

EQUITY RESEARCH: RÁBA AUTOMOTIVE HOLDING

Hold

15 December 2017

Company name

Recommendation		HOLD
12m Target price	HUF	1380
Estimated total return	%	12,4

Key market data

Market cap	(HUF bn)	16,9
Free float	%	24,98
Shares outstanding		13 352 765

Average daily trading volume

Shareholder structure

Hungarian National Assets Managant		74,35%
Domestic institutions		7,61%
Foreign institutions		2,20%
Domestic private investors		14,78%
Foreign private investors		0,04%
Management and employees		0,13%
Treasury shares		0,90%
Free float		24,76%

Key financial data

Book value / share	HUF	1 432
EPS (4Q-rolling)	HUF	118
Dividend / share	HUF	20
Dividend yield	%	1,6

Debt to Equity	%	27,0
Net debt / Equity	%	24,9
Net debt / EBITDA	%	26,3

ROE (4Q-rolling)	%	8,3
ROA (4Q-rolling)	%	4,6
ROI		n.a

P/E		11
P/BV		0,9

Price Performance

52-w range		1112-1345
52-w performance		9,56
Relative performance vs Bux		-12,44
Relative performance vs Bumix		-113,99
Beta		0,79

Valuation

DCF		1380
Multiples		1570

Analyst

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Sources: Rába, Bloomberg

Highlights

We initiate the coverage of Rába Automotive Holding Plc (RABA HB; RABA.BU) with a HOLD recommendation with a target price of 1,380 HUF/share on a 12-month horizon, 9,9 % higher than the latest HUF 1,255 closing price on December 14, 2017, while considering future potential dividend payment Rába stocks may offer 12% total return.

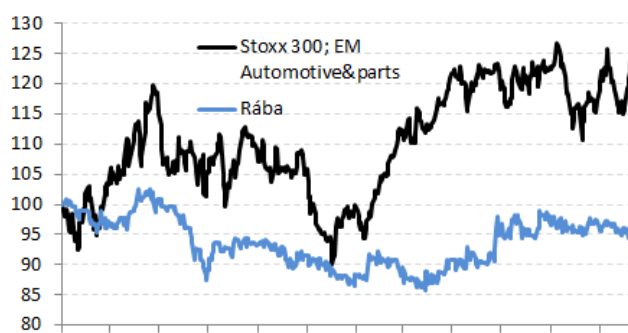
Summary and price drivers

- With improving economic conditions in the eurozone and in the CIS countries, the strongly pro-cyclical demand for Rába's products is expected to rise. Over the medium term, defence expenditure in Hungary could also rise closer to NATO's defence spending target.
- The recent investment programme will boost capacities, improve efficiency and mitigate labour shortage.
- Operating expenditures will increase due to raw material and labour costs.
- Rába's financial indicators have improved significantly in recent years, by now they are in-line with or look better, than the indicators of the Hungarian vehicle-peer group.
- Our DCF model shows a modest upward potential compared to the current market price.

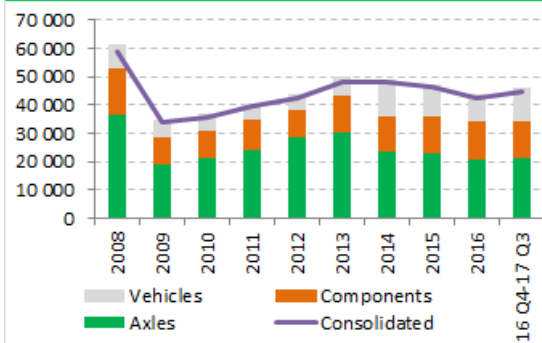
Main risks to our target price

- As a consequence of low free cash-flow, the share price is heavily dependent on the terminal value. If profit growth will diverge from the forecasted 3%, pricing could change sharply.
- Faster normalisation of yield environment could be a pressure on the share price as well.
- Labour shortage could be a drag on production

Rába vs. Stoxx 300 EM Automotives index (2015.12.31=100)

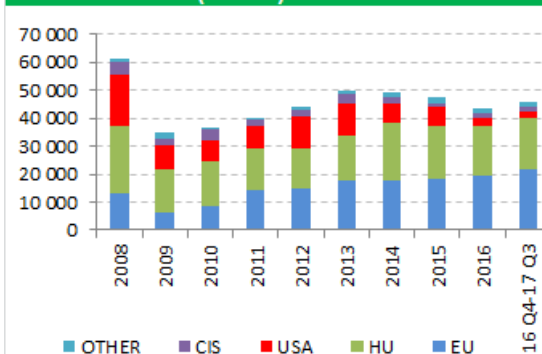


Revenue structure (HUF bn)



Half of the revenues are generated by axles, components and vehicles give roughly 25% each.

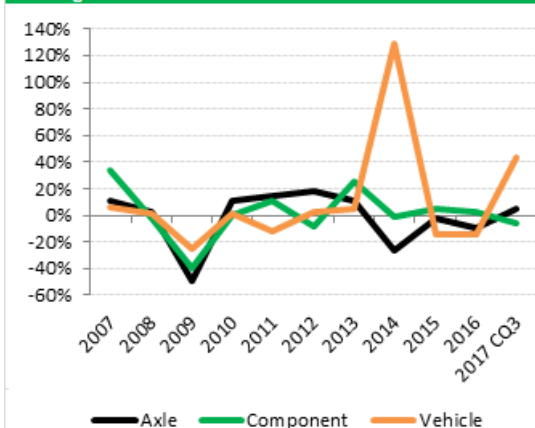
Revenue structure (HUF bn)



Europe and Hungary are the main markets. Revenues from the USA and CIS countries fell.

