

barcelona school of management



Rub Valves¹

1. History

RuB Valves S.R.L. is an Italian family-owned business manufacturing industrial brass valves. The company has recently experienced some issues in coping with challenging economic conditions during the financial crisis and is also facing low-cost competition from China.

The founding company was created in 1828 by Carlo Bonomi, who set up a bronze foundry business in Valtrompia, an industrial valley in northern Italy. The valley stands out from other vallies in the area since there historically have been many small and medium companies which compete between each other within the same industry, and they are all owned by relatives. Therefore, the competition is fierce between the families, but the same families also have lunch together during Sundays and go back to competing in business during the week.

Carlo's heirs, Luigi and his son Serafino took over the business and started to focus more on producing valves and developed a water-powered manufacturing facility in Lumezzane, a small town in Valtrompia. After the Second World War, business was booming, which allowed them to expand the production. Then Serafino's great-great-grandson, Silvio, decided to separate the business from that of his relatives and to focus more on valves for agriculture components, setting up RuB Valves as we know it in 1954.

Silvio undertook the brave decision of actually moving the company from the traditional Valtrompia's town, Lumezzane, to a less industrial area in Brescia, with the purpose of

¹ Case written by Carl Martin Engh, Leonardo Valentino, Patrick Walker and Sara Bonomi, with the collaboration of Oriol Amat, Barcelona School of Management, Universitat Pompeu Fabra, 2012.

separating his business from that of his uncles an freeing himself from the oligopolistic business culture of the valley.

In thirty years the company's production exceeded 1 million of ball valves per year, all manufactured in Mazzano, Brescia in a gradually expanding production plant, whose area was increased to $9,000 \text{ m}^2$.

Over the years the company has implemented and maintained the concept of "Made in Italy": Each valve is produced in the manufacturing plant in Mazzano, (BS), Italy, and even small components which are bought from suppliers and then assembled are made in Italy. Despite the intense competition from low-cost countries, especially China and India, RuB Valves has traditionally refused to outsource parts of its production in order to take advantage of low labour costs, and maintains a strong focus on an internally implemented Quality System in compliance with ISO 9000 principles and other relevant certification criteria.

Production is done locally, however 98% of total sales are exported abroad. The strong market is represented by Germany, which accounts for 40% of total production and also the United States represent a great opportunity, which RuB Valves has decided to target and has set up a fully owned subsidiary – RuB Inc. - back in 1995.

In 2001 RuB Valves was able to produce 10 million valves per years, thanks to increased manufacturing capacity as well as establishing a new area for shipping and packaging and reached a total production plant size of 14000 m².

Due to the growing importance of Asian markets, in 2005 the new wholly owned subsidiary RuB KK was established in Tokyo.

Today the founder of RuB Valves, Silvio Bonomi, is formally retired but it is possible to meet him every day at 8 am in the company's office. His two sons, Luciano and Sandro, have different responsibilities: Luciano is in charge of manufacturing and sales to Germany and France, while Sandro manages administration and worldwide sales.

The authors appreciate the collaboration of the Company and thank specially Luciano Bonomi, the owner.

2.Organization

Being a traditional medium sized business, RuB Valves is run by its three owners, who are also the three only shareholders of the company. The Board of Directors and other relevant stakeholders, such as the Administration Manager, the Personnel Responsible, and other parties depending on the topic in agenda. Due to their strong focus on quality, they also introduced a Quality Controller in the Board of Directors, which reports on the quality system management and makes recommendations about further implementations.

The entire production takes place in the manufacturing plant in Mazzano, (BS), Italy, while the two administrative and sales subsidiaries are located in Minneapolis, MN, USA and Tokyo, Japan. They have their own financial reports and operate under their domestic currency, to protect them from exchange rate fluctuations.

