



CFA Institute

CFA Institute Research Challenge

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Rába Automotive Holding Plc

Consumer Goods Sector, Automobiles & Parts Industry
Budapest Stock Exchange (BSE)

Date: December 29, 2014

Ticker: RABA HB (Bloomberg)

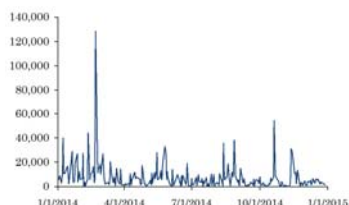
Current Price: HUF 1070

HUF/EUR: 315

Recommendation: BUY (19% upside)

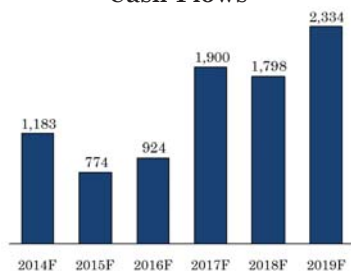
Target Price: HUF 1270 (EUR 4.03)

Figure 1: Daily Turnover of Rába's share (quantity)



Source: Budapest Stock Exchange

Figure 2: Estimated Free Cash-Flows



Source: Team estimation

Rába Market Profile

Last Price (HUF)	1,070
Volume	5,424
Turnover (HUF)	9,295,140
Index	BUMIX
Market	Budapest Stock Exchange
Ticker (BSE)	RABA
Ticker (Bloomberg)	RABA HB
Market Cap (thousands HUF)	14,416,587
52 Week High (HUF)	1,399
52 Week Low (HUF)	1,010
P/E	5.40
EPS (HUF)	198
Dividend Yield	0%
Book Value (thousands HUF)	13,512,847
Enterprise Value (thousands HUF)	32,791,514

Source: EMIS Intelligence

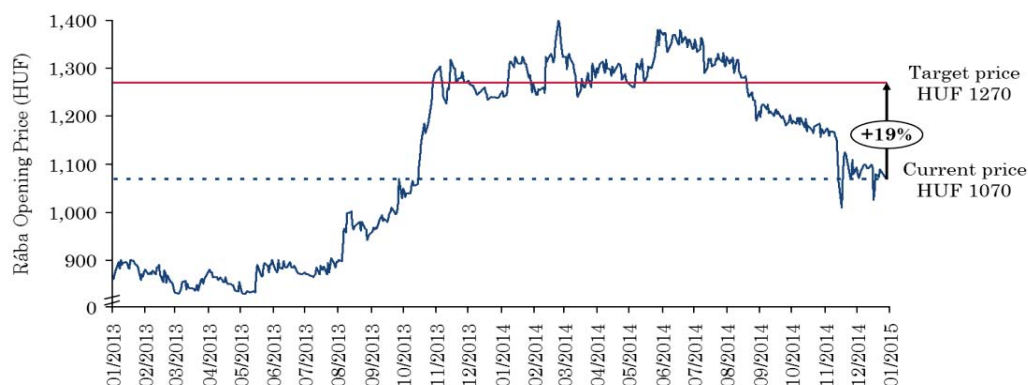
Percentage point change in all-equity cost of capital (r_A)	Percentage point change in gross margin 2014-2019						
	-2.0%	-1.0%	-0.5%	0.0%	0.5%	1.0%	2.0%
-3%	1,037	1,482	1,705	1,928	2,151	2,374	2,820
-2%	868	1,261	1,458	1,654	1,850	2,047	2,440
-1%	738	1,089	1,265	1,441	1,617	1,792	2,144
0%	634	952	1,111	1,270	1,430	1,589	1,907
1%	549	840	986	1,131	1,277	1,423	1,714
2%	478	747	881	1,016	1,150	1,284	1,553
3%	419	669	793	918	1,043	1,168	1,417

Highlights

Rába – Investing in an improving automotive supplier

- **We issue a buy recommendation with a target price of HUF 1270.** It implies 19% share price increase compared to current share price that can be utilized in the upcoming month.
- **Rába is a leading automotive supplier located in Hungary.** Sales activity of Rába is more and more concentrated on export markets, export share of revenue is above 70% currently. Rába is able to exploit the opportunities emerging from increasing car and truck sales in EU countries and in the USA.
- **The management of Rába is focusing on profitability and efficiency.** Investments aim to increase efficiency. We expect growing gross margin (20% in 2014F and 22.5% in 2019F).
- Increasing GDP growth and devaluation of the local currency, Hungarian Forint, give further opportunity to Rába to achieve higher margins.
- Higher profitability and cash-flow makes it possible to **reduce debt and achieve a less risky Net debt to EBITDA ratio** as the current one. This means lower interest rates and therefore higher value to equity holders.
- **Main risk issues are:** Volatile demand, uncertain GDP growth, failure to improve efficiency and margin, and government actions as a shareholder of the company.

Figure 3: Rába's share price movement in the last two years



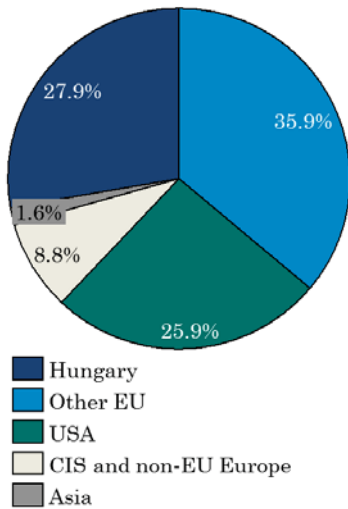
Source: Budapest Stock Exchange, Team estimation

Figure 4: Location of Rába's plants



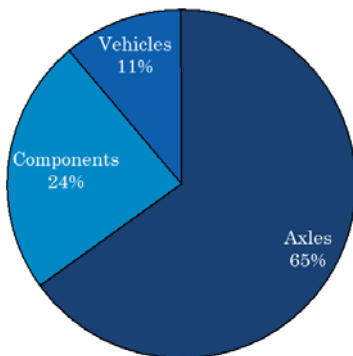
Source: Rába Annual Report

Figure 5: Geographical distribution of Rába's revenue in 2013



Source: Company data

Figure 6: Contribution of the Business units to sales revenue



Source: Company data

Business Description

Rába Automotive Holding Plc. is one of the largest Hungarian companies in the automotive industry. Established in 1896, it has more than a hundred years of experience in engineering and adjustment to continuously changing business environment. Rába consists of three strategic business units, the Rába Axle Ltd, the Rába Automotive Components Manufacturing and Trading Ltd, and the Rába Vehicle Ltd. The Holding employs approximately 2000 people in its three plants, Sárvár, Mór and Győr, where the Holding's headquarter is. The company is internationally renowned for its high quality products and hence has a stable clientele.

Rába Axle Ltd manufactures axles and axle components which are primary installed in medium- and heavy-duty trucks, military trucks, buses and special vehicles such as tractors and construction equipment. This business unit is the most crucial member of the holding since its production accounts for 65% of the overall sales revenue of the group and employs more than 1000 people. The Axle Business Unit not only produces but also develops axles enabling Rába to provide complex industrial solutions for its most demanding clients as well. The Axle Business Unit focuses on exporting: close to 40% of its revenues come from the USA and a similar fragment from EU, not including the domestic sell part which was only 11% according to 2013 statistics. Additionally, it also exports to CIS countries and Asia.

Rába Components Ltd primarily products seats for cars and commercial vehicles, seat parts and car components to international automotive companies operating in Hungary and in other EU countries. Its key customer is Toyo Seat, which supplies Suzuki that has a plant in Esztergom (Hungary). Besides, the Component Business Unit supplies Rába Axles Business Unit with some components as well. Manufacturing takes place in two facilities in the Mór and in the Sárvár plants. The Component Business Unit accounts for 24% of the overall sales revenue of the group.

The last subsidiary, Rába Vehicle Ltd has the exclusive rights to supply the Hungarian Army with off-road vehicles until 2018 and also produces buses and trolleybuses for the civilian sector. Moreover, it manufactures chassis and steel structures as well.

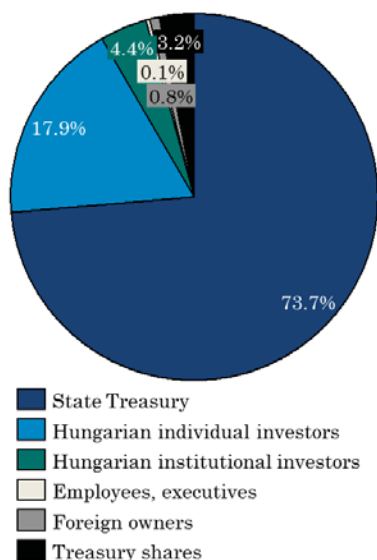
The **company's strategy** can be described by the followings:

- **Efficiency and profitability increase** – Rába plans to increase its efficiency by focusing on research and development, yet it will not influence negatively the production. The company always tried to satisfy its clients' needs in both production and continuous development. In long terms, it will hold the company among the leading corporations in the automotive supplier industry. However, Rába does not plan outstanding investments in the future such as expanding its capacity.
- **Reducing debt** – Rába intends to decrease debt and keep the Net debt to EBITDA ratio at 1.2.
- **Diversifying sources of revenues of the vehicle unit into not-military use** – The company will raise the ratio of products for civilian use in the Vehicle Business Unit's production by widening the number of customers and seeking for new long-term contracts. This will reduce the dependence of the Hungarian Government's orders. An illustrating example is the new agreement with the Volvo Group for supplying fire trucks.

Shareholder structure

During this year there was no major change in terms of shareholders structure of the company. The Hungarian National Asset Management Inc. (MNV) owns 73.68% since the buyout in December 2011 – it is still not clear for analysts why the government had

Figure 7: Current shareholder structure



Source: Company data

decided to have a significant part of the stocks of Rába. It is the only shareholder that holds more than 5% of the company's equity. Although the government has interest in the company, they have no operational contact. Rába does not get any subsidies; revenues come exclusively from the sales activity mainly to the private sector.

