“READING BETWEEN THE LINES OF CORPORATE FINANCIAL REPORTS”: ANALYZING FINANCIAL STATEMENT FOOTNOTES (*CASE STUDY OF VOLKSWAGEN GROUP*)

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VOLKSWAGEN GROUP – BASIC FINANCIAL STATEMENT DATA FOR 2007 AND 2008:

	2007	2008
Sales revenue	108 897	113 808
Operating profit	6 151	6 333
Net earnings*	4 120	4 753
Total assets	145 357	167 919
Total equity	31 938	37 388

	2007	2008
Sales growth y/y	-	4,5%
Operating margin (operating profit / sales revenue)	5,6%	5,6%
Net margin (net earnings / sales revenue)	3,8%	4,2%
Return on equity (net earnings / total equity)	12,9%	12,7%
Total assets Turnover (sales revenue / total assets)	74,9%	67,8%
Total indebtedness (total assets less total equity / total assets)	78,0%	77,7%

Profit attributable to shareholders of Volkswagen AG

RED FLAG NO 1:
CAPITALIZED DEVELOPMENT EXPENDITURES

RED FLAG NO 1 – CAPITALIZED DEVELOPMENT EXPENDITURES:

In the bottom of the page 200 we can read that:

„In accordance with IAS 38, research costs are recognized as expenses when incurred.

Development costs for future series products and other internally generated intangible assets are capitalized at cost, provided manufacture of the products is likely to bring the Volkswagen Group an economic benefit. If the criteria for recognition as assets are not met, the expenses are recognized in the income statement in the year in which they are incurred.

Capitalized development costs include all direct and indirect costs that are directly attributable to the development process. Borrowing costs are not capitalized. The costs are amortized using the straight-line method from the start of production over the expected life cycle of the models or powertrains developed – generally between five and ten years."

RED FLAG NO 1 – CAPITALIZED DEVELOPMENT EXPENDITURES:

In the bottom of the page 223 we can read that:

„Of the total research and development costs incurred in 2008, €2,216 million (previous year: €1,446 million) met the criteria for capitalization under IFRSs."

And in the upper part of the following page (224) we can find the information about the R&D expenses:

	2008	2007
Research and non-capitalized development costs	3 710	3 477
Amortization of development costs	1 392	1 843
Research and development costs recognized in the income statement	5 102	5 320

RED FLAG NO 1 – CAPITALIZED DEVELOPMENT EXPENDITURES:

On the basis of the above information we can adjust the reported operating profit in the following way:

	2008	2007
Reported operating profit	6 333	6 151
Plus amortization of previously capitalized development expenditures	*1 391*	*1 843*
Minus currently capitalized development expenditures	*-2 216*	*-1 446*
Adjusted operating profit	5 508	6 548
Adjusted profit vs. Reported profit	-13,0%	6,5%

RED FLAG NO 1 – CAPITALIZED DEVELOPMENT EXPENDITURES:

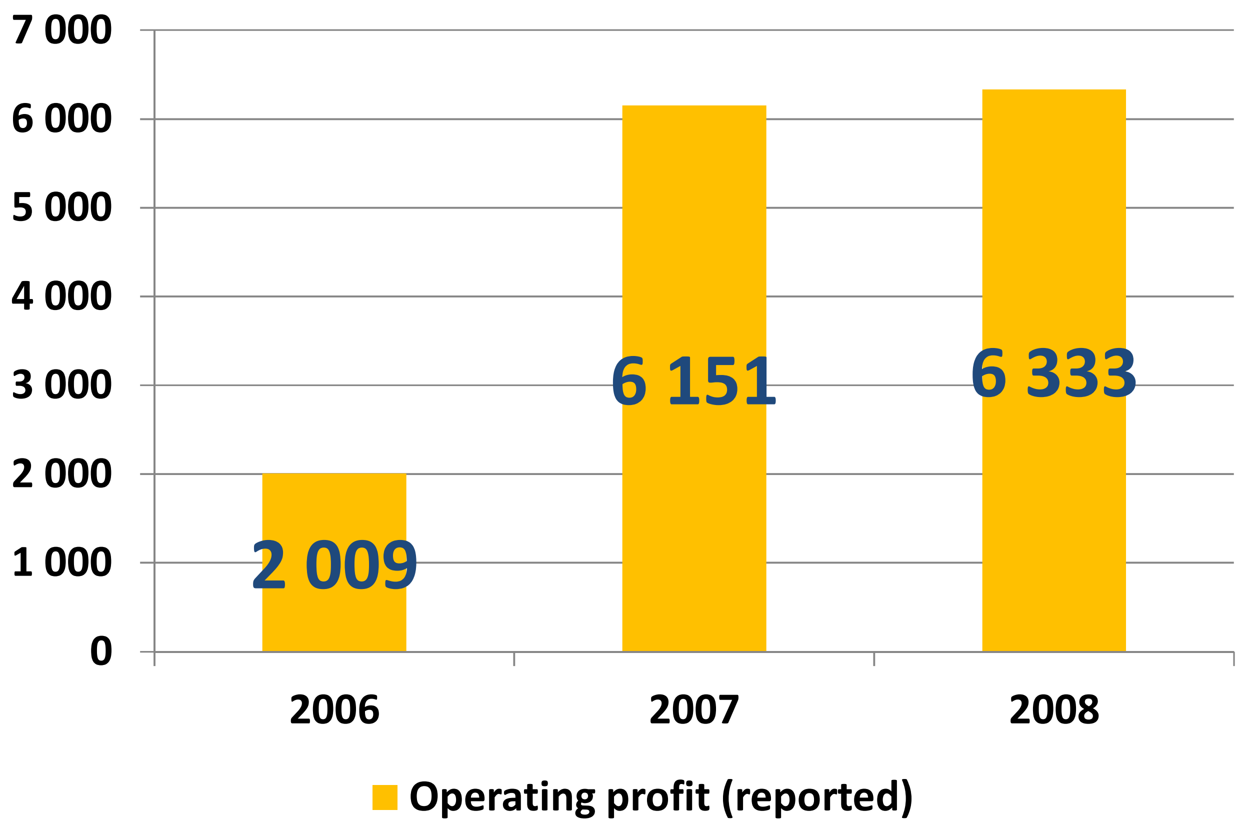
CONCLUSIONS:

If the Group would expensed all the R&D expenditures when incurred (instead of capitalizing development expenditures), then the operating profit for 2006 would be higher by about 6,5% and the operating profit for 2008 would be lower by about 13%.

If this is the case, then why the Group expensed so many R&D expenditures in 2007 (causing reported 2007 operating profit to be lower by some 6,5% than adjusted profit)? The plausible answer is: because 2006 was exceptionally good year, with operating profit rising threefold as compared to 2006 (as we can see on the above chart)!

RED FLAG NO 1 – CAPITALIZED DEVELOPMENT EXPENDITURES:

VOLKSWAGEN GROUP OPERATING PROFIT (AS REPORTED) FOR 2006, 2007 AND 2008:



RED FLAG NO 1 – CAPITALIZED DEVELOPMENT EXPENDITURES:

However, capitalizing development expenditures is mandated (and not just permitted) under IAS. This means that the capitalization itself is not any kind of "creative accounting".

But there are some additional and subjective issues, which seem to be intriguing here:

- **Increasing share of capitalized R&D expenditures in total R&D expenditures:**

	2008	2007
Research and non-capitalized development costs	3 710	3 477
Expenditures capitalized as assets (instead of being expensed)	2 216	1 446
Total R&D expenditures in the period	5 926	4 923
Share of capitalized expenditures	37,4%	29,4%

- **Declining annual amortization charge from capitalized development expenditures (decline from €1,843 in 2007 to €1,392 in 2008).**

RED FLAG NO 1 – CAPITALIZED DEVELOPMENT EXPENDITURES:

In that regard we need to remember, that (information from page 200):

"The costs are amortized using the straight-line method from the start of production over the expected life cycle of the models or powertrains developed – generally between five and ten years."

