

23 September 2013 | 32 pages

Auto Manufacturers (Citi)
Western Europe

European Autos: Model Behaviour

How Much Do Model Cycles Really Matter And Who Is Ahead?

- **Beyond the hype** – We have a broadly positive view on Auto stocks as Europe stabilises and model cycles play an important role in stock selection. Nevertheless, we also feel that too often the market and analysts place too much emphasis on individual product stories such as the S-class or BMW X5. In this note we bring together our understanding of European OEM model launches and fleet age for all the major players, an exercise which highlights the plethora of competing products (SUVs are a particular focus for OEMs raising questions on pricing). Indeed, in 2014 there will be >350 major model ranges in Europe, hardly any player is inactive and every OEM seems to look for market share gain.
- **VW over-looked** – With this in mind we believe that model cycle changes have to be comprehensive and across fleets (reflected in falling fleet age) to really move the dial. In this regard we find the clear standouts are MBC and also somewhat surprisingly VW. MBC has the best momentum with fleet age at 2.6 years by end-14E v 3.7 years at end-12E. With new S, E, C classes and it addressing weakness in SUVs (GLA/MLC), we think model cycle can contribute to higher margins too. But we feel this is also priced in with it trading on c.11x 14E P/E vs 7x for VW. VW's model strengths, e.g. a new Passat and an expanded Porsche/Audi range seem underappreciated, reinforcing our Buy view. VW's group model age at 2.7 years in 14 and 15 is nearly as young as MBC's and it has shown more consistency too. There may be too much optimism on Porsche, but Audi's fleet age should be younger than MBC's in 16E. By then we will see new A4, A5, A8 and new Q1, Q5, Q6, Q7.
- **RNO and BMW strengths** – We are buyers of RNO (Focus List) for multiple reasons; model cycle whilst healthy, is not the most important though its leading entry level positioning should help it in softer EM as peers go upmarket. It still has a significantly more youthful average fleet age than PSA and Fiat with Dacia in particular in a sweet-spot. BMW retains the most youthful fleet with an average age of c.2.5 years in 14E but its sweet-spot has passed too we believe. There is lots to come, e.g. new Mini, X5 and EVs, but we don't see these as reversing the trend of lower margins in the years ahead.
- **PSA and Fiat** – PSA is a steady investor in new product but we think nothing stands out in its product cycle to justify the market's recent bullishness on the stock, even the rollout of a new 308. Its product age at 3.1 years at end-15E is still at the industry average and its move upscale has risks if the market further polarises between budget and luxury. Even Fiat is playing the upscaling game with the Maserati range expanding to become more like Jaguar but group product age remains resolutely the oldest in the space at c.4.2 years in 2014, doing nothing to alter our Sell view on the stock.

Philip Watkins

+44-20-7986-3949

philip.watkins@citi.com

See Appendix A-1 for Analyst Certification, Important Disclosures and non-US research analyst disclosures.

Citi Research is a division of Citigroup Global Markets Inc. (the "Firm"), which does and seeks to do business with companies covered in its research reports. As a result, investors should be aware that the Firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision.

Contents

Model Cycle Matters...	4
Why it Matters....	5
BMW Product Summary	8
Daimler Product Summary	10
Fiat Product Summary	12
Peugeot Product Summary	14
Renault Product Summary	16
VW Product Summary	18
VW: Audi/Luxury Product Summary	20
Appendix A-1	28