Corporate Governance and Social Responsibility

Corporate Governance

Rába follows the Corporate Governance standards demanded from European and Hungarian stock market companies.

Board: It is required of the Board members to exercise their business judgment in the best interest of the company and to ensure efficient and well-balanced promotion of the shareholders. Based on Rába's own independence criteria and the declaration of the Board members, the majority of the Board Members qualify as independent. It is also important that the management compensation processes aim at transparency.

Audit: As required by the Hungarian law, Rába shall maintain an Audit Committee from the independent members of the Supervisory Board to review the financial statements and the reporting system of the Company as main tasks.

Shareholders: Shareholders may have influence on the company's operation solely through their voting power (principle of equal treatment of shareholders, one-share-one-vote policy).

Social Responsibility

According to the company's Social Responsibility Program, Rába aims to raise the proportion of the domestic suppliers thereby supporting the upswing of the Hungarian industry and employment. Rába supports not only the education and retraining of its employees, but also has close cooperation with the educational institutions in the region. The company gives subsidy for developing the practice-oriented education of the universities and vocational schools. Moreover, the Rába Scholarship Program was established in 2012, and in the framework of which they are supporting students. Rába is committed to competitive sports also, and supports sports clubs, e.g. Rába ETO Futsal Club and motorized sports. Furthermore, Rába is pursuing its designated strategy in consideration of the environmental awareness (for details see Appendix 17).

Industry Overview and Competitive Positioning

Macroeconomic overview

GDP growth in the developed countries is projected to be stronger compared to the previous years, but it will still remain modest (related to the strong pre-crisis expansion). While the recovery looks more robust in the United States, it will be slower in the Euro area.¹ According to the most recent OECD Outlook, Euro area growth rate is expected to be 2%, and USA GDP growth rate is 2.8%. Emerging markets have better growing potential, however, this markets does not belong to the target markets of Rába.

The global automotive market and its perspectives

Belonging to the relevant environment, it is important to have a vision of the market and industry where Rába is involved. Overall, the global automotive industry performs better than five years ago, especially the US, where profits and sales have recovered following the recent economic crisis, and China, where growth remains strong. The global automotive manufacturing industry grew by 6.1% in 2013 (see Appendix 12).

The global automotive market is expected to grow intensively during the upcoming decades. However, the main driver of growth will be the Asia-Pacific region, Europe accounts only for 12.9% of the growth and North America only for 10.3%.² On the other hand, the heavy truck segment is expected to grow at a compound annual growth rate (CAGR) of 3.1% until 2024 where the key driver will be the Indian market, but will perform well.³

Carbon dioxide regulation is likely to continue to tighten, and not just in Europe. China, the US, and Japan have also enacted laws to reduce emissions. Original equipment manufacturers (OEM) need to develop more efficient technologies in order reduce their emission or their costs are plausible to rise.⁴

Though automotive industry is considered to be a mature industry, it can be renewed by combining with another industry such as electronics. Smart technologies break in the automotive industry also, the number of networked cars grow year by year. Heavy truck segment may also take advantage of computer-driven possibilities, for example, the pressure in tires on off-road vehicles now easily can be altered from the driver's cabin on the go, thanks to new generation of axles.

Competition assessment of the target markets: The Five Forces Approach

Industry rivalry | *significant*

Rába is operating in two very different segments. Rába Axle and Rába Automotive Components produce several products for the automotive industry. It supplies not only traditional car manufacturers (e.g. Suzuki), but also farm machinery companies (e.g. John Deere). On the other hand, Rába Vehicle is mainly involved in tender markets (e.g. bus manufacturing) or monopolized markets (e.g. military trucks for the Hungarian Army).

At first, the automotive supplier industry will be considered. This is a profitable segment with 7.2–7.5% average EBIT margin based on estimates of the last two years. These EBIT margins are record high compared to previous years and there are some doubts whether they are sustainable in the long-run. The market is highly competitive because many players are trying to increase their market share using their existing capacities.⁵ On the other hand, industry forecasts show further increase in car manufacturing that can indicate that high margins can remain. However, the favorable profit margin is not equally valid for every supplier. Smaller market players tend to achieve smaller margins. Furthermore, chassis and interior parts producers reached below average margins and interior parts manufacturers have to face with squeezing margins.

Market expectations are positive with regard to automotive suppliers. Total CAGR is expected to be 2.9% in the time period from 2014 to 2020 that is in line with global vehicle production growth. European suppliers tend to achieve lower growth rates, only 2.1% annually.⁶

Rába's Vehicle Business Unit mainly serves the domestic market. Bus market is squeezing rapidly in Hungary, in 2013 only 55 buses were made in Hungary.⁷ Thus, this market have to face some major problems and won't be a driver of Rába's profitability and sales.

Threat of potential entry | *low*

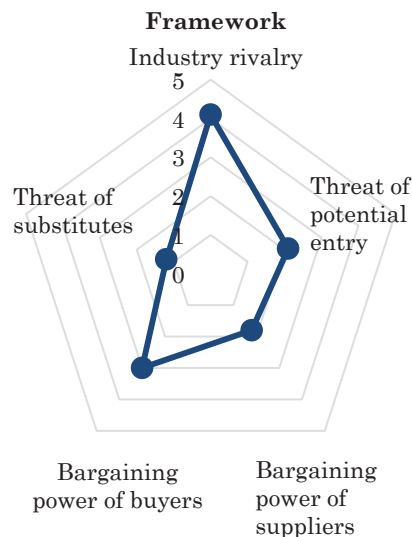
Nowadays not capacity expanding but technology developing is the most profitable way of growing or staying on the top among automotive suppliers. Entry barriers are maintained high by intellectual property as well. Competition comes to sight and Europe-

Figure 8: EBIT margin of automotive suppliers



Source: Roland Berger, Company data, Team estimation

Figure 9: Five Forces Framework



Source: Team estimation

based suppliers mostly benefit from their technology leading position. However, company size is still important, small or medium-sized suppliers have a disadvantage that causes them lag behind the average performance.

Taking a closer look to the European and Hungarian automotive industry, market volume is equal to the “crisis level.” A restructuring is also visible on the market, premium products gain market share. This will lead to a market value increase of components as well, but the increase will affect only those suppliers that are the partners of the premium car manufacturers.⁸ Other suppliers may have to make some measures in order to deal with resource underutilization.

Automotive supply industry is tended to consolidate in the last years.⁹ Taking this into account together with the fact that small scale suppliers are less than average profitable and that the importance of relationship with automotive manufacturers increased, this market has high entry barriers for new comers therefore it is not attractive for new entrants. Threat of new entrants therefore has a negligible effect on industry competition.¹⁰

Bargaining power of suppliers | *low*

Rába is working together with more than 1000 suppliers. Many of them are producing specific products, nevertheless, Rába had never had a situation that it wanted to extend its operation, but the suppliers’ capacity did not permit it. Most of the suppliers are located in Europe, and lots of them are Hungarian SMEs. In order to stabilize the supply chain, Rába uses qualification for the suppliers. The supplier range is diversified, and to decrease risks further the company applies double sourcing in case of core products. Therefore the company can easily switch to another supplier if it is necessary. Furthermore, Rába is able to finance its operation by suppliers. **The deadlines of the disbursements are longer between the company and the suppliers than between the company and the buyers.** Rába pays for the suppliers only after they have got the money from the buyers. Due to these facts we can state that the bargaining power of suppliers is quite low.

Bargaining power of buyers | *moderate*

In recent years Rába had stable and expanding co-operations. There is strong interdependence between Rába and its buyers. This is caused by (1) long-term contracts; (2) common R&D projects with buyers; (3) should trust in Rába and its high quality products. However, Rába should pay special attention to the reinforcement of its innovative research and development activities, to further improve product’s quality and first-rate customer service, and to manufacture reliable products. Therefore there is only a few number of new buyers from year to year, but the new cooperation is generally stable. Additionally, it is important to note that there are several vendors in the EU and the US market. Taking all these fact in to account, we find moderate bargaining power of buyers.

Threat of substitutes | *insignificant*

As far as substitutes are concerned, automotive industry is not threatened. Axles and vehicle components are made from materials that cannot be replaced (e.g. steel). Quality is also important, therefore long-term contracts are common and R&D activity of supplier often focuses on the needs of OEMs. There is no new technology in sight that may result significant change in the assembly process, or new raw materials that replace steel and iron, and that will reshape the whole industry. On the contrary, vehicle components, such as bus seats can be rapidly altered, i.e. using plastic covers instead of fabrics.

Investment Summary

We issue a BUY recommendation for Rába Automotive Holding Plc. with a target price of HUF 1270 that indicates 19% upside from the price level of December 29, 2014. The remarkable increase in share price is derived from (1) balanced and continuous increase in sales; (2) R&D activities that ensure the competitiveness of the company in the future; (3) the management's aim to increase efficiency and productivity by investments; (4) higher margins are expected in foreign markets due to the devaluation of HUF.

Rába has long-term contracts and high potential in axle and vehicle component production and can also profitably assemble buses or firework vehicles based on Volvo and Scania licenses. These factors indicate long-term growth opportunity.

Valuation method

We derived our target price estimation by the Adjusted Present Value (APV) approach. This method calculated the value of the firm in two steps. First, we calculated the value of the firm as if it were all-equity financed and then we add the value of the tax shield of debt. This method simply applies the first theorem of Miller and Modigliani with taxes.