As already mentioned, 98% of RuB Valves production is sold abroad, 40% of which in Germany and 35% in the United States and to 30 other countries. This is one of the strengths of the company, since it differentiates itself from its Italian competitors that are all located in the same geographic area. RuB Valves moved its sales abroad already in the late 1980s, in order to take serve the fast growing foreign markets and the increase in demand of brass valves.

By having a global presence it enables the company to be less subject to fluctuations in demand in the Italian market as well as expanding the scope of revenue in a wider geographical market place, especially if considering that RuB Valves is exporting to more than 30 different countries.

3.Products

RuB Valves offers a full range of shut-off brass valves with focus on ball valves for gas, water, air, oil installations. The products are manufactured in Italy according to strict quality controls. The company works constantly to improve production flexibility and customization, for example by using laser technology to give each product a specific marking. A great importance is also given to the raw material traceability in compliance to the European Pressure Equipment Directive that requires precise information for every batch of the critical components of the valve.

RuB Valves has to deal with the highly fluctuating price of the products' raw material, brass, heavily dependent on the price of copper. The company bargains with few brass suppliers, which are often organized in an informal oligopoly. The company makes contracts with suppliers at a specific future price and quantity to hedge against price fluctuations, and then it has six months to buy brass at those conditions. This turns out to be positive in case of further price increases; however it could be an issue when the price decreases, not to mention the problem of high inventory costs, since RuB Valves buys huge quantities of raw materials and then is not able to sell such large quantities to its customers in the short term.

The company also has patents for innovative features of the brass valves, which render the products unique in the world and customizable at customers' requests. This, however, also represents a challenge since it is subject to unfair competition from low-cost countries. RuB Valves has on-going investigations and has sued two Chinese companies for patent infringement.

The company plans to maintain and improve its strong focus on quality control and customer satisfaction, and keeping professional relationships with suppliers and stakeholders in the company, including everyone employees to sales personnel.

4.Latest evolution of the company

In 2010 RuB Valves had a turnover of 24.5 Million Euros which can be seen as a positive sign of recovery after the financial crisis hit in 2009. RuB Valves is in an industry, which traditionally has large order reserves. Therefore the company felt the impact of the financial crisis later than in other industries.

Another main issue for RuB Valves is that they export and sell goods in local currency (Euro), while selling to its US subsidiary in dollars. This means that the company is exposed to high risk in the exchange market and it is bearing all the exchange rate burden on itself, to let the subsidiary with larger margin for manoeuvre. This market has been volatile in recent years as seen through the fluctuations for the exchange rate profit/loss in the balance sheet.

5. Forecasts for the coming years

The Company is in the process of preparing some forecasts for the next three years taking into account the inflation forecast from E&Y research (2,7% annually), estimates from the company's management and forecast based on the general trend of the industry.

Year 2011 forecast

Sales are forecasted to increase by 15% with respect to year 2010; the company has hired two more sales representative for the European market in year 2010, as testified by the higher value of Personnel expenses in the Income statement, so a higher sales growth is expected and forecasted by country managers thanks to a larger customer base.

Cost of goods sold instead, is supposed to increase less than sales, approximately by 10% since raw material cost is forecasted by analysts to increase less than the normal rate, due to favourable economic and political condition in exporting countries (especially in South America).

Personnel expenses, fixed costs, administrative expenses are planned to decrease by 10% to obtain a positive EBIT. This will not be easy to achieve, but with a thorough plan concerning expenditures the goals can be reached, as the company did in 2009 when it managed to reduce those costs by an average of 25%.

Other operating expenses are back to values before 2010 (357.421), while amortization is reduced (1.210.275) since it terminates for machinery bought in 2001. The latter is also reflected in a lower value of financial expenses (85.618), since the leasing period for the machinery is finished, while a high value of extraordinary revenues reflects the sale of two trucks previously owned by the company (171.477). RuB Valves has in fact decided to outsource outbound transportation. In the forecast for 2011 to 2013 we have assumed 0 for the exchange rate revenue/losses since RuB Valves do not hedge their exchange rate risk and it is therefore hard to forecast. The Income Tax will be 35%.