Figure 1. European Automakers, Current Basic Data: Recommendations & Valuations

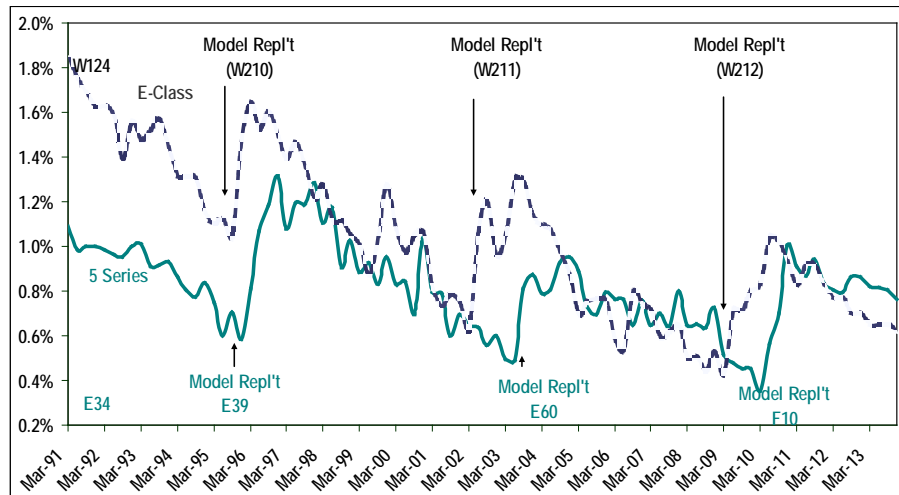
RIC	Company	Citi	Price			ETR	Price Performance			EPS (local curr.)				Cons EPS (local cy)			
Code	Name	Rating	Ccy	Curr	Target	1Y (%)	3m	6m	12m	2011	2012	2013	2014	2011	2012	2013	2014
European Automakers																	
BMWG.DE	BMW	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> <div>2</div>	EUR	81	80	1.3	8.3	7.6	34.7	1.94	1.62	7.86	8.18	7.45	7.77	7.85	8.14
DAIGn.DE	Daimler	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> <div>2</div>	EUR	58	52	(7.2)	12.6	20.2	40.0	5.31	5.71	5.03	4.94	5.52	5.25	4.99	5.49
FIA.MI	Fiat	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> <div>3</div>	EUR	6.2	4.5	(26.8)	1.0	39.2	34.7	1.08	0.28	0.36	0.54	0.30	0.49	0.28	0.51
PEUP.PA	Peugeot	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> <div>3</div>	EUR	13	5	(60.6)	75.6	83.4	88.1	2.30	(18.13)	(2.85)	(0.69)	3.94	(2.77)	(2.08)	0.22
PSHG_p.DE	Porsche	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> <div>2H</div>	EUR	67	65	0.2	3.2	2.4	54.2	0.14	25.53	12.19	12.87	0.14	25.53	11.18	12.26
RENA.PA	Renault	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> <div>1</div>	EUR	61	73	21.8	-2.0	7.7	51.6	7.68	6.51	4.78	9.67	7.68	6.50	5.38	9.09
VOWG.DE	Volkswagen	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> <div>2</div>	EUR	171	150	(10.0)	2.4	3.8	29.1	19.03	46.34	22.30	25.58	18.49	46.42	22.01	25.63
VOWG_p.DE	Volkswagen(pref)	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> <div>1</div>	EUR	177	220	26.7	2.9	0.7	21.0	19.03	46.34	22.30	25.58	18.53	46.48	21.25	24.65
European Suppliers																	
ALV.N	Autoliv	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> <div>3</div>	SEK	563	345	(36.4)	7.3	23.6	36.8	43.9	41.4	5.7	6.0	43.19	39.42	5.69	6.32
CONG.DE	Continental	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> <div>1</div>	EUR	125	132	7.9	21.4	25.7	52.1	7.76	11.02	11.35	13.04	8.44	11.66	10.54	12.01
EPED.PA	Faurecia	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> <div>2</div>	EUR	22	20	(9.7)	19.8	47.7	43.9	3.11	1.26	1.29	2.21	3.11	1.27	1.29	2.38
VLOF.PA	Valeo	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> <div>1</div>	EUR	63	68	10.1	13.0	36.8	55.3	5.67	5.57	5.80	6.95	5.67	5.56	5.22	6.22
MICP.PA	Michelin	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> <div>1</div>	EUR	83	87	8.3	8.8	9.7	25.6	8.19	8.68	7.65	9.95	7.93	8.07	7.72	8.85
NRE1V.HE	Nokian Tyres	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> <div>3</div>	EUR	38	28	(22.2)	14.7	4.0	8.0	2.28	2.41	2.43	2.54	2.32	2.46	2.55	2.84
