Brady

Interim results

Positioning for new technologies

Software & comp services

Brady has undergone a significant transition into a leaner, more focused business. Costs have been taken out and the recycling business sold earlier this year as it did not fit well with the business. The main priorities are delivering on legacy contracts while significant resources are being used to refresh the product, with c 25% of FY18 sales expected to be spent on R&D. Consequently near-term ratings remain elevated. However, the market opportunity is substantial and we believe Brady is well positioned to benefit from the significant sector consolidation.

Year end	Revenue (£m)	PBT* (£m)	EPS* (p)	DPS (p)	P/E (x)	Yield (%)
12/16**	25.4	1.3	2.4	0.0	27.5	N/A
12/17**	22.3	(2.9)	(5.6)	0.0	N/A	N/A
12/18e	23.7	0.3	0.3	0.0	206.3	N/A
12/19e	24.9	1.3	1.2	0.0	55..2	N/A

Note: *PBT and EPS are normalised, excluding amortisation of acquired intangibles, exceptional items and share-based payments. **Excludes recycling business and FY17 has been restated for IFRS 15.

Investment case: E/CTRM is a highly attractive space

Brady has more than 300 customers, including many blue-chip names that cover a wide range of commodity businesses such as trading companies, financial institutions, producers and manufacturers. The global E/CTRM market was worth c $1.65bn in 2016 (ComTech Advisory) and is forecast to grow at c 6% CAGR in 2016-20. Brady has a strong position in niche areas including commodity logistics, credit risk, metals (number one globally) and European energy, yet has a relatively modest market penetration overall (we estimate 1.2%). Recurring revenues were 74% of the H118 group total, which is above the 70% medium-term target.

Interim results: As planned, reflecting streamlining

H1 group revenue of £10.5m reflected 2% growth at consistent currencies, while cost of sales fell by 4% on the same basis and hence the gross margin rose by 3% to 55%. Operating costs fell by 11% and consequently the operating loss reduced significantly to £2.3m. The group ended the period with cash of £4.8m and has no debt. Brady expects to receive a final payment of £1m for the recycling business in FY19. The outlook is maintained, and 95% of FY18 revenues are in the bag.

Forecasts: Normalised profits eased on cost switch

We have maintained our FY18-20 revenue forecasts while easing EBITDA, although our EBITDA (Brady methodology) forecasts are maintained. We forecast the group to end FY18 with net cash of £5.1m (previous forecast was £5.8m), which rises to £6.8m a year later after receiving the final payment for the recycling business.

Valuation: Well positioned in a consolidating sector

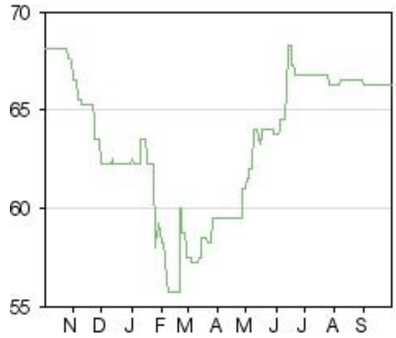
While we only forecast modest near-term profitability, the long-term shift to microservices and cloud will enable much improved scalability of the business model. If Brady could take a 5% market share and generate 20% operating margins, it would suggest c 400% upside if the stock traded on c 10x earnings.

1 October 2018

Price	**66p**
Market cap	**£55m**

Net cash (£m) at 30 June 2018	4.8
Shares in issue	83.4m
Free float	68%
Code	BRY
Primary exchange	AIM
Secondary exchange	N/A

Share price performance



%	1m	3m	12m
Abs	(0.4)	(0.8)	(2.9)
Rel (local)	1.2	0.7	(5.5)
52-week high/low		68.2p	55.8p

Business description

Brady is the largest Europe-based E/CTRM player. It provides a range of transaction and risk management software applications, which help producers, consumers, financial institutions and trading companies manage their commodity transactions in a single, integrated solution.

Next events

Trading update	January 2019
Final results	March 2019

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Edison profile page

Brady is a research client of Edison Investment Research Limited

EDISON

Investment summary: Positioning for new technologies

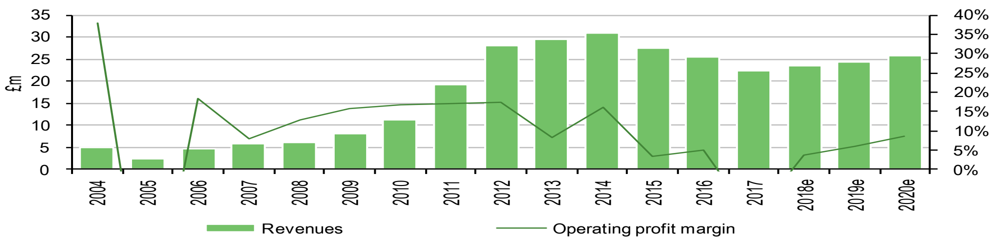
Company description: E/CTRM software vendor

Founded in 1985, Brady is a leading provider of trading and risk management software for global commodity markets. The group has 300+ customers worldwide, including some of the largest financial institutions and corporations, which depend on Brady's software solutions to deliver mission-critical business transactions across their global networks. The group employs c 180 people with development centres in the UK (Cambridge and Edinburgh), Norway (Bergen and Halden), Switzerland (Geneva) and India (Bangalore), and commercial offices in the US, UK, Europe and Singapore. Customers include Codelco, Cofco, Gerald Metals, Glencore, Koch Inds, LG Intl, Norilsk, Norsk Hydro, Rio Tinto, Standard Bank, Statkraft, Statoil, Traxys and Xstrata.

Financials: Shifting to a recurring revenue model

A primary focus is to transition the group's customer base to a recurring rental model. While Brady's Norwegian energy business operates a recurring onsite rental model, its commodities and energy scheduling units have traditionally operated a term licence model. The near-term focus is to shift this business to recurring rental. Longer-term, the plan is to transition to microservices, which provides a route to more scalable cloud deployment. The group posted an operating loss in FY17, due to disappointing revenues, with projects delayed, and there was an acceleration of the switch to the rental model, which reduces revenue in the short term. Underlying H118 group revenue rose 2% and 74% of revenues were recurring in nature, although this ratio is expected to decline in H2 as licence and service revenues recover. We forecast sales to grow by 6% CAGR organically over FY18-20, with adjusted operating profit recovering to £0.3m in FY18 and to £1.3m in FY19. Brady had net cash of £4.8m at end-H118 and we forecast this to increase to £5.1m at end-FY18 and to £6.8m a year later.

Exhibit 1: Revenue and operating margin trends



Source: Brady, Edison Investment Research

Sensitivities: IT budgets and commodities cycles

In our view, Brady's greatest sensitivity, as with a typical enterprise software vendor, is the risk of IT department budget cuts in an economic downturn. It is also exposed to commodity markets, which are cyclical and subject to periods of extreme volatility. We note that the 2015 commodity sell-off, which was related to a Chinese economic deceleration, was persistent and severe, and correlated across asset classes.

