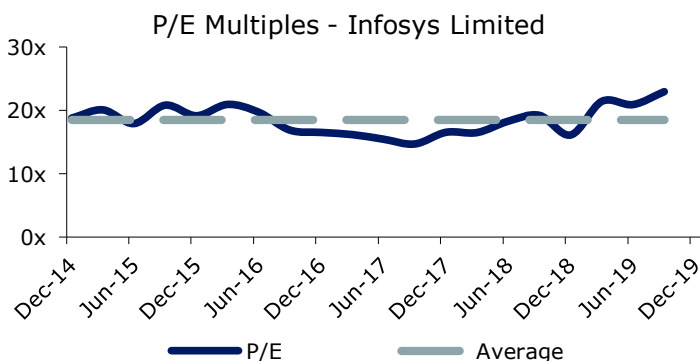
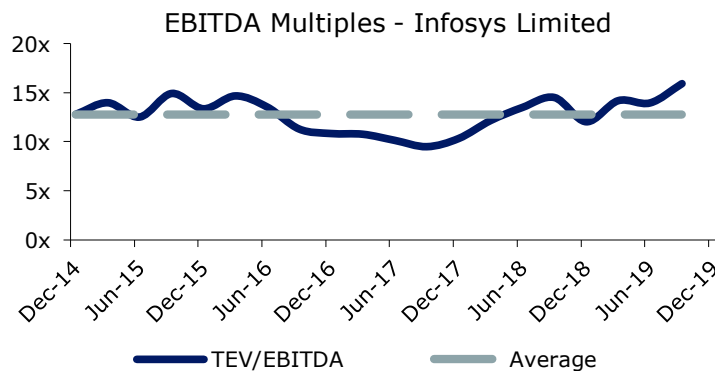
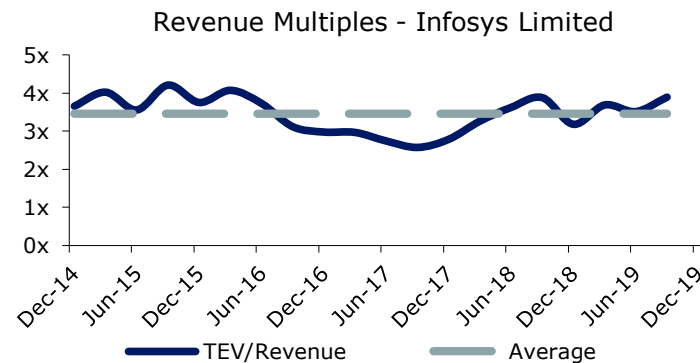
Public Basket



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
10/9/19	Infosys Enters into Strategic Partnership with Eishtec
8/22/19	Infosys and University of Illinois Urbana-Champaign Enter a Strategic Partnership for Precision Medicine
7/12/19	Infosys To Seek Acquisitions
5/9/19	Infosys Seeks Acquisitions
5/2/19	Infosys Seeks Acquisitions



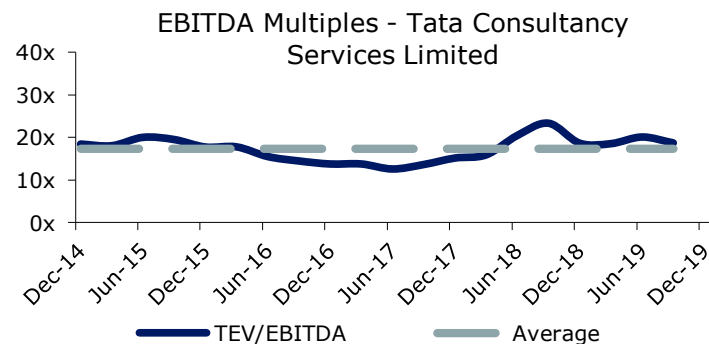
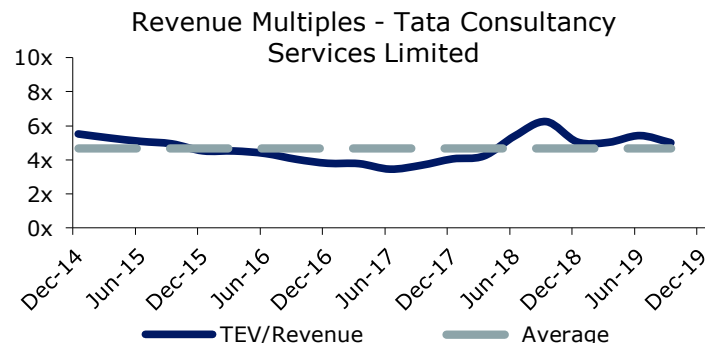
Public Basket



