



Sectorwatch: Software Engineering

July 2019

Software Engineering

July 2019

- Sector Dashboard [4]
- Public Basket Performance [5]
- Operational Metrics [7]
- Valuation Comparison [10]
- Recent Deals [13]
- Appendix [15]

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.



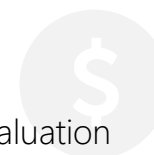
Public Basket Performance

- 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

↑ 4.3%

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

↓ -0.3%

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

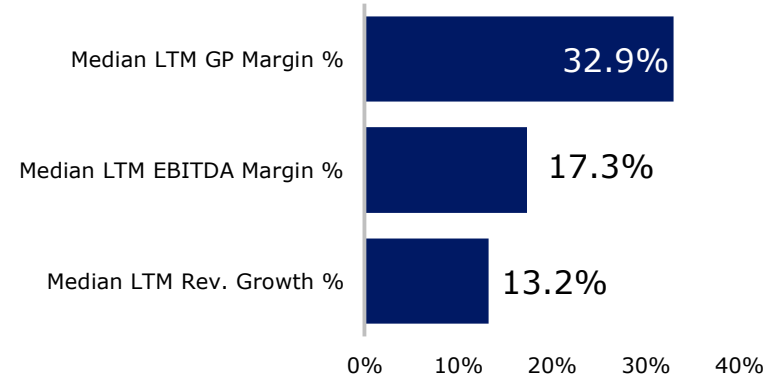
Profitability Momentum

↑ 1.0%

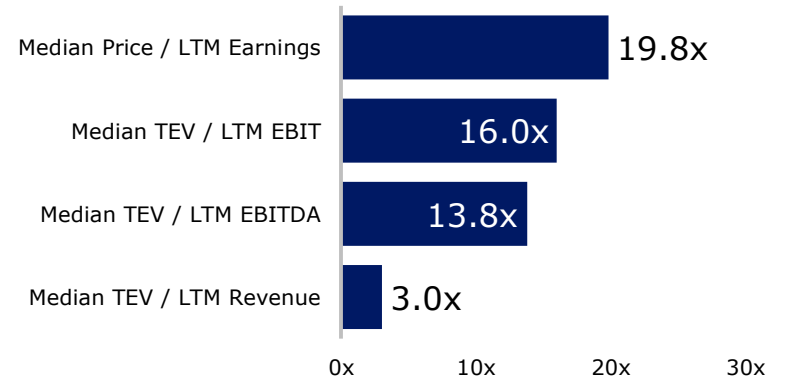
1 - year EBITDA % compared to EBITDA % average for last 3 years

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



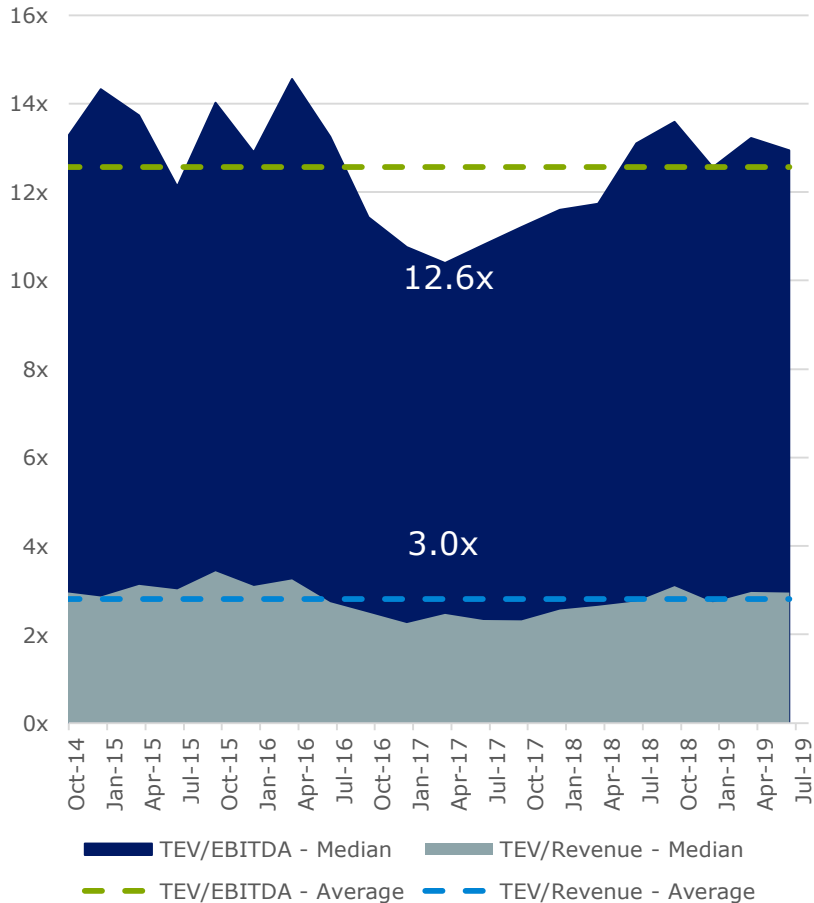
Public Basket



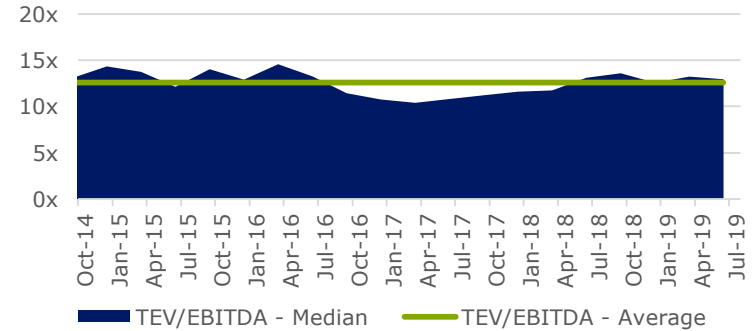
Company	TEV \$m	LTM Rev \$m	Rev Growth YoY	GP %	EBITDA %	TEV / Rev X	TEV / EBITDA X	# FTEs	Rev / FTE \$k
R Systems International Limited	39	107	24%	33%	9%	0.4	4.2	2,753	39
Persistent Systems Limited	474	490	7%	31%	16%	1.0	6.0	6,867	71
Globant S.A.	3,953	549	23%	40%	18%	7.2	39.0	8,384	65
EPAM Systems, Inc.	10,218	1,940	25%	35%	16%	5.3	34.0	30,156	64
Wipro Limited	18,465	8,607	8%	30%	20%	2.1	10.6	170,000	51
Capgemini SE	22,335	15,110	5%	27%	13%	1.5	11.9	211,313	72
Infosys Limited	46,575	12,099	9%	33%	24%	3.9	15.8	-	NA
Tata Consultancy Services Limited	110,535	21,817	18%	45%	27%	5.1	19.0	424,285	51
Average	26,574	7,590	15%	34%	18%	3.3	17.5	106,720	59
Median	14,341	5,273	13%	33%	17%	3.0	13.8	19,270	64