Sources: Rába

Sales growth in Rába's business units



Recent revenue growth has been driven by vehicles and axles

Sources: Rába

Company profile

Rába Automotive Holding Plc ("Rába") is a Tier1 and Tier2 automotive manufacturer with more than 120 years of history, located in Győr, North-Western Hungary, with plants in the Trans-Danubia region. The company's main profile is the manufacturing of axles, axle spare parts, vehicle components and vehicles of military and civilian use. Rába's main focus is the export, with sales to the USA and the EU making up the largest part of its revenue. Its buyers include high-profile machinery manufacturers like John Deere, Claas, Volvo and Scania.

Business units:

Rába's manufacturing operation is shared among its three fully-owned affiliates: the Axle Business Unit, the Components Business Unit, and the Vehicle Business Unit.

1) Axle Business Unit (ABU) or officially Rába Axle Ltd. (Rába Futómű Kft.), the flagship unit of Rába Holding, produces complete axles and axle components to medium- and heavy-duty trucks, military trucks, and specialty vehicles (tractor, construction equipment, buses).

ABU sells:

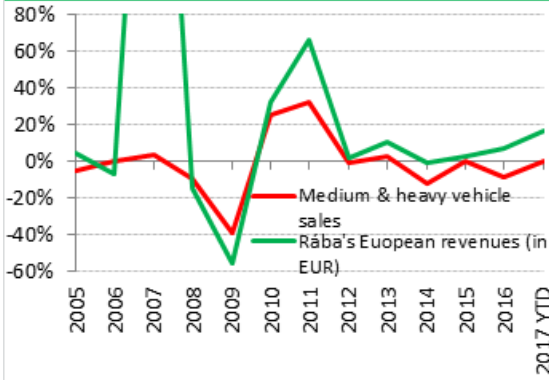
- special axles to the USA,
- machined and forged axle spare parts for trucks in European markets,
- axles for buses and commercial vehicles in Eastern Europe (mainly CIS).

Main current customers:

- John Deere, Meritor, Marmon-Herrington (USA)
- Claas, Volvo, Scania, Dana, MAN (EU)
- KAMAZ, GAZ Group (RUS)
- Rába Vehicles Ltd., BPW (HU)

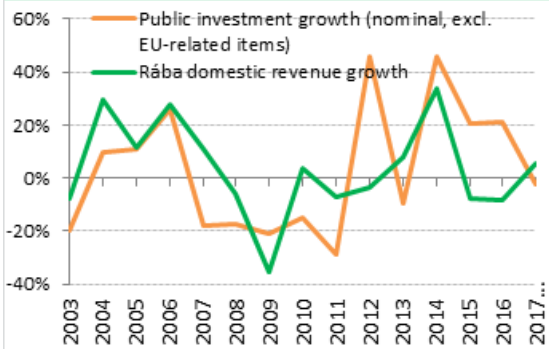
ABU delivers roughly half of Rába Holding's sales income and 55% of the Group's EBITDA. The Axle Business Unit has the biggest export share among the three subsidiaries; 84-86% of net sales are sold outside the domestic market. The US sales have a 14% share, while more than half of the unit's production was marketed in the EU. ABU had a very strong growth potential in the period between 2006 and 2013; however, sales income has not returned to pre-crisis levels yet. Since 2014 the axle business's sales has been declining, mainly in the USA, particularly

Raba's European revenue growth and vehicle registrations in Europe (Y-o-Y growth, %)



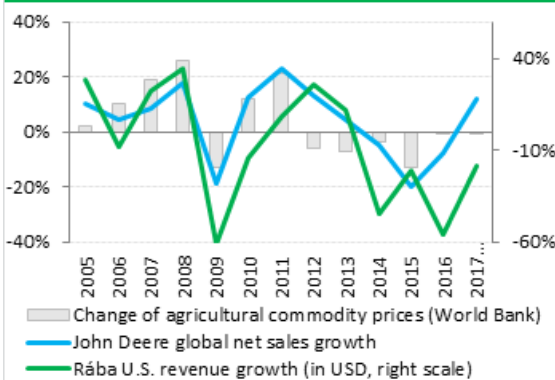
European revenues correlate with European truck sales

Hungarian revenues and public investments in Hungary (Without EU related items) (Y-o-Y; %)



Domestic revenues are driven by public expenditures

Revenue structure



The major US revenue driver is the evolution of agricultural commodity prices

Sources: Eurostat, CSO, World Bank, Raba

those to USA, primarily due to the weakness of the US agricultural machinery market. Our sales forecast expects US sales to decline further, while European markets seem to be in very good shape, so we expect growing sales there in the coming years.

2) Components Business Unit (CBU) or Rába Automobile Parts Ltd. (Rába Járműalkatrész Kft.): Tier1 and Tier2 supplier of the automotive supply chain in CEE and EU markets. The CBU produces seat frames, cut and sewn components for passenger and commercial vehicles and machined parts. It operates in Mór, Esztergom (in the vicinity of the Suzuki production base), and Sárvár. Its main customers are Magyar Suzuki, Magyar Toyo Seat, NAF GmbH, Rába Axle Ltd., Deutz, Claas, and Fehrer Hungária (VW and Suzuki parts).

