



Sic Transit Gloria Dux

The beginning

In the third quarter of 1987 simultaneous announcements in Sweden and Switzerland made public the news that an agreement had been concluded which would see the merger of Asea AB and BBC Brown Boveri Ltd to form the new company ABB. Headquartered in Zurich, Switzerland each parent company held 50 percent of the new company and operations began on January 5, 1988. Over the next two years ABB acquired about 55 companies.

Some of the major events are as follows:

In 1990, ABB purchased Westinghouse's metering and control business

Also, in the early 1990s, ABB purchased Combustion Engineering (C-E)

1994 saw ABB emerge from a two-year consolidation phase to begin new volume and profit growth. The company concentrated on the fast-growing service markets in Western Europe and North America. Through the mid 1990's

the demand in emerging markets for new infrastructure drove expansion through internal growth acquisitions and majority joint ventures. In Asia, ABB now had 30,000 employees and 100 plants, engineering, service and marketing centres. ABB also completed the merger at Board level in 1996 with the integration of its parent companies' Boards into the ABB Group Board.

Continuing with its expansion plans, ABB purchased Eltag Bailey, a process automation group, in 1997 which included



The global T&D market is estimated to continue to grow at a little over 4 % CAGR during the period from 2018 to 2028

and Lummus Global. In August 2007, Lummus Global was sold to CB&I.

In August 2008, ABB purchased the US transformer manufacturer Kuhlman Electric from the Carlyle Group.

In 2009, ABB realigned its automation divisions. As of January 1, 2010, the business units in the Automation Products and Robotics divisions were regrouped into two new divisions – Discrete Automation and Motion, and Low Voltage Products. The Process Automation division remained unchanged except for the addition of the instrumentation business from the Automation Products division.

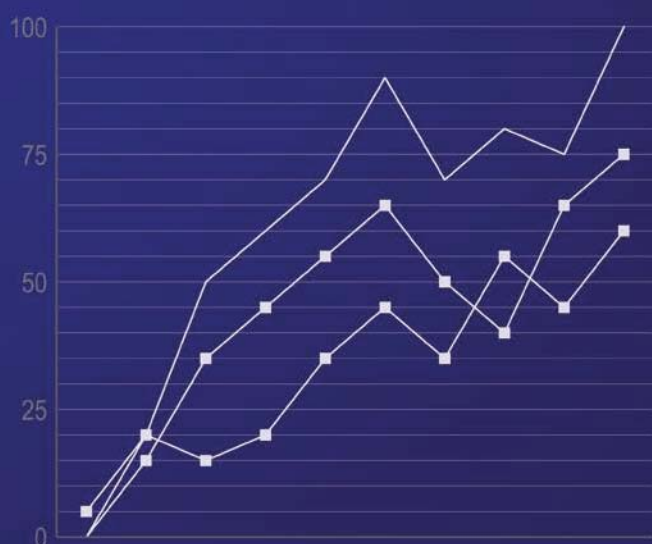
In 2011, ABB acquired Baldor Electric USA for US \$4.2 billion in an all-cash transaction. On January 30, 2012, ABB Group acquired Thomas & Betts in an US \$3.9 billion cash transaction. On June 15, 2012, it completed the acquisition of commercial and industrial wireless technology specialists Tropos. In July 2013, ABB acquired Power-One in a US \$1 billion all-cash transaction, to become the leading global manufacturer of solar inverters. On June 30, 2018, ABB completed its acquisition of GE Industrial Solutions, General Electric's global electrification business. The transaction was announced on September 25, 2017.

By the end of 2017, ABB had become a company with revenues of US \$34.3 billion across four business segments; Power Grids, Electrification Products, Industrial Automation and Robotics and Motion. The company is the world leader in the power grid business and this group accounts for 30 % of the revenue over 20 % of the profits.

The end?

Then in December 2018 it was announced that ABB is to divest itself

Statistics



Bailey Controls, Hartmann & Braun, and Fischer & Porter. This was the largest acquisition to date in ABB's history.

ABB bought International Combustion Ltd from Rolls-Royce in 1997.

March 1999 saw a deal that created a world leader. ABB and French company Alstom merged their power generation businesses to form ABB Alstom Power making the most of the complementary qualities of both parent companies and organised with the new company alignment in mind.

ABB formally divested from a joint venture named ABB-Alstom Power in 2000, and sold its interest in conventional power generation systems to Alstom

Power. ABB's nuclear business was sold to BNFL and merged into Westinghouse Electric Company.

ABB's Building Systems business unit was sold off in 2004 to Capvis, a Swiss private equity company, as part of ABB's strategy to focus on power and automation technologies. ABB's building systems businesses in Australia and Hong Kong were sold off the year before.