Favorable market outlook in heavy truck and passenger car segments will boost demand for Rába products

The Axle and the Components Business Units of Rába deliver 89% of total turnover. The Axle Business Unit mainly supply bus, truck and farm machinery producers. According to market forecast, the global truck market outlook is optimistic indicating 3.1% annual global growth rate until 2024.¹¹ This is mainly driven by global GDP growth (Appendix 11).

The regional breakdown of truck sales development is favorable for Rába as Eastern Europe is expected to grow by 10% and the EU by 4% annually.¹² The Volkswagen Group (MAN and Scania), one of the most important partners of Rába, is expected to benefit from the German truck market growth and this will also positively affect the performance of Rába.

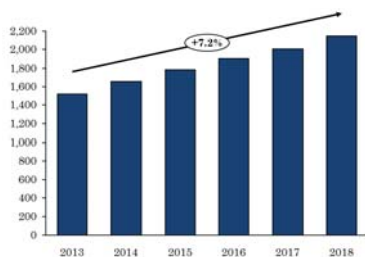
Global automotive manufacturing is also expected to grow in the upcoming years. Market forecasts indicate that the value of the market will be 41.5% higher in 2018 than in 2013. At the same time, market volume is expected to grow only by 27.4% during the same period that indicates a price increase as well.

The automotive seats market, where Rába is also involved, estimated to grow by 4.4% CAGR between 2013 and 2018. Europe is the biggest market in automotive seats market and the global market share will slightly decrease in the upcoming years, but it will be still the market leader in 2018.

Possible investment risks

Besides the influence of market risk (volatile and decreasing demand in target markets) investors should be aware of other possible adverse influences: uncertain GDP growth

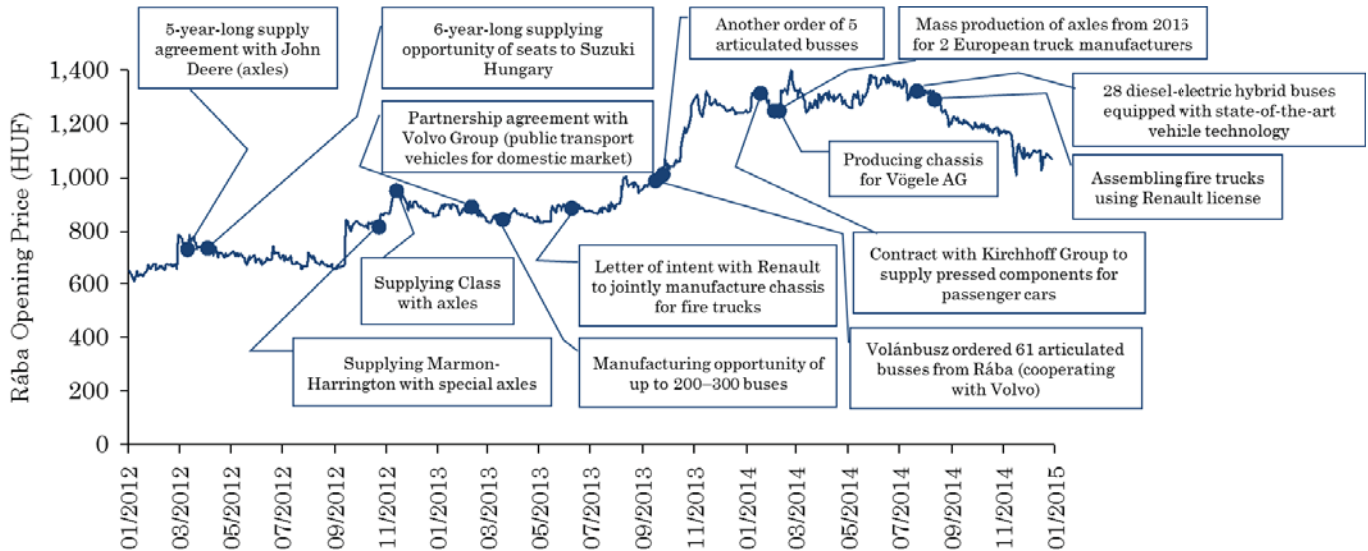
Figure 10: Global automotive manufacturing industry value forecast (billion USD)



Source: Marketline

in Europe, volatile exchange rate, delays in efficiency improvement, unforeseeable government actions, and influence of State Treasury to enter less profitable business ventures. We identify main risks in Investment Risks section.

Figure 11: Rába's share price and news flow since January 1, 2012



Source: Budapest Stock Exchange, Portfolio.hu, Company data

Valuation

We derived our target price by using the Adjusted Present Value (APV) approach.

Sales forecast and drivers

The sales forecast is based on the fact that Rába modified its medium-term strategy. In the previous years management concentrated on growth rate and new markets. However, in the upcoming years more attention will be paid on profitability and efficiency.

The demand for the products of Rába is a derived demand as the company is mainly an automotive supplier. Based on the market development projections of trucks and passenger cars, a conservative revenue forecast was used. Estimated sales growth rate is 2.5–2.6%.

Increasing margins due to efficiency gains and HUF devaluation

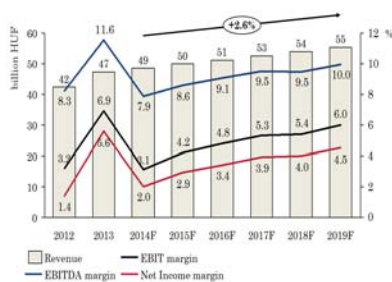
Gross margin expectations are based on historical data, and company data available for 2014Q3. 2013 was a very successful year with above average gross margin. 2014Q3 data indicate that gross margin will decline, however, long-term expectation are increasing margins due to (1) efficiency improvements; and (2) continuous devaluation of HUF. Taking into consideration the fact that more than half of the total revenue is coming from abroad, local currency devaluation means higher competitiveness and higher margins (in HUF).

EBITDA margin will also increase. The main driver behind this increase is gross margin increase.

Capital Expenditure

Capital Expenditure (CAPEX) was closely equal to Depreciation and Amortization in the previous years. This tendency will not change in the near future based on company announcements. This means that there will be no big investments in the upcoming

Figure 12: Revenue and margin estimations, and revenue growth rate



Source: Bloomberg, Team estimation

years that is in line with the revenue forecast. Therefore CAPEX is set to be equal to Depreciation and Amortization.

Dividend policy

Rába did not pay dividends in the 2012 and 2013 and this will continue in the future as the company's aim is to decrease total debt and reach 1.2 of Net debt/EBITDA ratio.

Terminal Value

Explicit Free Cash-Flow (FCF) calculations are made for the upcoming five years and Terminal Value is calculated afterwards. Terminal Value is calculated by assuming 2% FCF growth rate and no change in Net Assets (i.e. Depreciation and Amortization is equal to Capital Expenditure). Terminal Value Growth Rate is based on economic growth, growth potential of the relevant segments and inflation.

All-equity cost of capital

Due to the fact that the APV approach was used, one can calculate the present value of FCF using all-equity cost of capital (r_A). In order to determine r_A , risk-free interest rate, market premium and asset beta is needed. Risk-free interest rate is the 10-year long Hungarian government bond's yield (3.6%). Market premium is expected to be 5.5% based on expert estimations.

Debt, Interest Payment and Tax Shield

APV method needs to calculate Tax Shield of Interest Payments that is a potential source of Corporate Value. Taking into consideration that Rába's aim is to reduce Net debt/EBITDA ratio to 1.2, we projected a decreasing Net debt/EBITDA ratio that will reach the target value in 2019. Debt repayments are possible from Free Cash-Flow generated by the company.

Calculating interest payments, two effects were taken into consideration, (1) debt-to-equity ratio of Rába will be lower therefore credits will be less risky indicating increasing interest rates; (2) in line with the strengthening economic activity in Europe, central banks tend to increase interest rates that will cause higher interest rates for companies. These two effects extinguish each other causing a flat interest rate that is equal to the current weighted average interest rate of 2.4%. It is very unlikely that companies operating in Hungary will receive loans for lower interest rates (three-year long government bond's yield is 2.72% currently). Present value of Tax Shield was calculated using weighted average interest rate (i.e. 2.4%).

Corporate tax is 19% based on 2013 company data that is in line with KPMG tax survey.¹³

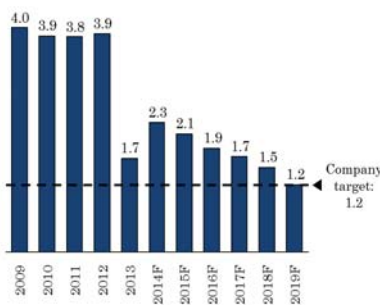
Financial Analysis

DuPont Analysis

In the analyzed historical period, Rába exhibited very volatile Return on Equity (5.32% in 2012 and 20.97% in 2013). 2013 was a very successful year in Rába's life that is unlikely to occur again. 2014Q3 data indicate that 2014 will be rather similar to 2012. This is visible in operating margin. The detailed DuPont Analysis is available in Appendix 10.

Previously, interest burden affected ROE negatively that was mainly caused by exchange rate losses.¹⁴ Our expectation is that this factor will improve, because (1) the primary goal of Rába's risk management strategy is the reduction of the volatility of

Figure 13: Net debt to EBITDA ratio of Rába



Source: Bloomberg, Team estimation

HUF; and (2) we expect that HUF will weaken in the upcoming years, therefore exchange rate gains will dominate (as it was the case in 2013).

Leverage ratio is expected to decrease caused by the company's aim to reduce debt level. We forecast ROE in 2019F to be 9.97%. DuPont analysis suggests that the main driver behind this improvement is increasing operating margin and interest burden. The key success factors are therefore efficiency gains and better interest rates.

