CREDIT SUISSE

Volkswagen (VOWG_p.DE)

Rating	**UNDERPERFORM***
Price (30 Sep 15, Eu)	97.75
Target price (Eu)	(from 169.00) 82.00[1]
Market cap. (Eu m)	48,627.44
Enterprise value (Eu m)	165,793.0

**Stock ratings are relative to the coverage universe in each analyst's or each team's respective sector.*
[1]Target price is for 12 months.

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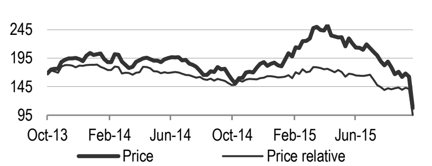
DECREASE TARGET PRICE

Financial services risks overlooked - UP

- **Downside risks not fully priced, estimates & TP cut:** We maintain our UP rating, as the market does not appear to be discounting negative knock-on effects. The outcome for recall costs and fines is unclear and largely depends on the engine performance post repair. Our scenario analysis shows a wide range of €23-78bn for total costs. We increasingly see risk in VW's Financial Services business which supported industrial growth in the past. Higher refinancing costs and risk provisioning makes it difficult for the FS to fund itself going forward; thus a capital injection would likely be required unless growth is reduced materially. EPS before one-off items cut by 33% for the period 16-18E to reflect lower volume/price assumptions. FS estimates cut 44%.
- **Financial services weakness overlooked:** Material risks are likely to arise from VW's Financial Services business, which has materially expanded its balance sheet (close to €150bn) to support growth of the industrial business. Earnings expected to suffer from higher refinancing costs (bond yields up +200bps since 18-Sep), and higher risk provisioning, which it turn means pressure on its capital ratio. Consequently, balance sheet expansion without capital injection from the industrial business looks more challenging. Equity of FS could also be impacted by impairments stemming from lower residual values (CS estimate €1-2bn).
- **Material balance sheet risk.** We see risk to VW's balance sheet, as industrial net cash position of c.€25bn (including Suzuki and LeasePlan) is unlikely to be sufficient to cover potential recall costs/fines or subsidy clawbacks. Even in a more optimistic outcome we see meaningful risk of a capital increase. While VW likely tries to spread cash-out costs over several years, the biggest fundamental problem remains its lack of cash flow generation with >80% stemming from China (JV and imports).

Share price performance



The price relative chart measures performance against the DEUTSCHE BORSE DAX INDEX which closed at 9658.93 on 30/09/15
On 30/09/15 the spot exchange rate was €1./Eu 1. - Eu .9/US$1

Performance over	1M	3M	12M
Absolute (%)	-40.5	-54.0	-39.2
Relative (%)	-37.0	-41.4	-42.1

Financial and valuation metrics

Year	12/14A	12/15E	12/16E	12/17E
Revenue (Eu m)	202,458.0	209,635.9	207,121.7	209,975.2
EBITDA (Eu m)	29,488.00	30,071.48	27,031.69	27,133.78
Adjusted Net Income (Eu m)	10,846.00	9,568.56	7,064.46	6,836.01
CS adj. EPS (Eu)	21.90	19.14	14.14	13.69
Prev. EPS (Eu)	—	20.21	19.84	20.49
ROIC (%)	4.62	4.20	2.99	2.74
P/E (adj., x)	4.46	5.11	6.91	7.14
P/E rel. (%)	31.0	40.4	58.9	66.3
EV/EBITDA	5.6	5.5	6.5	6.9

Dividend (12/15E, Eu)	1.56	IC (12/15E, Eu m)	214,851.16
Dividend yield (%)	1.6	EV/IC	0.77
Net debt (12/15E, Eu m)	117,165.6	Current WACC	7.00
Net debt/equity (12/15E, %)	119.9	Free float (%)	100.00
BV/share (12/15E, Eu)	184.2	Number of shares (m)	475.73

Source: FTI, Company data, Thomson Reuters, Credit Suisse Securities (EUROPE) LTD. Estimates.

Volkswagen VOWG_p.DE

Price (30 Sep 15): **Eu97.75**, Rating: **UNDERPERFORM**, Target Price: **Eu(from 169.00) 82.00**

Income statement (Eu m)	**12/14A**	**12/15E**	**12/16E**	**12/17E**
Revenue (Eu m)	202,458	209,636	207,122	209,975
EBITDA	**29,488**	**30,071**	**27,032**	**27,134**
Depr. & amort.	(16,791)	(17,819)	(17,605)	(17,848)
EBIT (Eu)	**12,697**	**12,252**	**9,426**	**9,286**
Net interest exp.	(2,658)	(2,395)	(1,855)	(1,825)
Associates	3,988	3,430	2,379	2,163
Other adj,	767	—	—	—
PBT (Eu)	**14,794**	**13,287**	**9,950**	**9,624**
Income taxes	(3,726)	(3,496)	(2,659)	(2,558)
Profit after tax	**11,068**	**9,791**	**7,291**	**7,066**
Minorities	(84)	(50)	(55)	(58)
Preferred dividends	—	—	—	—
Associates & other	(138)	(172)	(172)	(172)
Net profit	**10,846**	**9,569**	**7,064**	**6,836**
Other NPAT adjustments	—	—	—	—
Reported net income	**10,846**	**9,569**	**7,064**	**6,836**