share price as of 25Jul19

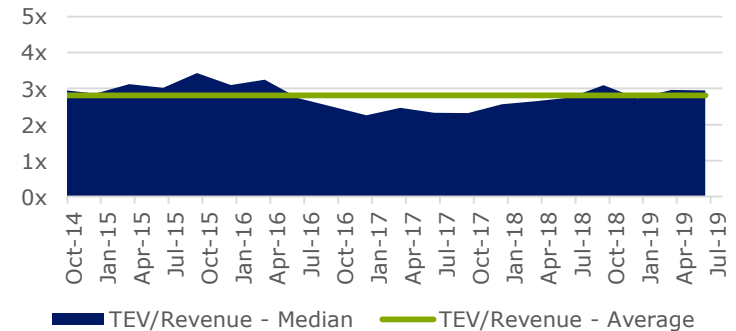
Public Basket Valuation Trends



Public EBITDA Multiples over Time



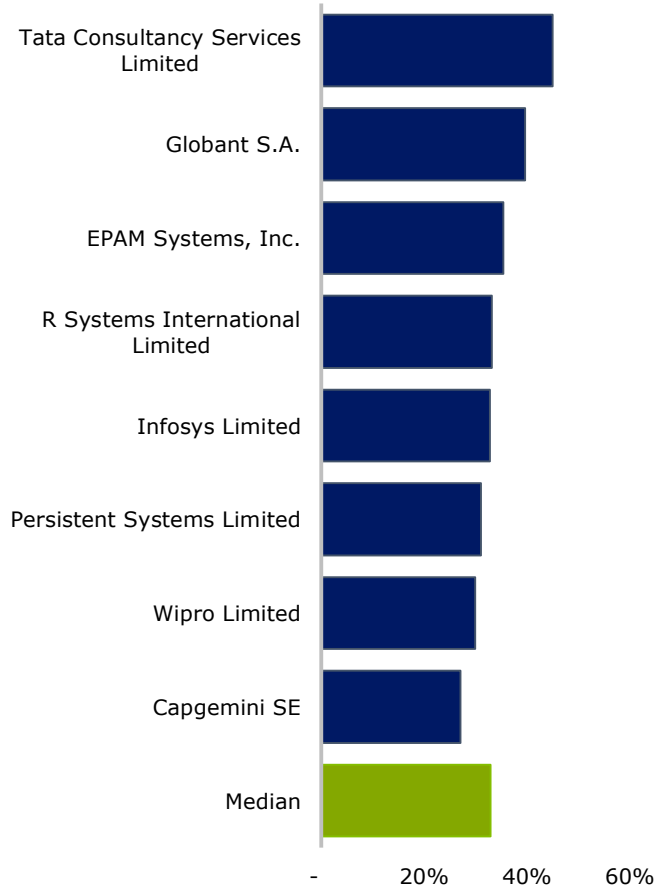
Public Revenue Multiples over Time



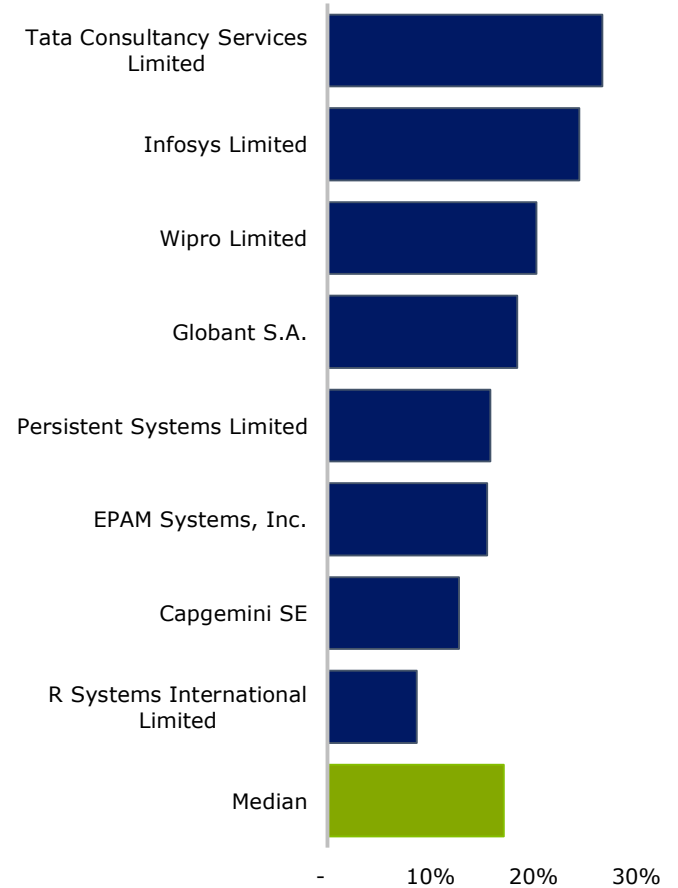
Operational Metrics