PECI.MI	Pirelli	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> <div>2</div>	EUR	10	9	(4.3)	3.1	5.2	3.4	0.72	0.91	0.88	1.02	0.7	0.8	0.8	1.0
	Company	Citi	PER			EV/EBITDA			FCF Yield %			EV/Sales			EBIT Margin		
	Name	Rating	2012	2013	2014	2012	2013	2014	2012	2013	2014	2012	2013	2014	2012	2013	2014
European Automakers																	
BMWG.DE	BMW	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> <div>2</div>	50.2	10.4	10.0	3.6x	3.5x	3.2x	8%	6%	7%	56%	52%	48%	10.8%	10.1%	9.9%
DAIGn.DE	Daimler	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> <div>2</div>	10.2	11.6	11.8	3.7x	4.5x	5.1x	2%	0%	4%	41%	55%	53%	7.5%	8.8%	7.2%
FIA.MI	Fiat	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> <div>3</div>	22.1	17.1	11.3	4.2x	4.2x	4.1x	-13%	-8%	-14%	40%	40%	41%	4.5%	4.5%	4.9%
PEUP.PA	Peugeot	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> <div>3</div>	(0.7)	(4.5)	(18.4)	1.6x	3.9x	3.4x	-84%	-42%	-22%	15%	18%	20%	-1.0%	-1.0%	0.5%
PSHG_p.DE	Porsche	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> <div>2H</div>	2.6	5.5	5.2	0.4x	364.0x	471.8x	23%	3%	4%	nm	nm	nm	nm	nm	nm
RENA.PA	Renault	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> <div>1</div>	9.4	12.8	6.3	-1.8x	-2.0x	-1.6x	7%	5%	7%	-15%	-18%	-18%	1.8%	2.8%	3.5%
VOWG.DE	Volkswagen	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> <div>2</div>	3.7	7.7	6.7	3.8x	3.7x	3.2x	5%	3%	5%	42%	47%	43%	6.0%	5.9%	6.9%
VOWG_p.DE	Volkswagen(pref)	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> <div>1</div>	3.8	7.9	6.9	3.8x	3.7x	3.2x	5%	3%	5%	42%	47%	43%	6.0%	5.9%	6.9%
European Suppliers																	
ALV.N	Autoliv	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> <div>3</div>	14.5	15.6	14.8	7.3x	7.7x	7.1x	4%	3%	6%	95%	98%	91%	9.7%	8.8%	9.1%
CONG.DE	Continental	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> <div>1</div>	11.3	11.0	9.6	4.8x	6.6x	5.7x	7%	4%	7%	71%	96%	87%	10.8%	10.8%	11.3%
EPED.PA	Faurecia	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> <div>2</div>	17.6	17.2	10.0	3.5x	3.8x	3.4x	-22%	7%	7%	21%	24%	23%	3.1%	3.3%	3.6%
VLOF.PA	Valeo	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> <div>1</div>	11.3	10.9	9.1	3.9x	5.0x	4.4x	1%	4%	6%	42%	56%	52%	6.2%	6.4%	7.0%
MICP.PA	Michelin	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> <div>1</div>	9.5	10.8	8.3	4.9x	5.6x	4.9x	7%	3%	7%	80%	96%	89%	11.3%	11.7%	12.5%
NRE1V.HE	Nokian Tyres	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> <div>3</div>	15.7	15.6	14.9	10.0x	9.7x	9.3x	3%	4%	4%	308%	299%	269%	25.7%	25.3%	23.8%
PECI.MI	Pirelli	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> <div>2</div>	10.7	11.1	9.5	6.0x	5.7x	5.2x	-1%	4%	6%	109%	106%	97%	13.7%	13.5%	13.6%