Tata Consultancy Services Limited

Tata Consultancy Services Limited provides information technology (IT) and IT enabled services worldwide. The company offers CHROMA, a cloud-based talent management solution that enables organizations to drive transformational employee experiences; ignio, a cognitive automation system; iON, an assessment solution; TAP, a cloud solution, including TAP contract management, purchasing, accounts payable, and supplier management solutions; and TCS MasterCraft, a digital platform to automate and manage IT processes. It also provides customer intelligence and insight solutions to deliver personalized retail, banking, and communications experiences; Intelligent Urban Exchange, an enterprise software to accelerate smart city transportation, water, and energy programs for cities. Tata Consultancy Services Limited is a subsidiary of Tata Sons Limited.

Date	Key Development Headline
9/15/19	Tata Consultancy Services Limited (NSEI:TCS) entered into an agreement to acquire Certain Assets of General Motors Technical Centre India Private Limited.
9/5/19	Posten Norge Expands Its Strategic Partnership with TCS to Enable Superior Customer Experience
4/14/19	Tata Consultancy Services To Seek Acquisitions
2/11/19	Tata Consultancy Services Announces Global Partnership with JDA Software to Build Next-Generation Cognitive Solutions
1/10/19	TCS Seeks Acquisitions



CONTACT INFO

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.

Leroy Davis, Partner	704.899.5962	leroy@7mileadvisors.com
Tripp Davis, Partner	704.899.5762	tripp@7mileadvisors.com
Andy Johnston, Partner	704.899.5961	andy@7mileadvisors.com
Mark Landry, Managing Director	561.972.0609	mark@7mileadvisors.com
Ben Lunka, Managing Director	704.496.2995	ben@7mileadvisors.com
Jeff Stoecklein, Managing Director	312.796.9330	jeff@7mileadvisors.com
Neil Churman, Director	281.742.9340	neil@7mileadvisors.com
John Cooper, Director	704.973.3996	john@7mileadvisors.com
Tim Frye, Director	704.973.3994	tim@7mileadvisors.com
Kristina Sergueeva, Director	704.899.5149	kristina@7mileadvisors.com
Ben Garber, Vice President	412.626.7898	ben.garber@7mileadvisors.com
Nicholas Prendergast, Vice President	704.973.3995	nicholas@7mileadvisors.com
Ariail Barker, Director, Sales & Marketing	704.981.2908	ariail@7mileadvisors.com
Emily Halstenberg, Marketing & Sales Coordinator	704.409.9912	emily@7mileadvisors.com
Marty Johnson, Senior Associate	704.973.3999	marty@7mileadvisors.com
Sydney Scadden, Senior Associate	704.973.3998	sydney@7mileadvisors.com
Garth Martin, Senior Associate	704.973.3997	garth.martin@7mileadvisors.com
Steve Buffington, Associate	704.960.1828	steve@7mileadvisors.com
Dennis Fox, Associate	704.706.9168	dennis@7mileadvisors.com
Rory Julyan, Associate	704.981.2520	rory@7mileadvisors.com
Daniel Kim, Associate	704.912.4584	daniel@7mileadvisors.com
Olufunke Abass, Associate	704.285.8171	olufunke@7mileadvisors.com