Valuation: Active M&A and sector consolidation

The stock trades on a P/E of 206x our FY18 earnings forecast, falling to 55x in FY19e and to 35x in FY20e. The high ratings reflect the depressed profitability, which we expect to improve as the business scales, and Brady should benefit from its streamlined cost base. Alternatively, the stock trades on 1.9x FY19e revenues, which is substantially below the broader sector (see Exhibit 7 on page 14). Additionally, the stock is underpinned by the high level of M&A in the financial software sector and in particular across the commodities software space.

Company description: Commodities s/ware growth play

Brady seeks to be the definitive provider of choice for natural resources software solutions. It operates in the E/CTRM (energy/commodity trading, transaction and risk management) software space, supporting the business processes of enterprises that are associated with trading energy and commodities. Brady is the largest Europe-headquartered E/CTRM provider; it is the largest in the metals (a segment within CTRM or commodity trading, transaction and risk management) and the largest ETRM (energy trading, transaction and risk management) provider in Europe. Brady has over 30 years' expertise in the commodity markets with more than 300 customers worldwide. These businesses rely on Brady's software solutions to deliver business transactions across their global operations. Brady clients include many of the world's largest financial institutions, trading companies, miners, refiners, tier one banks and a large number of London Metal Exchange (LME) Category 1 and 2 clearing members, and many leading European energy generators, traders and fabricators.

Transitioning to a more scalable business

Over the last few years, Brady has undergone a significant transition into a leaner, more focused business. Costs have been taken out and the recycling business sold, as it did not fit well with the business. A strategic review was initiated by Ian Jenks, chairman, following his appointment in June 2016, and completed in 2017. The group has switched from operating on a divisional basis to global functions, and hence no longer reports results for energy and commodities separately. Staff numbers have reduced by around a third since the peak as a result of the recycling disposal, reduction in headcount in the Bangalore office in early 2018 and cuts from duplication as the group transitioned to operating on global functions basis. We also note that staff turnover was high in 2017 but this has since returned to normal levels. The development team has been unified, and development work is shifting from platforms to 'microservices', so that new products can be leveraged across the group and Brady is evolving to a recurring revenue model. An account management function has been created to replace what was previously handled by sales and this has helped drive new sales from existing customers in H1. The focus now is to improve the new sales process to build the pipeline of new customers.

What does the software do?

Brady combines fully integrated and complete solutions supporting the entire commodity trading operation, from capture of financial and physical trading, through risk management, handling of physical operations, to back office financials and treasury settlement for energy, refined and unrefined metals, soft commodities and agricultural products.

Commodities (CTRM)

Brady has a particularly strong position in metals and a smaller presence in agriculture and softs. The main solutions include Trinity, FinTrade and Aquarius. Trinity is the group's original solution while FinTrade was acquired with Viveo Switzerland in 2010. Trinity's functionality includes trading and risk management from physical contract positions to hedging and derivatives trading activities, notably for precious and base metals. FinTrade is a physical and financial solution for all metals, agriculturals & softs and bulk energy commodities, and has an accounting module called FinAccount. The functionality of the group's concentrates solution has recently been built into FinTrade, while a handful of customers continue to operate the legacy Aquarius solution.

Energy (ETRM)

Primary solutions include Energy Trading and Risk Management (originally Elviz), Energy Data Management (originally Navita) and Energy Logistics (originally Syseca). The solutions cover the following energy products: power, electricity, gas, emissions, renewables, LNG and LPG. Functionality covers physical trading, power generation, scheduling and nomination, cross-border trading, and financial trading and risk management. The bulk of Brady's ETRM customers are in Norway and other Nordic countries, for the trading/risk and EDM solutions. The Nordic energy margins are going through significant changes – energy data are being centralised, but with different standards in Norway, Sweden and Finland. This creates an opportunity for Brady.

The group has made some small ETRM sales in other European countries, and a significant power scheduling deal with EirGrid, the Irish state-owned transmission system operator (TSO) that manages and operates the transmission grid across both the Republic of Ireland and Northern Ireland. This solution has been built to manage scheduling for I-SEM (Integrated Single Electricity Market), the new wholesale electricity market arrangement for Ireland and Northern Ireland, and this relationship has helped Brady win additional I-SEM-related business in Ireland. The Irish business development and support is handled from the group's Edinburgh office.

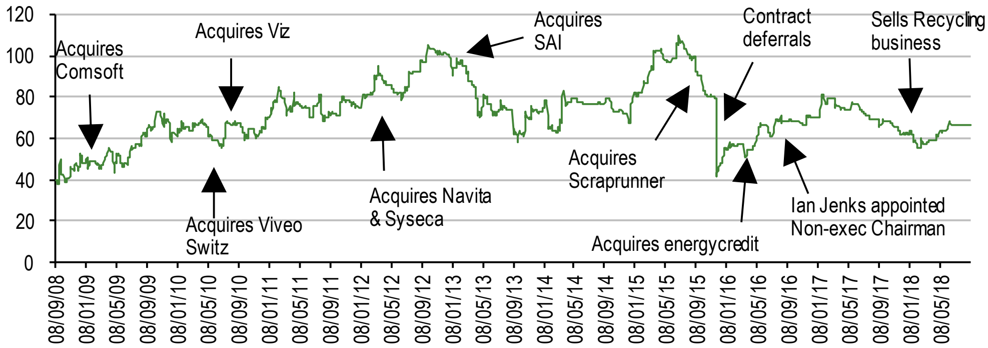
Credit risk

Brady Credit Risk is a global limits management and credit exposure measurement application that was built for the energy markets. Brady Credit Risk interfaces with multiple systems across front and back offices, allowing credit risk exposures to be measured and policed on a global basis. The solution was acquired as energycredit and Brady intends to target the solution at the broader commodity markets.

Background

Brady listed on AIM in 2004. At that time, its core competence was in the metals markets, and it was typically winning one to three new contracts per annum. A new management team joined in 2007, which sought to use the public listing to broaden the group's exposure across the commodities spectrum. In 2009, Brady acquired Comsoft to expand into concentrates. The acquisition of Viveo Switzerland in early 2010 added exposure to soft commodities and agriculturals, while also strengthening its position in metals. The first significant exposure to energy (ETRM) markets came with the acquisition of Viz Risk Management, a Norwegian business, later in 2010. This was strengthened via the acquisition of Navita, the major competitor of Viz in Norway, along with Syseca, a small Swiss business that has provided the foundation of the group's energy scheduling business. The Norwegian businesses were streamlined with customers transitioned to go-forward platforms. SAI, a software provider to the scrap metals (recycling) industry, was acquired in 2012, which was strengthened via the acquisition of ScrapRunner in mid-2015. These businesses were sold in January 2018 following the strategic review, because the recycling industry is a challenging end-market, and the recycling software platform was not suited to the transition to microservices. The group's credit risk product was acquired in 2016 (energycredit).