HUF devaluation

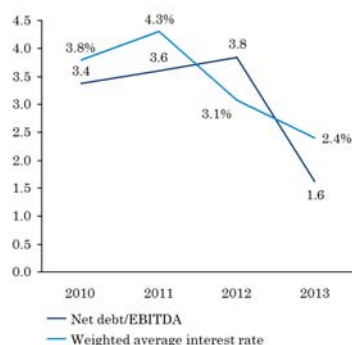
The bookkeeping currency of Rába is Hungarian Forint. All of the production sites of Rába are located within the borders of Hungary. On the contrary, more than 70% of its revenue came from export sales, mainly from EU member states and from the USA. HUF weakened steadily in the past years and we expect further devaluation: (1) Hungarian government favors weak HUF in order to boost export; (2) target inflation rate of the Hungarian central bank (3%) is higher than ECB's target (2%); (3) Hungary's government bonds are rated in the speculative category (non-investment grade) and international environment is not favorable either (e.g. war in Ukraine).

Having said that Rába's revenue is mainly determined in EUR or USD, and costs mainly occur in HUF, HUF devaluation can increase margin and result higher profit in HUF.

Financing structure and debt

Before 2013, the leverage of Rába was extremely high measured by >3 Net debt/EBITDA ratio. This was associated with higher interest rates. Company management realized the risk caused by too high leverage in a cyclical industry and made efforts in order to reduce debt exposure. The company's aim to reduce Net debt/EBITDA ratio to 1.2 which will cause lower interest rates as well. Our projections are in line with this, and based on our estimation Rába will reach this goal in 2019.

Figure 14: Net debt to EBITDA and weighted average interest rate of Rába's debt



Source: Company data

Investment Risks

Market Risk | *Volatile demand for farm machineries*

The fall of the grain prices on agricultural markets could cause significant decrease in the demand of farm machineries since the farmers have to postpone their purchases. John Deere, one of the leading farm machinery producer in the USA is an important partner of Rába and demand decrease for John Deere products will affect Rába's performance as well. This happened in 2014, and it is possible to happen again in the following years. Agricultural axles account for 29% of the revenue of the Rába Axle Ltd, therefore this decrease has also significant impact on the Holding's total revenue.

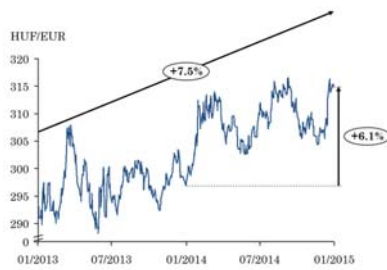
Market Risk | *Possible decreasing demand of the automotive industry*

Rába Components Ltd is the supplier of automotive companies (e.g. Suzuki). The demand of the automotive industry is really volatile. Before the crisis there were stable markets, e.g. the European truck market that diminished by half through the crisis. Such unexpected fallbacks would decrease the revenues of the company.

Economic Risk | *Stagnation or recession in Europe*

Recent macroeconomic outlooks forecast a GDP growth in the Euro area, however call attention to the potential of stagnation or recession. Car and truck sales are strongly related to GDP growth, therefore declining GDP can cause lower revenue for Rába.

Figure 15: HUF/EUR exchange rate



Source: Central Bank of Hungary

Economic Risk | *Volatile HUF/EUR exchange rate*

HUF/EUR exchange rate proved to be very volatile in the past and there is no sign indicating any changes. This can affect Rába's financial income through export revenues. Rába already realized the importance of foreign exchange rate changes on its Net income and made several efforts in order to reduce its impact. The company raised funds required for operation in foreign exchange (by taking out EUR or USD denominated loans) and regards these loans as hedge transactions suitable for preserving the value of EUR or USD denominated income to the extent of the expected exposure.

Operational Risk | *Failure of improving efficiency*

Though Rába's strategy states that efficiency is generally considered, the management team may take decisions that affect the company adversely, causing stagnation (or even deterioration) of the efficiency level. In this case, expenses become higher than expected, and margins and FCF will fall. Furthermore, the company's revenues may fall at the same time due to losing some of its first-class customers that can further reduce income and free cash-flow.

Political Risk | *Payroll expenses grow unexpectedly*

Payroll expenses may increase due to changes in the tax system (as it happened in 2011–2012). Rába's success strongly relies on the high quality and unreplaceable expertise that give the bottom line of the production and development. Without these, the company would not be able to hold its first-class customers and would lose its importance in the automotive supply industry. Therefore, in a situation when the payroll expenses grow, the company cannot allow itself to lower its costs by dismissing people, especially engineers. To reduce inflexibility in terms of labor force, Rába puts strong emphasis on maintaining and improving efficiency.

Political Risk | *Government will influence the daily operation*

Hungarian government owns more than 70% of Rába's share since 2011. In this time period, national government neither affected the daily operation of Rába nor the strategy of the company. Nevertheless, it can happen in the future. This holds the potential of irrational decisions (e.g. increasing headcount in order to reduce unemployment rate) that may distort margin.

Appendix 1: Balance sheet

Million HUF	2012	2013	2014F	2015F	2016F	2017F	2018F	2019F
Assets								
Cash & Near Cash Items	178	265	1,039	1,721	1,941	3,550	4,324	5,376
Short-Term Investments	-	-	-	-	-	-	-	-
Accounts & Notes Receivable	9,682	9,429	9,732	10,489	11,022	11,577	11,883	12,198
Inventories	8,426	7,163	8,272	8,990	9,741	9,998	10,803	11,089
Other Current Assets	112	36	61	58	62	66	57	61
Total Current Assets	18,398	16,893	19,104	21,258	22,766	25,191	27,067	28,723
LT Investments & LT Receivables	339	338	345	352	360	374	392	414
Net Fixed Assets	13,777	13,842	13,842	13,842	13,842	13,842	13,842	13,842
Gross Fixed Assets	44,119	45,157	47,457	49,657	51,857	54,057	56,257	58,457
Accumulated Depreciation	30,342	31,315	33,615	35,815	38,015	40,215	42,415	44,615
Other Long-Term Assets	2,391	2,057	2,057	2,057	2,057	2,057	2,057	2,057
Total Long-Term Assets	16,506	16,237	16,244	16,251	16,259	16,273	16,291	16,313
Total Assets	34,904	33,130	35,348	37,509	39,025	41,464	43,358	45,036
Liabilities & Shareholders' Equity								
Accounts Payable	9,532	9,518	10,900	11,443	11,671	12,109	12,639	12,891
Short-Term Borrowings	10,293	3,303	1,028	1,257	2,248	2,483	3,387	2,321
Other Short-Term Liabilities	-	-	-	-	-	-	-	-
Total Current Liabilities	19,829	12,821	11,927	12,699	13,919	14,592	16,026	15,211
Long-Term Borrowings	3,288	5,821	7,779	7,779	6,354	6,040	4,300	4,300
Other Long-Term Liabilities	405	414	578	511	476	495	515	499
Total Long-Term Liabilities	3,693	6,235	8,357	8,290	6,830	6,535	4,815	4,799
Total Liabilities	23,522	19,053	20,284	20,989	20,749	21,126	20,842	20,011
Total Preferred Equity	-	-	-	-	-	-	-	-
Minority Interest	-	-	-	-	-	-	-	-
Share Capital & APIC	12,921	12,941	12,941	12,941	12,941	12,941	12,941	12,941
Retained Earnings & Other Equity	1,539	1,136	2,123	3,579	5,335	7,397	9,576	12,084
Total Equity	11,382	14,077	15,064	16,520	18,276	20,338	22,516	25,025
Total Liabilities & Equity	34,904	33,130	35,348	37,509	39,025	41,464	43,358	45,036

Source: Bloomberg, Team estimation

Percent of Total assets	2012	2013	2014F	2015F	2016F	2017F	2018F	2019F
Total Assets								
Cash & Near Cash Items	0.5%	0.8%	2.9%	4.6%	5.0%	8.6%	10.0%	11.9%
Short-Term Investments	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Accounts & Notes Receivable	27.7%	28.5%	27.5%	28.0%	28.2%	27.9%	27.4%	27.1%
Inventories	24.1%	21.6%	23.4%	24.0%	25.0%	24.1%	24.9%	24.6%
Other Current Assets	0.3%	0.1%	0.2%	0.2%	0.2%	0.2%	0.1%	0.1%
Total Current Assets	52.7%	51.0%	54.0%	56.7%	58.3%	60.8%	62.4%	63.8%
LT Investments & LT Receivables	1.0%	1.0%	1.0%	0.9%	0.9%	0.9%	0.9%	0.9%
Net Fixed Assets	39.5%	41.8%	39.2%	36.9%	35.5%	33.4%	31.9%	30.7%
Gross Fixed Assets	126.4%	136.3%	134.3%	132.4%	132.9%	130.4%	129.7%	129.8%
Accumulated Depreciation	86.9%	94.5%	95.1%	95.5%	97.4%	97.0%	97.8%	99.1%
Other Long-Term Assets	6.9%	6.2%	5.8%	5.5%	5.3%	5.0%	4.7%	4.6%
Total Long-Term Assets	47.3%	49.0%	46.0%	43.3%	41.7%	39.2%	37.6%	36.2%
Total Assets	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Liabilities & Shareholders' Equity								
Accounts Payable	27.3%	28.7%	30.8%	30.5%	29.9%	29.2%	29.2%	28.6%
Short-Term Borrowings	29.5%	10.0%	2.9%	3.4%	5.8%	6.0%	7.8%	5.2%
Other Short-Term Liabilities	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Current Liabilities	56.8%	38.7%	33.7%	33.9%	35.7%	35.2%	37.0%	33.8%
Long-Term Borrowings	9.4%	17.6%	22.0%	20.7%	16.3%	14.6%	9.9%	9.5%
Other Long-Term Liabilities	1.2%	1.3%	1.6%	1.4%	1.2%	1.2%	1.2%	1.1%
Total Long-Term Liabilities	10.6%	18.8%	23.6%	22.1%	17.5%	15.8%	11.1%	10.7%
Total Liabilities	67.4%	57.5%	57.4%	56.0%	53.2%	51.0%	48.1%	44.4%
Total Preferred Equity	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Minority Interest	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Share Capital & APIC	37.0%	39.1%	36.6%	34.5%	33.2%	31.2%	29.8%	28.7%
Retained Earnings & Other Equity	-4.4%	3.4%	6.0%	9.5%	13.7%	17.8%	22.1%	26.8%
Total Equity	32.6%	42.5%	42.6%	44.0%	46.8%	49.0%	51.9%	55.6%
Total Liabilities & Equity	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: Bloomberg, Team estimation