Source: dataCentral, Priced as of 20 September 2013

Model Cycle Matters...

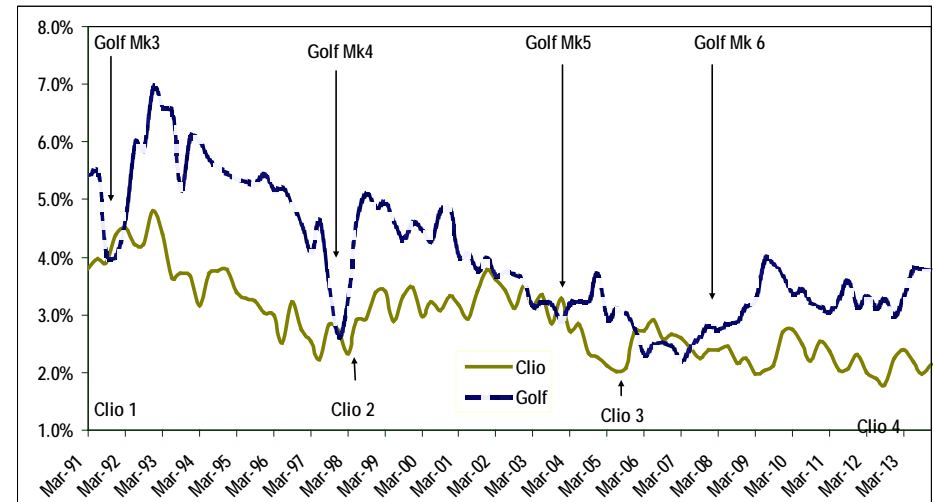
- **For Market Share** – The difference between the European market share of a Passat at post-replacement peak and pre-replacement trough is up to 100bps (i.e. 2.2% to 1.2% market share contribution). For E-Class and BMW 5 Series the amplitude has been even greater, with E-Class varying from 140bps to 60bps over the last product cycle, and 5-Series 110bps to 50bps. Though both of these were influenced by 'cash for clunkers' schemes, previous cycles saw similar swings.
- **For Pricing** – Incentives disappear when consumers are excited about a new product in short supply; they increase when dealers have to tempt buyers into time-expired late life-cycle models.
- **For Production Costs** – No OEM can make significant 'running' changes to cost structures of a model, with production equipment and supplier contracts fixed for the 6-7 year lifetime of a model. Production costs can only fundamentally change with a full product renewal – these incorporate new supplier strategies, and in many cases next stage component modularisation/platform sharing.
- **Life Blood of Industry** – No surprise that industry leaders continue to place much emphasis on expected financial impact of product renewals in their communication.

Figure 3. Mercedes E-Class vs BMW 5 Series, European Market Shares 1Q91A-4Q13E



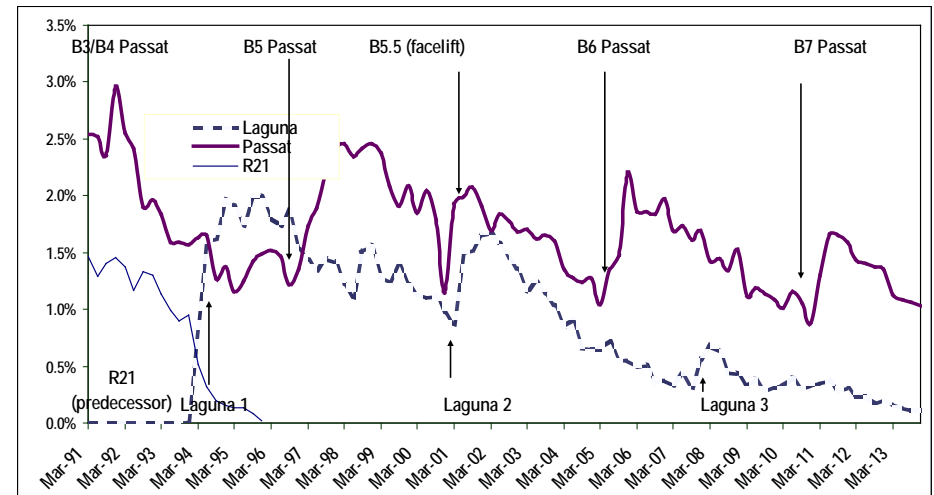
Source: Company Reports, Citi Research

Figure 2. Market Share Leaders: VW Golf vs Renault Clio, European Market Shares, 1Q91A-4Q13E