The Component Business Unit delivers over 20% of Rába's total sales and one quarter of the consolidated EBITDA. Export at CBU is pronounced as well; about half of sales revenues comes from European markets while the other half is domestic sales income. Interestingly, in spite of the decades-long collaboration with its business partners, neither the export sales nor the domestic income show steady growth or balanced moves; sales revenues are volatile in yearly comparison in both segments. The CBU only sells to European markets outside Hungary; in our sales forecast we expect a very dynamic sales growth (CAGR: 7%) in the next five years.

3) Vehicle Business Unit (VBU) or Rába Vehicle Ltd. (Rába Jármű Kft.): exclusive supplier of off-road vehicles to the Hungarian Defence Forces until 2018, supplier of the fire-service under a three-year project worth of HUF 1.5bn (fire-engine chassis), buses, bus chassis, chassis for trailers. State orders have around 10% share in the sales of the vehicle unit, army orders amount to about HUF 2.7bn per year. In line with Hungary's commitment to NATO, to raise defence spending closer to the 2.0% target, from its current level of 0.8% of GDP, sales in this segment have room for slight uptick but are not expected to gain more than HUF 3bn in the short term.

As the supplier of army vehicles and fire engines and also buses, this unit has traditionally the smallest exposure to foreign markets; domestic sales had an around 70% share in the past years. In 2017, orders from new European customers considerably boosted the share of exports (over 40% in Q1-Q3, YoY). Changes in sales volume are hectic, but EBIT and EBITDA are both steadily rising.

Industry Overview

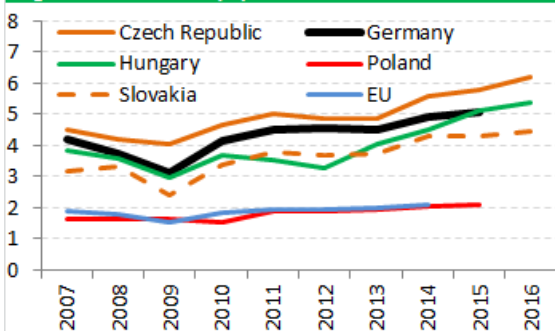
Demand for vehicles, which are durable goods with a longer amortisation cycle, is usually highly income-sensitive, so growth potential and cyclicity (and the beta) is above one. Longer amortisation period means higher beta, so demand for heavy trucks strongly correlates with the business cycle. Competition in the industry is strong, stimulated also by regulation to mitigate the negative impact on the environment and to improve safety.

In Hungary, vehicle production (manufacture of motor vehicles, trailers, semi-trailers and of other transport equipment) is an important industry – just like in the Czech Republic and Slovakia, companies are usually parts of the German automotive product chains. Roughly 90% of the production is exported. The structure of vehicle production looks like a pyramid, with a few original equipment manufacturers – like VW – on the top. Tightening regulation and increasing fixed cost of R&D put heavy pressure on original equipment manufacturers to consolidate, so their numbers are decreasing. Their suppliers are the Tier 1-2-3 level players in the automotive sector, specialized in a given car equipment.

Rába mainly caters for the manufacturers of medium and heavy commercial vehicles (trucks and buses). Demand for these vehicles shows strong cyclical fluctuations. Road freight is driven strongly by construction, which is in turn determined by investment in buildings and other structures. Demand for these fixed assets typically shows large and long cycles.

However, long-term growth prospects of the heavy vehicle industry appear limited, particularly in developed economies. Contrary to GDP, road freight volumes show no clear upward trend in the European Union. Demography can have some effect on long-term demand for buildings and structures, but economic development (in terms of per capita GDP growth) need not. First, economic growth is driven more and more by services, which create only limited demand for heavy transport equipment. Second, supply chain management and logistics underwent massive efficiency improvements (driven partly by sustained high oil prices, aided by the container technology and the IT revolution), which means that a fixed amount of vehicles can transport a higher volume of goods than before. Such efficiency increases may continue in the future (e.g. with self-driving

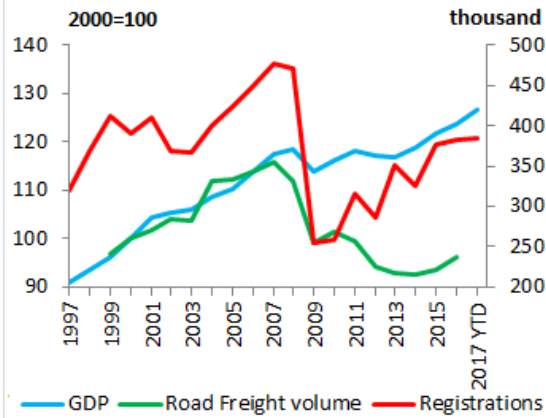
Share of manufacture of motor vehicles, trailers, semi-trailers and of other transport equipment in gross value added (%)



In Hungary, Slovakia and the Czech Republic share of vehicle production is around 5% of gross value added, like in Germany, well above the EU average

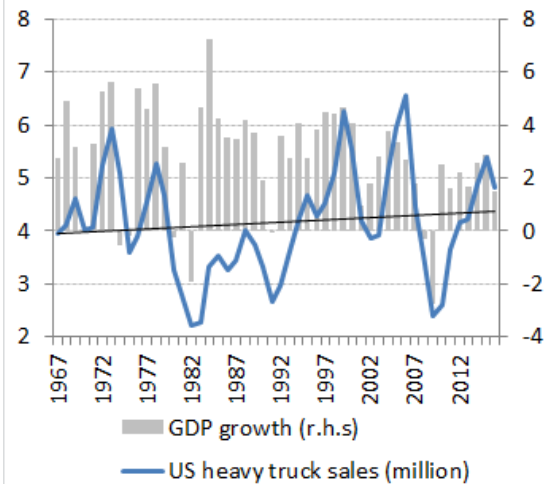
Source: Eurostat

Road freight volume, GDP (2000=100) and truck sales in Europe



While European truck sales move in line with the business cycle, the trend is weak