Exhibit 2: Share price history over 10 years



Source: Bloomberg, Regulatory News

Interim results: £2.8m of new bookings in H1

This first set of numbers since last year's restructuring reveals a stabilising revenue base, growing recurring revenues, rising gross margin and falling operating costs. While Brady is still running at a loss, there is less risk in the business due to the significantly reduced cost base and management is in a significantly better position to scale the business. Further, the group retains a strong balance sheet with net cash and no financial debt. There was £2.8m of new bookings, including £2.3m of from existing customers and £0.5m from two new energy customers. The bookings from existing customers included £1.2m of new business (new user licences and additional modules) and £1.1m of renewals, with the latter reflecting a 100% hit rate as four customers renewed their term licences. The group ended the period with cash of £4.8m and has no debt. A final payment of £1m for the recycling business is due to be received in FY19.

Traxys case study

Traxys is a privately owned physical commodity trader and merchant in the metals and natural resources sectors. Its logistics, marketing, distribution, supply chain management and trading activities are conducted by over 400 employees in over 20 offices worldwide, and its annual turnover exceeds $6bn. With a Luxembourg HQ, Traxys is active in a range of non-ferrous metals, ferroalloys, minerals, industrial raw materials and energy-related commodities. Traxys serves a broad base of customers and suppliers and offers a full range of commercial and financial services.

Traxys grew through a series of acquisitions, which resulted in multiple trading systems and different processes across its global businesses. In 2011–12, Traxys implemented one common global accounting system. In 2013, it set out to replace all of its trading systems. Traxys had three trading systems ranging from a 20+ year-old custom build to one more modern platform and a very large number of spreadsheets. Its primary objective was to end up with one global system and one set of global processes. The greatest challenge in selecting a system for Traxys was the range of products it trades and there was no single system on the market that handled all its products.

Traxys selected Brady's FinTrade solution for the following reasons:

- strong physical logistics;
- closest coverage for the majority of products it traded;
- strategic alignment: Brady convincingly demonstrated a strategy to build the most comprehensive physical metal trading system on the market;
- Brady had acquired Aquarius, a specialized system for concentrates together with its expert personnel, and committed to redeveloping that concentrates functionality within FinTrade; and
- collaborative approach to enhance the software in phases aligned with Traxys's global deployment plan.

Traxys has successfully gone live with FinTrade in a number of its divisions, including the base metals business (globally in five locations, 100% live) and Industrial Minerals (50% live globally). User feedback has been positive overall and the system is seen as a significant improvement in control and efficiency.

There were challenges with the project, with development timelines stretched out and project budgets overrun, and there has been high turnover of resources. However, the changes at Brady in the past year have restored confidence and the product has seen ongoing improvements. Traxys is now deeply invested in Brady and has confidence in a successful project completion and long-term relationship. The roll-out is expected to be completed in mid-2019.

Management changes

Ian Jenks joined Brady in June 2016 as a non-executive chairman. Mr Jenks hired external consultants to review the business. In September 2016, it was announced that Gavin Lavelle, CEO, was leaving the business and Mr Jenks took over as executive chairman on an interim basis. The company is looking for a new CEO who has a strong sales focus, after which Mr Jenks will return to the non-executive chairman role.

A new senior management team has now evolved:

Head of value enablement – Scott Hestenes: Mr Hestenes joined Brady when it acquired Navita in 2012. He is responsible for all sales and marketing activities.

Head of product – Libby Koehn: Ms Koehn is responsible for all product development. Ms Koehn spent her career in the software industry and joined Brady in 2017 from Sage, where she was VP of product for the company's enterprise software business.

Head of business enablement – Martin Thorneycroft: Mr Thorneycroft joined Brady in 2014 and is responsible for finance, HR and legal. He was previously finance director of AIM-listed Patsystems from July 2004.

Further biography details are on page 15. A new layer of team leaders has been established under the operating board.

Strategy: Focus is on refreshing the software and driving sales

The initial priority is to complete a number of legacy contracts which, once completed, will free up resources to focus on new projects.

We highlight the following points on the group strategy:

- **Delivering on historical contracts.** Brady has several complex, multi-year installations it is still completing, including a large contract with Traxys, the commodity trader and merchant in the metals and natural resources sectors. These deals involve a lot of focus on service delivery and are expected to be completed in the middle of 2019.
- **Building the recurring revenue base.** A key objective is to build the group's recurring revenue base, which consists of support and maintenance revenues, software rental and cloud revenues. A hosted cloud offering, in partnership with Rackspace, is the group's default solution, available across all business units. Management has been simplifying the installation process and pushing more hosted installations – these moves will result in a reduction in professional services.
- **Refreshing the software.** There are a number of key upgrades on the traditional products (such as concentrates and a new front end for Brady Credit Risk), as well as the development of the FAST START implementation offerings. Going forward, there will be an increasing focus on microservices. At the capital markets day in June, the company said it was investigating new

technologies including big data, advanced analytics, cloud computing, artificial intelligence and blockchain. There is an initial blockchain proof of concept (POC) in place with Norilsk Nickel.

- **Driving new sales.** The focus has been on revitalised account management, which has successfully been boosting sales from existing customers. There has been a series of Brady campaigns, along with attending industry conferences, to drive news sales. Going forward, the sales strategy to drive the pipeline will be determined by the incoming CEO.
- **Building partnerships where there are missing components.** An example is the strategic partnership with Trailight, which operates in the regulatory compliance and governance technology space. Brady has built a new solution called Brady Accountability Compliance for this partnership, which is focused on meeting the requirements of the Senior Managers and Certification Regime. Brady expects to announce more partnerships.
- **Acquisitions.** Brady has said it will build, buy or partner to strengthen its product base. We do not envisage major acquisitions, while small in-fill acquisitions are possible.
- **Exploiting the sector consolidation.** Brady seeks to take advantage of disruption among its major competitors, all of which have been acquired in recent years. In our view, the acquisitions of Triple Point, OpenLink and Aspect by private equity-backed ION is likely to strengthen Brady's position.

Disposal of recycling business

In January, Brady sold its US-based recycling business to AMCS Group, an Irish software company focused on the waste and recycling sector, for an initial c £3.3m with a c £1m balance in 18 months. The disposal included Systems Alternative International, which Brady acquired in November 2012 for an initial £3.9m, along with ScrapRunner, which Brady acquired in July 2015 for c £1.3m. The recycling business provided software to the metals recycling industry, and the bulk of its sales were in North America. Brady chose to sell the business as the recycling industry is a challenging end-market, and the software platform was not suited to the transition to microservices.

Research and development

Gross R&D remains at elevated levels, at c £6m or c 25% of sales in FY18, down from £7m or c 30.5% of sales in FY17. The company is going through a major refresh of its product portfolio, which in H1 included additional functionality for the concentrates solution and a tolling module for FinTrade. The FinTrade solution has been significantly enhanced. A new front end has been developed for Brady Credit Risk, which gives it much deeper insight and will enable it to be sold to a broader customer base, outside its traditional energy target market.