Source: Company Reports, Citi Research

Figure 4. Volkswagen Passat vs Renault Laguna, European Market Shares 1Q91A-4Q13E



Source: Company Reports, Citi Research

Why it Matters....

- **Six-year cycle in Europe** – Like most consumer goods which rely on attracting the interest of customers through design, technology features and performance, European cars have quite well-defined lifecycles. European OEMs have tended to see the right balance between product origination costs, brand and model identity and return as a lifecycle of 6-7 years with mid-cycle facelifts and with typical 'carry-over' content of 40-50%, though we sense some shortening in cycles recently as competition grows. In Japan a more typical cycle for a high-volume product is 4 years, but with a much higher carryover from previous generation models; in the US it has been around 5-6 years.
- **Sales peak early in lifecycle** – The first two years show best sales and then inexorably decay.
- **Upscale makers tend to seven years** – but they do not seem to enjoy any more stability in sales through the lifecycle. In fact our data for Europe suggests they have slightly greater volatility of sales, though this may also be related to German consumers' higher appetite for new models than other Europeans.

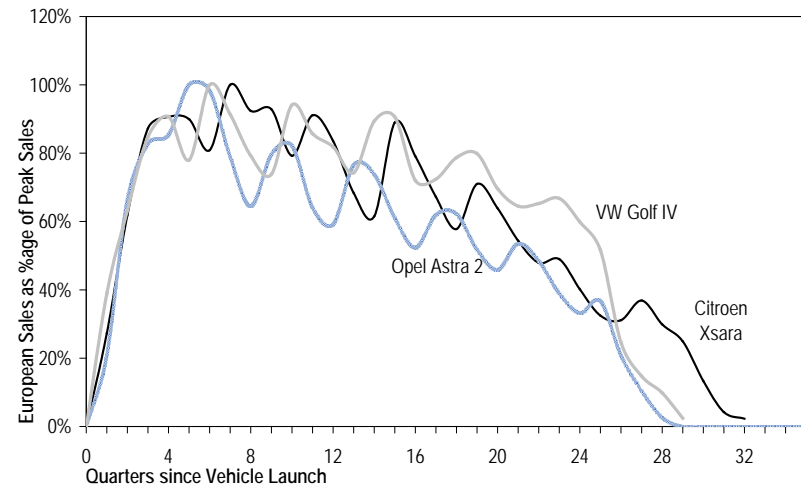
Distinctive Models (>1000 annual sales) on European Market, 1997A, 2011A, 2014E

	1997	2011	2014E
No of Model Series on offer	222	300	355
Average Volume/model achieved	65,000	44,000	38,000