LTM Gross Profit Margin %



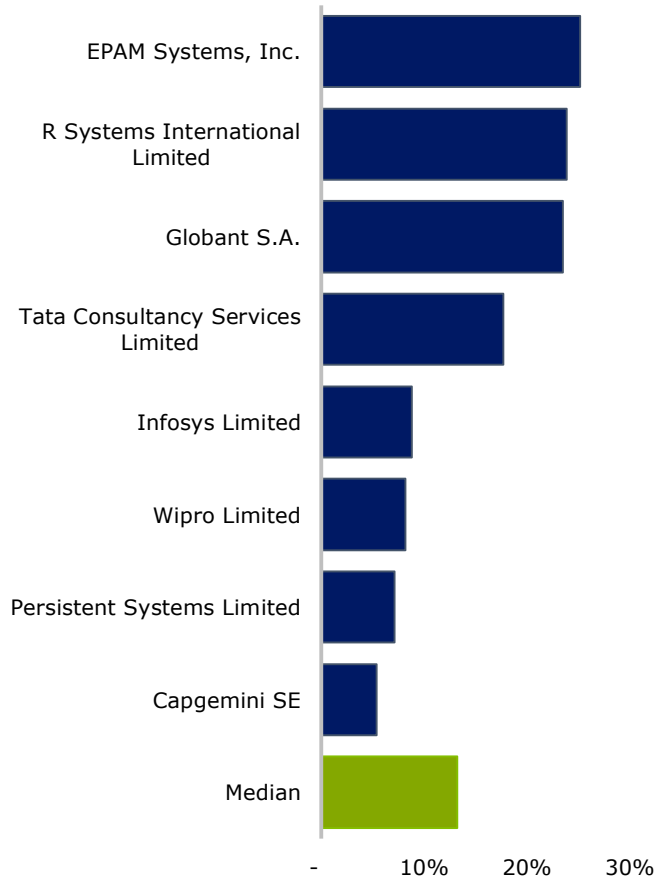
LTM EBITDA %



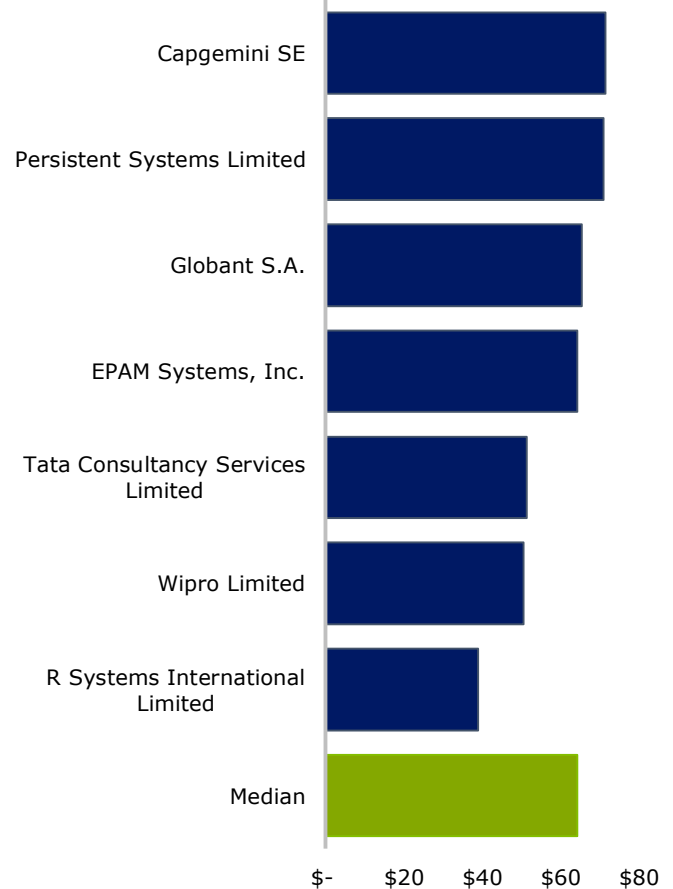
Operational Metrics



LTM Revenue Growth %



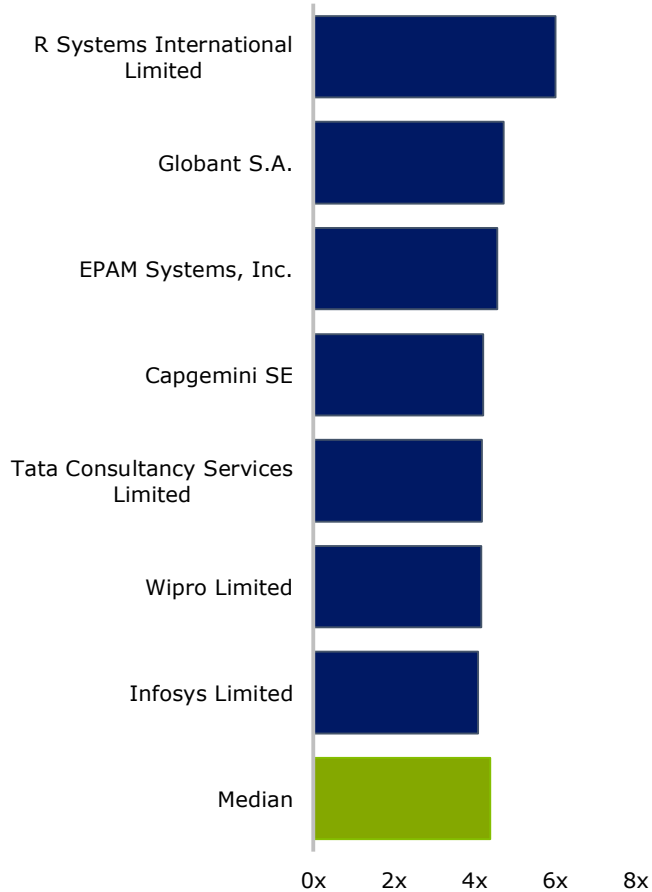
LTM Revenue per Full Time Employee x 000's