Year 2012 forecast

Sales are forecasted to increase by 6% with respect to year 2011 based on country managers forecasts, and cost of goods sold by an additional 3% due to the increased cost for product transportation.

Personnel expenses will increase by 10% as the company is planning to hire additional sales representatives for the Brazilian market, envisioning a strategic expansion in that market for the following year.

All other figures will be increased using the inflation rate of 2,7%. The Income Tax will be 35%.

Year 2013 forecast

Year 2013 is forecasted to be a turning point for RuB Valves. With the 2014 Brazilian World Cup –and looking forward to the 2016 Olympic Games in Rio de Janeiro- the company has acknowledged the importance of this South American country and is planning to strategically expand its sales into this growth market. Sales are thus forecasted to increase by 8% with respect to previous year, while the cost of goods sold would benefit from economies of scale. Personnel expenses are expected to increase as the sales force in Brazil is expanded to handle the growing demand. Italian personnel costs would benefit from the new Italian government's reforms package, which is expected to introduce favourable incentives for small and medium Italian businesses.

With this budget forecast RuB Valves could increase its EBT within three years, and could benefit even more from the reduction in tax rates for businesses from 35% down to 25% for year 2013.

Assignment

You are asked to prepare the following:

- 1. Analysis of the balance sheets (Appendix 1), profit and loss accounts (Appendix 2) and ratios (Appendix 3 and 4) in order to identify strengths and weaknesses.
- 2. Cause and effect diagram for the year 2010 identifying the main drivers of profitability and liquidity.
- 3. Measures to be taken by the Company in order to improve the performance.

- 4.Budgets of the profit and loss accounts, balance sheets and main ratios for the next three years according to the Company's forecasts.
- 5. Give an opinion about the Company's forecasts.

Appendix 1. Rub Valves Balance Sheets

	2007	Vertical	Analysis	2008	Vertical	Analysis
		1	2		1	2
1.Total fixed assets	5'106'372	100.0%	17.7%	10'028'059	100.0%	28.1%
Total intangible fixed assets	60'500	1.2%	0.2%	133'414	1.3%	0.4%
Patents and Copyrights	39'500	65.3%	0.1%	117'849	88.3%	0.3%
Other intangibles	21'000	34.7%	0.1%	15'565	11.7%	0.0%
Total tangible fixed assets	5'036'565	98.6%	17.4%	9'885'338	98.6%	27.7%
Buildings and lands	126'443	2.5%	0.4%	6'152'337	62.2%	17.2%
Plant and machinery	4'462'781	88.6%	15.5%	3'347'967	33.9%	9.4%
Industrial and commercial equipment	22'137	0.4%	0.1%	16'119	0.2%	0.0%
Other tangible assets	339'677	6.7%	1.2%	354'915	3.6%	1.0%
Other fixed assets	85'527	1.7%	0.3%	14'000	0.1%	0.0%
Total financial assets	9'307	0.2%	0.0%	9'307	0.1%	0.0%
Shareholding on incorporated	7'229	77.7%	0.0%	7'229	77.7%	0.0%
Shareholding in other companies	2'078	22.3%	0.0%	2'078	22.3%	0.0%
2. Total current assets	23'767'283	100.0%	82.3%	25'721'576	100.0%	71.9%
Total inventories	9'269'565	39.0%	32.1%	9'032'707	35.1%	25.3%
Inventory- raw material	2'150'078	23.2%	7.4%	2'263'256	25.1%	6.3%
Inventory - goods in process	5'611'323	60.5%	19.4%	5'134'995	56.8%	14.4%
Inventory - finished goods	1'508'164	16.3%	5.2%	1'634'456	18.1%	4.6%
Debtors	6'275'051	26.4%	21.7%	8'369'480	32.5%	23.4%
Cash	8'060'103	33.9%	27.9%	8'174'458	31.8%	22.9%
Short-term investments	162'564	0.7%	0.6%	144'931	0.6%	0.4%
TOTAL ASSETS	28'873'655		100.0%	35'749'635		100.0%