Source: LMC Automotive, ACEA, Citi Research

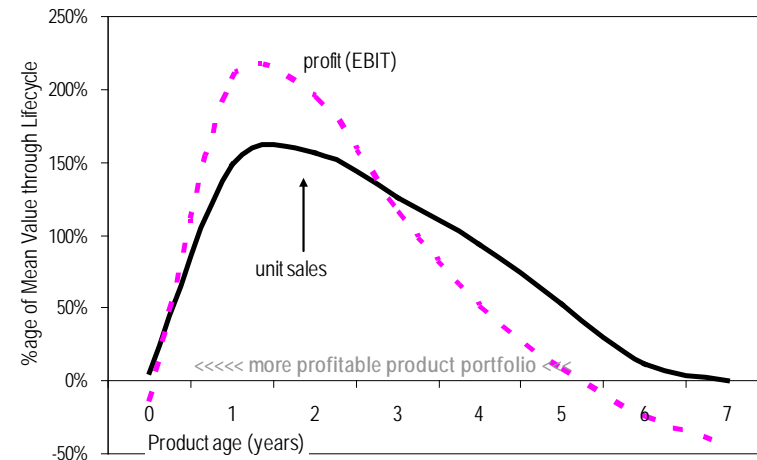
- **Increased model count** – The number of distinctive vehicle model series on offer is increasing, but the total market is now mature. So even successful individual models can only take a declining share of the market.
- **Profits peak early in lifecycle** – once launch costs are met, with full plant utilisation, tight inventory and lifetime low incentives.
- **The 'tail' of the lifecycle is very unprofitable** – which is why analysis concentrating just on new models as a percentage of sales is not enough; the proportion of high-incentive late-cycle models in the portfolio is as important. In calculating model age and estimating product launch dates we rely on a number of sources from LMC, companies, auto press, whilst making assumptions about the need to replace ageing vehicles to stay competitive.

Figure 5. Typical European car model cycle, as measured historically



Source: Company Reports, Citi Research

Figure 6. Schematic relationship, Product Age and Profitability of Model



Source: Company Reports, Citi Research

■ Upscale Car Competition

■ **MBC leads** – MBC is the clear stand out with it refreshing most of its sedans (something peers aren't) whilst plugging gaps in its weak SUV offering, i.e. GLA. It enters its product sweet-spot in H214/H115, MBC exceeded BMW and Audi margins in 2007/08 when it had a younger fleet. Nevertheless, MBC, BMW, Audi, Porsche, Jaguar and VW are all heavily focused on expanding and improving their SUV offering raising questions on pricing here.

■ **BMW slips** – BMW's advantages are waning modestly with most focus on an expanded SUV range, next generation mini and the I Series rollout (which faces competition). Though BMW is active we don't see any of these rollouts as likely to reverse the trend of modestly lower Auto EBIT margins over the next 2 years.

■ **Porsche/Audi** – Porsche is broadening its palate with all-new small SUV Macan in 2014. Though this product has promise we think there is too much optimism. We believe by 2015 it could add c.€350m to profit on 50k units but little to 14E EBIT on launch costs. Audi seems to us to be very active, with new Q1, 5, 6, 7 and A4, 5 and 8 by 2016, it should have a younger fleet age than MBC then too.

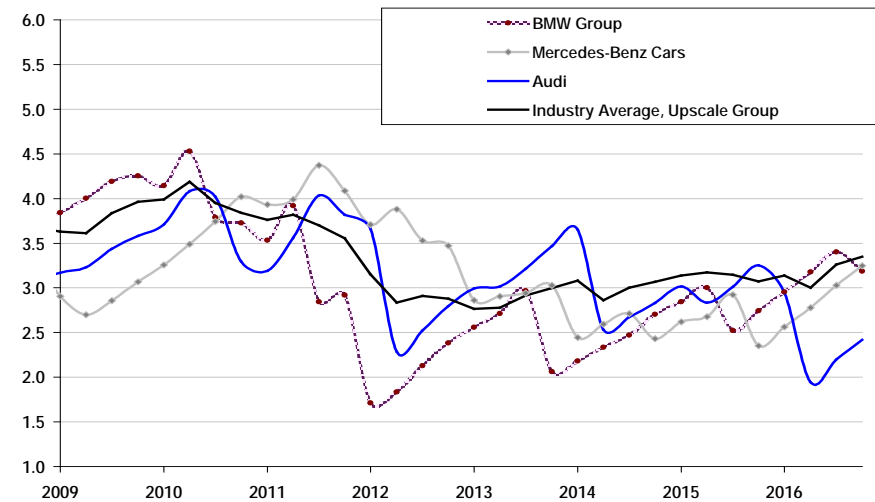
■ Volume Cars: Leaders and Laggards

■ **Renault** – No OEM stands-out in the mass market in the way that RNO did in 2013, but RNO still enjoys advantages over PSA and Fiat. The most important new launches we think are a new Megane, likely in 2015. Beyond this it should enjoy benefits from the cumulative impact of new A platform (with MBC) and C/D platform cars (with Nissan). Dacia rollouts in Brazil and Russia and a new Duster keep RNO the entry level leader, particularly as peers go upmarket.