Heavy truck sales in the USA (millions) and GDP growth (Y-o-Y)



The situation is similar in the USA, truck sales are strongly pro-cyclical, but trend growth is moderate

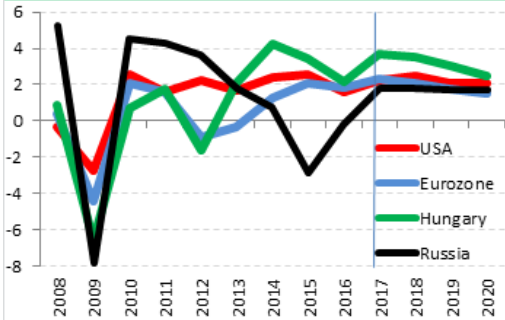
Sources: Eurostat, Federal Reserve Bank of St. Luis,

trucks).

As a result of these trends, annual sales of medium and heavy vehicles have fluctuated around a long-term average of around 380,000 in the European Union since the 1990s, according to ACEA. Longer series (since 1967) for the United States confirm that heavy truck sales are strongly cyclical but do not grow in the long term.

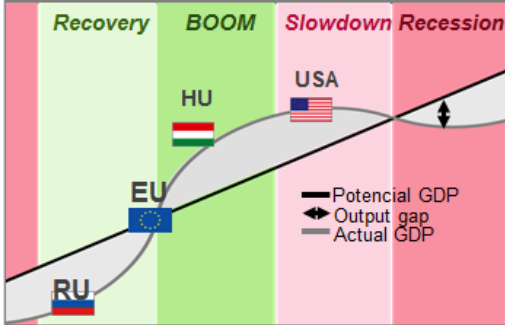
These trends suggest that the overall economic environment will be supportive of Rába's revenue growth as long as the European construction sector recovers. However, the long-term growth potential based on macroeconomic factors alone is limited. Instead, long-term revenue growth may come from entry into new markets as well as moving up the value chain.

Expectations on GDP growth of Raba's main markets (%)



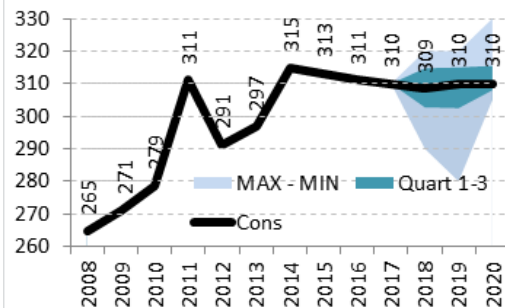
GDP growth in the USA, the EZ and Russia could reach 2% in the 2018-2020 period.

The business cycle position of Raba's main markets (OTP assessment)



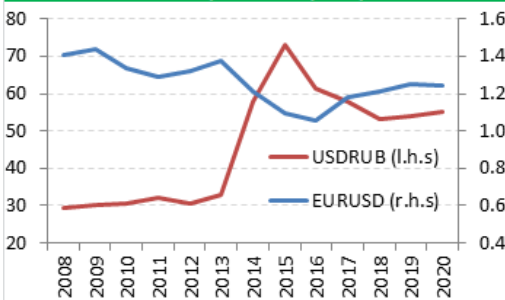
The cyclical position of markets are different. The USA may slow down, Hungary & the EZ are enjoying the boom phase, while Russia has just emerged from

EURHUF expectations (EoP*)



Analysts expect the EURHUF to remain flat as the NBH could neutralise appreciation pressure.

EURUSD & USDRUB expectations (EoP*)



Analysts expect both the EUR and the RUB to appreciate further against the USD.

Sources: Eurostat, NBH, Bloomberg, OTP Bank

* end of period

Macroeconomic & interest rate environment

The demand for Raba's products is strongly pro-cyclical, and right now the growth outlook of the main export markets looks promising. Decent growth is forecast for the EU, USA and Hungary as well, while the recovery in Russia could go on after the country emerged from recession in 2017.

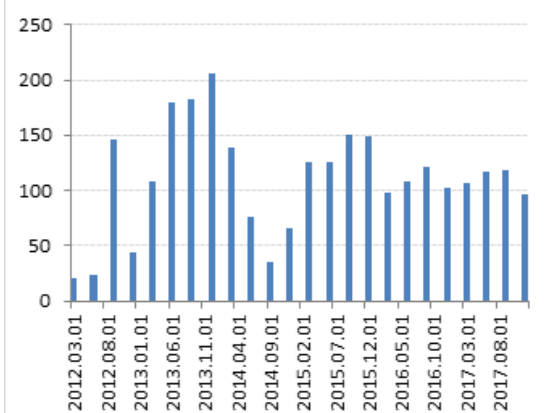
Europe's GDP could reach 2.2% this year, outperforming expectations of only 1.4% at the beginning of the year. Not only did growth accelerate, but it also became synchronized among countries, and broad-based, as both exports and domestic demand are strong. The improvement is driven by the labour market: employment rose to all-time highs, while unemployment fell below 9%. Accordingly, household and business confidence, consumer spending, investment activity, loan demand and building permits all revived. Looking ahead, the market expects growth to moderate to 2% in 2018 and to 1.5% until 2020. However, risks are on the upside as economic policies could remain supportive, interest rates will be kept low and there is no need for fiscal tightening.