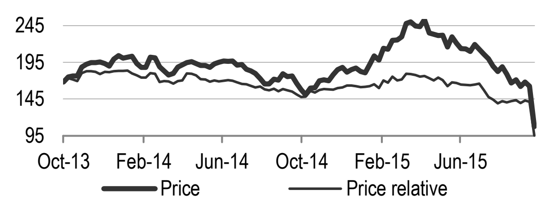
Cash flow (Eu)	**12/14A**	**12/15E**	**12/16E**	**12/17E**
EBIT	12,697	12,252	9,426	9,286
Net interest	(2,658)	(2,395)	(1,855)	(1,825)
Cash taxes paid	(4,040)	(3,496)	(2,659)	(2,558)
Change in working capital	(15,615)	(16,913)	(16,698)	(18,371)
Other cash & non-cash items	20,400	22,388	19,236	19,215
Cash flow from operations	10,784	11,836	7,451	5,747
CAPEX	(12,012)	(12,309)	(12,166)	(12,329)
Free cashflow adj.	7,345	9,297	7,595	8,580
Free cash flow to the firm	**6,117**	**8,823**	**2,880**	**1,998**
Acquisitions	(278)	—	—	—
Divestments	440	4,980	—	—
Other investment/(outflows)	(7,249)	(4,518)	(4,426)	(4,289)
Cash flow from investments	**(19,099)**	**(11,847)**	**(16,592)**	**(16,618)**
Net share issue/(repurchase)	4,932	—	—	—
Dividends paid	(1,962)	(2,294)	(764)	(764)
Issuance (retirement) of debt	8,212	4,000	8,000	8,000
Other	(19,013)	(3,511)	(8,000)	(8,000)
Cash flow from financing	**(7,831)**	**(1,805)**	**(764)**	**(764)**
Effect of exchange rates	295	(3)	—	—
Changes in Net Cash/Debt	**(15,851)**	**(1,820)**	**(9,905)**	**(11,634)**
.				
Net debt at start	99,495	115,346	117,166	127,071
Change in net debt	**15,851**	**1,820**	**9,905**	**11,634**
Net debt at end	115,346	117,166	127,071	138,705

Balance sheet (Eu m)	**12/14A**	**12/15E**	**12/16E**	**12/17E**
Assets				
Cash and cash equivalents	18,634	20,814	18,909	15,275
Accounts receivable	61,960	66,100	69,503	73,289
Inventory	31,466	31,371	30,272	30,535
Other current assets	19,043	18,554	18,554	18,554
Total current assets	**131,103**	**136,839**	**137,238**	**137,653**
Total fixed assets	73,754	81,029	88,836	97,131
Intangible assets and goodwill	59,935	61,669	63,348	64,848
Investment securities	3,683	3,683	3,683	3,683
Other assets	82,734	81,615	87,362	93,158
Total assets	**351,209**	**364,834**	**380,468**	**396,473**
Liabilities				
Accounts payable	19,530	21,162	21,767	22,970
Short-term debt	65,564	65,564	65,564	65,564
Other short term liabilities	45,611	45,611	45,611	45,611
Total current liabilities	**130,705**	**132,337**	**132,942**	**134,145**
Long-term debt	68,416	72,416	80,416	88,416
Other liabilities	61,896	62,396	62,896	63,396
Total liabilities	**261,017**	**267,149**	**276,254**	**285,957**
Shareholders' equity	89,991	97,438	103,910	110,155
Minority interest	198	248	303	361
Total equity & liabilities	**351,206**	**364,834**	**380,468**	**396,473**
Net debt (Eu m)	115,346	117,166	127,071	138,705

Per share data	**12/14A**	**12/15E**	**12/16E**	**12/17E**
No. of shares (wtd avg)	496	501	501	501
CS adj. EPS (Eu)	**21.90**	**19.14**	**14.14**	**13.69**
Prev. EPS (Eu)	—	20.21	19.84	20.49
Dividend (Eu)	4.86	1.56	1.56	2.10
Div yield	4.97	1.60	1.60	2.15
Dividend payout ratio	22.19	8.15	11.03	15.37
Free cash flow per share	12.33	17.62	5.75	3.99

Key ratios and valuation	**12/14A**	**12/15E**	**12/16E**	**12/17E**
Growth (%)				
Sales	2.8	3.5	(1.2)	1.4
EBIT	8.8	(3.5)	(23.1)	(1.5)
Net profit	19.6	(11.8)	(26.2)	(3.2)
EPS	17.3	(12.6)	(26.1)	(3.2)
Margins (%)				
EBITDA margin	14.6	14.3	13.1	12.9
EBIT margin	6.3	5.8	4.6	4.4
Pretax margin	7.3	6.3	4.8	4.6
Net margin	5.4	4.6	3.4	3.3
Valuation metrics (x)				
EV/sales	0.81	0.79	0.85	0.89
EV/EBITDA	5.6	5.5	6.5	6.9
EV/EBIT	12.9	13.5	18.6	20.2
P/E	4.5	5.1	6.9	7.1
P/B	0.57	0.53	0.50	0.47
Asset turnover	0.58	0.57	0.54	0.53
ROE analysis (%)				
ROE stated-return on	12.7	10.8	7.4	6.7
ROIC	4.6	4.2	3.0	2.7
Interest burden	1.2	1.1	1.1	1.0
Tax rate	25.2	26.3	26.7	26.6
Financial leverage	1.5	1.4	1.4	1.4
Credit ratios (%)				
Net debt/equity	127.9	119.9	121.9	125.5
Net debt/EBITDA	3.9	3.9	4.7	5.1
Interest coverage ratio	4.8	5.1	5.1	5.1

Source: FTI, Company data, Thomson Reuters, Credit Suisse Securities (EUROPE) LTD. Estimates.



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Financial services at risk

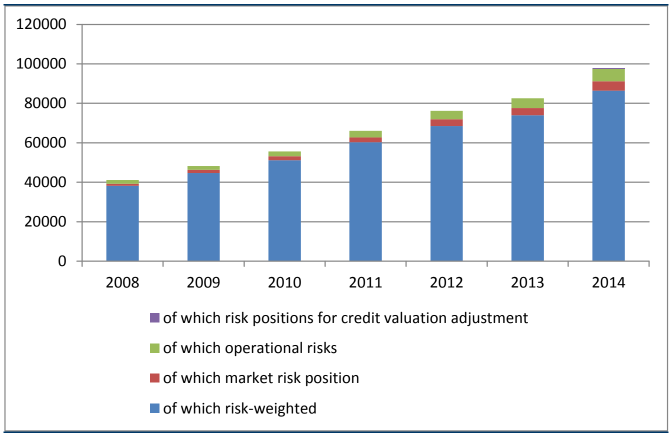
In our view focus of the investment community is likely to shift to VW's financial services business, with balance sheet close to €150bn.

Risk-weighted asset position grew c.15% annually over the last few years

The data for the following analysis is based on Volkswagen Financial Services AG and does therefore not include VW's other FS companies in the US, Canada, Argentina and Spain.