■ **VW** – Product cadence continues to be steady, even slightly more youthful in 14E with we anticipate a new Passat for 2014 (22% of VW brand global production and a new Polo (12% of VW brand global production) for 2015, all on the new MQB platform. VW continues to have the most stable fleet age in Europe. We don't expect a Dacia-like entry level car for VW in the near term.

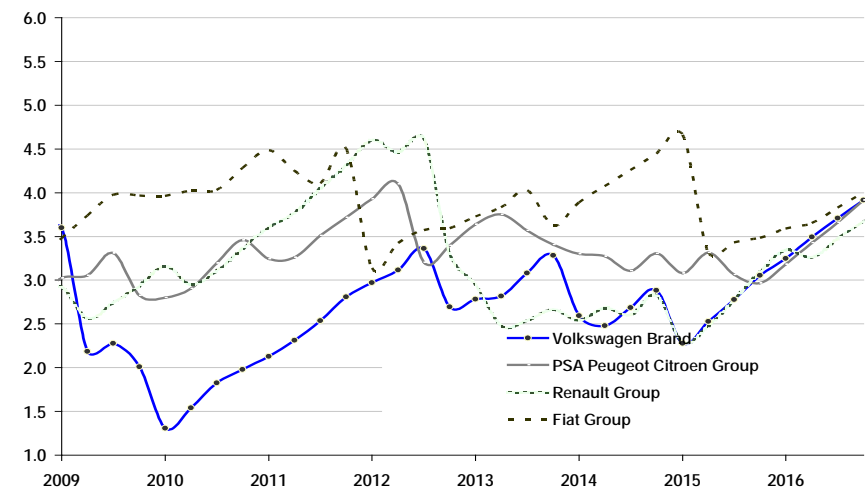
■ **Fiat** – Fiat remains the laggard with high model age and continued uncertainty on when a new Punto will come. The 500 range though does continue to expand and is now the key product range (30% of Fiat brand in Europe). There is no sign of an Alfa sale and Maserati becomes more like Jaguar.

Figure 7. Upscale Cars: comparison of Product Portfolio Age, 1Q10-4Q16E. Years since launch



Source: Company Reports, Citi Research

Figure 8. Volume Cars: comparison of Product Portfolio Age, 1Q10-4Q16E. Years since launch