The USA's growth is also expected to fluctuate between 2% and 2.4% in the coming years. However, the risk profile is less positive than in the eurozone, as after seven years of continuous growth, the probability of a slowdown in the USA should not be mitigated, even taking into account the positive effects of the tax reform, likely to be passed by Congress and the Senate in a short time. However overseas demand for Rába products is also influenced by the prices of agricultural commodities, which may have hit bottom and are expected to pick up from the current low levels, according to the forecasts of the World Bank.

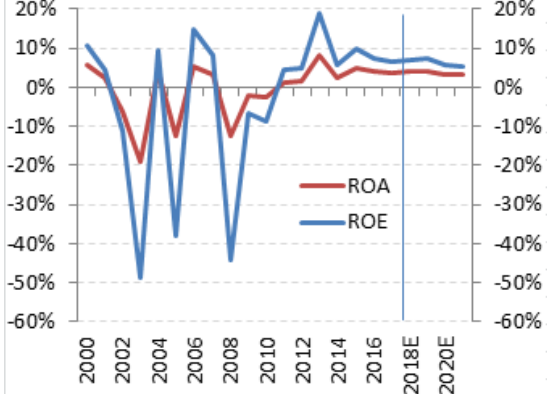
In Hungary, after a temporary slowdown to 2% in 2016 caused by the short-lived fall in EU-funds-related public investments, the economy gained traction again in 2017. GDP growth accelerated back to the 3-4% range (GDP grew by 3.9% YoY in Q3). The business cycle has reached maturity stage and growth is broad-based, therefore exports, consumption, public and private investments posted decent growth rates. GDP growth could reach 3.8% in 2017 as a whole, while the consensus expects growth to moderate to 3.4% in 2018, 2.8% in 2019, and to 2% until 2022 (OTP Research forecasts 3.7% for 2018, 2.6% for 2019, and then a slowdown to 2% as the growth contribution of real estate and EU-fund-related investments is expected to moderate, with upward risks.

The business cycle of Russia lags behind Europe, as Russia was severely hit by the fall in commodity prices that started in 2014, which pushed the economy into recession in 2015 and 2016. After a serious rebalancing, the recovery started in the second half of 2016. In 2017 as a whole GDP could grow by around 1.7%. In the coming years growth could fluctuate in the 1.6-2% range, as tight fiscal policy and hawkish interest rate policy is expected to remain a drag on the economy. In our view, exchange rate is an important driver of Rába’s sales to Russia, where the market expects some further depreciation in the medium term.

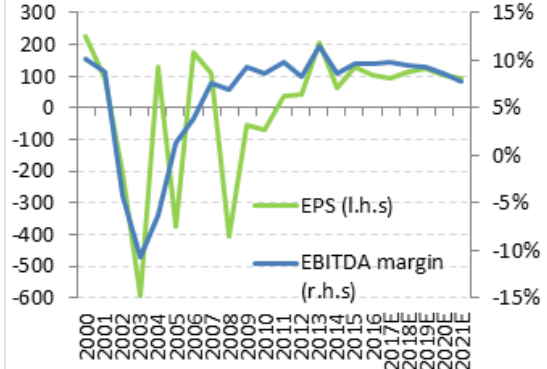
4Q-rolling EPS (HUF)



ROE, ROA, fact and forecasts (%)



EPS (l.h.s) and EBITDA margin (r.h.s, %)



Sources: Rába

FINANCIAL ANALYSIS

Promising sales outlook

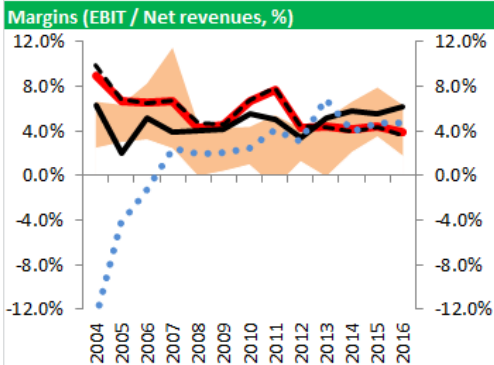
The total consolidated sales income of Rába declined by 8% in 2016 as the market conditions weakened in some of Rába’s main export markets, and domestic sales income also shrank. However, in a longer term we expect Rába’s sales to recover as demand strengthens due to improving economic conditions. CAGR for the period 2018-2022 is expected to reach about 4% compared to the 3% average annual growth after the crisis. The main contributor to the forecasted sales growth is the CIS market (CAGR: 11%), while European markets (EU and other Europe) also did its bit. We forecast EU sales to grow by an average 7%, while our model estimates an annual average growth of 9% in other, residual markets of Rába.

Margins

Permanently high steel prices and labour costs put profitability under pressure. Rába’s historical margin level ranges between 19% and 23% of net sales in the past ten years and we do not expect significant changes in the explicit forecast period. However, rising steel prices weigh on profitability at the production level, and only partly are offset by declining energy prices. EBITDA margin fluctuates in a wider range; it averaged about 14% in the past five years. Labour shortage and labour cost put a downside risk on corporate profitability, like in almost every sector of the Hungarian economy, and it especially applies to the manufacturing industry and the region where Rába is located.