New FAST START implementation offerings

In May, Brady launched a new hosted cloud version of its physical trading and risk management solution for metals (FinTrade), which employs out-of-the-box, preconfigured settings that make it usable from day one. Brady plans to roll out further quick-start solutions for other commodities. It has found that many aspects of an installation can be standardised and this new approach simplifies the typical installation and hence reduces installation time and cost.

Microservices

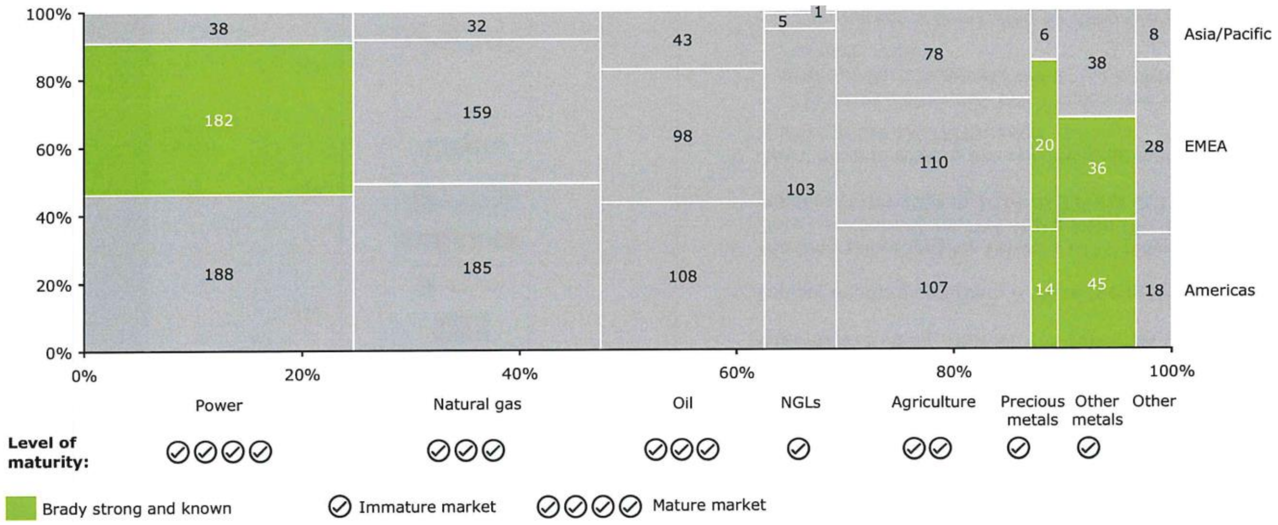
Microservices are core to the development strategy, as they provide a more efficient approach to software development. Microservices enable large software applications to be broken down into multiple services. Each microservice can be employed independently, acts as a single business function and enacts only that business function. Brady has several platforms and there are a number of overlaps, so developing a microservice allows the company to improve efficiencies. Also, Brady can offer the microservice on a standalone basis to customers. Ultimately, microservices provide Brady with a method to build a cloud platform without having to develop a new one from scratch.

Market environment

The E/CTRM software segment supports the business processes of enterprises that are associated with trading energy and commodities. The E/CTRM market is divided into ETRM for the energy markets and CTRM for agriculture, metals and other commodities. The ETRM market began in the early 1990s, inspired by regulatory changes, with the establishment of the first ETRM vendor in 1992, which was focused on the natural gas markets. The ETRM market was expanded into power in the mid-1990s and crude oil products in the late 1990s. The CTRM market was slower to take off, and did not gain significant traction until the mid-noughties. Prior to the advent of E/CTRM vendors, participants had to develop their own in-house systems, typically developed from spreadsheets.

Brady's traditional market was metals (CTRM) and it expanded by acquisition into soft commodities and power (ETRM) spaces. Its areas of strength are in metals (number one globally) and power (number one in Europe). The company lacks exposure to the petroleum markets which is a highly competitive area. Brady intends to expand its portfolio, with a focus on soft commodities/agriculture. Brady already has a presence in cotton, sugar and coffee and it intends to expand its capabilities in these areas.

Exhibit 3: E/CTRM market by commodity and region: $1,648m (2016)



Source: ComTech Advisory (2016)

Industry outlook

ComTech Advisory sized the E/CTRM market at $1.65bn in 2016, and forecast it to grow by 6% CAGR over 2016-2020e to $2.06bn. We estimate that Brady has 1.2% of this market. In our view, the total market opportunity for Brady is significantly larger, after taking into account the fact that a large component in the market still operates on spreadsheets, particularly at the lower end, and management believes the market remains poorly severed. Further, there is an opportunity to extend into adjacent areas, eg logistics.

Competitive environment

The market has undergone significant consolidation in recent years. Most notably, ION Trading has acquired the two leading pure-play E/CTRM participants – OpenLink and Triple Point – while also acquiring Aspect Enterprise Solutions, a smaller E/CTRM player that operates a cloud computing business model. This makes ION by far the largest player in the space. The accumulation of such high-quality assets looks daunting, especially since ION also owns a range of other solutions in the value chain following the acquisitions of FfastFill, Patsystems and, most recently, Fidessa.

However, there are a number of reasons why this situation could benefit Brady:

- When issuing requests for proposals, enterprises might want to ensure there is at least one non-ION firm in the bidding.
- Some of ION's customers could look to the market to ensure there are adequately diverse suppliers.
- If ION chooses at some point to streamline the number of platforms to generate cost savings, it will create an incentive for its customers to look to the market.

Additionally, FIS acquired SunGard, the financial software giant, in 2015. Smaller independent players include Allegro, India-based EKA and AIM-quoted MicroGen (Cortex). Further down the hierarchy, the commodities software market remains highly fragmented with a large number of small specialist players. Small participants do present a competitive threat to Brady in that they can win niche, standalone services that enterprises can stitch together.

In the credit risk space, the main competitor is CubeLogic, which was taken private from OpenLink in 2016.

Financials: Focus on building recurring revenues

A primary focus is to transition all the group's customers to a recurring rental model. While Brady's Norwegian energy business operates an onsite rental model, the group's commodities and Switzerland-based energy scheduling unit have traditionally operated a term licence model. The aim over time is to switch these customers to a rental model. The company is also progressing in making installations more efficient, which will require a lower level of services. Over time, the evolution of microservices and cloud will add further efficiencies.

Business model: A big push to shift to software rental

The Norwegian energy business operates an onsite rental model with professional services to support customers. The group's commodities and energy scheduling unit have traditionally operated a term-licence model, normally for five years. There is an annual 20% support and maintenance fee on top, along with services, which could potentially double the licence fee. The default delivery is a hosted cloud offering, which involves a recurring annual hosting fee. Clients that are renewing their contracts are encouraged to switch to rental, but the latest batch of renewals all chose to stick with term licences. While it is easier to encourage new customers to choose the rental option, there will always be some that insist on a term licence. The financial benefits of the switch to rental are relatively small, eg a £300k term licence generates £600k of revenue over five years, including support; on a rental basis, this would convert to £125–150k per annum, including support.