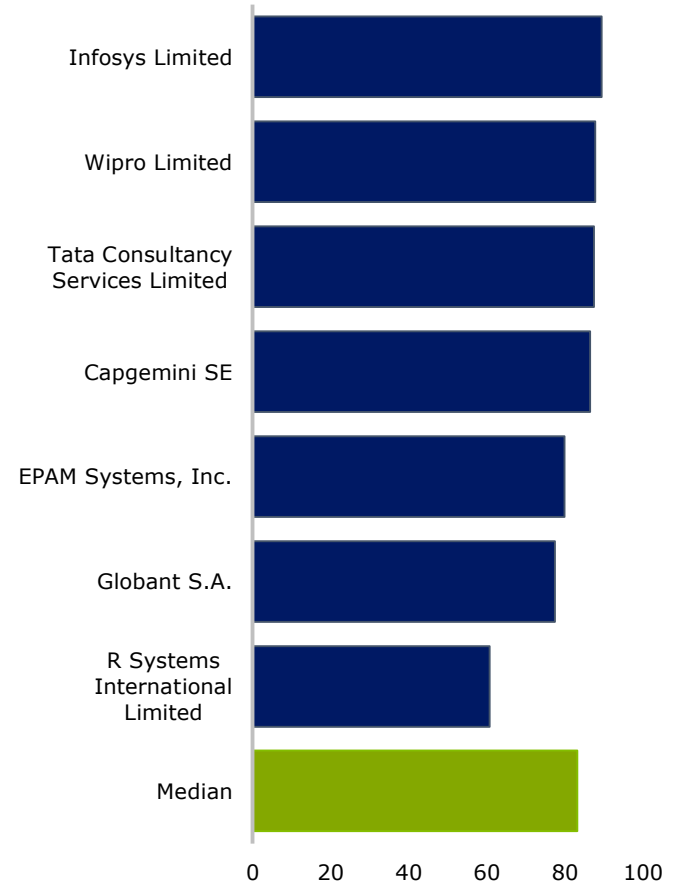
Operational Metrics



Accounts Receivable Turnover



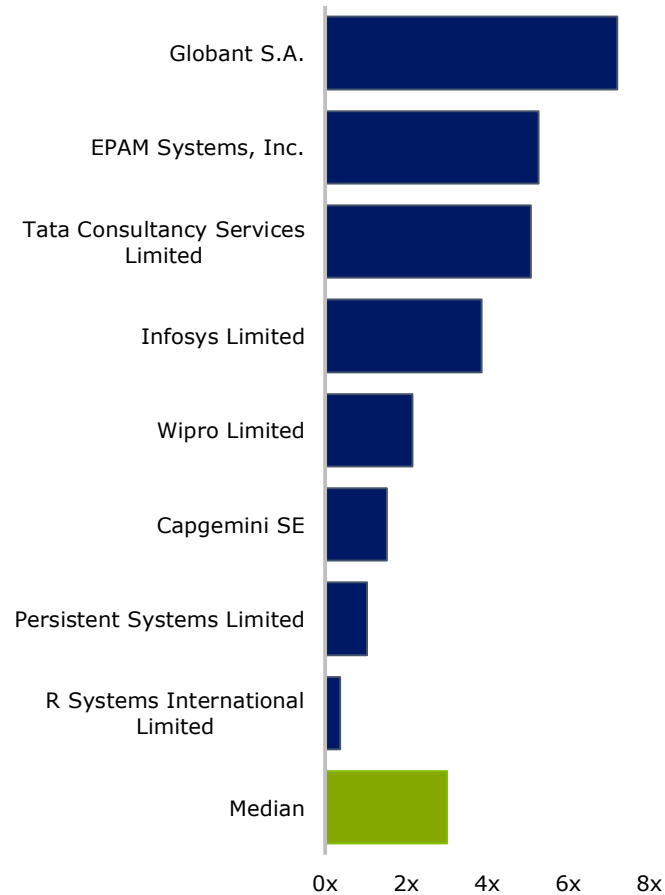
Average Days Sales Outstanding



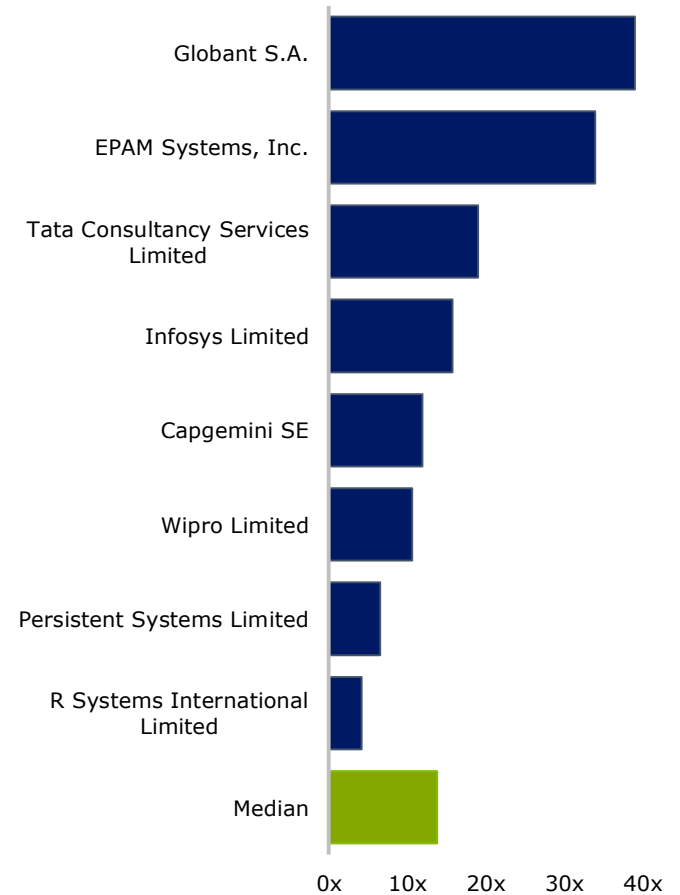
Valuation



TEV / LTM Revenue



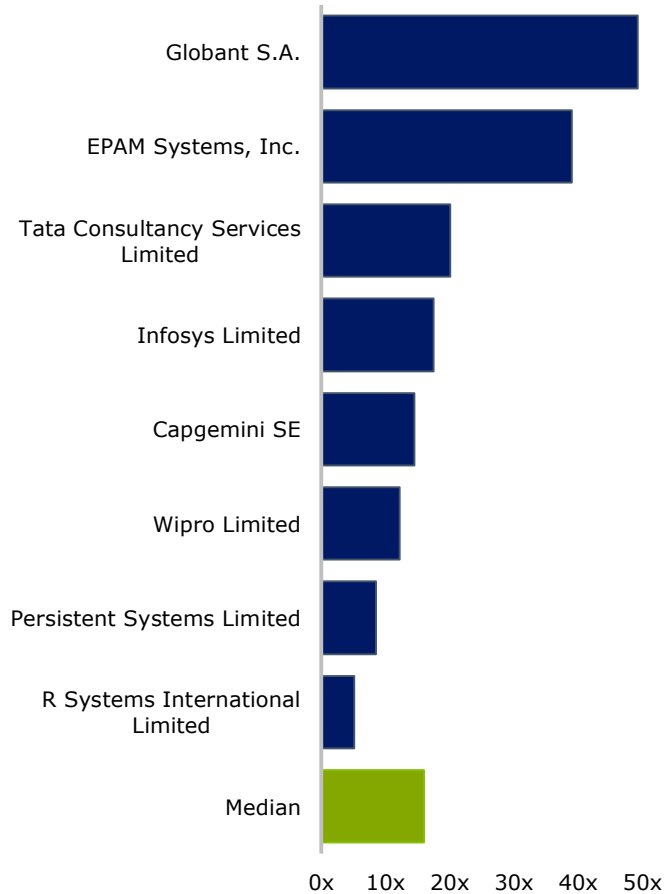
TEV / LTM EBITDA



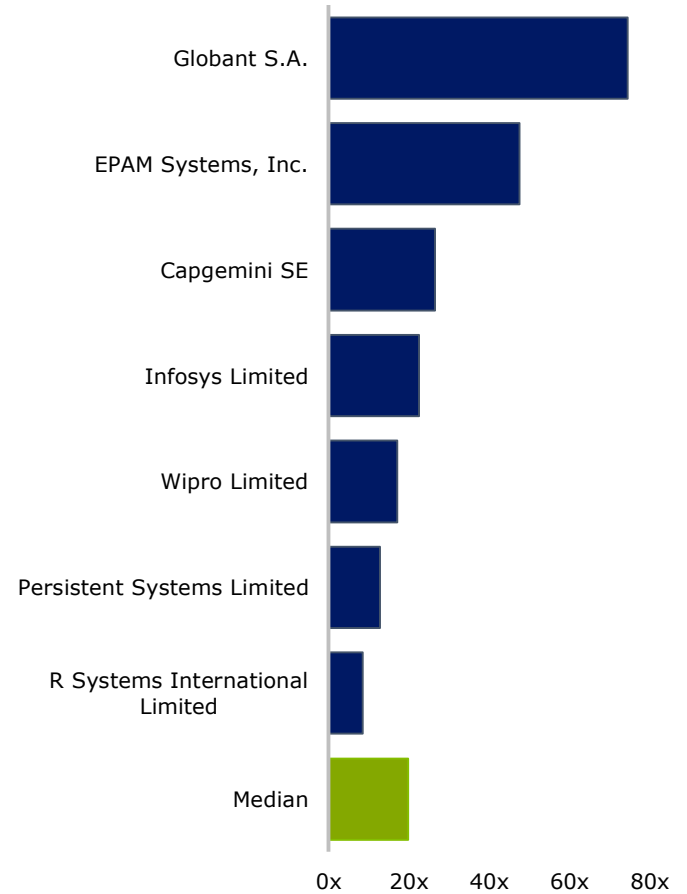
Valuation



TEV / LTM EBIT



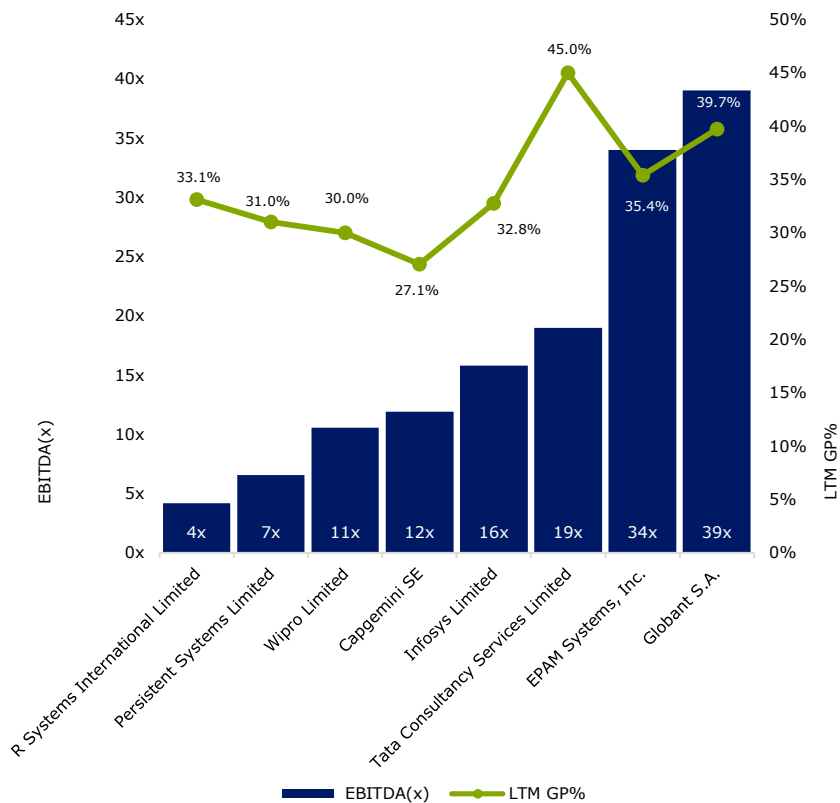
Price / LTM Earnings



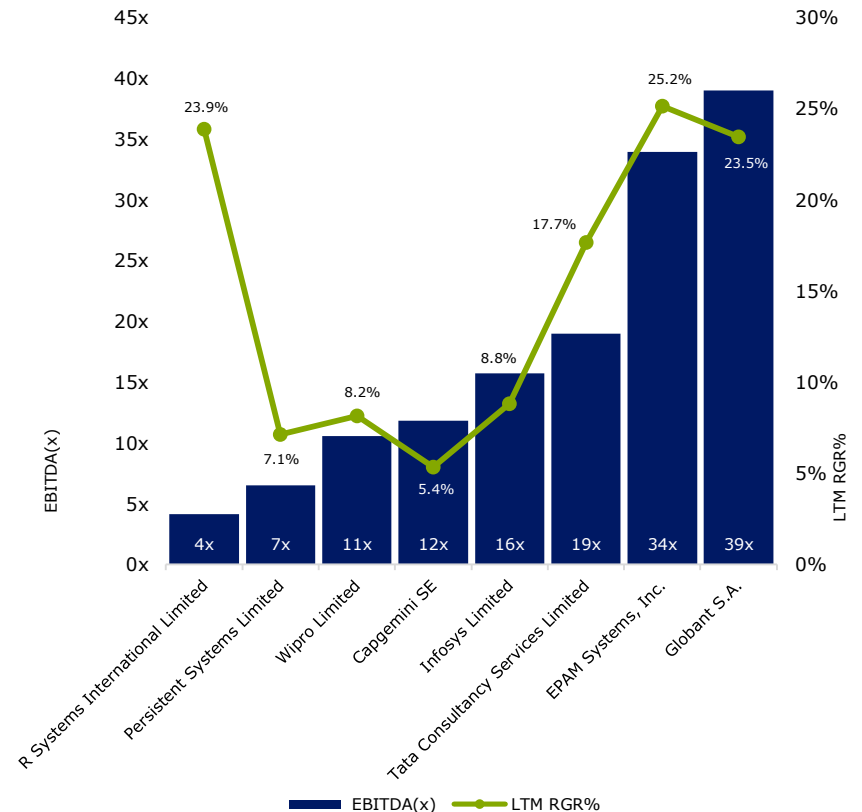
Valuation



Historical Valuation Multiples versus Gross Profit



Historical Valuation Multiples versus Revenue Growth Rate



Recent Transactions



<u>Date</u>	<u>Target</u>	<u>Buyer / Investor</u>	<u>Total Transaction Value</u>	<u>Target Revenue</u>	<u>TEV / Revenue</u>	<u>TEV / EBITDA</u>
10Jul19	QualiTest Ltd.	Bridgepoint Advisers Limited	-	-	-	-
3Jul19	DONAT group GmbH	Data Respons ASA	9.59	10.38	0.9x	-
21Jun19	Biztech Software Services Pty Ltd	MediaMonks B.V.	-	-	-	-
14Jun19	SoNET Systems Pty Ltd	RM plc	9.20	3.78	2.4x	-
31Jan19	OOO Korklass	IKS Corporation	9.87	-	-	-
6Jun19	Building Systems Design Inc.	RIB Software SE	42.00	-	-	-
21May19	RPM Technologies, Inc.	Broadridge Financial Solutions, Inc.	300.00	-	-	-
24Apr19	Link Software S.r.l.	TXT e-solutions S.p.A.	11.98	-	-	-
15Mar19	Omni Resources, Inc.	Saggezza Inc.	-	-	-	-