The middle

Financial debt and lingering asbestos liability brought ABB to the brink of bankruptcy in the early 2000s. In 2006, ABB recovered financially by settling asbestos issues brought by its U.S. subsidiaries, Combustion Engineering

Table 1

ABB HEADLINE RESULTS & REVENUES BY DIVISION													
Values in US \$ Million	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Total Revenues	22,012	24,412	29,183	34,912	31,795	31,589	37,990	39,336	41,848	39,830	35,481	33,828	34,312
Total Net Income	735	1,390	3,757	3,118	2,901	2,561	3,168	2,704	2,787	2,594	2,055	2,034	2,365
Revenue by Division													
Power Products	5,200	6,300	9,800	11,890	11,239	10,199	10,869	10,717	11,032	10,333	9,550		
Power Systems	4,100	4,500	5,900	6,912	6,549	6,786	8,101	7,852	8,375	7,020	6,342		
Power Grid										12,518	11,245	10,660	10,394
Automation Products	5,900	6,800	8,700	10,250									
Process Automation	5,000	5,500	6,500	7,815	7,839	7,432	8,300	8,156	8,497	8,618	7,219	6,654	6,880
Robotics	1,800	1,300	1,400	1,642									
Discrete Automation					5,405	5,617	8,806	9,405	9,915	10,142	8,188	7,906	8,401
LV Products					4,071	4,554	5,304	6,638	7,729	7,532	6,547		
Electrification Products										10,572	9,547	9,292	10,094

Source: Published data & Goulден analysis

Table 2

ABB EBIT BY DIVISION													
Values in US \$ Million	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Power Products	600	920	1,600	2,100	1,969	1,622	1,782	1,585	1,435	1,319	1,178		
Power Systems	200	300	500	592	388	111	743	290	326	-96	274		
Power grid										607	810	998	972
Automation Products	800	1,100	1,500	1,908									
Process Automation	400	560	700	926	643	755	1,028	1,003	1,022	1,045	977	897	953
Robotics	100	10	100	9									
Discrete Automation					557	926	1,664	1,735	1,622	1,595	1,288	1,223	1,178
LV Products					519	806	1,059	1,219	1,265	1,241	1,096		
Electrification Products										1,739	1,561	1,528	1,510

Source: Published data & Goulден analysis

Table 3

ABB EBIT % BY DIVISION													
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Power Products	11.54%	14.60%	16.33%	17.66%	17.52%	15.90%	16.40%	14.79%	13.01%	12.76%	12.34%		
Power Systems	4.88%	6.67%	8.47%	8.56%	5.92%	1.64%	9.17%	3.69%	3.89%	-1.37%	4.32%		
Power grid	8.60%	11.30%	13.38%	14.32%	13.25%	10.20%	13.31%	10.10%	9.07%	4.85%	7.20%	9.36%	9.35%
Automation Products	13.56%	16.18%	17.24%	18.61%									
Process Automation	8.00%	10.18%	10.77%	11.85%	8.20%	10.16%	12.39%	12.30%	12.03%	12.13%	13.53%	13.48%	13.85%
Robotics	5.56%	0.77%	7.14%	0.55%									
Discrete Automation					10.31%	16.49%	18.90%	18.45%	16.36%	15.73%	15.73%	15.47%	14.02%
LV Products					12.75%	17.70%	19.97%	18.36%	16.37%	16.48%	16.74%		
Electrification Products										16.45%	16.35%	16.44%	14.96%

Source: Published data & Goulde analysis

ABB Power Grid is the number one player in that market and is up to date with the necessary product profile, and it seems that the business should be able to remain profitable in that sector for the foreseeable future

of the entire Power Grid business so that it can concentrate on the remaining 70 % of the business and shape itself as a “leader in digital industries”.

WHY?

Do they need the money?

Do they not believe in the future growth of the global T&D segment?

Payday for shareholders

The information from ABB indicates that Enterprise Value of US \$11 billion for 100 % of Power Grids, is equivalent to an EV/op. EBITA multiple of 11.2x and that they intend “to return 100 % of the estimated net cash proceeds of \$7.6-7.8 billion from the 80.1 % sale to shareholders in an expeditious and efficient manner through share buyback or similar mechanism.”

The figures shown in table 2 indicate that the EBIT return from the Power Grid business (and the former Power Products and Power Systems divisions that preceded it) over the last 11 years have returned a total of US \$18,430 million - not inflation adjusted. In the long term sticking with the grid business looks like the better of the two options for the shareholders but the opposing view that a “bird in the hand is worth two in the bush” has prevailed.

ABB state that sale will crystallize value from the transformation of Power Grids including doubling operational EBITA margin since 2014. No doubt it will crystallize the value, but doubling the operational margin since 2014 is not such an incredible claim. In 2014, the EBIT return from Power Grids was 4.85 %

which is the lowest recorded over the thirteen years assembled for table 3 and very far from the 14.32 % recorded in 2008 and the recovery since 2014 to 9.35 % in 2017. The management have clearly succeeded in returning the business to near double digit levels of profitability but earnings are still at a lower level than the other three remaining divisions.