CONCLUSIONS:

Although we cannot be sure (because we do not have any strict proof), it seems that:

- **In 2008 the Group more aggressively (than in 2007) determined the borderline between research phase and development phase (treating more expenditures as development-related than research-related),**
- **In 2008 the Group could lengthen the amortization periods for capitalized development expenditures.**

RED FLAG NO 2:
STRUCTURE OF INVENTORIES

RED FLAG NO 2 – STRUCTURE OF INVENTORIES:

In the Note 19 (top of the page 234) we can find the following data:

	2008	2007
Raw materials, consumables and supplies	2 009	2 225
Work in progress	1 656	1 365
Finished goods and purchased merchandise	12 396	8 880
Current leased assets	1 703	1 545
Payments on account	52	16
Total inventory	**17 816**	**14 031**

What interesting (and intriguing) can we infer from the above data…? Let's look at the same data in the different format:

RED FLAG NO 2 – STRUCTURE OF INVENTORIES:

	Growth y/y
Raw materials, consumables and supplies	-9,7%
Work in progress, finished goods and purchased merchandise	37,2%
Total inventory	27,0%
Net sales	4,5%

RED FLAG NO 2 – STRUCTURE OF INVENTORIES:

CONCLUSIONS:

The above data constitute the classical "red flag":

- **If inventories rise much faster than sales (here, 27% y/y vs. 4,5% y/y), especially if it lasts longer than one period, then we receive the signal that the company gets significantly over-inventoried (meaning: having excessive inventories, of which some will have to be sold under some pressure and at significantly lowered prices),**
- **This is especially so when the inventories of finished and semi-finished goods rise strikingly fast (here they grew 37,2% y/y as compared to 4,5% y/y!),**
- **Relevant information is also obtained from the fact that raw materials, consumables and supplies (that is: unprocessed inventories, purchased for being the production input) declined by almost 10% y/y, while finished and semi-finished goods rose by more than 37% y/y – this suggests that probably the Group' management already knew (at the end of 2008) that the demand is declining and expected the fall of sales in the forthcoming year (2009).**

RED FLAG NO 2 – STRUCTURE OF INVENTORIES:

CONCLUSIONS:

To sum up, given the changes and structure of inventories we should conclude that:

- **The Group is probably significantly over-inventoried, which means that at least some inventories (finished cars) will have to be marketed at depressed prices (which entails significant shrinkage of margins and profits),**
- **The management expects the stagnation (or even decline) of demand, and in reaction they reduced the purchases of production supplies (which is logical when You plan to lower production),**
- **If You produce less, than You should expect lower future margins (because fixed manufacturing costs are allocated to smaller number of production units, and as a result the total unit production costs rise, while You cannot transmit these higher costs into higher sale prices).**

RED FLAG NO 3:
STRUCTURE OF RECEIVABLE ACCOUNTS

RED FLAG NO 3 – STRUCTURE OF RECEIVABLE ACCOUNTS:

On the face of the balance sheet (page 189) we can find the following data:

	2008	2007
Financial services receivables (noncurrent assets)	31 855	27 522
Trade receivables (current assets)	5 969	5 691
Financial services receivables (current assets)	27 035	24 914
Total operating receivables	**64 859**	**58 127**

What interesting can we infer from the above data…? Let's compare the growth of operating receivables with the growth of net sales:

	Growth y/y
Total operating receivables	**11,6%**
Net sales	**4,5%**

But why do we treat the "financial services receivables" as operating (and not financial) receivables…?

RED FLAG NO 3 – STRUCTURE OF RECEIVABLE ACCOUNTS:

…because much deeper in the financial statement footnotes we can find the following data (on the page 230):

	NONCURRENT AND CURRENT FINANCIAL SERVICES RECEIVABLES					
	current	non-current	Carrying amount, Dec. 31, 2008	current	non-current	Carrying amount, Dec. 31, 2007
Receivables from financing business						
customer financing	*9 534*	*20 302*	*29 836*	*9 531*	*18 471*	*28 002*
dealer financing	*10 147*	*981*	*11 128*	*9 791*	*774*	*10 565*
direct banking	*133*	*0*	*133*	*94*	*0*	*94*
	19 814	21 283	41 097	19 416	19 245	38 661
Receivables from operating lease business	125	0	*125*	103	0	*103*
Receivables from finance lease business	7 096	10 572	*17 668*	5 395	8 277	*13 672*
	27 035	31 855	58 890*	24 914	27 522	52 436*