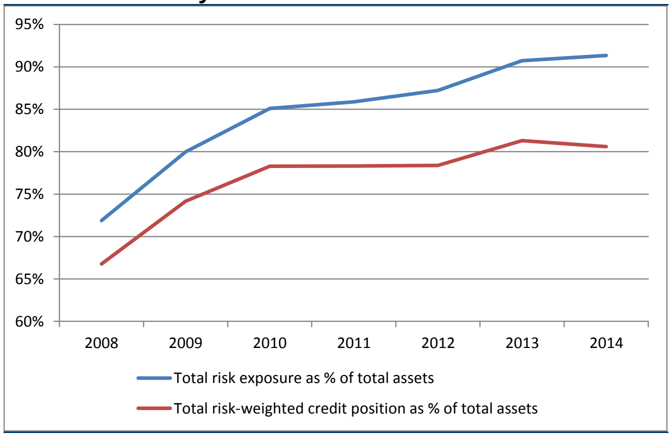
Total amount of risk exposure grew from €41bn in 2008 to €98bn in 2014, implying CAGR of c.15.5%. Risk-weighted positions grew roughly in line with total amount of risk exposure – from €38bn in 2008 to €86bn in 2014, implying CAGR of 14.5%. It is interesting to note, that both total risk exposure as well as risk-weighted positions increased as % of total assets on the balance sheet (risk weighted assets from 67% in 2008 to 81% in 2014).

Figure 1: Total risk position close to €100bn – CAGR of c.15% since 2008



Source: Company data, Credit Suisse estimates

Figure 2: Risk exposure as % of total assets increased over the last few years



Source: Company data, Credit Suisse estimates

Figure 3: **Outline of Risk Weighted Assets and Capital Ratio Limits**

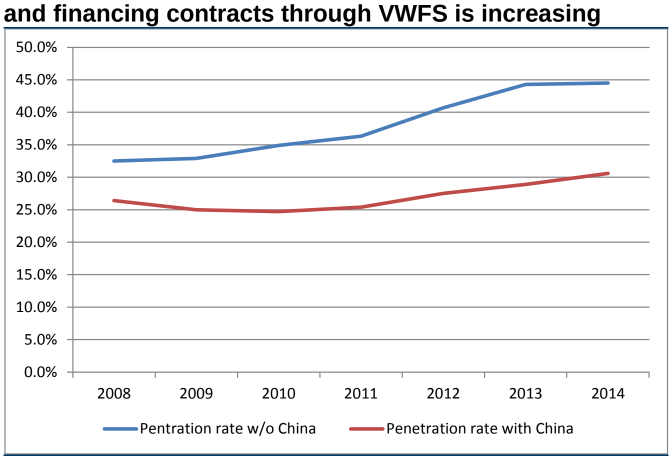
Ratio	Regulatory Minimum
Tier 1 Capital Ratio	6.0%
Total Capital Ratio (Solvency Ratio)	8.0%
Common Equity Capital Ratio	4.5%
Definitions	
Risk weighted assets	A bank's assets or off-balance-sheet exposures, weighted according to risk. Different classes of assets have different risk weights associated with them. Total risk-weighted assets are determined by multiplying the capital requirements for market risk and operational risk by 12.5 (i.e. the reciprocal of the minimum capital ratio of 8%) and adding the resulting figures to the sum of risk-weighted assets for credit risk VWFS uses the standardized approach to calculate their risk-weighted position. Claims on auto loans have a risk weight of 75%
Tier 1 Capital Ratio	(Total Equity - Revaluation Reserves)/Risk Weighted Assets
Total Capital Ratio	(Tier 1 + Tier 2 Capital)/ Risk Weighted Assets
Total Common Capital Ratio	(Tier 1 + Tier 2 Capital ex. Preferred shares and non-controlling interests)/ Risk Weighted Assets
Tier 1 capital	Total Equity - Revaluation Reserves
Tier 2 capital	Revaluation Reserves + Subordinated Debt + Hybrid Capital + Provisions including deferred tax + Total loan loss & other reserves

Source: BIS

Penetration Rate

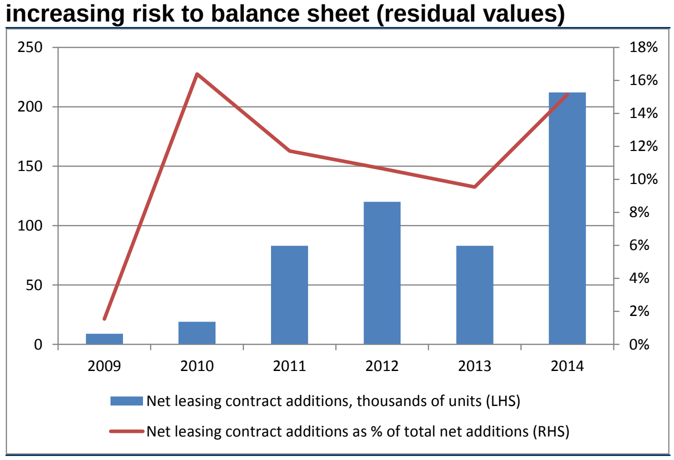
- The proportion of VW group sales on leasing and financing contracts through VW Financial Services (penetration rate) has increased to 45% (ex. China), leading to increasing riskier assets in the form of receivables from customers on financing and leasing contracts.
- Furthermore, operational leases have become an increasing proportion of new contracts. Leasing contracts were 15% of net contract additions (new contracts – expiring contracts) in 2014, relative to 10% in 2013. These operational leases are of particular concern since the leased vehicles are held as assets on the balance sheet. A significant drop in residual value of affected vehicles would require material impairments (we estimate €1-2bn) be made to the value of these assets, which would in turn reduce VWFS's capital ratio. The potential size of this impairment is considered in our scenario analysis of the total costs VW could face.