1. Shareholders funds	15'671'068	100.0%	54.3%	22'784'274	100.0%	63.7%
Capital	1'500'000	9.6%	5.2%	1'500'000	6.6%	4.2%
Other shareholders funds	14'171'068	90.4%	49.1%	21'284'274	93.4%	59.5%
2. Non current liabilities	7'024'415	100.0%	24.3%	7'485'303	100.0%	20.9%
Long-term debt	7'024'415	100.0%	24.3%	7'485'303	100.0%	20.9%
3. Current liabilities	6'178'172	100.0%	21.4%	5'480'058	100.0%	15.3%
Creditors	3'769'060	61.0%	13.1%	3'924'441	71.6%	11.0%
Other current liabilities	2'409'112	39.0%	8.3%	1'555'617	28.4%	4.4%
TOTAL SHAREH. FUNDS & LIAB.	28'873'655		100.0%	35'749'635		100.0%

	2009	Vertical	Analysis	2010	Vertical	Analysis
		1	2		1	2
1.Total fixed assets	9'246'420	100.0%	29.2%	9'037'171	100.0%	25.2%
Total intangible fixed assets	288'280	3.1%	0.9%	160'769	1.8%	0.4%
Patents and Copyrights	269'887	93.6%	0.9%	145'928	90.8%	0.4%
Other intangibles	18'393	6.4%	0.1%	14'841	9.2%	0.0%
Total tangible fixed assets	8'948'833	96.8%	28.3%	8'867'095	98.1%	24.8%
Buildings and lands	5'970'868	66.7%	18.9%	5'915'703	66.7%	16.5%
Plant and machinery	2'604'016	29.1%	8.2%	2'559'923	28.9%	7.2%
Industrial and commercial equipment	9'207	0.1%	0.0%	4'077	0.0%	0.0%
Other tangible assets	331'742	3.7%	1.0%	349'922	3.9%	1.0%
Other fixed assets	33'000	0.4%	0.1%	37'470	0.4%	0.1%
Total financial assets	9'307	0.1%	0.0%	9'307	0.1%	0.0%
Shareholding on incorporated	7'229	77.7%	0.0%	7'229	77.7%	0.0%
Shareholding in other companies	2'078	22.3%	0.0%	2'078	22.3%	0.0%
2. Total current assets	22'425'551	100.0%	70.8%	26'754'662	100.0%	74.8%
Total inventories	7'609'014	33.9%	24.0%	11'667'357	43.6%	32.6%
Inventory- raw material	2'014'825	26.5%	6.4%	4'709'654	40.4%	13.2%
Inventory - goods in process	4'611'956	60.6%	14.6%	4'997'954	42.8%	14.0%
Inventory - finished goods	982'233	12.9%	3.1%	1'959'749	16.8%	5.5%
Debtors	5'069'056	22.6%	16.0%	5'931'971	22.2%	16.6%
Cash	9'613'161	42.9%	30.4%	9'028'295	33.7%	25.2%
Short-term investments	134'320	0.6%	0.4%	127'039	0.5%	0.4%
TOTAL ASSETS	31'671'971		100.0%	35'791'833		100.0%

1. Shareholders funds	22'076'870	100.0%	69.7%	22'423'264	100.0%	62.6%
Capital	1'500'000	6.8%	4.7%	1'500'000	6.7%	4.2%
Other shareholders funds	20'576'870	93.2%	65.0%	20'923'264	93.3%	58.5%
2. Non current liabilities	5'713'287	100.0%	18.0%	4'101'775	100.0%	11.5%
Long-term debt	5'713'287	100.0%	18.0%	4'101'775	100.0%	11.5%
3. Current liabilities	3'881'814	100.0%	12.3%	9'266'794	100.0%	25.9%
Creditors	2'677'174	69.0%	8.5%	7'510'524	81.0%	21.0%
Other current liabilities	1'204'640	31.0%	3.8%	1'756'270	19.0%	4.9%
TOTAL SHAREH. FUNDS & LIAB.	31'671'971		100.0%	35'791'833		100.0%