Appendix 2: Income statement

Million HUF	2012	2013	2014F	2015F	2016F	2017F	2018F	2019F
Revenue	42,346	47,485	48,659	49,946	51,267	52,623	54,015	55,444
Cost of Revenue	33,241	36,378	38,927	39,457	40,245	41,046	42,132	42,969
Gross profit	9,104	11,107	9,732	10,489	11,022	11,577	11,883	12,475
Other Operating Revenue	423	916	670	670	670	670	670	670
Other Operating Expenses	8,190	8,761	8,873	9,056	9,243	9,434	9,628	9,827
Sales costs	790	921	876	899	923	947	972	998
Other general overhead	7,400	7,840	7,997	8,157	8,320	8,486	8,656	8,829
EBITDA	3,494	5,492	3,829	4,303	4,650	5,013	5,125	5,517
Operating income (EBIT)	1,338	3,262	1,529	2,103	2,450	2,813	2,925	3,317
Interest income	27	18	5	9	10	18	22	27
Interests paid	2,331	1,917	199	202	179	175	144	131
Net Non-Operating Losses (Gains) -	1,876	-	-	-	-	-	-	-
Foreign Exchange Losses (Gains)	-	-	117	112	112	111	113	116
Pretax profit or loss	910	3,311	1,218	1,797	2,168	2,546	2,689	3,097
Income Tax Expense	309	622	231	341	412	484	511	588
Balance Sheet profit or loss	601	2,689	987	1,456	1,756	2,062	2,178	2,508

Source: Bloomberg, Team estimation

Percent of Revenue	2012	2013	2014F	2015F	2016F	2017F	2018F	2019F
Revenue	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Cost of Revenue	78.5%	76.6%	80.0%	79.0%	78.5%	78.0%	78.0%	77.5%
Gross profit	21.5%	23.4%	20.0%	21.0%	21.5%	22.0%	22.0%	22.5%
Other Operating Revenue	1.0%	1.9%	1.4%	1.3%	1.3%	1.3%	1.2%	1.2%
Other operating expenses	19.3%	18.5%	18.2%	18.1%	18.0%	17.9%	17.8%	17.7%
Sales costs	1.9%	1.9%	1.8%	1.8%	1.8%	1.8%	1.8%	1.8%
Other general overhead	17.5%	16.5%	16.4%	16.3%	16.2%	16.1%	16.0%	15.9%
EBITDA								
Operating income (EBIT)	3.2%	6.9%	3.1%	4.2%	4.8%	5.3%	5.4%	6.0%
Interest income	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Interests paid	5.5%	4.0%	0.4%	0.4%	0.4%	0.3%	0.3%	0.2%
Net Non-Operating Losses (Gains)	-4.4%	-4.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Foreign Exchange Losses (Gains)	0.0%	0.0%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%
Pretax profit or loss	2.1%	7.0%	2.5%	3.6%	4.2%	4.8%	5.0%	5.6%
Income Tax Expense	0.7%	1.3%	0.5%	0.7%	0.8%	0.9%	0.9%	1.1%
Balance Sheet profit or loss	1.4%	5.7%	2.0%	2.9%	3.4%	3.9%	4.0%	4.5%

Source: Bloomberg, Team estimation

Appendix 3: Statement of Cash-Flows

Million HUF	2014F	2015F	2016F	2017F	2018F	2019F
Cash From Operating Activities						
Net Income	986.8	1,455.7	1,756.3	2,062.2	2,178.2	2,508.5
Depreciation & Amortization	2,300.0	2,200.0	2,200.0	2,200.0	2,200.0	2,200.0
Other Non-Cash Adjustments	-	-	-	-	-	-
Changes in Non-Cash Capital	55.3	929.3	1,059.8	378.5	570.7	352.9
Cash From Operations	3,231.6	2,726.3	2,896.5	3,883.7	3,807.5	4,355.5
Cash From Investing Activities						
Disposal of Fixed Assets	-	-	-	-	-	-
Capital Expenditures	2,300.0	2,200.0	2,200.0	2,200.0	2,200.0	2,200.0
Cash From Investing Activities	- 2,300.0	- 2,200.0	- 2,200.0	- 2,200.0	- 2,200.0	- 2,200.0
Cash from Financing Activities						
Dividends Paid	-	-	-	-	-	-
Change in Short-Term Borrowings	- 2,275.6	229.1	991.1	235.2	904.0	- 1,066.2
Change in Long-Term Borrowings	2,122.1	- 67.1	- 1,460.2	- 295.3	- 1,719.4	- 15.8
Cash from Financing Activities	- 153.5	162.0	- 469.0	- 60.1	- 815.4	- 1,082.0
Net Changes in Cash	778.1	688.3	227.4	1,623.6	792.1	1,073.5

Source: Team estimation

Appendix 4: Current Debt Structure of Rába

Type	Currency	Expiration	December 31, 2012	December 31, 2013
Mortgage bank loan	EUR	2014	77,685	42,273
Mortgage bank loan	EUR	2018	-	3,859,830
Mortgage bank loan	EUR	2016	1,864,256	1,425,168
Mortgage bank loan	EUR	2014	-	7,803
Mortgage bank loan	EUR	2017	1,166,874	-
Mortgage bank loan	USD	2015	927,906	-
Mortgage bank loan	USD	2013	662,790	-
Mortgage bank loan	EUR	2017	3,145,932	2,494,044
Mortgage bank loan	EUR	2013	2,020,426	-
Mortgage bank loan	EUR	2014	10,412	-
Mortgage bank loan	HUF	2014	923	-
Mortgage bank loan	EUR	2014	-	590,851
Mortgage bank loan	EUR	2014	252,428	-
Mortgage bank loan	HUF	2014	5,996	8,712
Mortgage bank loan	EUR	2013	1,165,160	-
Mortgage bank loan	EUR	2013	1,747,740	-
Mortgage bank loan	HUF	2014	12	475,056
Other	HUF	-	-	3
Financial leasing	EUR	2014	532,201	219,206
Sum of loans and debts			13,580,741	9,122,946

Source: Company data

Appendix 5: Key financial ratios

Key financial ratios	2012	2013	2014F	2015F	2016F	2017F	2018F	2019F
Liquidity Ratio								
Current Ratio (x)	0.93	1.32	1.60	1.67	1.64	1.73	1.69	1.89
Quick Ratio (x)	0.50	0.76	0.91	0.97	0.94	1.04	1.01	1.16
Cash Ratio (x)	0.01	0.02	0.09	0.14	0.14	0.24	0.27	0.35
Efficiency Ratio								
Total Asset Turnover (x)	1.21	1.43	1.38	1.33	1.31	1.27	1.25	1.23
Inventory Turnover (x)	5.03	6.63	5.88	5.56	5.26	5.26	5.00	5.00
Days in Inventory (days)	92.52	71.87	77.56	83.16	88.34	88.91	93.59	94.19
Payables Period (days)	104.67	95.50	102.20	105.85	105.85	107.68	109.50	109.50
Days Sales Outstanding (DSO)	83.46	72.48	73.00	76.65	78.48	80.30	80.30	80.30
Operating Cycle (days)	71.31	48.84	48.36	53.96	60.97	61.54	64.39	64.99
Profitability Ratio								
Gross Profit Margin (%)	21.5%	23.4%	20.0%	21.0%	21.5%	22.0%	22.0%	22.5%
EBIT Margin (%)	3.2%	6.9%	3.1%	4.2%	4.8%	5.3%	5.4%	6.0%
EBITDA Margin (%)	8.3%	11.6%	7.9%	8.6%	9.1%	9.5%	9.5%	10.0%
Net Profit Margin (%)	1.4%	5.7%	2.0%	2.9%	3.4%	3.9%	4.0%	4.5%
ROA (%)	1.7%	8.1%	2.8%	3.9%	4.5%	5.0%	5.0%	5.6%
ROE (%)	5.3%	19.1%	6.6%	8.8%	9.6%	10.1%	9.7%	10.0%
Solvency Ratio								
Debt Ratio (%)	38.9%	27.5%	24.9%	24.1%	22.0%	20.6%	17.7%	14.7%
Debt to Equity Ratio (x)	1.19	0.65	0.58	0.55	0.47	0.42	0.34	0.26
Equity Multiple (x)	0.88	1.09	1.16	1.28	1.41	1.57	1.74	1.93
Long Term Debt Ratio (%)	10.6%	18.8%	23.6%	22.1%	17.5%	15.8%	11.1%	10.7%

Source: Bloomberg, Team estimation

Appendix 6: Valuation Approach – APV Analysis

Step 1: Value the firm as if it were 100% equity financed

5-year-long forecast period (including 2014)

Million HUF	2014F	2015F	2016F	2017F	2018F	2019F
EBITDA	3,829	4,303	4,650	5,013	5,125	5,517
Tax rate	19.0%	19.0%	19.0%	19.0%	19.0%	19.0%
Depreciation and amortizati	2,300	2,200	2,200	2,200	2,200	2,200
CAPEX	2,300	2,200	2,200	2,200	2,200	2,200
Change in working capital	55	929	1,060	378	571	353
FCF	1,183	774	924	1,900	1,798	2,334
r_A	12.1%	12.1%	12.1%	12.1%	12.1%	12.1%
DCF	1,183	690	736	1,349	1,139	1,319