Figure 4: **The proportion of VW group sales on leasing and financing contracts through VWFS is increasing**



Source: Company data, Credit Suisse estimates

Figure 5: **Expansion of Operational Leases adds increasing risk to balance sheet (residual values)**

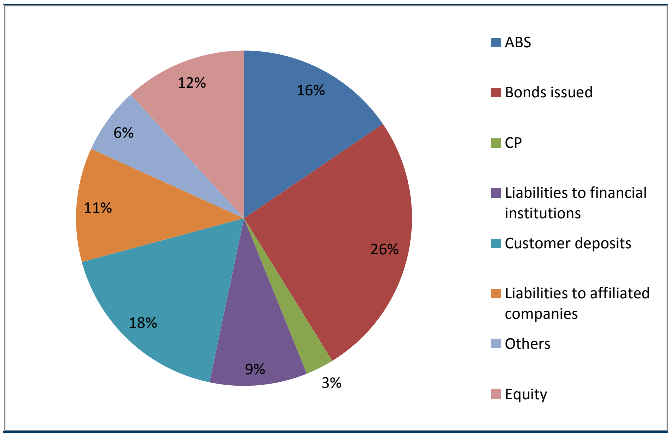


Source: Company data, Credit Suisse estimates

Total capital ratio expected to decline – industrial unit may need to inject more capital

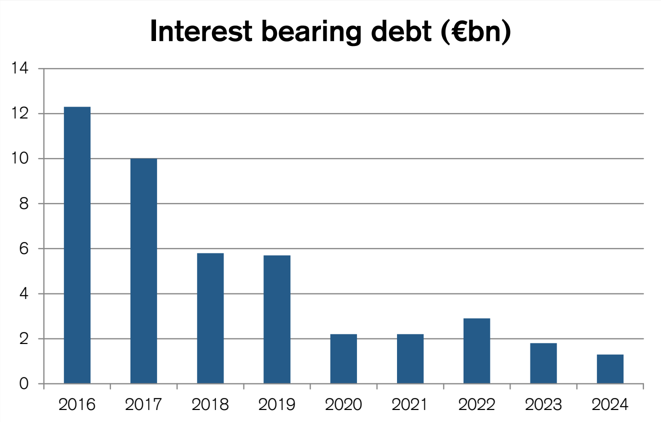
Total funding of VW Financial Services accounted for €147bn end of June 2015 out of which €22.8bn (15.5%) is ABS, €37.8bn bonds (25.7%) and €25.7bn (17.5%) customer deposits. Taking the maturity profile, €12bn need to be refinanced in 2016 and €10bn in 2017E

Figure 6: **Funding structure Financial services – total EUR147bn as of June 2015**



Source: Company data, Credit Suisse research

Figure 7: **VW group funding maturity profile (as of march 2015 excluding Porsche, MAN, Scania)**

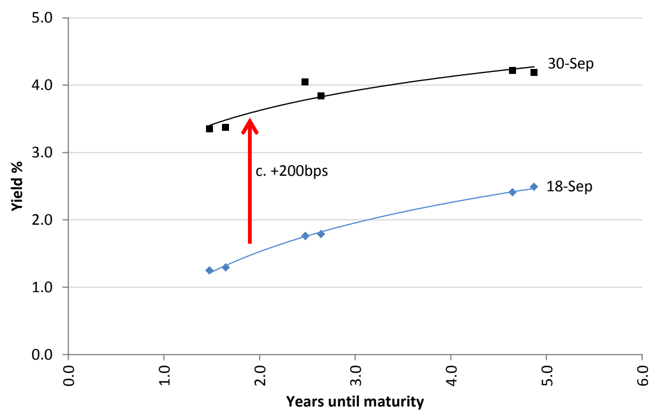


Source: Company data, Credit Suisse research

Bond yields up 200 basis points

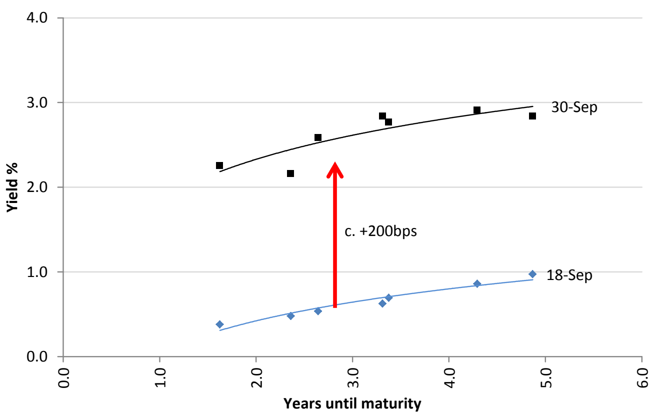
Between September 18 and September 30 bond yields for VW have materially widened by c. 200 basis points for US Dollar bonds and also European bonds.

Figure 8: **US Dollar bond yields**



Source: Thomson Reuters, Credit Suisse estimates

Figure 9: **Europe bond yields**



Source: Thomson Reuters, Credit Suisse estimates

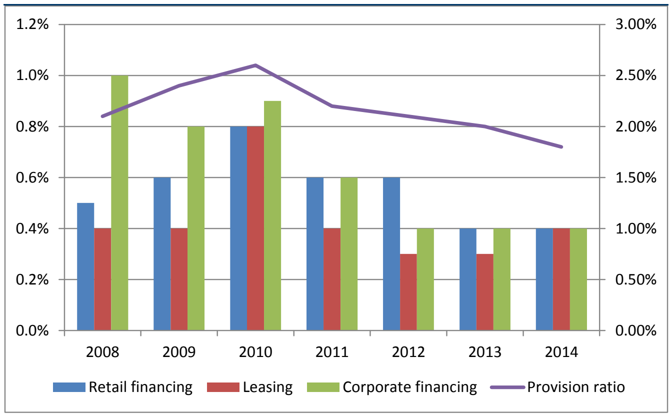
Material earnings risk for Financial Services

We see two-fold earnings risk for VW's financial services business:

- **Increased interest rates:** Assuming €12.3bn of debt needs to be refinanced at 175 basis points higher rates versus current facilities, the impact would be -€215m already in 2016E, followed by another -€175m in 2017E (€10bn to be refinanced)