A typical traditional term licence is in the £300k–350k range, while recurring energy deals are much smaller. A smaller value licence might take one to two months to implement and cost £100k to £150k. Larger deals typically have more complex services requirements, might cost more than £750k and take six to 12 months to implement. Following the signing of a new deal, Brady proceeds to implement the software, charging for professional fees. Annual support and maintenance is 20%, paid annually in advance, and the company also offers consultancy and development services. The company has a conservative revenue recognition policy, only recognising the licence revenue when the customer has the ability to go live. Brady has a hosting partnership with Rackspace and the hosted cloud offering saves the customer hardware and internal IT support costs, and hence has a lower total cost of ownership. The price of the cloud offering is dependent on the level of application uptime that is guaranteed in the service level agreement (SLA), and the highest level can potentially double the cost of the licence. As Brady grows its hosting revenues, the gross margin from the partnership increases.

Q4 is typically the busiest quarter, followed by Q2 and Q3, with Q1 the quietest. Q4 and Q2 are boosted as some customers use up their remaining IT budgets in purchasing additional modules and user licences.

H118 results

Group revenue slipped by 1% to £10.5m, but on a constant currency basis it rose by 2%. Cost of sales fell by 7% (4% at constant currencies) and hence the gross margin rose by 300bp to 55%. Recurring revenue represented 74% of the total, but this is expected to ease to c 70% in the full year, due to an expected increase in licence and services revenue in H2. Operating costs fell by 7% (11% at constant currencies) and consequently the operating loss (Brady method) slipped by £0.8m to £2.3m. While there were no exceptional items, £150k of redundancy costs were put through operating costs. There was £2.8m of new bookings, including £2.3m of from existing customers and £0.5m from two new ETRM customers (Ustekveikja Energi and AES). The bookings from existing customers included £1.2m of new business (new user licences and additional modules), which reflected the increased focus on account management. Additionally, there were £1.1m of renewals, reflecting a 100% hit rate as all four customers that came up for renewal renewed their term licences. All of these renewals were in the form of term licences. The group capitalised £1.2m on development expenditure in H1, which related to additional functionality for the concentrates product and a tolling module for FinTrade. The group ended the period with cash of £4.8m and has no debt. A final payment of £1m for the recycling business is expected to be received in FY19.

Exhibit 4: Half-by-half analysis

£000's	H117	H217e	FY17	H118	H218e	FY18e
Software licence sales	584	1,953	2,537	1,105	2,395	3,500
Recurring fees (licence rental & maintenance)	7,910	7,784	15,694	7,800	8,200	16,000
Services fees (consulting and development)	2,170	1,874	4,044	1,637	2,587	4,224
Total Revenue	10,664	11,611	22,275	10,542	13,182	23,724
Gross profit	5,583	6,573	12,156	5,793	8,459	14,252
Gross margin (%)	52.4	56.6	54.6	55.0	64.2	60.1
Selling and administrative expenses|*	(7,621)	(7,116)	(14,737)	(7,253)	(6,304)	(13,557)
Adjusted EBITDA	(2,038)	(543)	(2,581)	(1,460)	2,154	694
EBITDA margin (%)	(19.1)	(4.7)	(11.6)	(13.8)	16.3	2.9
Depreciation	(290)	(8)	(298)	(167)	(183)	(350)
Adjusted operating profit	(2,328)	(551)	(2,879)	(1,627)	1,971	344
Operating Margin	(21.8%)	(4.7%)	(12.9%)	(15.4%)	15.0%	1.5%
Interest received	0	(22)	(22)	(30)	20	(10)
Edison Profit Before Tax (norm)	(2,328)	(573)	(2,901)	(1,657)	1,991	334
Share-based payments	(6)	(5)	(11)	(1)	(149)	(150)
Amortisation of acquired intangibles	(775)	(784)	(1,559)	(635)	(635)	(1,270)
Exceptional items	(607)	(1,834)	(2,441)	0	0	0
Profit before tax (continuing operations) (FRS 3)	(3,716)	(3,196)	(6,912)	(2,293)	1,207	(1,086)
Reconciliation of Edison and Brady EBITDA definitions						
Adjusted EBITDA (Edison definition)	(2,038)	(543)	(2,581)	(1,460)	2,154	694
Deduct: share based payments	(6)	(5)	(11)	(1)	(149)	(150)
Add: Amortisation of capitalised development	800	1,725	2,336	1,037	1,063	2,100
Deduct: exceptional items	(607)	(1,834)	(2,441)	0	0	0
EBITDA (Brady definition)	(1,851)	(657)	(2,697)	(424)	3,068	2,644

Source: Brady (historics), Edison Investment Research (forecasts). Note: *Excludes share-based payments and amortisation of acquired intangibles.

IFRS 15

The group has implemented IFRS 15 for FY18 and restated its FY17 accounts for the new accounting standard. Under IFRS 15, FY17 revenues were 3% lower than previously stated, while

EBITDA (Brady methodology) was £0.5m lower and net assets fell from £24.1m to £21.8m. The fall in revenue is due to slower revenue recognition from software licence and services elements of contracts with multiple performance obligations as the revenue is recognised at the point the customer has the ability to go-live rather than on legal acceptance of the software, as the work is performed or on a percentage-of-completion method.

Pension deficit: Accounting purposes only

The group's pension deficit dipped from £2.5m to £2.0m. We note that Brady has no defined benefit schemes (where the company takes on the investment risk). The deficit relates to two Swiss defined contribution pension schemes, which it is required under IFRS to account for as if they are defined benefit schemes because Brady guarantees them. However, they are insured with Zurich Insurance. Hence we have not included the deficit in our adjusted debt numbers.

Outlook: 95% of FY18 revenues are in the bag

Brady says that it expects FY18 results to be in line with market expectations. Consequently, management expects revenue growth of 3-4% in FY18, in relation to the old (ie pre-IFRS 15) FY17 numbers. The group has visibility of 95% of FY18 revenues, largely due to the ongoing work on legacy contracts that will involve significant licence and services in H2, and this will help to bring the recurring revenue level back to c 70%. Any new licence sales achieved in H2 will see minimal revenue recognised in FY18, but there are typically additional user licences sold in Q4.

Forecasts: Operating profits maintained

We have maintained our revenue forecasts, while we have adjusted the balance between underlying operating costs and share-based payments, increasing the former while reducing the latter by an equivalent amount. This reduces our profitability measures. However, EBITDA (Brady methodology) remains unchanged on our forecasts as it includes the share-based payments charge. We have also made other minor adjustments including to R&D, interest and FY18 depreciation.