Terminal value calculation (million HUF)

$$TV(CF) = \frac{FCF_{2019F} \cdot (1 + g)}{r_A - g} = \frac{2,334 \cdot 1.02}{0.121 - 0.02} = 23,578$$

$$DTV(CF) = \frac{TV(CF)}{(1 + r_A)^5} = \frac{23,578}{1.121^5} = 13,320$$

Step 2: Add the value of the tax shield of debt

Million HUF	2014F	2015F	2016F	2017F	2018F	2019F
Interest paid	199	202	179	175	144	131
Tax shield (TS)	38	38	34	33	27	25
r_D	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%
DTS	38	37	33	31	25	22

Terminal value calculation (million HUF)

$$TV(TS) = \frac{TS_{2019F} \cdot (1 + g)}{r_D - g} = \frac{22 \cdot 1.02}{0.024 - 0.02} = 5,640$$

$$DTV(TS) = \frac{TV(TS)}{(1 + r_D)^5} = \frac{5,640}{1.024^5} = 5,009$$

Step 3: Target price calculation

Sum of DCF (million HUF)	6,416
DTV(CF) (million HUF)	13,320
Sum of TS (million HUF)	186
DTV(TS) (million HUF)	5,009
Company value (million HUF)	24,931
Debt value (million HUF)	7,779
Equity value (million HUF)	17,151
Shares outstanding (million)	13.5
Target price (HUF)	1,270

Appendix 7: APV Assumptions

Revenue

Estimated sales growth rate is 2.5–2.6% that was calculated using the following assumptions: (1) revenue contribution of the three business units will be stable; (2) the Axle Business Unit's market potential is determined by the development of the truck segment in Europe and in the USA; (3) the Components Business Unit follows the performance of the Hungarian and EU passenger car production; (4) sales growth rate is smaller for components suppliers than OEMs.

Cost of Revenue

We expect increasing margin because of (1) efficiency improvements; and (2) continuous devaluation of HUF.

Million HUF	2012	2013	2014F	2015F	2016F	2017F	2018F	2019F
Gross margin	21.5%	23.4%	20.0%	21.0%	21.5%	22.0%	22.0%	22.5%

Sales Costs

We expected that sales cost is 1.8% of total revenue based on historical company data.

Other General Overhead

We expected that other general overhead expenses will grow by inflation rate.

Interest Income and Expenses

We expect that Rába will receive 0.5% interest rate for cash and cash equivalents.

Weighted average interest rate of debt will remain at the current level (2.4%) due to (1) decreasing debt level; but (2) interest environment will not be favorable.

Foreign Exchange Losses (Gains)

Due to the fact that more than 70% of Rába's revenue is created in foreign currency, and we expect HUF devaluation, two effects will form foreign exchange losses: (1) account policy requires that revenues have to be calculated using official exchange rates, however, banks issue some margins, therefore exchange losses have to occur; but (2) HUF devaluation decreases this burden and makes EUR denominated accounts receivable more wealthy in HUF.

Working Capital

Million HUF	2012	2013	2014F	2015F	2016F	2017F	2018F	2019F
Accounts & Notes Receivable (% of Revenue)	22.9%	19.9%	20.0%	21.0%	21.5%	22.0%	22.0%	22.0%
Inventories (% of Revenue)	19.9%	15.1%	17.0%	18.0%	19.0%	19.0%	20.0%	20.0%
Accounts Payable (% of Cost of Revenue)	28.7%	26.2%	28.0%	29.0%	29.0%	29.5%	30.0%	30.0%

CAPEX, and Depreciation and Amortization

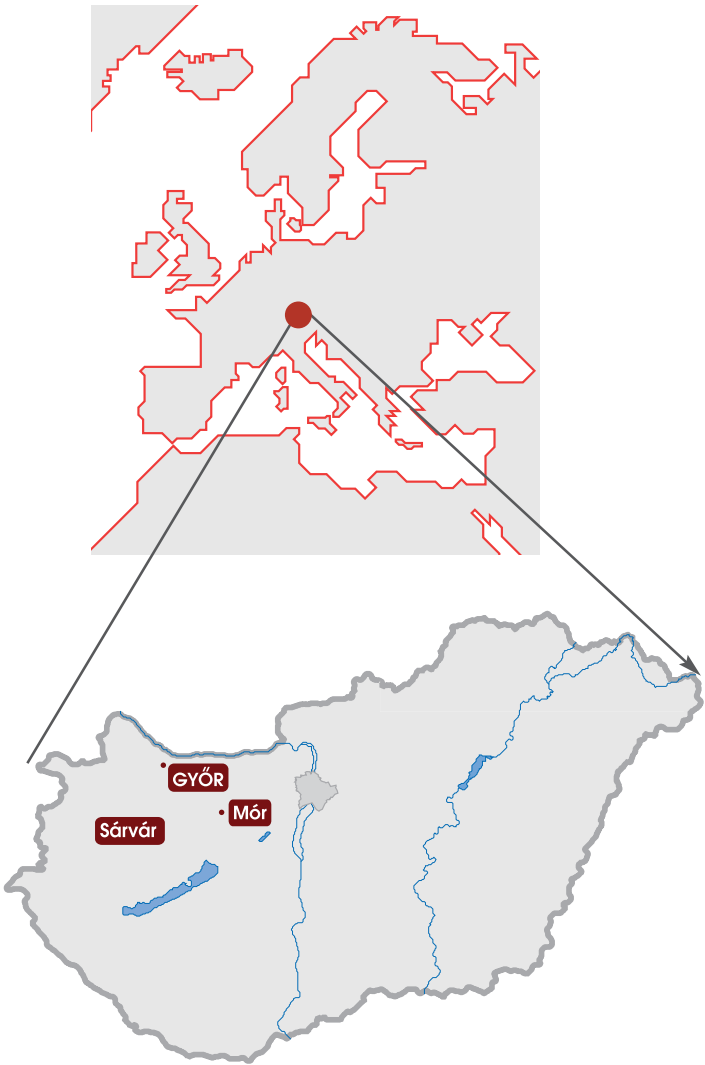
Million HUF	2012	2013	2014F	2015F	2016F	2017F	2018F	2019F
Amortization	2,156	2,230	2,300	2,200	2,200	2,200	2,200	2,200
CAPEX	2,161	2,449	2,300	2,200	2,200	2,200	2,200	2,200

All-equity Cost of Capital

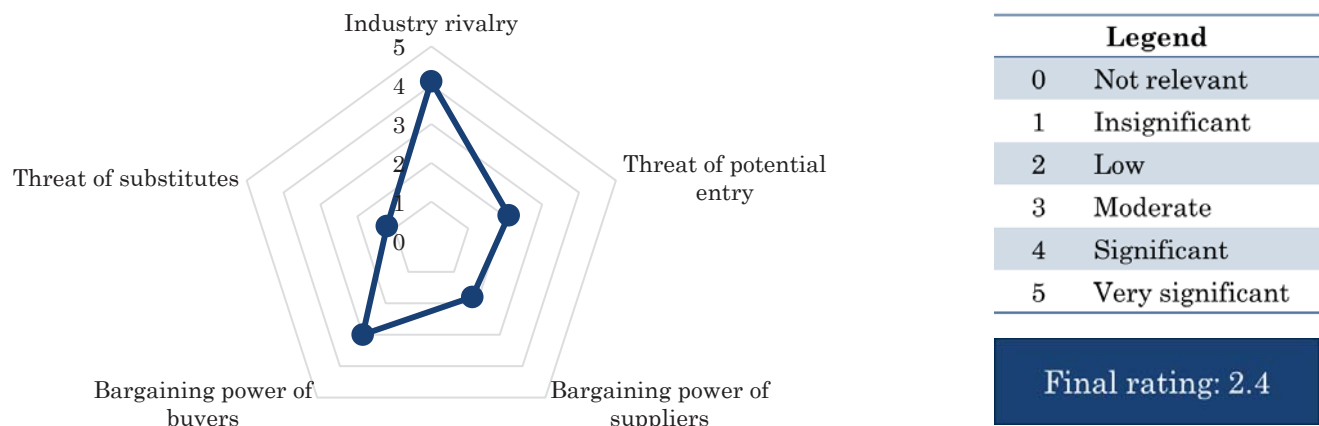
We used the CAPM model to calculate discount rate for FCF.