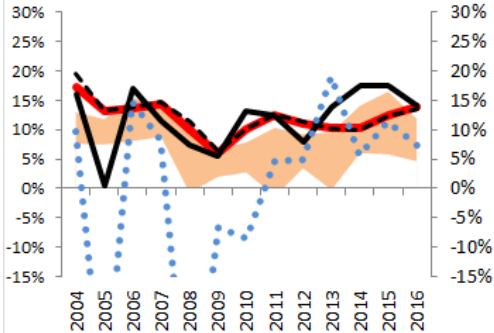
Relatively high taxes (corporate tax + industry tax) still weigh on the company’s profitability in spite of the lower corporate tax rate effective from January 1, 2017. Rába’s effective tax rate is

Road vehicle production in Hungary vs. Raba



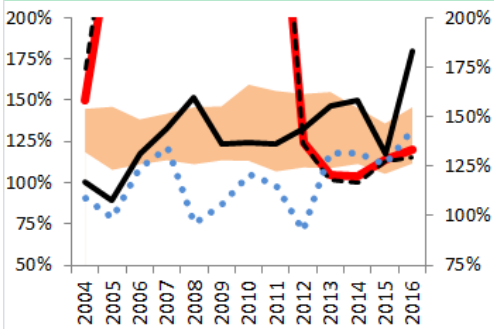
The margin of Raba has been in line with the industrial average since 2007

ROE (Profit after tax / Equity; %)



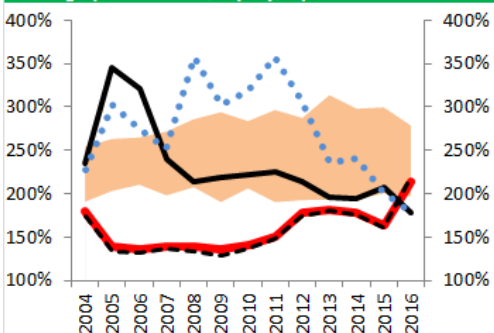
The margin of Raba has been in line with the industrial average since 2007

Liquidity ratio



After an extended period of low liquidity, the current level is OK

Leverage (Total assets / Equity; %)



Leverage has been high, but indebtedness fell to levels, which could be labelled as low in industrial comparison

Sources: GKI, National Tax and Customs Administration of Hungary, RÁBA

considerably higher than the official rate, and the mid-year data indicate that nothing has changed in this respect.

Financial structure

Being an automotive manufacturer, Rába has very cyclical operation. When the global financial crisis started in 2008, Rába was in a very good shape in terms of profitability and financial soundness. But all of a sudden, the crisis almost halved Rába's export sales, its operation turned into huge losses and leverage increased above the healthy level at consolidated level. The company, just like the whole industry in general, recovered soon, although sales have never returned to pre-crisis levels. In the post-crisis years Rába's leverage significantly improved: it is below the sector's and the Hungarian economy's average, profitability returned and remained stable, though it is below the industry average. After scaling down the company's consolidated debt in the past few years, Rába announced this year a strategic investment programme worth of HUF 12.4bn. The investment program covers the high-value development and capacity expansion in the Axle Business Unit at first, and the two other units as well. Rába applied to the Hungarian Large Enterprise Investment Support Program announced by the government, in order to get help to finance the new capital expenditures. The financial support obtained varies by business units and establishments, and is between 25% and 35%, amounting to HUF 3.2 billion at group level. As a result, we assume that the company's now conservative debt structure may relax in the medium term.

Cash Flow

Looking forward, the capex program announced this year results in higher negative investment cash flow in the 2017-2019 period. Operating cash flow in 2017 is expected to increase but at a slower pace than before, due the slower gain of current assets than that of short term non-debt liabilities. Financial cash flow is expected to contribute to the positive financial cash flow through the higher leverage. We expect a net positive change in the equity, with profit reserves growing bigger. Our forecast does not calculate with dividend payment in the coming years, even though the stable, profitable operations of Rába and the composition of the equity allow it.

In the main indicators – margins, profitability, liquidity and leverage – the Hungarian vehicle industry outperforms other industries. After the hard years, Rába improved a lot in these indicators and by now is in line with the Hungarian vehicle

industry as a whole.

VALUATION

We evaluate Rába by applying two techniques: Discounted Cash Flow and Multiple Analysis. Although Rába itself is a holding company, and its operation is outsourced to three companies as business units, all of them are so closely linked to the holding company's management and to each other, that we evaluate them as one. We do not think Rába's three business units have company-specific issues that would remain undiscovered under this kind of approach.

DCF

Our DCF values Rába at 1,306 HUF/share, or HUF 17,6bn, in respect of total corporate value by end-2018. Cash flow statement shows negative FCFF in 2015 and 2016 according to the available data, and as investment intensifies the same happens in the first half of the forecast period, in line with the company capex program. As a result, the low volume of FCFF weighs on Rába's equity value, while terminal value contributes more.

For the estimation of WACC, we used the current ten-year government bond yield as the risk free rate. The reason is that in the current interest rate environment the five-year bond rate seems unrealistically low. Equity premium was estimated at 5.5% using the average of the historical and the forward-looking estimations. Finally, we used a 3% add-on to account for illiquidity and small-stock premium. Beta was estimated at 1.65x. Using the CAPM model, it gives 11% as the required rate of return on equity. Interest rate on debt was forecasted at 1.6%, and the debt to equity ratio is 15%.

Multiples

Rába's peers are the Eastern European automotive and automotive parts companies. Rába compares itself as a benchmark to the Stoxx 300 Automobiles & Parts Index.

According to the available data and the calculations Rába seems undervalued compared to most of the index components. To value Rába on the basis of P/E relative to its peers, Rába's market value is HUF 1570 per share, 25% higher than Rába Latest market price.