Future T&D markets

Is the company exiting a market that is fundamentally flawed or is the future global T&D market essentially sound? The global T&D market is estimated to continue to grow at a little over 4 % CAGR during the period from 2018 to 2028. Given that ABB Power Grid is the number one player in that market and is up to date with the necessary product profile, it seems that the business should be able to remain profitable in that sector for the foreseeable future - Hitachi obviously believe this to be the case. It has to be acknowledged that the market is prone to long investment cycles with large contracts which can lead to feast and famine cycles but these large companies with a full range of capabilities have the ability to bridge

Throughout ABB's history there have been two constants; talented leadership and electricity transmission and distribution at the heart of the business

the gaps between orders. To some extent the Power Systems division which has always shown a lower rate of profitability than the Power Products division must have been useful in pulling through products in turnkey projects. It will remain to be seen what effect the absence of this complete division will have on the digital grid automation and control segments that are to be retained by ABB.

Competitive environment

ABB has grown both organically and by acquisition and has constantly evolved from 1988, has survived two or is it three global recessions, extraordinary compensation claims, anti-trust actions and various other business ups and downs and has emerged 30 years later as a global leading corporation. Throughout that history there have been two constants; talented leadership and electricity transmission and distribution at the heart of the business. A quick look at the other competitors in the market place underlines the achievements.

During the last thirty year that ABB has successfully navigated through GEC of the UK was swallowed up by Alstom and the business evolved into Areva T&D - a highly profitable business which was split and re-arranged with government assistance due to group losses. The MV business went to Schneider and the grid business back to Alstom in 2010. Ultimately the Alstom grid business was sold in 2014 to GE and is now GE Grid Solutions.

Up to this point, GE had virtually withdrawn from grid markets all bar a JV with Hitachi for HV switchgear and an interest in GE Prolec in Mexico but now seems to have a renewed interest in the sector and GEC, Areva T&D and Alstom are all names which have disappeared from the T&D sector.

The Japanese companies all have had major setbacks. By the turn of the last

century business was so bad for all of the major Japanese T&D suppliers that they were forced into a series of tactical mergers in order to preserve their T&D businesses. In July 2001, Japan AE Power Systems was formed from the T&D businesses of Hitachi, Fuji Electric and Meiden; and in October 2002, TMT&D was formed by Toshiba and Mitsubishi. The Japan AE business was de-merged after 11 years in 2012 at which time the business was 50 % Hitachi, 30 % Fuji and 20 % Meiden. The TMT&D 50:50 joint venture did not last as long and was de-merged in 2005. But this whole episode has had a lasting effect on the Japanese industry.

All of the above are examples of the effects market changes have had on all of the players in T&D markets during difficult condition and only ABB and Siemens really prospered through that era. Siemens, having mopped up the transformer and generator businesses in the 1980's (TU - Transformatoren Union and KWU - Kraftwerk Union), were well placed and well managed through this period and are well set for the future. Had the proposed deal gone ahead in 2014 to sell the Alstom T&D business to Siemens rather than to GE, we would be looking at a very different scenario now.

So what does Hitachi benefit from the purchase from ABB other than an US \$11 billion business? There are a lot of fine words in press releases issued by both parties, but the attraction must be

the acquisition of a truly leading global business ensuring that Hitachi will be the region's number one player with global capabilities.

Into the next 30 years

Looking specifically at the transformer industry, when ABB had completed its major acquisitive phase by 2005, they had amassed a transformer business comprising of 57 plants in 28 countries employing 13,500 people. They rationalised that business and by 2009 the power products business, of which transformers are a major part, was returning EBIT figures in excess of 17 %. At that time, the global transformer market was a little over US \$15 billion annually of which China contributed 23 %. Global exports were worth US \$4.6 billion and China provided 2.6 % of this total. In 2017, the global market was worth about US \$39.5 billion annually of which China contributed 30 % of this total. Global exports had increased to US \$10.0 billion and China provided 13 % of this.

In 2008, the Power Products division of ABB derived 39 % of revenues from Europe, 24 % from the Americas and 37 % from MEA and in 2017 the comparative figures are 30 %, 29 % and 41 % respectively. The world markets are evolving and the major focus is shifting evermore eastwards and China is more and more dominant. It is just possible that whilst Sweden was an unlikely location from which to begin global domination in the 1980s, perhaps Switzerland seems an even more unlikely location from which to maintain that position into the 2020s. This just may have been a contributory factor in the sale - Sic Transit Gloria Dux; and good luck to Hitachi - fortes fortuna juvat.

Author



Steve Aubertin is the Managing Director of Goulden Reports and following a first career in electrical engineering has spent the last 30 years researching and reporting on the global market for electrical products in both published and in the form of tailored research for specific clients.