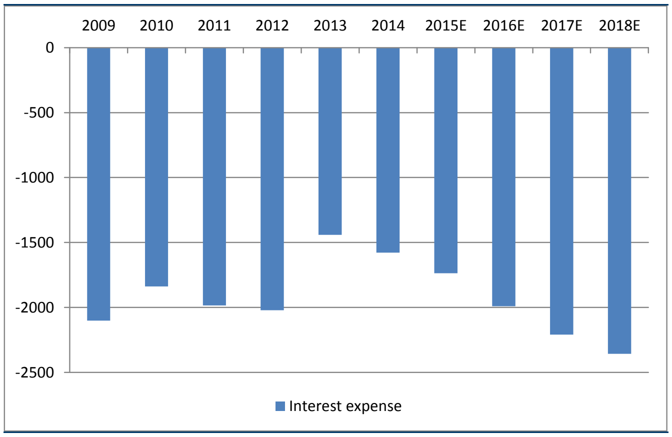
- **Risk provisions likely to increase:** Provision ratio decreased from 2.6% in 2010 to 1.8% in 2014; although the magnitude of increase is still unclear at this point, we see the risk of 50 – 100 basis points increase in coming years; we estimate risk provisions could increase €200-300m which is more in line with the years 2009/2010

Figure 10: **Risk provisioning likely to increase again**



Source: Company data, Credit Suisse research

Figure 11: **Development of interest payments for VW Financial Services AG**



Source: Company data, Credit Suisse estimates

Total capital ratio expected to decline

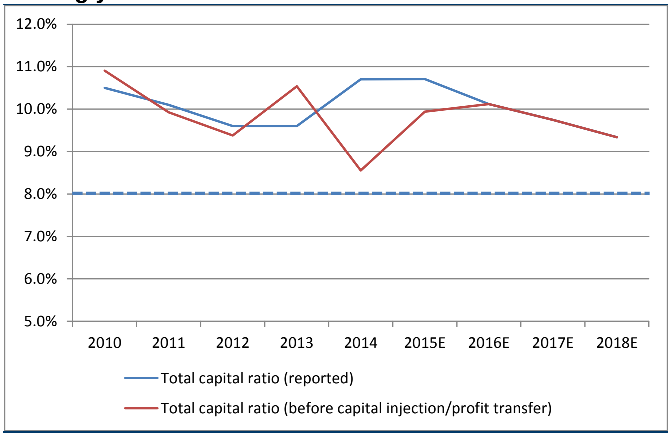
Since 2010 VW's industrial unit injected in total €5.2bn capital into its Financial services unit with €2.3bn in 2014 and €1.1bn in 1H15 in order to support industrial growth. On the other hand a total of €2.4bn profits have been transferred back into the industrial unit (impacting equity and eligible capital). Taking the net figure, the industrial unit injected €2.7bn.

VW FS total capital ratio averaged 10.4% since 2008 above required 8% level. However with the capital injection in 2014, we estimate that ratio would have come down to 8.6% (taking eligible capital less €2.25bn capital injection).

We expect total capital ratio to decline from 10.7% in 2014 to 9.7% in 2017E, based on the following assumptions:

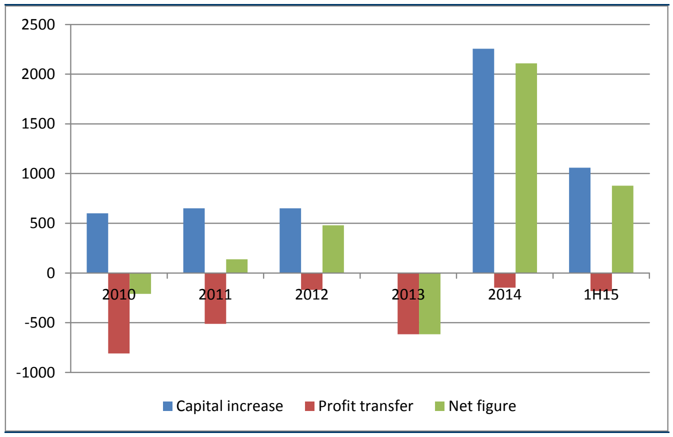
- Growth of total risk exposure to slow from 15.5% since 2008 to 10% in 2016E and 7% in 2017E
- Pre-tax profit to show negative CAGR2014-2018E of 16.2% due to increased financing costs (+175 basis points on refinancing versus previous debt) and €200-300m higher costs related to provisioning
- Profit transfer of 25% to Volkswagen AG

Figure 12: Total capital ratio expected to decline in coming years



Source: Company data, Credit Suisse estimates

Figure 13: Industrial business injected €5.2bn capital since 2010



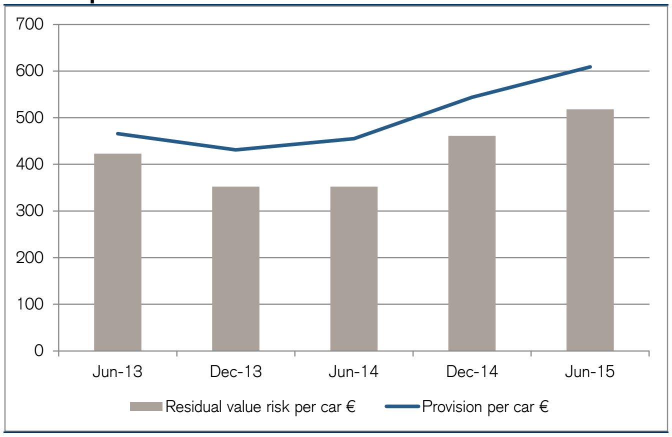
Source: Company data, Credit Suisse estimates

Risk on residual values

In addition to declining earnings, there could be risk to VW's residual values (operating lease) – total value of leasing and rental assets is around €11bn end of June. Our analysis shows that existing provisions could cover decline in residual values of up to 7.7%, based on the following assumptions.