Company name	Market cap (bn HUF)	EV/EBITDA	P/E	P/B
Rába	17	5,1	11,0	0,9
Ford Otosan	1 460	10,2	14,4	5,8
Tofas Türk Otomobil Fabrikasi	1 130	9,1	11,8	5,0
Inter Cars	314	12,0	13,8	2,7
Yazicilar Holding	243	15,8	-	0,9
EGE Endüstri	67	7,9	7,7	3,2
Tümosan Motor	53,5	50,8	18,9	3,2
Average	545	19,1	13,3	3,5
Median	-	12,0	13,6	3,2

Rába	EV/EBITDA	P/E	P/B
Ford Otosan	0,50x	0,76x	0,16x
Tofas Türk Otomobil Fabrikası	0,56x	0,93x	0,18x
Inter Cars	0,43x	0,79x	0,33x
Yazıcılar Holding	0,32x	-	1,0x
EGE Endüstri	0,64x	1,43x	0,28x
Tümosan Motor	0,10x	0,58x	0,29x
Average	0,27x	0,82x	0,26x
Median	0,43x	0,81x	0,28x

Risks to the target price

FX risk: As export sales have a dominant share in Rába's sales performance, the company is exposed to exchange rate fluctuations. About 60% of the total sales revenue is FX-dominated, which is estimated to grow from 62% in 2016 to 67% in 2022.

Raw material & energy prices: Although raw material (steel) prices did not increase further in Q3, prices stabilized at relative high levels.

Labour supply: The present labour market developments, particularly the prevailing labour shortage may arrive at a point when it may harm the companies' growth potential, and result in higher labour costs, or extra capex need to substitute labour force with robotisation, or may lead to chronic capacity shortage. Rába is located in Western Hungary, where unemployment practically vanished, and the local labour market is supply-driven.

Ownership: Apparently, the state-owned MNV's 75% ownership in Rába made no palpable changes to the company's operation or strategy. A significant part of MNV's asset portfolio consists of companies linked to public services – from this point of view Rába, an industrial manufacturer that operates under market conditions, does not seem to fit the owner's portfolio. MNV has not published a comprehensive strategy or a clear view on its goals with Rába except the declaration at the time of the buyout on the strengthening of the state's presence in strategic sectors like the automotive industry. A further risk is that directives centrally declared on the operation of state-owned companies make no difference between companies, and do not take into consideration the sector characteristics. Although we consider the dominant state ownership a real risk, this research does not factor it in.

CONSOLIDATED INCOME STATEMENT		HUFm				
	2014	2015	2016	2017E	2018E	2019E
Domestic sales	19 526	17 838	16 216	16 678	2 180	1 899
Export sales	28 390	28 315	26 413	26 971	43 565	46 545
Total sales revenue	47 916	46 154	42 629	43 649	45 744	48 444
Direct cost of sales	-38 725	-36 317	-33 200	-34 046	-36 596	-38 271
Gross profit	9 191	9 837	9 429	9 603	9 149	10 173
Indirect costs of sales	-7 299	-7 640	-7 429	-7 682	-7 319	-8 139
EBIT	1 891	2 196	2 000	1 921	1 830	2 035
EBITDA	4 122	4 463	4 122	4 281	4 349	4 503
Net financial profit/loss	-584	-104	-11	-140	183	203
Profit before tax	1 308	2 093	1 989	1 781	2 013	2 238
Tax	-456	-410	-612	-489	-503	-560
After-tax profit	852	1 682	1 378	1 291	1 510	1 679
Dividend	0	0	269	404	579	674
EPS	65	127	102	96	112	125
DPS			20	30	40	50

Balance Sheet	2014	2015	2016	2017E	2018E	2019E
Property, plant, equipment	14 977	14 832	14 410	15 355	16 363	18 581
Intangible assets	1 071	789	500	384	433	404
Non-current assets	17 276	16 723	15 799	16 535	17 471	19 614
Inventories	6 629	6 211	5 728	7 948	7 356	8 831
Receivables	11 304	8 375	10 075	8 418	9 149	8 851
Cash and cash equivalents	1 025	3 199	1 900	1 807	1 601	2 422
Current Assets	18 976	17 807	17 703	18 209	18 106	20 105
TOTAL ASSETS	36 252	34 530	33 502	34 745	35 577	39 718

CONSOLIDATED CASH FLOW		HUFm				
	2014	2015	2016	2017E	2018E	2019E
EBITDA	4 122	4 463	4 122	4 281	4 349	4 503
Cash flow from operation	3778	6641	3244	1 925	3 084	2 899
Cash flow from investment	-3 261	-1 784	-1 196	-3 097	-3 455	-4 611
FCFF	517	4 858	2 048	-1 172	-371	-1 712
FCFE	1 124	1 930	-1 549	-77	31	1 463

Rába's valuation (HUFm)	Base Year)						FCFF in the explicit period
	2018	2019	2020	2021	2022		
FCFF	-77	31	1 463	-834	1 044	1 171	
Discount factor	0,94	0,91	0,92	0,91	0,91	0,90	
DCF	-1 099	-339	-1 569	-972	2 636	1 849	1 606
Terminal value (HUFm)							26 965
Net present value (HUFm)							17 740
Net debt							981
Equity value - Dec 31 2017							18 421
Number of shares							13 352 765
Expected return on equity							11,8%
12M Target price							1 380
Current price							1 255
Upside/Downside							9,9%
TR Upside/Downside							14%

Sensitivity Analysis

We examined the fair value's sensitivity to different factors.