3Mar19	Xiamen Kuaiyou Network Technology Co., Ltd.	Hangzhou Gaoxin Rubber & Plastic Materials Co., Ltd.	19.77	-	-	-
21Jan19	New Sports Group Limited (nka:Glory Sun Land Group Limited)	China Goldjoy Group Limited (nka:Glory Sun Financial Group Limited)	796.12	241.09	3.7x	77.0x
7Jan19	InterGlobe Technologies Private Limited (nka:IGT Solutions Pvt. Ltd.)	Apollo Global Management, LLC; ICICI Venture Funds Management Company Limited; AION Capital Partners Ltd; Goldman Sachs Asia Strategic Pte. Ltd.	22.92	-	-	-
6Jan19	Luxoft Holding, Inc.	DXC Technology Company	2,072.15	904.44	2.2x	20.6x
20Dec18	DevOps Research and Assessment LLC	Alphabet Inc.	-	-	-	-
11Dec18	4th Source, LLC	AN Global	-	-	-	-
1Nov18	Assembla, LLC	IDERA, Inc.	-	-	-	-
12Oct18	Nexii Labs Inc.	GSS Infotech, Inc.	1.36	1.80	0.8x	-
8Oct18	Perfecto Mobile Ltd.	Perforce Software Inc.	200.00	-	-	-
20Oct18	Dev9, LLC	Nortal AS	-	-	-	-
17Sep18	Kinex Inc.	Planned Systems International, Inc.	-	-	-	-
13Aug18	iQuest GmbH & Co KG	Allgeier SE	-	34.24	-	-
9Aug18	Pillar Technology Group LLC	Accenture plc	-	52.00	-	-
9Aug18	Mindtribe Product Engineering Inc.	Accenture plc	-	-	-	-
1Aug18	POSTIS, LLC	Fluence Automation, LLC	-	-	-	-
24Jul18	KWR Technologies Limited	Aprose Solutions Limited	-	-	-	-
11Jul18	CA, Inc.	Broadcom Inc.	21,776.02	4,148.00	4.4x	16.4x