Designation	Value	Source
r_f	3.6%	10-year-long government bond
β_A	1.55	Damodaran estimation (Unlevered Beta for European Auto Parts industry)
Market Risk Premium	5.5%	Hungarian expert estimation
r_A	12.1%	Calculation based on CAPM model assumptions

Appendix 8: Production sites of Rába Holding



Appendix 9: Porter’s Five Forces Analysis



Industry rivalry | 4.1

- Capacity underutilization in Europe
- Lower expected growth rate in Europe
- Many players are trying to increase their market share
- Smaller market players can be superseded by large companies
- Hungarian bus market is declining
- Economies of scale

Threat of potential entry | 2.1

- Relationships with OEMs is getting more and more important
- Long-term contracts
- Intellectual property
- High capital requirements

Bargaining power of suppliers | 1.8

- Double sourcing in core elements
- There are many potential suppliers in the market

Bargaining power of buyers | 3.0

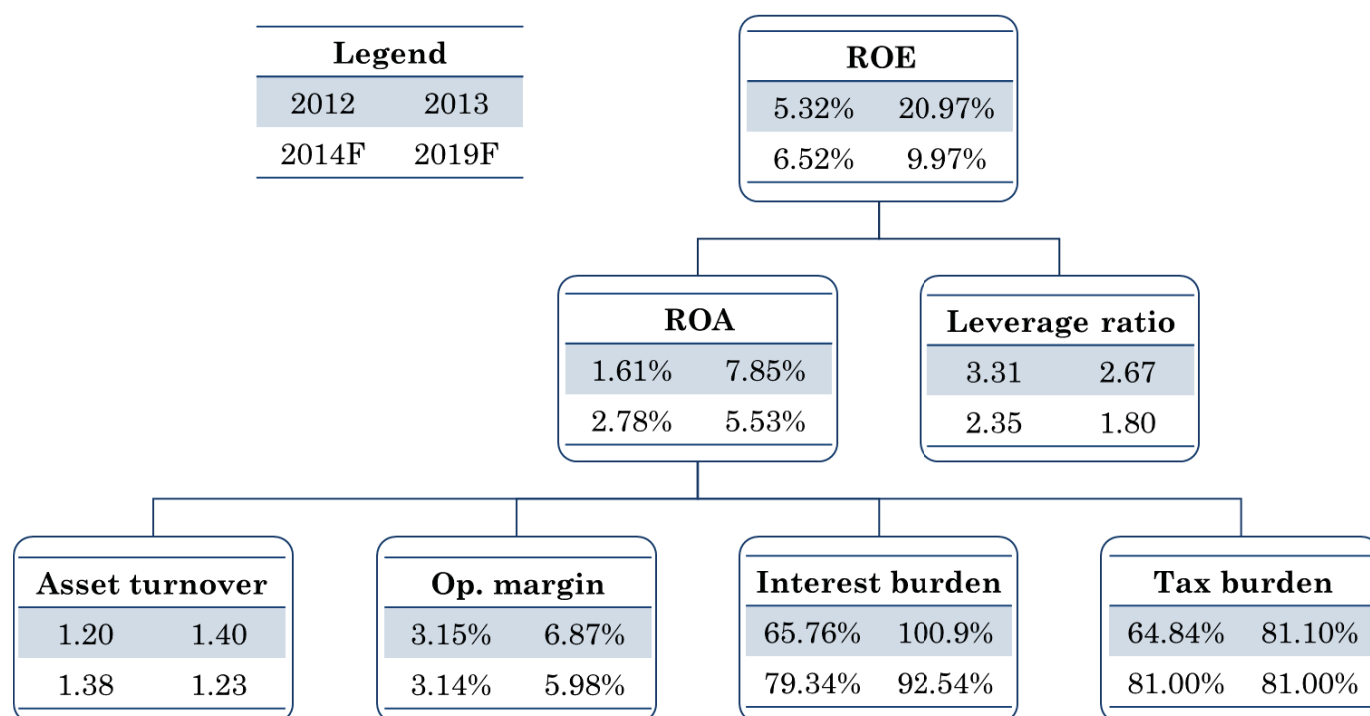
- Long-term contracts, trust
- Common R&D projects
- Many possible vendors

Threat of substitutes | 1.2

- There is no substitute for automotive parts that can satisfy similar needs
- State-of-the-art technology and IT solutions can modify the market

Source: Team estimation

Appendix 10: Detailed DuPont Analysis



Source: Bloomberg, Team estimation

Definitions:

- Leverage ratio: Assets per Equity
- Asset turnover: Revenue per Assets
- Operating margin: EBIT per Revenue
- Interest burden: Pre-tax profit per EBIT
- Tax burden: Net income per Pre-tax profit

Appendix 11: Economic Outlook

Hungary has exited from recession in the end of 2012, and there was a modest recovery in 2013. The estimated growth of GDP in 2014 is 3.2%, but reducing of this level is expected the next two years. Structural economic changes and developments were loss the recent years, but the Gross public debt tend to decreasing. A number of special taxes introduced over recent years have helped bring the budget deficit below 3% of GDP. In 2014 the inflation rate was under the target rate, but the exchange rate has been depreciated. Standard&Poors credit rating for Hungary stands at BB. Moodys rating for Hungary sovereign debt is Ba1. Fitchs credit rating for Hungary is BB+.

Economic forecast for Hungary

Forecasts for Hungary	2013	2014	2015	2016
GDP growth (% , yoy)	1,20	3,20	2,50	2
Inflation (% , yoy)	1,70	0,10	2,50	3
Unemployment (%)	10,20	8	7,80	7,80
Public budget balance (% of GDP)	-2,40	-2.9	-2.8	-2.5
Gross public debt (% of GDP)	77,30	76,90	76,40	75,20
Current account balance (% of GDP)	4,20	4,30	4,30	4,30

Source: OECD Economic Surveys: Hungary 2014

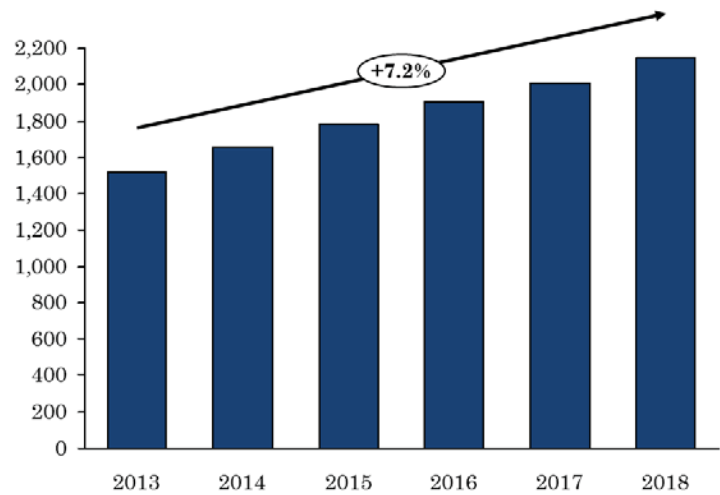
Annual Gross domestic product growth forecast

Country	2014	2015	2016	2017	2018	2019
Austria	1.5%	2.1%	2.7%	2.5%	2.3%	2.1%
Belgium	1.5%	1.7%	1.9%	2.0%	2.1%	2.1%
Czech Republic	1.2%	2.4%	4.1%	4.3%	4.2%	3.9%
Denmark	1.4%	1.8%	1.8%	1.7%	1.7%	1.7%
Estonia	1.2%	3.1%	4.4%	4.4%	4.1%	3.7%
France	0.9%	1.5%	2.7%	2.8%	2.7%	2.6%
Germany	1.9%	2.1%	1.0%	0.9%	0.9%	1.0%
Hungary	2.0%	1.6%	1.7%	1.7%	1.7%	1.8%
Italy	0.5%	1.1%	1.8%	1.9%	1.8%	1.8%
Netherlands	1.0%	1.3%	2.9%	3.1%	2.9%	2.8%
Poland	3.0%	3.4%	2.9%	2.7%	2.6%	2.5%
Portugal	1.1%	1.4%	2.3%	2.1%	1.7%	1.4%
Slovak Republic	2.0%	2.9%	3.7%	3.9%	3.7%	3.5%
Slovenia	0.3%	1.2%	2.9%	2.9%	2.7%	2.5%
Spain	1.0%	1.5%	2.4%	2.2%	1.9%	1.7%
Sweden	2.8%	3.1%	3.0%	3.0%	3.0%	3.0%
United Kingdom	3.2%	2.7%	2.6%	2.7%	2.8%	2.9%
United States	2.8%	3.5%	3.3%	3.0%	2.8%	2.6%
Euro area (15 countries)	1.2%	1.7%	2.1%	2.1%	2.0%	1.9%
OECD - Total	2.3%	2.8%	2.7%	2.6%	2.5%	2.4%
World	3.4%	3.9%	3.9%	3.8%	3.6%	3.5%

Source: OECD Outlook Long-term baseline projections, No. 95

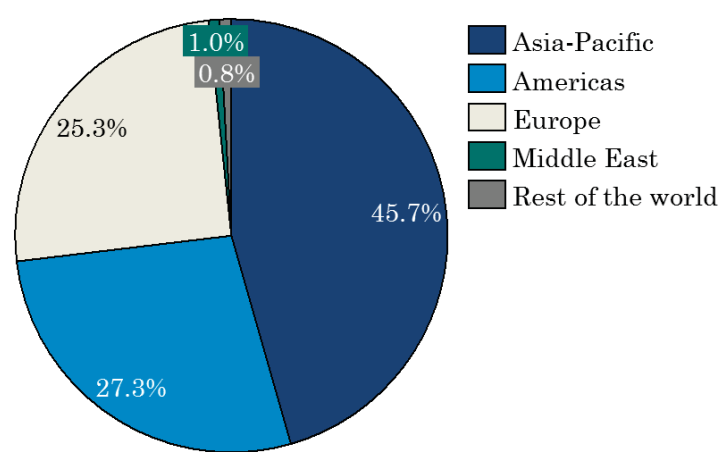
Appendix 12: Global automotive manufacturing industry outlook

Global automotive manufacturing industry value forecast (billion USD)