To the change of expected growth rate after the explicit period and the beta, fair value varies as follows. The analysis signals greater sensitivity to the expected profit growth than the changes of beta.

We also examined model sensitivity to the interest rate changes and the future profit growth after the explicit period. In an increasing rate environment a 25bp rate hike cuts Rába's value by HUF 46 per share when other parameters remain equal.

		Profit growth after the explicit period								
		1,0%	1,5%	2,0%	2,5%	3,0%	4,0%	5,0%	6,0%	7,0%
Beta factor	-0,20x	1 201	1 271	1 349	1 439	1 541	1 797	2 158	2 702	3 621
	-0,15x	1 165	1 231	1 305	1 389	1 485	1 723	2 054	2 545	3 350
	-0,10x	1 131	1 194	1 264	1 343	1 432	1 654	1 958	2 403	3 115
	-0,05x	1 099	1 158	1 224	1 298	1 383	1 589	1 871	2 275	2 908
	0,00x	1 068	1 124	1 187	1 257	1 336	1 529	1 789	2 159	2 724
	0,05x	1 039	1 092	1 151	1 217	1 292	1 473	1 714	2 052	2 561
	0,10x	1 010	1 061	1 117	1 180	1 250	1 420	1 644	1 955	2 414
	0,15x	984	1 032	1 085	1 144	1 210	1 370	1 579	1 866	2 282
	0,20x	958	1 004	1 054	1 110	1 173	1 323	1 518	1 783	2 162

		Net change in interest rates								
		-0,5%	-0,25%	0,0%	0,25%	0,5%	0,75%	1,0%	1,50%	2,0%
Profit growth after the explicit period	-0,01x	942	917	895	873	851	811	811	774	740
	0,00x	1 029	1 002	974	949	923	878	878	835	795
	0,01x	1 136	1 103	1 070	1 040	1 011	956	956	907	861
	0,02x	1 269	1 227	1 188	1 152	1 116	1 083	1 052	993	939
	0,03x	1 436	1 385	1 336	1 290	1 247	1 207	1 168	1 097	1 033
	0,04x	1 656	1 589	1 527	1 468	1 414	1 363	1 315	1 227	1 148
	0,05x	1 957	1 866	1 783	1 705	1 634	1 506	1 506	1 393	1 295
	0,06x	2 396	2 264	2 145	2 04	1 938	1 762	1 762	1 614	1 485

History

Rába Járműipari Holding (Rába Automotive Holding Plc) is one of the first modern manufacturing companies of the Hungarian industrial heritage. It was established in 1896, when the spill-over of the mid-19th century industrial revolution in Western Europe reached Hungary.

By the end of the 19th century the importance of agriculture declined, while demand for transport and machinery production emerged. That was the idea behind the establishment of Rába's predecessor, the Hungarian Railway Carriage and Machine Works Plc. In terms of the level of mechanisation, the Carriage Works was a leading edge of the Hungarian industrial production at that time and also remained in the consecutive decades.

By 1898 the company manufactured 8-10 wagons a day, the number of employees expanded to 1,200, from the initial 200. The company also successfully entered the international markets by delivering urban tram cars, passenger railway carriages to Western Europe, Africa and India – even the trainsets of the London underground were manufactured in Győr. At the time of motorisation, the company did not lag behind in the development automobiles, powered by steam engine first, and soon by combustion. The company registered officially under the name “Rába” in 1913 manufactured both passenger cars and high-efficiency trucks. This latter was first made to the army and later adjusted to civilian needs.

Well after WWI, the management set new directions. Ending the production of passenger vehicles, the construction of quick trucks and buses, engines and agricultural machinery got into the focus. Licence agreements with prestigious international manufacturers of the time, like Praga, Austro-Fiat and MAN supported the continuous product development. The years prior to WWII brought the revival of vehicle manufacturing, mainly to fulfil military orders.

Following WWII, car manufacturing discontinued. Rába, now as a state-owned company, gained a prominent role in the restoration of transport in Hungary (construction of bridge and iron structures), as well as in the redemption. From the 1960s vehicle production returned to the production portfolio, both for commercial transport and military use. Due to the fast and ongoing expansion of the production capacities by 1980, Rába became one of the biggest manufacturing companies in Hungary with nearly 20,000 employees and seven production plants nationwide. Axles represented 40% of the production; engine manufacturing had a 30% stake, while truck and power machinery, along with agricultural machinery made up 7.5% each.

During the Communist era, Rába was an important supplier of the Soviet Union, the COMECON, Yugoslavia and the Arab world. After the political and economic changes starting in 1989 in Eastern Europe, Rába lost a significant part of its export markets. It was the time of redesign again. As Rába had a potential in the market of axles and axle parts, the company set the strategic goal to maintain and improve the competitiveness of this division even at the expense of other units.

In 1992 Rába became a joint stock company. As a result of the privatisation process, Rába's shares were listed on the Budapest Stock Exchange (BSE) on December 17, 1997. In 1999 the company outsourced a substantial part of its activity and continued its operation as a holding company. In 2001 the engine division was divested and bus manufacturing was also discontinued.

The global financial crisis took its toll on Rába, just like on other automotive manufacturers. As a Tier1/Tier2 supplier, Rába pulled through the crisis in better shape than other suppliers at the other end of the purchasing chain.

In 2011 the state-owned Hungarian National Asset Management Inc. (MNV) made a public offering for the outstanding Rába shares at 815 HUF/share or 30% premium over the then market price. MNV became a 74.35% owner of Rába, while the remaining part is practically free float.

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