Software Engineering

July 2019

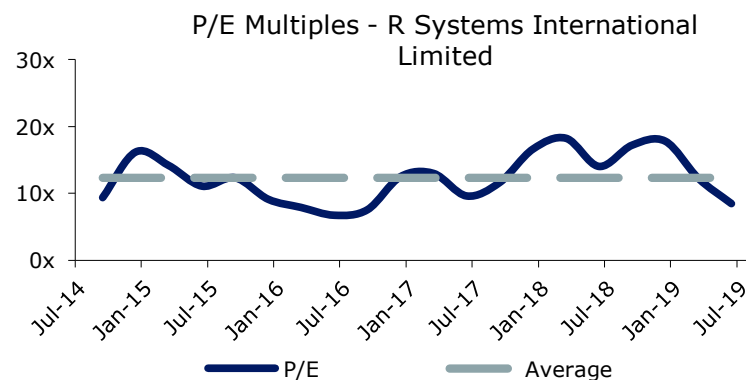
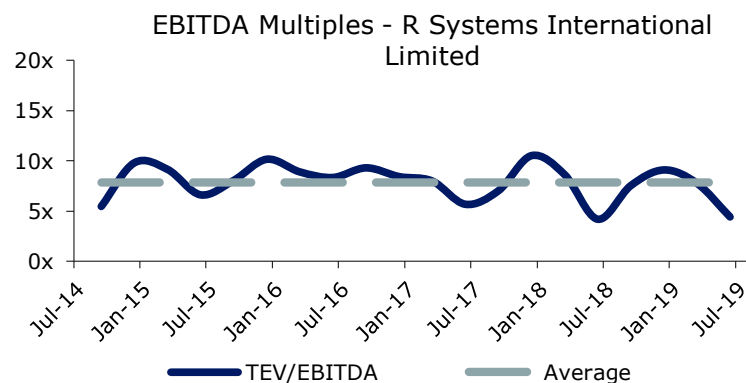
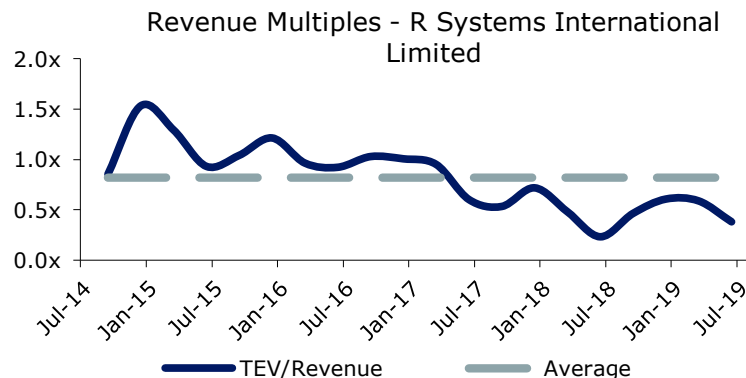
APPENDIX:
Public Basket
Constituents

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.



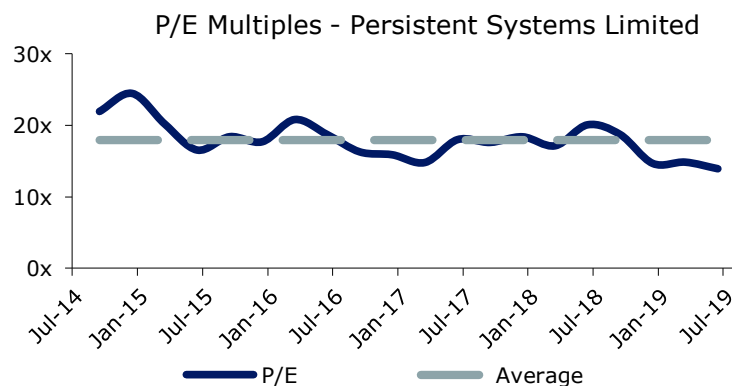
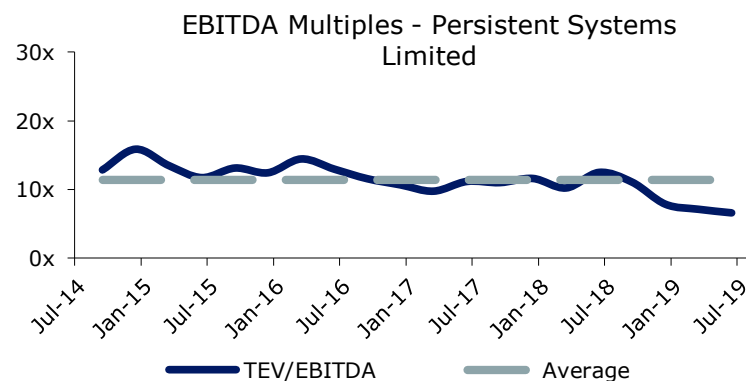
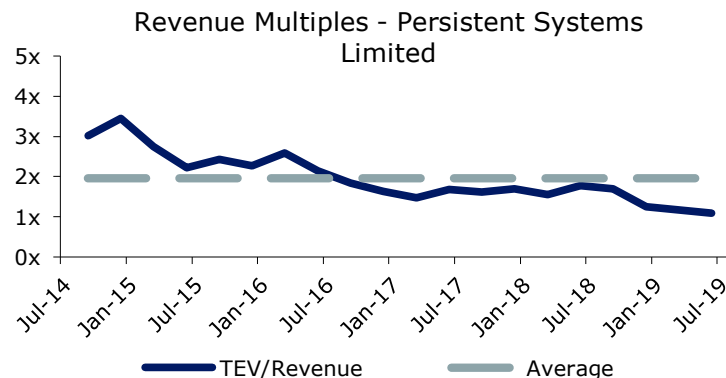
Public Basket



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



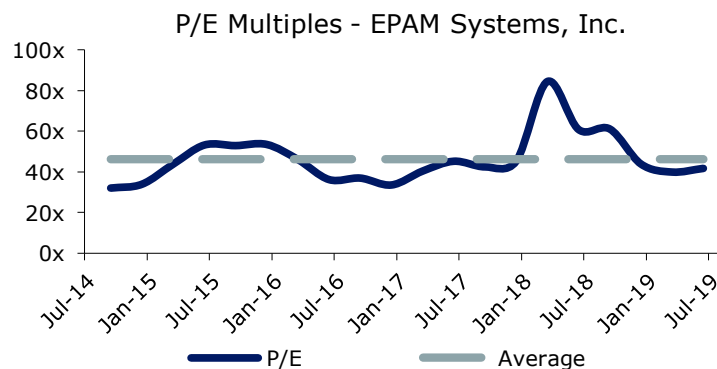
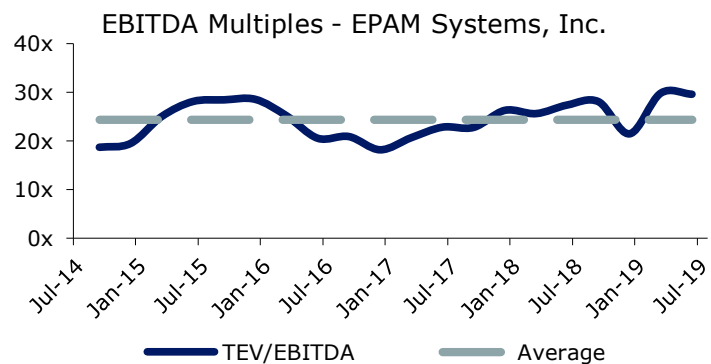
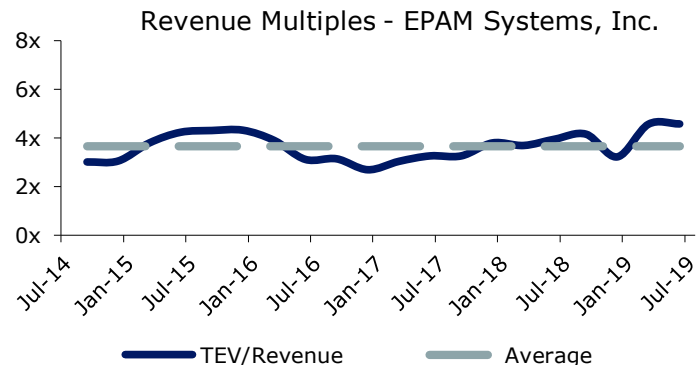
Public Basket