Appendix 2. Rub Valves Income Statements

	2007	2008	% change	2009	% change	2010	% change
Turnover	31.011.693	26.416.745	-14.82%	16.627.169	-37.06%	24.548.183	47,64%
Cost of goods sold	15.190.188	12.520.618	-17.57%	6.736.947	-46.19%	13.847.059	105,54%
Gross profit	15.821.505	13.896.127	-12.17%	9.890.222	-28.83%	10.701.124	8,20%
Personnel expenses	3.911.253	4.228.485	8.11%	4.137.309	-2.16%	4.880.801	17,97%
Fixed costs	5.172.342	4.518.855	-12.63%	3.224.710	-28.64%	4.731.549	46,73%
Administrative expenses	2.001.991	1.860.726	-7.06%	1.471.860	-20.90%	1.639.035	11,36%
Depreciation	1.555.099	1.528.299	-1.72%	1.536.726	0.55%	1.515.914	-1,35%
Other operating expenses	707.614	61.421	-91.32%	303.227	393.69%	124.556	-58,92%
EBIT	2.473.206	1.698.341	-31.33%	-783.610	-146.14%	-2.190.731	179,57%
Financial revenue	390.631	485.382	24.26%	148.112	-69.49%	70.282	-52,55%
Financial expenses	-319.918	-500.298	56.38%	-259.354	-48.16%	-175.343	-32,39%
Exchange rate rev./losses	-802.272	537.645	-167.02%	306.413	-43.01%	279.128	-8,90%
Financial P/L	-731.559	522.729	-171.45%	195.171	-62.66%	174.067	-10,81%
Extraordinary P/L	40.715	-19.774	-148.57%	-65.602	231.76%	+2.763.042	+4311,83%
EBT	1.782.362	2.201.296	23.50%	-654.041	-129.71%	746.378	-214,12%
Taxes	-1.172.343	-871.588	-25.65%	40.891	-104.69%	-392.883	-1060,81%
Net Income	610.019	1.329.708	117.98%	-613.150	-146.11%	353.495	+157,65%

Appendix 3. Rub Valves Ratios

	2007		2008		
	RUB Valves	Avg. Competitors ²	RUB Valves	Avg. Competitors	
Analysis of the profitability					
Return on Equity (Net					
profits/Equity)	3.89%	3.08%	5.84%	6.12%	
Return on Assets (EBIT/TA)	8.57%	1.39%	4.75%	3.09%	
Net Return ((net					
profit+interest cost)/TA)	3.22%	1.92%	5.12%	4.17%	
Liquidity Ratios					
Current Ratio (CA/CL)	3.85	1.90	4.69	2.29	
Acid Test					
((Debtors+Cash&Bank)/CL)	2.35	1.04	3.05	1.22	
Cash Ratio (Cash&Bank/CL)	1.33	0.50	1.52	0.61	
Working Capital Ratios					
Working Capital (CA-CL)	17'589'111	18'419'237	20'241'518	12'390'906	
Working capital over assets					
(WC/TA)	0.61	0.40	0.57	0.27	
Working capital over CL					
(WC/CL)	2.85	0.95	3.69	1.21	
Gearing Ratios					
Gearing Ratio (Debt/Assets)	0.46	0.53	0.36	0.52	
Quality of debt ratio					
(CL/TL)	0.47	0.82	0.42	0.72	
Asset turnover Ratios					
Fixed asset turnover					
(Sales/FA)	6.07	5.46	2.63	3.03	
Current asset turnover					
(Sales/CA)	1.30	1.27	1.03	1.33	
Stock turnover					
(Sales/Stocks)	3.35	3.34	2.92	3.61	
Stock turnover	1.64		1.20		
(COGS/Stocks)	1.64		1.39		
Debtors turnover	4.04	6.00	2.16	5.65	
(Sales/Debtors)	4.94	6.99	3.16	5.67	
Debtors and creditors					
turnover periods Debtors collection period					
(Debtors/Avg.Daily Sales)	73.86	85	116	92	
Creditor payment period	/3.00	63	110	92	
((Creditors/Purchases)*365)	90.57	55	114	76	
((Creditors/Purchases)*303)	90.37	33	114	/6	