** equals the sum of current and noncurrent financial services receivables in the balance sheet: 58.890 (31.855 + 27.035) in 2008 and 52.436 (27.522 + 24.914) in 2007*

RED FLAG NO 3 – STRUCTURE OF RECEIVABLE ACCOUNTS:

On the page 256 we can also find the following data about the GROSS VALUES of Group's receivable accounts:

	Neither past due nor impaired	Past due and not impaired	Impaired	Dec. 31, 2008	Neither past due nor impaired	Past due and not impaired	Impaired	Dec. 31, 2007
Financial services	55 838	2 587	1 923	60 348	50 298	2 254	1 782	54 334
Trade receivables	4 724	1 136	388	6 248	4 747	873	286	5 906
Other receivables	11 158	161	242	11 561	14 402	205	406	15 013
	71 720	3 884	2 553	78 157	69 447	3 332	2 474	75 253

What interesting (and perhaps intriguing) can we infer from the above data…? Let's look at some ratios:

RED FLAG NO 3 – STRUCTURE OF RECEIVABLE ACCOUNTS:

	2008	2007
All past due (impaired and not impaired) / total receivables	8,2%*	7,7%**
Past due and impaired / total past due	39,7%***	42,6%****

**** (3.884 + 2.553) / 78.157***
***** (3.332 + 2.474) / 75.253***
****** 2.553 / (3.884 + 2.553)***
******* 2.474 / (3.332 + 2.474)***

However, on the following page (p. 257) we can find even more insightful data about the age structure of receivables which are past due and not impaired:

RED FLAG NO 3 – STRUCTURE OF RECEIVABLE ACCOUNTS:

	PAST DUE BY:			GROSS CARRYING AMOUNT
	up to 30 days	30 to 90 days	more than 90 days	Dec. 31, 2007
Financial services receivables	1 898	351	5	2 254
Trade receivables	589	145	139	873
Other receivables	122	27	56	205
	2 609	523	200	3 332

	PAST DUE BY:			GROSS CARRYING AMOUNT
	up to 30 days	30 to 90 days	more than 90 days	Dec. 31, 2008
Financial services receivables	1 843	584	160	2 587
Trade receivables	668	278	190	1 136
Other receivables	74	29	58	161
	2 585	891	408	3 884

What interesting (and intriguing) can we infer from the above data…? Again, let's look at some ratios:

RED FLAG NO 3 – STRUCTURE OF RECEIVABLE ACCOUNTS:

	2008	2007
Past due and not impaired / total receivables	5,0%*	4,4%
Past due by up to 30 days / total past due	66,6%**	78,3%
Past due by more than 30 days / total past due	33,4%***	21,7%

** 3.884 / 78.157*
*** 2.585 / 3.884*
**** (891 + 408) / 3.884*

RED FLAG NO 3 – STRUCTURE OF RECEIVABLE ACCOUNTS:

CONCLUSIONS:

Again, the above data constitute the classical "red flag":

- **If operating receivables rise much faster than sales (here, 11,6% y/y vs. 4,5% y/y), especially if it lasts longer than one period, then we receive the signal that the company probably faces some problems with collecting receivables (which often reflects deteriorating financial situation of customers) or general pressures from falling demand (forcing company to loosen the credit terms provided to customers),**
- **This is especially so when the age structure of gross receivables deteriorates (that is: the share of receivables which are past due increases and the average age of overdue receivables rises),**
- **If such tendencies are observed (i.e. receivables rise faster than sales, and/or share of overdue receivables increases, and/or average age of overdue receivables increases), then we should infer that the general quality (and credit risk) of operating receivables deteriorates significantly.**

RED FLAG NO 3 – STRUCTURE OF RECEIVABLE ACCOUNTS:

CONCLUSIONS:

Here, given the changes and structure of Group's operating receivables, we should conclude that:

- **In 2008 the Group probably faced significant demand-pressures, resulting in rising and ageing receivables (which means that rising portion of operating receivables was at risk of being uncollected),**
- **In 2008 the Group experienced simultaneously: growth of receivables twice faster than growth of net sales, AND rising share of overdue receivables in total receivables (from 7,7% in 2007 to 8,2% in 2008), AND rising share of receivables overdue by more than 30 days in total overdue receivables (from 21,7% in 2007 to 33,4% in 2008),**
- **However, despite all these facts, the management apparently was becoming MORE OPTIMISTIC (as compared to 2007) in terms of the estimated credit quality of the Group's receivables, and reduced the share of impaired receivables (in total overdue receivables) from 42,6% in 2007 to 39,7% in 2008,**
- **Such a set of facts is a classical and very strong "RED FLAG" and should always make an analyst very skeptical!!!**

SUMMARY

SUMMARY OF THE RED FLAGS:

To sum up:

- **The Group capitalizes development expenditures - this is fully consistent with IFRS, however it is highly subjective and open to manipulations (e.g. by changing the classification of expenditures into research and development phase, by allocating more expenditures to development projects and less to research projects, or by setting long amortization periods for capitalized development expenditures),**
- **In 2008 the R&D costs recognized in the income statement declined (from 5.320 to 5.102), while capitalized (as assets) development expenditures rose (from 1.446 to 2.216),**
- **Also, the amortization of capitalized development expenditures fell (from 1.843 to 1.392),**
- **The mix of the above facts suggests that the Group could (which we cannot be sure, however) be more aggressive in 2008 in capitalizing (instead of expensing) R&D expenditures, in order to boost its reported income.**

SUMMARY OF THE RED FLAGS:

To sum up:

- **In 2008 the Group experienced negative tendencies in terms of inventories,**
- **Total inventories rose much faster that net sales,**
- **Also, the breakdown of inventories changed adversely (with declining raw materials and rising work in progress and finished goods),**
- **Those facts suggest significant problems with declining demand and rising pressure on sales prices (which usually precede the significant deteriorations in margins and profits).**

SUMMARY OF THE RED FLAGS:

To sum up:

- **In 2008 the Group experienced also negative tendencies in terms of receivables,**
- **Operating receivables rose much faster that net sales,**
- **Also, the ageing breakdown of operating receivables changed adversely (with rising share of overdue receivables in total receivables),**
- **However, despite all these facts, the management was becoming more optimistic (as compared to 2007) in terms of the estimated credit quality of the Group's receivables,**
- **The mix of the above facts suggests that the Group could (which we cannot be sure, however) be more aggressive in 2008 in estimating provisions for bad debts, in order to boost its reported income.**

SUMMARY OF THE RED FLAGS:

Final conclusion:

Such a set of multiple significant RED FLAGS should always suggest the analyst to be very skeptical about the quality of company' reported financial results.

Doubtful quality of reported earnings (with red flags suggesting the overstatement of these reported earnings) is usually followed by significant deterioration of future financial results.

VOLKSWAGEN GROUP – DETERIORATION OF FINANCIAL RESULTS IN 2009:

	2007	2008	2009
Sales revenue	108 897	113 808	105 187
Operating profit	6 151	6 333	1 855
Net earnings*	4 120	4 753	960
Total assets	145 357	167 919	177 178
Total equity	31 938	37 388	37 430
	2007	2008	2009
Sales growth y/y	-	4,5%	-7,6%
Operating margin (operating profit / sales revenue)	5,6%	5,6%	1,8%
Net margin (net earnings / sales revenue)	3,8%	4,2%	0,9%
Return on equity (net earnings / total equity)	12,9%	12,7%	2,6%
Total assets Turnover (sales revenue / total assets)	74,9%	67,8%	59,4%
Total indebtedness (total assets less total equity / total assets)	78,0%	77,7%	78,9%

*** Profit attributable to shareholders of Volkswagen AG***

THANK YOU FOR YOUR ATTENTION

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