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
5/9/19	EPAM To Seek Investments
5/8/19	EPAM Systems, Inc. (NYSE:EPAM) acquired testCloud.de GmbH for \$17.3 million.
10/31/18	EPAM Systems, Inc. (NYSE:EPAM) acquired Think Limited for \$35.2 million.
9/17/18	EPAM Systems, Inc. Partners with Positive, on Research-Driven Cybersecurity R&D Lab



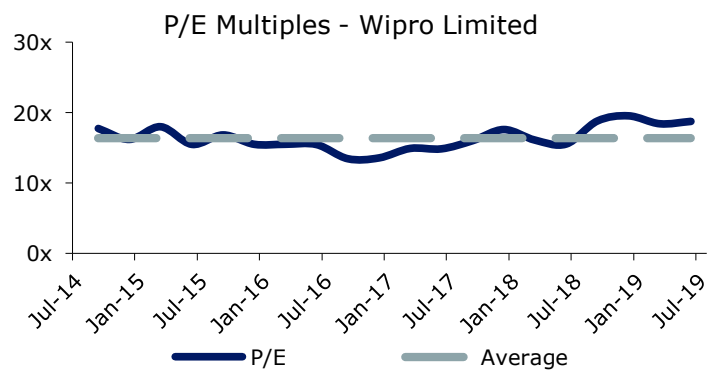
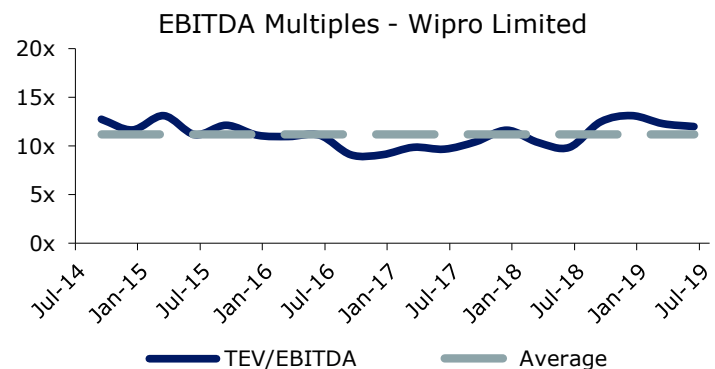
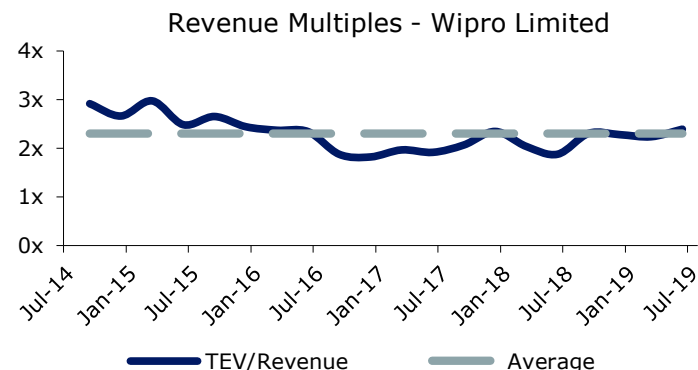
Public Basket



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
6/20/19	Wipro Launches Pivotal Software Center of Excellence in Dallas, Texas
6/4/19	Wipro Limited (BSE:507685) entered into a definitive agreement to acquire International TechneGroup Incorporated.
5/30/19	Alight Solutions LLC completed the acquisition of Workday and Cornerstone OnDemand business from Wipro Limited (BSE:507685).
3/28/19	Wipro and LIT Kharagpur Partner for Advanced Research in 5G and AI
2/26/19	Alight Solutions LLC entered into an agreement to acquire Workday and Cornerstone OnDemand business from Wipro Limited (BSE:507685) for approximately \$110 million.



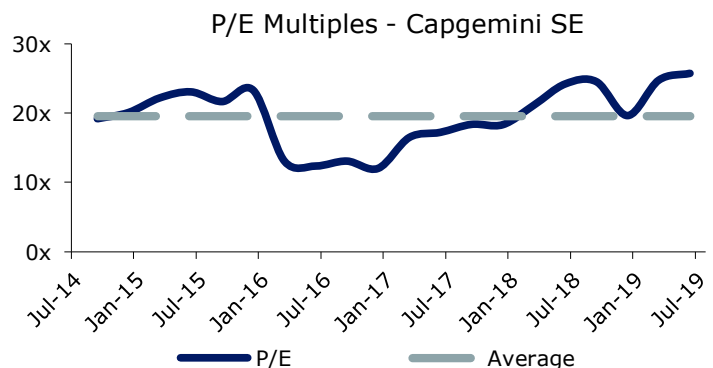
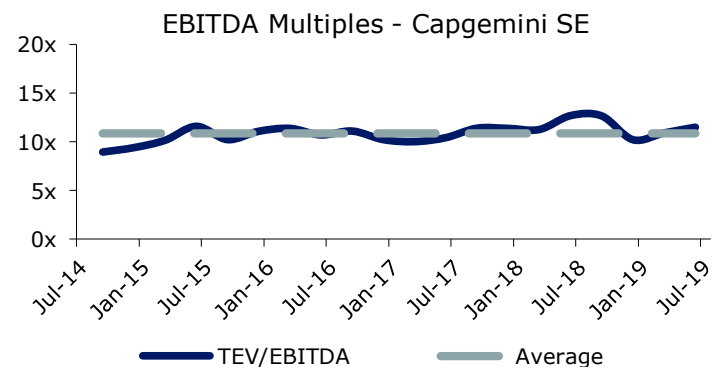
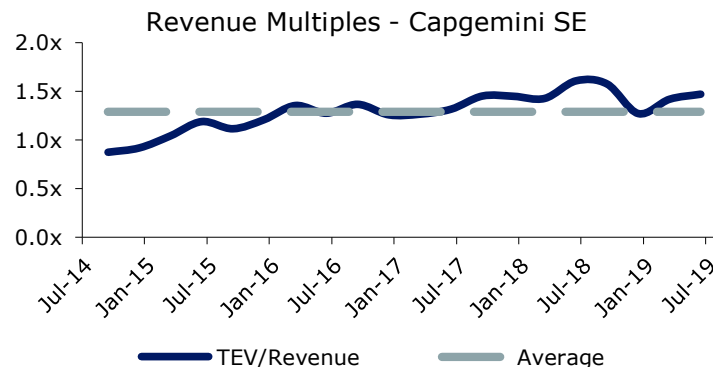
Public Basket