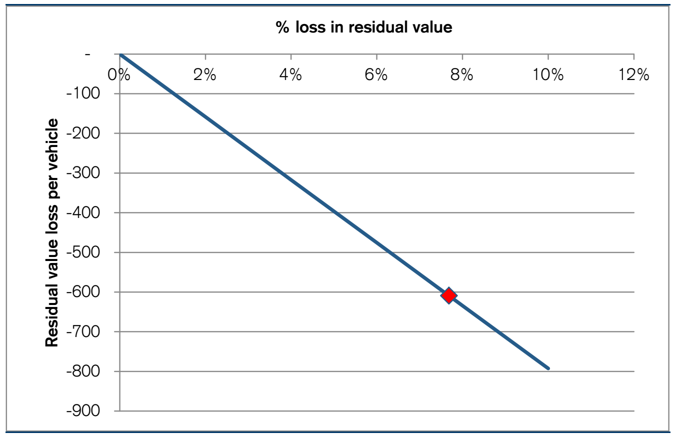
- Estimated ASP of c.€20k with 40% residual value after 3 years
- VW provisioned €609 per car as of June 2015 versus their expectation of residual value risk of €518 per car, which would imply some safety buffer
- Taking the provisions of €609 per car on estimated residual value of €7,926 after three years, we estimate that a decline of 7.7% can be compensated

Figure 14: **VW provisioned around €609 per car versus their expected residual risk at €518**



Source: Company data, Credit Suisse estimates

Figure 15: **We estimate that provisions are sufficient up to 7.7% decline in residual values**



Source: Company data, Credit Suisse estimates

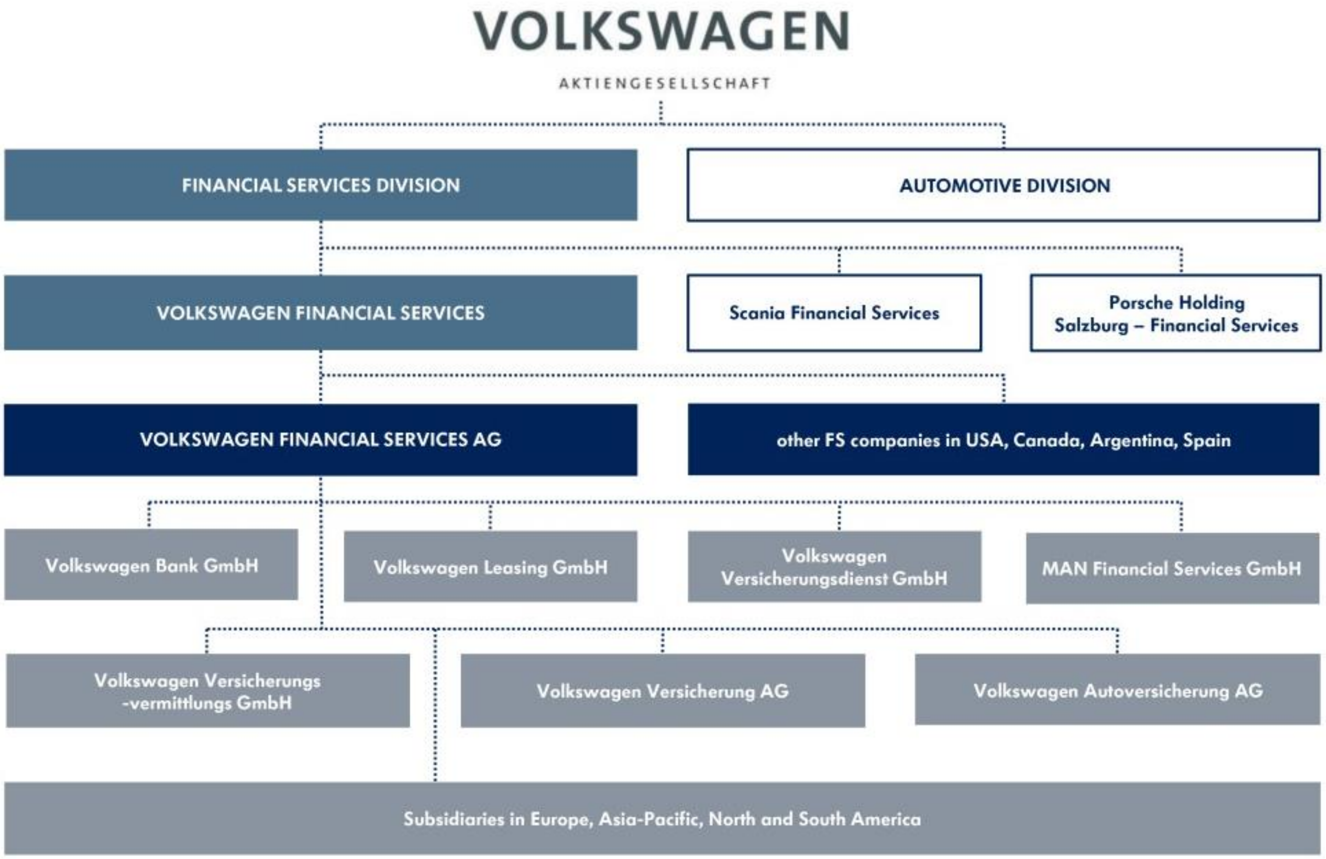
Estimates for loss of residual value in the aftermath of current events must take into account the total additional fuel cost as a result of the NOx:CO_2 trade off incurred in bringing NOx emissions below regulatory levels, as well as an additional reduction as a result of the fall in demand for vehicles as a result of reputational damage. We estimate that the fall in residual values as a result of these 2 contributors will be between €16-33bn – this is explored in further detail in our cost impact scenario analysis.

Current owners will demand compensation for this fall in residual value; however it is not yet clear exactly how VW will incur these costs. It is likely that, if possible, VW will attempt to avoid settling these compensation claims up front to reduce delay the immediate impact on margin and FCF and additional financing expense. This could be achieved, for example, by offering discounts on subsequent new vehicle purchases, equal to the compensation due. The flexibility which VW will have to decide the technicalities of how these losses are incurred will only become clearer as the legal cases against the company are settled.

Outline of VW Financial Services

Volkswagen Financial Services AG (VWFS) is a 100%-owned subsidiary of Volkswagen AG. VWFS is divided into Volkswagen Bank GmbH, which runs VW's vehicle financing business, as well as direct bank activities; Volkswagen Leasing GmbH, which leases individual vehicles and vehicle fleets to private and corporate customers and Volkswagen Versicherung AG, which provides insurance services.