Licence fees: this includes licence sales (excluding software rentals), along with additional modules and user licences, which typically represent half of this revenue category. We forecast licence revenue to jump by 38% to £3.5m in FY18, reflecting the revenue from legacy contracts. We forecast licence revenue to decline thereafter as the focus shifts to recurring revenues.

Recurring fees: this includes annual support and maintenance, software rentals (mainly in the energy business) and cloud revenues. We forecast recurring fees grow by 2% in FY18, then by 16% in FY19 (helped by support revenues from FY18 licence sales) and by 8% in FY20. This results in recurring revenues dipping to 67% of the total in FY18, then rising to 75% in FY19 (as licence revenue falls back) and to 77% in FY20.

Services: this includes software implementation, consulting and development revenues. While we are forecasting a rebound in H2 as work progresses on legacy contracts, this will not be nearly enough to reach our previous forecasts. We also note that the new FAST START implementation requires fewer services, hence our services forecasts come back by 30% in FY18 and by 29% in FY19 and FY20.

Cost of sales: cost of sales includes software delivery (consulting, implementation and development services) and R&D (some of which is capitalised), as well as hosting costs. R&D was c £7m in FY17, representing 30.5% of sales. We forecast R&D to decline to £6m in FY18, representing c 25.4% of sales which we assume will ease to 25% in FY19 and to 24.5% in FY20. We assume 52% of R&D, or £3.1m, is capitalised in FY18, which is well above traditional levels, reflecting a number of specific development projects. We forecast this to fall to 36% in FY19 and to 31% in FY20. We assume capitalised development costs are amortised over the subsequent five years, resulting in an amortisation charge of £2.1m in FY18, rising to £2.3m in FY20. We forecast that gross margins continue to advance, reflecting the improved scalability of the business. This includes more efficient installations, with the introduction of the FAST START programme, which will result in lower implementation services.

Operating costs and margins: we assume that selling and administrative expenses dip by 7.5% in FY18 reflecting the recycling disposal, remain broadly unchanged in FY19 (noting the minor redundancies in Q118 that were included in opex) and rise by 2% in FY20. We forecast an operating margin of 1.5% in FY18, which rises to 5.0% in FY19 and to 7.8% in FY20.

Taxation: the company benefits from a favourable R&D tax environment. We assume an effective tax rate of 20% in FY19, 22% in FY20 and 24% in FY21.

Exhibit 5: Forecast changes

£000s	2018e			2019e			2020e		
	Old	New	Change (%)	Old	New	Change (%)	Old	New	Change (%)
Revenue									
Licence revenues	1,000	3,500	250	947	1,890	100	870	1,527	75
Recurring fees (s/w rental, hosting, support)	16,690	16,000	(4)	17,709	18,592	5	18,942	20,150	6
Services and development	6,042	4,224	(30)	6,284	4,435	(29)	6,598	4,657	(29)
Group revenue	23,732	23,724	(0)	24,940	24,917	(0)	26,410	26,334	(0)
Growth (%)	3.5	6.5		5.1	5.0		5.9	5.7	
Cost of sales (before dev cost capn)	(10,635)	(10,504)	(1)	(10,062)	(9,781)	(3)	(10,181)	(9,819)	(4)
Capitalisation of dev'ment costs (net)	1,024	1,032	1	86	53	(38)	(250)	(287)	15
Gross profit	14,121	14,252		14,965	15,189		15,979	16,228	
Gross margin (%)	59.5	60.1		60.0	61.0		60.5	61.6	
Selling & administrative expenses	(12,927)	(13,557)	5	(13,127)	(13,583)	3	(13,354)	(13,784)	3
Adjusted EBITDA	1,194	694	(42)	1,838	1,606	(13)	2,625	2,444	(7)
Depreciation	(325)	(350)	8	(350)	(350)	0	(393)	(393)	0
Adjusted operating profit	869	344	(60)	1,488	1,256	(16)	2,232	2,051	(8)
Operating profit margin (%)	3.7	1.5		6.0	5.0		8.5	7.8	
Growth (%)	(136.3)	(112.0)		71.1	265.0		50.1	63.3	
Net interest	20	(10)	(150)	50	30	(40)	80	60	(25)
Profit before tax (norm)	889	334	(62)	1,538	1,286	(16)	2,312	2,111	(9)
Amortisation of acquired intangibles	(1,559)	(1,270)	(19)	(1,559)	(1,270)	(19)	(1,559)	(1,270)	(19)
Share-based payments	(500)	(150)	(70)	(600)	(400)	(33)	(650)	(500)	(23)
Profit before tax	(1,170)	(1,086)	(7)	(621)	(384)	(38)	103	341	231
Normal tax charge	(178)	(67)	(62)	(338)	(283)	(16)	(555)	(507)	(9)
Profit after tax	(1,348)	(1,153)	(14)	(960)	(667)	(31)	(452)	(165)	(63)
Adjusted EPS (p)	0.9	0.3	(62)	1.4	1.2	(16)	2.1	1.9	(9)
P/E – adjusted EPS (x)		**206.3**			**55.2**			**34.7**	
Adjusted EBITDA (Edison)	1,194	694	(42)	1,838	1,606	(13)	2,625	2,444	(7)
Deduct: share based payments	(500)	(150)	(70)	(600)	(400)	(33)	(650)	(500)	(23)
Add: Amortisation of capitalised development	1,952	2,100	8	2,158	2,189	1	2,247	2,278	1
EBITDA (Brady definition)	2,646	2,644	(0)	3,396	3,396	0	4,222	4,222	(0)

Source: Edison Investment Research

Sensitivities: Users subject to volatile commodities

Commodity markets are cyclical and subject to periods of extreme volatility. However, while falling commodities prices hurt producers, they are beneficial to manufacturers, which also purchase the group's software, while traders can benefit from increased volatility. Further, falling commodity prices can force producers to drive through efficiencies, which can involve them upgrading or replacing their in-house software with Brady's software. The 2015 commodity sell-off, which was related to the Chinese economic deceleration, was persistent and severe, and correlated across asset classes. This forced restructurings across the commodity trading sphere, with players deferring deals to conserve cash. Nevertheless, target commodity customers (producers, fabricators, traders, etc) are generally well capitalised, dealing with high volumes, yet are significantly underinvested in IT trading platforms. Strong regulatory and compliance drivers are also pushing demand for improved IT systems.

We highlight the following sensitivities:

- Economic slowdown – commodities and financial sector IT budgets are subject to pressure in an economic slowdown.
- Mining/commodities – the group's clients operate in cyclical industries, whether producers and fabricators or brokers and traders. Nevertheless, these businesses have a continued need to invest and maintain their IT systems. We note that Brady Energy operates in the electricity and gas sectors, and Brady has little exposure to the highly competitive petroleum markets.
- Competitive environment – products are at risk of being surpassed by competitors. Existing competitor rivalry may put pressure on pricing.
- Acquisition risk – implementation risk in the acquisition strategy.