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



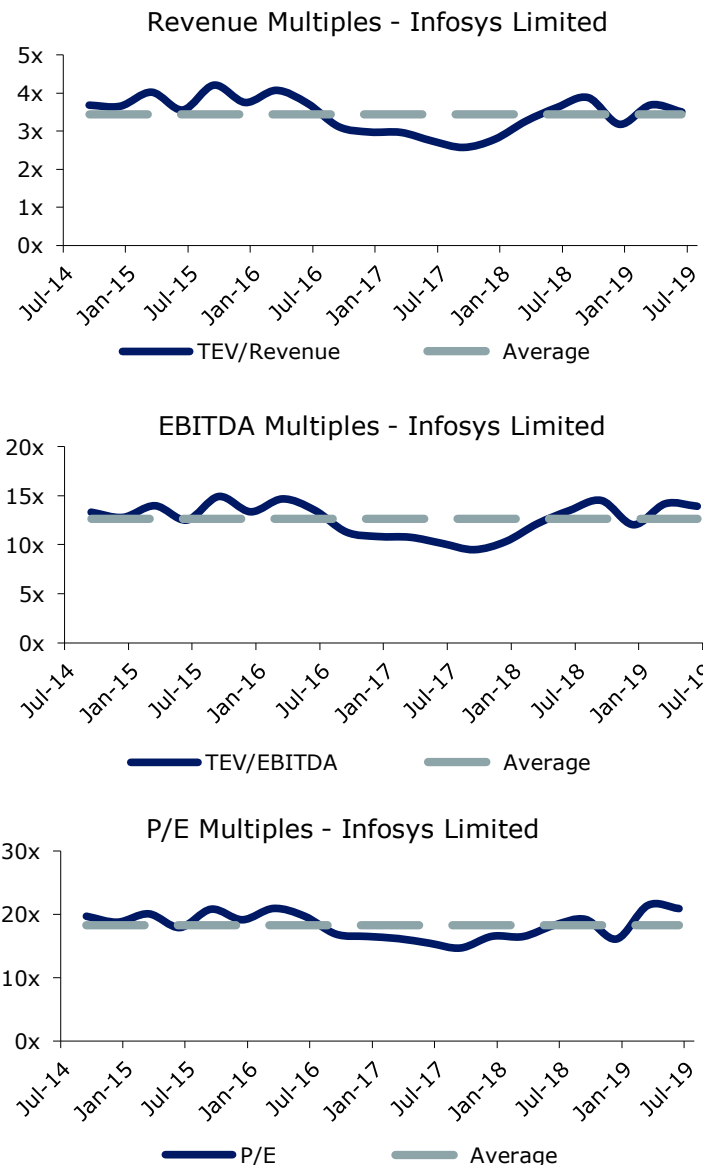
Public Basket



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
5/9/19	Infosys Seeks Acquisitions
5/2/19	Infosys Seeks Acquisitions
3/28/19	Infosys Limited and ABN AMRO Announce Strategic Partnership in the Netherlands
1/11/19	Infosys Drops Plan To Sell Panaya, Skava and Kallidus
1/9/19	Amazon Web Services, Inc. completed the acquisition of CloudEndure Ltd. from Infosys Limited (NSE:INFY) and others.



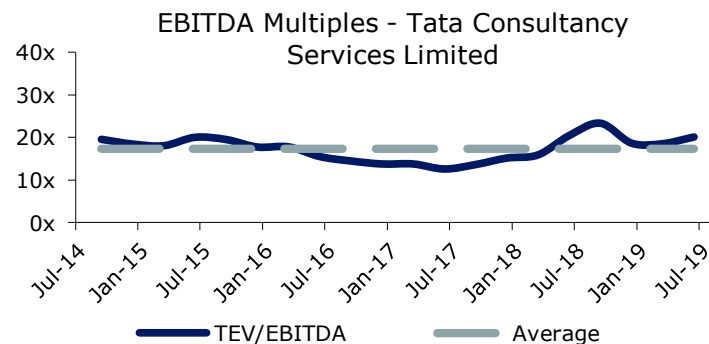
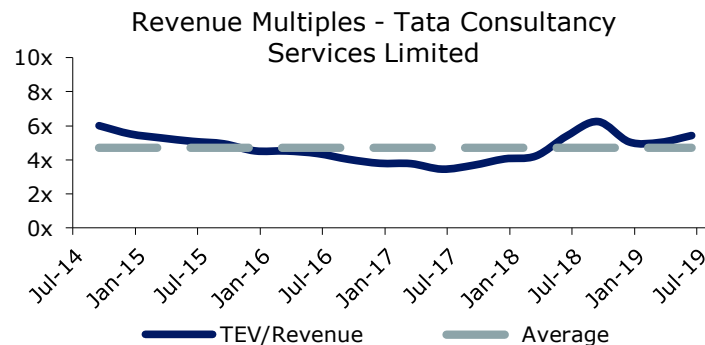
Public Basket



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
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
12/18/18	Tata Consultancy Services Extends Collaboration with Red Hat to Build Microservices-Based Open Source Solutions and Frameworks
11/27/18	Tata Consultancy Services Limited (NSEI:TCS) acquired Assets of BridgePoint Group, LLC.



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
Ben Lunka, Managing Director	704.496.2995	ben@7mileadvisors.com
Jeff Stoecklein, Managing Director	312.796.9330	jeff@7mileadvisors.com
Mark Landry, Managing Director	561.972.0609	mark@7mileadvisors.com
Kristina Sergueeva, Director	704.899.5149	kristina@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
Ben Garber, Vice President	412.626.7898	ben.garber@7mileadvisors.com
Nicholas Prendergast, Financial Analyst	704.973.3995	nicholas@7mileadvisors.com
Ariail Siggins, Marketing Director	704.981.2908	ariail@7mileadvisors.com
Emily Halstenberg, Marketing & Sales Coordinator	704.409.9912	emily@7mileadvisors.com
Sydney Larese, Associate	704.973.3998	sydney@7mileadvisors.com
Marty Johnson, Associate	704.973.3999	marty@7mileadvisors.com
Rory Julyan, Associate	704.981.2520	rory@7mileadvisors.com
Garth Martin, Associate	704.973.3997	garth.martin@7mileadvisors.com
Dennis Fox, Associate	704.706.9168	dennis@7mileadvisors.com
Steve Buffington, Associate	704.960.1828	steve@7mileadvisors.com
Brynne Miller, Associate	704.960-1701	brynne@7mileadvisors.com