Figure 16: **Structure of Volkswagen Financial Services business**

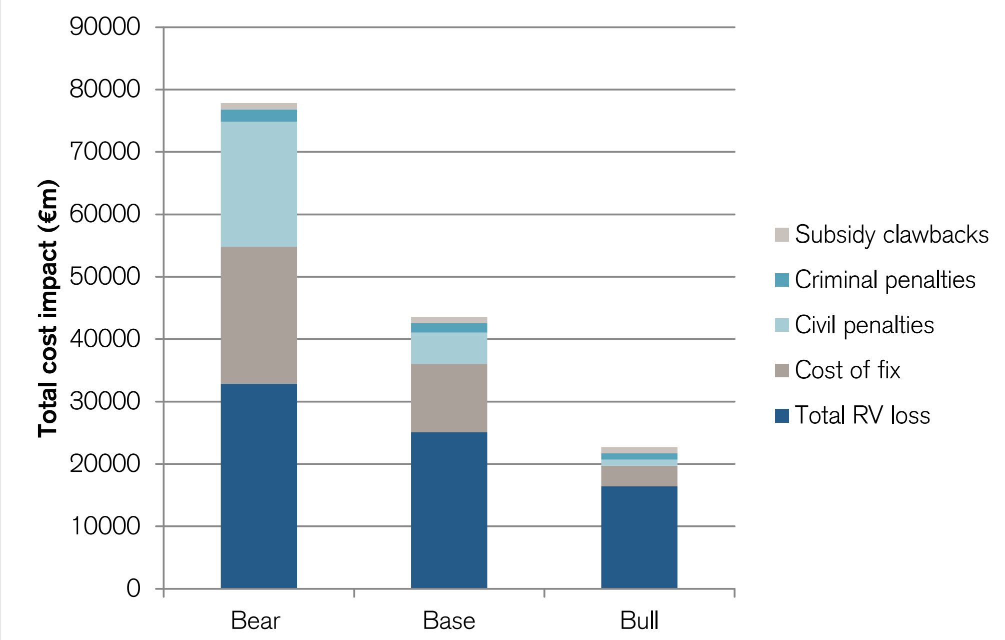


Source: Company data, Credit Suisse research

Estimating the total cost impact from this 'defeat device' scandal

We estimate that the total cost implications for VW will sit between €78bn in a bear case and €23bn in a bull case.

Figure 17: **Breakdown of potential cost impact for VW**



Source: Credit Suisse estimates

To arrive at these estimates the following costs have been considered:

- **Fall in residual value (RV)**. RV has been calculated as the sum of the total additional fuel cost as a result of the NOx:CO2 trade off incurred in bringing NOx emissions below regulatory levels plus an additional reduction as a result of the fall in demand for vehicles as a result of reputational damage.
- **Cost of the fix** required to bring NOx emissions below regulatory levels
- **Potential civil and criminal penalties**
- **Clawback of subsidies** for energy efficient vehicles

The 3 scenarios considered are outlined below:

Bear

- Additional fuel cost based on 20% fuel efficiency loss as a result of the fix to reduce NOx to legal limits, which has a direct impact on residual value
- Further 10% drop in residual value due to reduced demand as a result of reputational damage
- This gives an overall drop in residual value of 37%
- Average total cost of fix €2000, based on need for extensive hardware refit e.g. LNT or SCR fit on majority of affected models
- Civil penalties estimated at €20bn, criminal penalties €2bn

- Subsidy clawback €1bn

Base

- Additional fuel cost based on 15% fuel efficiency loss as a result of the fix to reduce NOx to legal limits, which has a direct impact on residual value
- Further 8% drop in residual value due to reduced demand as a result of reputational damage
- This gives an overall drop in residual value of 28%
- Average total cost of fix €1000, based on need for some extent of hardware refit
- Civil penalties estimated at €5bn, criminal penalties €1.5bn
- Subsidy clawback €1bn

Bull

- Additional fuel cost based on 15% fuel efficiency loss as a result of the fix to reduce NOx to legal limits, which has a direct impact on residual value
- Further 5% drop in residual value due to reduced demand as a result of reputational damage
- This gives an overall drop in residual value of 19%
- Simple software fix is possible to bring NOx levels within limits, with labour cost of €300 per vehicle
- Civil penalties estimated at €1bn, criminal penalties €1bn
- Subsidy clawback €1bn

Figure 18: Scenario analysis for potential total costs across 11m affected vehicles

Total costs for 11m affected vehicles €m	Bear	Base	Bull
Total RV loss	32823	25057	16412
- of which additional fuel cost	24023	18017	12012
- of which residual value loss	8800	7040	4400
Cost of fix	22000	11000	3300
Civil penalties	20000	5000	1000
Criminal penalties	2000	1500	1000
Subsidy clawbacks	1000	1000	1000
Total	**77823**	**43557**	**22712**
RV Loss			
Additional fuel cost			
Total number of vehicles (m units)	11	11	11
Average current l/100km for diesel car	5.4	5.4	5.4
Fuel efficiency loss	20%	15%	10%
Per 100 km	1.08	0.81	0.54
Average kilometres per year	15000	15000	15000
Fuel penalty per year l	162	121.5	81
Cost per litre in €c/l	134.81	134.81	134.81
Total costs per year €	218	164	109
Average lifetime car	13	13	13
Average age of 9 years	3	3	3
Remaining lifetime	10	10	10
Total additional fuel cost per car €	2184	1638	1092
Reputational damage			
VW group sales 2015 (m€)	202458	202458	202458
Vehicle units 2014	10217003	10217003	10217003
Current average price/vehicle (€)	20000	20000	20000
Average residual value after 3 yrs (€)	8000	8000	8000
% loss RV due to reputational damage	10%	8%	5%
Additional RV loss per vehicle (€)	800	640	400
Total RV loss per vehicle (€)	**2984**	**2278**	**1492**
% RV loss per vehicle	37%	28%	19%
Cost of fix			
Fix cost per vehicle (€)	2000	1000	300

Source: Credit Suisse estimates

We see more downside

In our view there is more downside despite €32bn drop in market cap, based on the following assumptions:

- We cut our earnings by 29% for 2016E largely to reflect lower pricing assumptions; in our view the pricing impact should be bigger than the volume effect since VW needs avoid volume drop given high costs associated with MQB ramp up – assuming 6.0x multiple on earnings cut, this would reflect €17bn impact on market cap; we apply lower multiple on earnings cut since negative pricing should recover gradually
- For the cost impact (recall costs plus fines) we take our bull case scenario which implies total costs of €22.7bn or €45/share
- Comparing market cap drop of €32bn vs. total estimated costs/earnings loss of €39.9bn, we think there is still more downside of €16/share (€83 fair value in such scenario)

Figure 19: **We see downside even in more optimistic outcome for recall costs and fines**

EPS before	19.84
EPS after	14.14
Cut	-5.70
Number of shares	500.8
Cut net income	-2854
Trading multiple	6.0
Market cap impact	**-17121**
Bull case costs	**-22712**
Total cost/earnings impact	**-39833**
Share price September 18 close	162
Share price September 30 close	98
Impact	-64
Market cap decline	**-32176**
Earnings/costs vs market cap	-7657
Per share	-15.3

Source: Company data, Credit Suisse estimates

Cutting estimates and TP

Earnings cut largely driven by lower assumptions for VW brand

We cut our EPS for the period 2016-2018E by 33% largely to reflect material cut to VW brand estimates. We forecast VW brand to record losses (before one-offs) in 2016E and 2017E largely driven by deterioration in pricing and some market share losses.