Valuation: Unique quoted asset in a consolidating marketplace

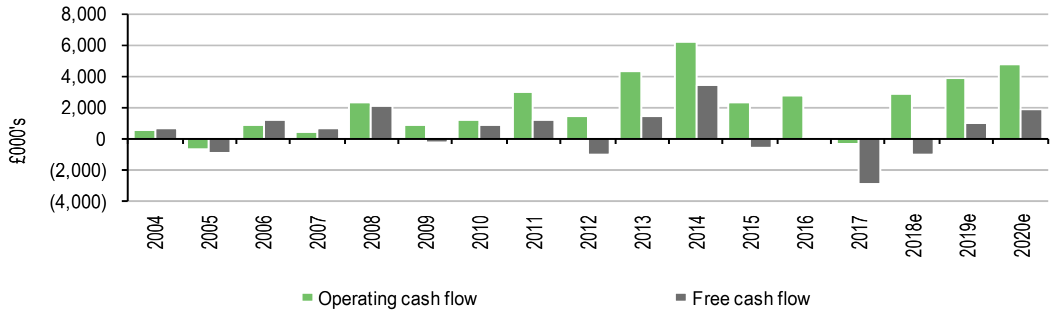
The stock trades on c 55x our FY19e earnings. Alternatively, the shares trade on 1.9x our FY19e sales and 30x EBITDA (Edison method). As the company is undergoing a transition, the shares do not look appealing on near-term traditional valuation metrics. However, there are a number of reasons why we believe investors should take a longer-term view.

- The transition to microservices and ultimately to the cloud, supported by the shift to a global functional team, significantly improves the scalability of the business. The restructuring of the cost base adds additional efficiencies to the business.
- Management believes there is a significant opportunity to leverage value from analytical products that utilise the data that flow through the group's software platforms.
- The global E/CTRM end-market is an attractive market, valued at c $1.65bn (source: ComTech Advisory 2016) and growing at mid-single digits. Brady has a strong market position, being the top in metals globally, and the leading European energy trading and risk management player, and is well positioned in some of the most attractive areas of the market, including natural gas, power and agriculture.
- Brady has a high-quality, blue-chip customer base that includes many household names.
- The sector remains in disarray after a swathe of private equity-funded deals that were executed at high EV/sales multiples in late 2011 and mid-2013. The sector deals in 2011 were said to be in the 3.3–4.6x sales range, while ION acquired Triple Point in 2013 at c 5x sales. These deals highlight the popularity of the commodity software space, particularly from private equity. Brady remains the only quoted asset in the sector and this transparency gives it a significant advantage over major peers.

We highlight the following points on the group's valuation:

- **Traditional P/E valuation:** the stock trades on 206.3x our earnings forecasts in FY18e, falling to 55.2x in FY19e and to 35.7 in FY20e. These numbers are well above Brady's peers (see Exhibit 7) reflecting the group's ongoing transition.
- **Cash flow:** Brady has generally been cash generative, albeit with high levels of volatility, which largely reflects the lumpy upfront licence business model. The focus on building recurring revenue should temper the volatility. We forecast a £1.9m free cash outflow in FY18, swinging to a £0.7m inflow in FY19 and a £1.7m inflow in FY20. These provide free cash flow yields of 1.3% in FY19 and 2.9% in FY20.

Exhibit 6: Cash flow



Source: Brady (historics), Edison Investment Research (forecasts)

- **Discounted cash flow valuation:** on our estimates, the current 66p valuation equates to an 8.5% 10-year revenue CAGR (slightly above our 6% FY18-20e CAGR) and a 2% terminal growth rate, along with operating margins tapering up to 15% after five years (relatively conservative for a software company that can successfully scale) and a 10% weighted-average cost of capital.

- **Peer comparison:** the stock trades on 1.9x our FY19e revenues (around half its global peers) and 29.6 x FY19e EV/EBITDA (around double its global peers). This reflects the potential for the business to grow margins as it scales.

Exhibit 7: Peer comparison

	Share price	Market cap	Market cap	EV/sales		Operating margins		EV/EBITDA (x)		PE (x)	
	Local curr	Local curr m	£m	Year 1	Year 2	Year 1	Year 2	Year 1	Year 2	Year 1	Year 2
Brady	66.00	55	55	2.0	1.9	1.5%	5.0%	68.6	29.6	206.3	55.2
1) UK-quoted financial software peers											
First Derivatives	4130.00	1,073	1073	5.1	4.6	14.4%	14.2%	28.6	25.4	51.9	46.8
Microgen	424.00	258	258	3.8	3.6	22.7%	24.7%	15.8	13.9	23.6	20.6
Gresham	161.50	110	110	4.2	3.7	18.3%	19.9%	18.2	14.5	25.2	21.5
StatPro	138.50	91	91	2.0	1.9	12.0%	12.8%	13.1	12.1	19.9	17.3
Medians				**4.0**	**3.6**	**16.4%**	**17.1%**	**17.0**	**14.2**	**24.4**	**21.1**
2) Selection of financial software peers quoted in other countries											
FIS	109.07	35,864	27478	5.2	5.0	27.8%	29.2%	14.0	13.1	20.8	18.7
Broadridge	131.95	15,372	11778	3.6	3.4	16.4%	17.1%	17.6	16.9	28.1	25.6
SS&C	56.83	13,619	10434	5.8	4.6	31.5%	31.1%	17.2	13.2	22.6	18.3
SimCorp	560.50	22,700	2707	7.9	7.2	27.2%	27.1%	27.7	25.0	37.2	33.1
Iress	12.40	2,147	1187	5.0	4.7	23.4%	24.1%	18.7	16.8	27.4	25.5
Linedata	37.70	275	245	2.0	2.0	16.6%	16.5%	8.3	8.2	14.1	13.7
GBST	1.86	126	70	1.3	1.2	6.2%	10.5%	7.9	5.7	18.0	12.6
Medians				**5.0**	**4.6**	**23.4%**	**24.1%**	**17.2**	**13.2**	**22.6**	**18.7**

Source: Edison Investment Research forecasts (Brady and StatPro), Bloomberg consensus data (all other companies). Note: Prices as at 1 October 2018..

- **Sector M&A:** There has been intense M&A activity across the financial software space over several years, and we have seen significant consolidation in the E/CTRM space. The consolidation should be beneficial to Brady, and the high level of activity clearly indicates that the company is also a target.

- Earlier this year, ION announced it was acquiring OpenLink, following the acquisitions of Triple Point in 2013 and Aspect Enterprise Solutions in October 2017. This follows a spate of deals in 2011, when OpenLink was acquired by Hellman & Friedman, SolArc purchased by OpenLink and Triple Point acquired by Welsh, Carson, Anderson & Stowe. OpenLink and Triple Point are the two largest players in the E/CTRM space, followed by Allegro, which acquired Financial Engineering Associates from MSCI in April, and SunGard, which was acquired by FIS in 2015. ION is also acquiring Fidessa, the equity trading software giant, for £1.5bn and it acquired derivative trading software providers Patsystems and FfastFill, whose solutions were used by commodity traders among others, in 2012 and 2013 respectively. Separately, MCG acquired Paragon Energy Software in 2017.