Source: Marketline

Global automotive manufacturing industry geographical segmentation



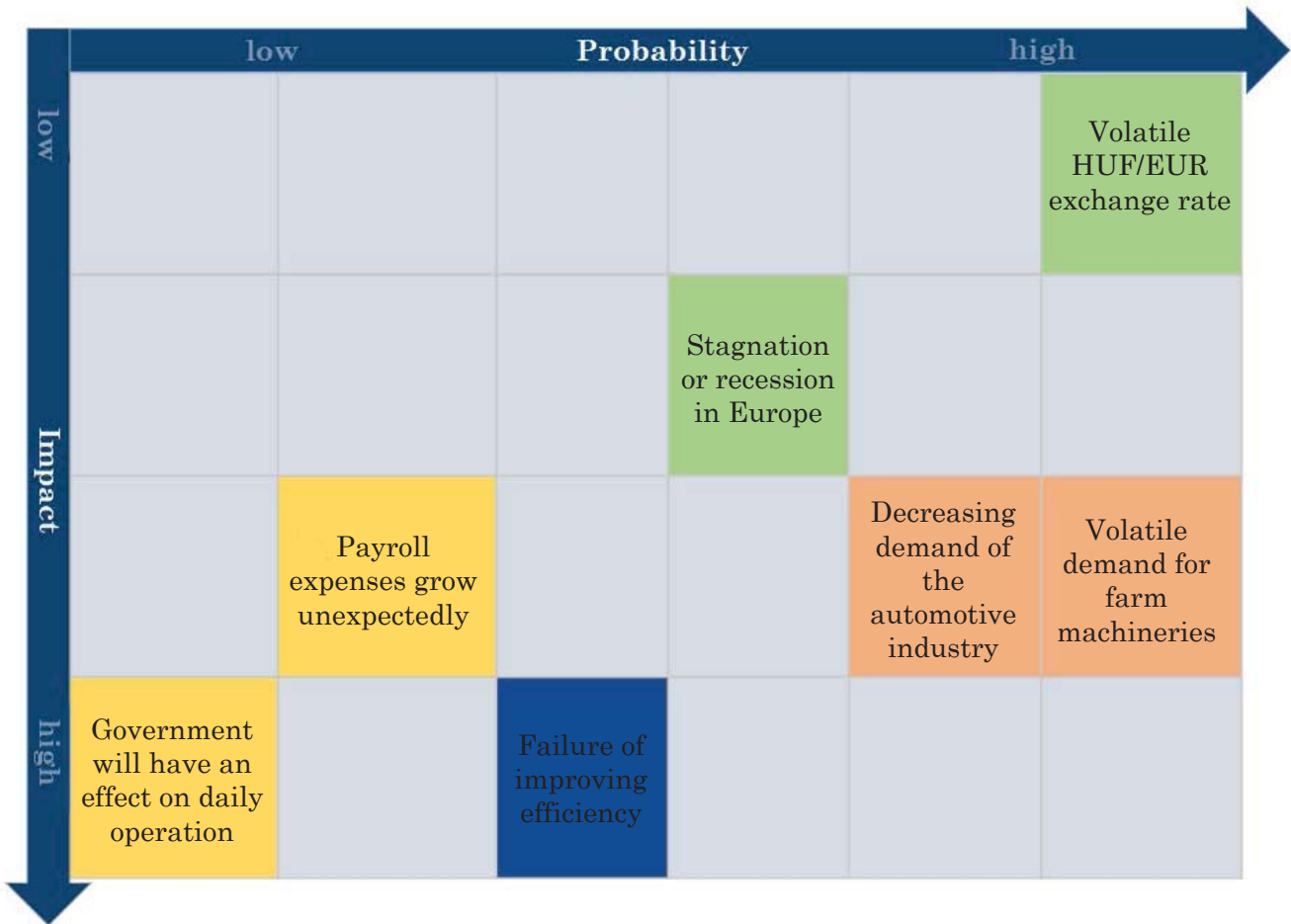
Source: Marketline

Appendix 13: Details of important announcements of Rába

Date of announcement	Partner	Worth	Details
August 14, 2014	Renault Trucks Defense		assembling fire trucks
July 23, 2014	T&J Busz Projekt Kft.		28 diesel-electric hybrid buses equipped with the most modern vehicle technology
February 11, 2014	2 european truck manufacturers	18 million EUR per year	mass production of new type axle beams from 2016
February 4, 2014	Joseph Vögele AG		producing chassis for asphalt pavers
January 20, 2014	Kirchhoff Group	more than 500 million HUF per year	supply of 600 000 pieces of pressed components for Western European passenger cars
September 26, 2013	Tüke Busz Zrt.		5 articulated busses
September 17, 2013	Volánbusz Zrt.	16 million EUR per year	delivery of 61 articulated busses in cooperation with Volvo
June 10, 2013	Renault Trucks Defense		letter of intent to jointly manufacture chassis for fire trucks
March 20, 2013	Volvo Bus Corporation	15-20 billion HUF new market opportunity	manufacturing up to 200-300 busses per year
February 12, 2013	Volvo-Group		partnership agreement to manufacture public transport vehicle for the domestic market
November 14, 2012	Claas		supplying axles to the universal prime movers of Claas
October 24, 2012	Marmon-Herrington	more than 15 million USD	deliverance of specialty front driven axles
April 5, 2012	Magyar Toyo Seat Kft. (Suzuki)	2,5 billion HUF per year	produce rear seat frames and covers and headrest covers
March 12, 2012	John Deere		axles for tractors; 5 years long term supply agreement

Source: Budapest Stock Exchange, Portfolio.hu, Company data

Appendix 14: Risk matrix



Appendix 15: Sensitivity Analysis

Percentage point change in all-equity cost of capital (r_A)	Percentage point change in gross margin 2014-2019						
	-2.0%	-1.0%	-0.5%	0.0%	0.5%	1.0%	2.0%
-3%	1,037	1,482	1,705	1,928	2,151	2,374	2,820
-2%	868	1,261	1,458	1,654	1,850	2,047	2,440
-1%	738	1,089	1,265	1,441	1,617	1,792	2,144
0%	634	952	1,111	1,270	1,430	1,589	1,907
1%	549	840	986	1,131	1,277	1,423	1,714
2%	478	747	881	1,016	1,150	1,284	1,553
3%	419	669	793	918	1,043	1,168	1,417

Source: Team estimation

Percentage point change in sales growth rate	Change in CAPEX (%)						
	-15.0%	-10.0%	-5.0%	0.0%	5.0%	10.0%	15.0%
-3%	633	549	465	381	297	213	129
-2%	914	830	746	662	578	494	409
-1%	1,211	1,126	1,042	958	874	789	705
0%	1,523	1,439	1,355	1,270	1,186	1,102	1,018
1%	1,854	1,769	1,685	1,600	1,516	1,431	1,347
2%	2,202	2,117	2,033	1,948	1,864	1,779	1,695
3%	2,569	2,485	2,400	2,315	2,231	2,146	2,061

Source: Team estimation

Appendix 16: Management Share Ownership

Name	Management role	No. of shares	Percent
István Pintér	Chairman of the Board Directors, CEO	7,082	0.053%
Béla Balog	Deputy CEO, Chief Financial Officer	3,332	0.025%
László Urbányi	Managing Director of Rába Automotive Components Manufacturing Ltd	3,332	0.025%
Ákos Farkas	Director of Strategic Purchasing and Asset Management	1,664	0.012%
Ádám Steszli	Director of Human Resources and Controlling	1,664	0.012%
János Torma	Managing Director of Rába Vehicle Co.	1,664	0.012%

Source: Company data

Appendix 17: Rába's environmental strategy

Rába is pursuing its designated strategy in consideration of the environmental awareness. Their environmental policy is based on the following basic principles:

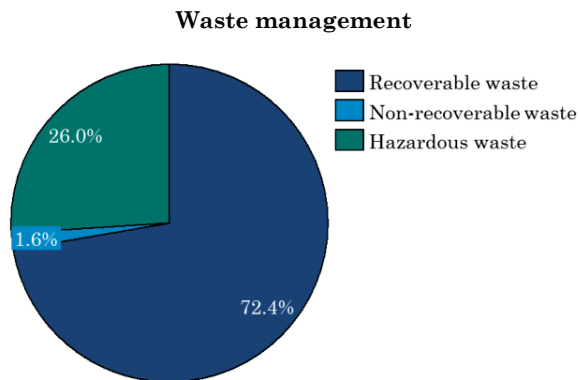
- Prevention of pollution and of emissions of hazardous substances
- Protection of the condition of water, air and soil, as well as of homogeneous living conditions
- Reduction of material consumption, of emissions of pollutants and of waste production, while meeting customer demands at a higher standard
- Continuous increase in the recycling, i.e. secondary use of wastes.

The two key goals of Rába are enforcement of the considerations of sustainable development and minimization of negative environmental impacts.

They also laid down the strategic objectives in the annual report of the company. Rába wants to reduce the material and energy requirement with using the most advanced technologies. Furthermore they are introducing low-waste technologies and processes and continuously monitoring their waste collection activities to reduce the amount and the hazardousness of waste materials and the emission risks. Cooperation with the authorities, local governments, customers and suppliers are considered as important tools and goals, e.g. the environmental audit of the suppliers is necessary to ensure that the principles above are enforced. The company expects environmental awareness of the employees since influencing the human aspects is considered as the most important tool for achieving the goals.

In order to implement the strategic objectives of the environmental policy, the company established the Environmental Management System compliant with the provisions of the standard MSZ EN ISO 14001:2005. This system underlies all activities of the Rába Holding.

Environmental developments take place every year.



Environmental investments and developments in 2013.

- Increasing the efficiency of energy utilization (Rába Group)
- Implementation of tasks related to the environmental product fee (Rába Group)
- Preparation and validation of the carbon dioxide emission report (Rába Axle Ltd)
- Introduction of environment-friendly, water soluble paints for the painting of military vehicles, whereby the emission of volatile organic compounds would decline, as well. (Rába Vehicle Ltd)
- Purchase of paper and plastic compression equipment (Rába Automotive Component Ltd and Axle Ltd)
- Purchase of drip trays and absorbent materials (Rába Axle Ltd)
- Establishment of a reservoir at the new industrial sewage farm (Rába Automotive Component Ltd)

- Filling up of production and monitoring wells used for the remediation of oil pollutions (Rába Automotive Component Ltd)
- Implementation of measurements defined in the auto-monitoring plan (waste water) (Rába Automotive Component Ltd and Rába Axle Ltd)
- Review of the operative damage prevention plan (Rába Axle Ltd)

Source: Rába Annual Report 2013.

Appendix 18: References

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