Figure 20: **Estimates cut by 33% for the period 2016-2018E**

	NEW			OLD			Change		
	2015E	**2016E**	**2017E**	**2015E**	**2016E**	**2017E**	**2015E**	**2016E**	**2017E**
Operating profit before non-recurring items									
Volkswagen brand	1870	-581	-475	2708.1	2583.0	2937.8	-30.9%	-122.5%	-116.2%
Audi	5560	5035	4663	5559.9	5257.5	5114.2	0.0%	-4.2%	-8.8%
Skoda	953	776	772	953.5	886.5	883.0	0.0%	-12.5%	-12.5%
SEAT	121	12	15	121.4	100.1	118.9	0.0%	-88.2%	-87.2%
Bentley	80	72	84	79.6	72.5	83.5	0.0%	0.0%	0.0%
Porsche	3218	3181	3187	3218.1	3180.8	3186.8	0.0%	0.0%	0.0%
VW CV	521	379	358	520.7	466.2	468.2	0.0%	-18.8%	-23.6%
Scania	1166	1212	1287	1165.7	1211.7	1287.2	0.0%	0.0%	0.0%
MAN	366	397	422	366.2	396.8	422.4	0.0%	0.0%	0.0%
Other	-3286	-2399	-2114	-3428.3	-2934.7	-2687.2	-4.1%	-18.3%	-21.3%
Financial Services	1933	1343	1086	1957.9	1955.0	2002.1	-1.3%	-31.3%	-45.7%
Group before one offs	**12502**	**9426**	**9286**	**13222.9**	**13175.3**	**13817.0**	**-5.4%**	**-28.5%**	**-32.8%**
Special items	-250	0	0	-250	0	0			
Group reported	12252	9426	9286	12972.9	13175.3	13817.0	-5.6%	-28.5%	-32.8%
EPS	**19.14**	**14.14**	**13.69**	**20.21**	**19.84**	**20.49**	**-5.3%**	**-28.7%**	**-33.2%**

Source: Credit Suisse estimates

TP cut to €82 – maintain UP

We change our TP methodology post the emission scandal.

- **Old:** Equally weighted approach of 8.0x 2016E EPS and DCF model
- **New:** Applying 9.0x 2016E EPS (before one-off charges) and assuming total negative impact stemming from fines/recall costs of €22.7bn (bull case scenario)

Figure 21: **Valuation approach – new TP at €82**

EPS 2016E	14.14
Assumed multiple	9.0
Fair value pre costs	127
Total costs	-22712
Per share	-45
Target price	**81.9**

Source: Credit Suisse estimates

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Companies Mentioned *(Price as of 30-Sep-2015)*

Volkswagen (VOWG_p.DE, €97.75, UNDERPERFORM, TP €82.0)

Disclosure Appendix

Important Global Disclosures

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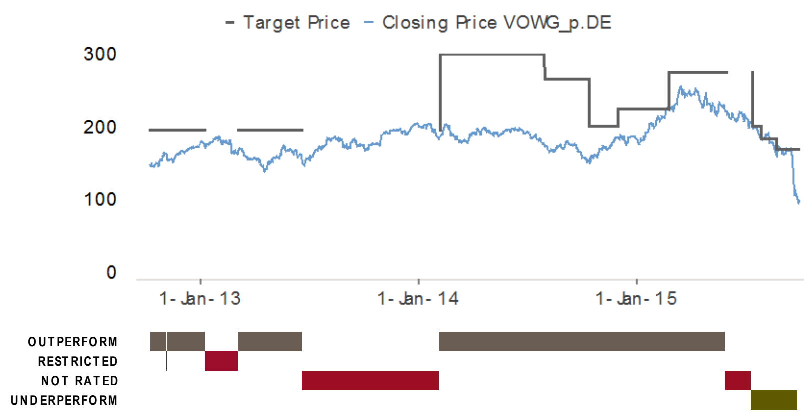
3-Year Price and Rating History for Volkswagen (VOWG_p.DE)

VOWG_p.DE Date	Closing Price (€)	Target Price (€)	Rating
09-Oct-12	147.55	195.00	O
05-Nov-12	162.40		R
06-Nov-12	155.70	195.00	O
09-Jan-13	171.60		R
05-Mar-13	166.45	195.00	O
20-Jun-13	153.10		NR
06-Feb-14	186.60	300.00	O *
31-Jul-14	174.55	265.00	
14-Oct-14	155.30	200.00	
01-Dec-14	184.70	225.00	
25-Feb-15	223.00	275.00	
01-Jun-15	220.35		NR
15-Jul-15	197.90	200.00	U *
29-Jul-15	186.35	183.00	
24-Aug-15	159.70	169.00	



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Price Target: (12 months) for Volkswagen (VOWG_p.DE)

Method: Our target price of €82 is based on 1.) 2016E underlying EPS applying multiple of 9.0x - yields fair value of €127/share and 2.) assuming total costs related to recalls/fines/subsidy clawbacks of €22.7bn or €45/share.

Risk: Key upside risks include: 1.) better outcome in terms of costs from emissions investigations, 2.) stronger than expected development in China (JVs and imports), 3.) higher than expected cost savings (MQB). Key downside risks include: 1.) worse outcome in terms of costs from emissions investigations 2.) more pronounced slowdown in China (JVs and imports), 3.) value destructive M&A

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