Exhibit 8: Financial summary

£'000s	2015	2016	2017	2018e	2019e	2020e
Year end 31 December	IFRS	IFRS	IFRS	IFRS	IFRS	IFRS
PROFIT & LOSS						
Revenue	27,374	25,373	22,275	23,724	24,917	26,334
Cost of Sales	(10,867)	(9,804)	(10,119)	(9,472)	(9,728)	(10,105)
Gross Profit	16,507	15,569	12,156	14,252	15,189	16,228
EBITDA	1,506	1,910	(2,581)	694	1,606	2,444
Adjusted Operating Profit	924	1,290	(2,879)	344	1,256	2,051
Amortisation of acquired intangibles	(1,640)	(1,618)	(1,559)	(1,270)	(1,270)	(1,270)
Exceptionals items	(469)	(1,250)	(4,363)	0	0	0
Share-based payments	(243)	(90)	(11)	(150)	(400)	(500)
Operating Profit	(1,428)	(1,668)	(8,812)	(1,076)	(414)	281
Net Interest	31	3	(22)	(10)	30	60
Profit Before Tax (norm)	955	1,293	(2,901)	334	1,286	2,111
Profit Before Tax (FRS 3)	(1,397)	(1,665)	(8,834)	(1,086)	(384)	341
Tax	(329)	(188)	102	(67)	(283)	(507)
Profit After Tax (norm)	813	1,992	(4,656)	267	1,003	1,605
Profit After Tax (FRS 3)	(1,726)	(1,853)	(8,732)	(1,153)	(667)	(165)
Average Number of Shares Outstanding (m)	82.7	83.0	83.3	83.6	84.0	84.4
EPS – normalised (p)	1.0	2.4	(5.6)	0.3	1.2	1.9
EPS – FRS 3 (p)	(2.1)	(2.2)	(10.5)	(1.4)	(0.8)	(0.2)
Dividend per share (p)	0.00	0.00	0.00	0.00	0.00	1.00
EBITDA Margin (%)	5.5	7.5	(11.6)	2.9	6.4	9.3
Adjusted Operating Margin (%)	3.4	5.1	(12.9)	1.5	5.0	7.8
BALANCE SHEET						
Fixed Assets	31,461	37,035	26,578	21,793	20,687	19,264
Intangible Assets	29,831	35,999	26,091	21,253	20,036	18,479
Tangible Assets	1,147	978	487	540	651	785
Deferred tax	483	58	0	0	0	0
Current Assets	13,633	14,640	13,340	10,194	12,125	14,098
Stocks	0	0	0	0	0	0
Debtors	7,039	7,297	4,787	5,098	5,355	5,659
Cash	6,594	7,343	4,089	5,096	6,770	8,438
Current Liabilities	(10,804)	(12,669)	(13,483)	(13,731)	(13,893)	(14,110)
Creditors	(10,804)	(12,669)	(13,483)	(13,731)	(13,893)	(14,110)
Short-term borrowings	0	0	0	0	0	0
Long-Term Liabilities	(4,814)	(5,670)	(4,593)	(4,593)	(4,593)	(4,593)
Long-term borrowings	0	0	0	0	0	0
Other long-term liabilities	(4,814)	(5,670)	(4,593)	(4,593)	(4,593)	(4,593)
Net Assets	29,476	33,336	21,842	13,663	14,327	14,659
CASH FLOW						
Operating Cash Flow	2,363	2,737	(316)	2,376	3,671	4,590
Net Interest	31	3	(22)	(10)	30	60
Tax	(416)	(428)	247	(760)	(257)	(465)
Capex	(2,591)	(2,167)	(2,806)	(3,535)	(2,704)	(2,518)
Acquisitions/disposals	(1,186)	(326)	0	2,936	934	0
Financing	469	47	190	0	0	0
Dividends	(1,524)	0	0	0	0	0
Net Cash Flow	(2,854)	(134)	(2,707)	1,007	1,675	1,668
Opening net debt/(cash)	(9,580)	(6,594)	(7,343)	(4,089)	(5,096)	(6,770)
Disposal	0	0	(265)	0	0	0
Other	(132)	883	(282)	0	0	()
Closing net debt/(cash)	(6,594)	(7,343)	(4,089)	(5,096)	(6,770)	(8,438)

Source: Brady (historicals), Edison Investment Research (forecasts). Note: IFRS 15 has been applied from FY17. FY17 excludes the recycling business.

EDISON

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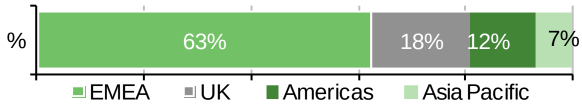
Revenue by geography (H118)



Management team

Executive Chairman: Ian Jenks

Ian joined the board on 6 June 2016 as chairman and was appointed as executive chairman on 1 September 2016. He has more than 30 years of board-level experience in the communications and industrial technology and software fields, both as an investor and as CEO of companies operating in the US and Europe.

CFO: Martin Thorneycroft

Martin joined Brady in January 2014 as CFO. He was previously finance director of AIM-listed Patsystems from July 2004, until after it was taken over by ION. Prior to that he was finance director of Profile Media Group. From 1997 to 2000, he was finance director of McMullen & Sons, a regional brewer. Martin, a member of the Institute of Chartered Accountants, having first qualified with Ernst & Young in 1986, holds a BCom from Birmingham University.

Chief Product Officer: Libby Koehn

Libby joined Brady as chief product officer in October 2017. She joined from Sage, where she had been VP of product for the company's enterprise software business from May 2015. Previously, Libby worked in similar roles leading enterprise software product management and turnaround efforts at a variety of UK- and US-based software companies such as Ticketmaster, Bottomline Technologies, Compassoft and Per-se Technologies.

Head of Value Enablement: Scott Hestenes

Scott joined Brady when it acquired Navita in 2012. As one of the senior co-founders of Navita, he facilitated the business into becoming one of the most visible Europe-based ETRM vendors. After Brady acquired Navita, Scott was promoted to head of Energy Data Management (EDM), a core product line within the energy market. Scott started his professional career working for a small innovative spin-off company that was later acquired by the OM Group.

Principal shareholders (as at 31 August 2018)	(%)
Kestrel Investment Partners	25.4
Coltrane Asset Management	17.9
Cannacord Genuity Wealth	10.8
Herald Investment Management	9.3
Warrington Investments	6.6
Livingbridge	4.7
Killik Asset Manageemnt	4.3
Other	21.0

Companies named in this report

First Derivatives (FDP), Gresham (GHT), MicroGen (MCGN), StatPro (SOG).