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² Average ratios of the main competitors (Rubinetterie Bresciane Bonomi SPA, Enolgas Bonomi SPA, S.I.R.A.L. Rubinetterie).

		2009	2	2010
	RUB Valves	Avg. Competitors	RUB Valves	Avg. Competitors
Analysis of the				
profitability				
Return on Equity (Net				
profits/Equity)	-2.78%	-0.44%	1.58%	5.51%
Return on Assets				
(EBIT/TA)	-2.47%	0.06%	1.61%	2.58%
Net Return ((net				
profit+interest cost)/TA)	-1.12%	1.58%	1.48%	2.98%
Liquidity Ratios				
Current Ratio (CA/CL)	5.78	2.78	2.89	1.99
Acid Test				
((Debtors+Cash&Bank)/CL)	3.82	1.57	1.63	0.96
Cash Ratio				
(Cash&Bank/CL)	2.51	0.84	0.99	0.40
Working Capital Ratios				
	18'543'73			
Working Capital (CA-CL)	7	14'157'732	17'487'868	16'403'450
Working capital over assets				
(WC/TA)	0.59	0.35	0.49	0.36
Working capital over CL				
(WC/CL)	4.78	1.63	1.89	0.98
Gearing Ratios				
Gearing Ratio (Debt/Assets)	0.30	0.47	0.37	0.52
Quality of debt ratio				
(CL/TL)	0.40	0.61	0.69	0.71
Asset turnover Ratios				
Fixed asset turnover				
(Sales/FA)	1.80	2.29	2.72	2.49
Current asset turnover				
(Sales/CA)	0.74	1.08	0.92	1.10
Stock turnover				
(Sales/Stocks)	2.19	3.40	2.10	2.65
Stock turnover				
(COGS/Stocks)	0.89		1.19	
Debtors turnover				
(Sales/Debtors)	3.28	5.09	4.14	4.98
Debtors and creditors				
turnover periods				
Debtors collection period				
(Debtors/Avg.Daily Sales)	111.28	108	88.20	88.98
Creditor payment period				
((Creditors/Purchases)*365)	145.05	76	197.97	91.67

Appendix 4. ROE and ROA Composition Analysis

									Tur-				1
	Fisca	al ef	fect		Ge	Gearing			nover		Margin		İ
	NP		Extraord.Profit		EBT		Assets		Sales		EBIT		1
	/Extraord.Profit	*	/EBT	*	/EBIT	*	/Equity	*	/Assets	*	/Sales	=	ROE
2007	14.98	*	0.02	*	0.72	*	1.84	*	1.07	*	0.08	=	3.89%
2008	-67.25	*	-0.01	*	1.30	*	1.57	*	0.74	*	0.06	=	5.84%
													-
2009	9.35	*	0.10	*	0.83	*	1.43	*	0.52	*	-0.05	=	2.78%
2010	-72.89	*	-0.01	*	1.29	*	1.60	*	0.69	*	0.02	=	1.58%

	Sales/TA	*	EBIT/Sales	=	ROA
2007	1.07404806	*	0.07975076	=	8.57%
2008	0.73893747	*	0.06429032	=	4.75%
2009	0.52498056	*	-0.0471283	=	-2.47%
2010	0.6858599	*	0.02351135	=	1.61%

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