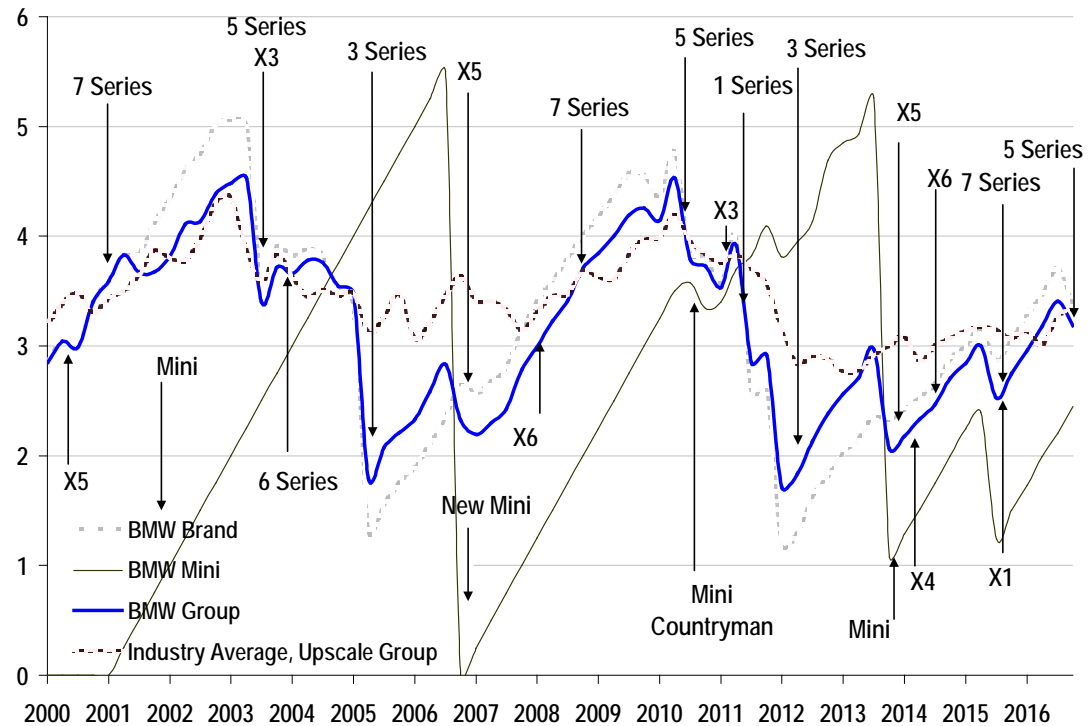
Source: Company Reports, Citi Research

Company Product Summaries

BMW Product Summary

- Sweet-spot passing** – BMW's product age remains low but we also think its sweet-spot has passed and upcoming models are unlikely to raise margins. Average BMW brand age was 1.5 years at end-12 rising to 3 years by end-15E. A new Mini keeps group product age low at 2.4 years at end-14E but Mini is not the highest mix. By 15E MBC (2.64 years) overtakes BMW group (2.8 years) in model age. Mix adjusted the gap is wider; by 2015 BMW is at 2.9 years v 2.4 years for MBC.
- SUVs** – There is still lots of activity in SUVs. The X5 is new in 2013 and we see an all new X4 in 14E. 2015E brings next generation (ng) X6 competing potentially with an all new Audi Q6 and in 2016 ng X1 completing the most comprehensive range in the space.
- Mini/EV** – 2014E also brings ng Mini (starting with Hatch) on FWD architecture likely increasing profitability for the small car platform. Sedans look set to be lower focus; ng 7 series is unlikely before end-15, we expect ng 5 Series in 16E. Though BMW is advanced in electric cars we also see significant competition for the i3 including MBC's electric B class and VW's E Up. We have seen some apply a high separate value to the I Series but this makes little sense to us given the competition.

Figure 9. BMW Product Portfolio Age in Pictures: Age (years since launch) of portfolio, 2000A-2016E



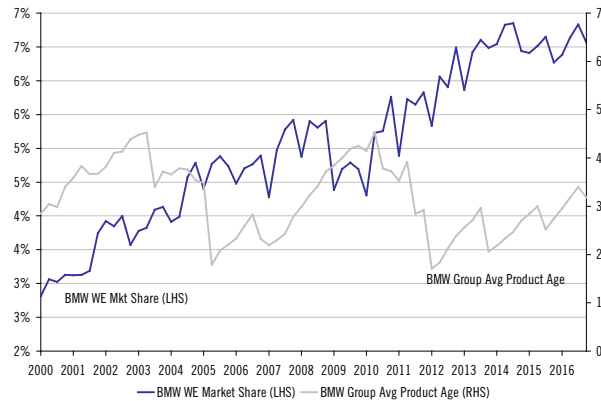
Source: Company Reports, Citi Research

Figure 10. BMW Product Introduction Summary, 2007A-2016E.

BMW Group	2007	2008	2009	2010	2011	2012	2013E	2014E	2015E	2016E
BMW	1 Coupe 1Q	X6 1Q	Z4 2Q	5 Series 2Q	6 Series 2Q	3 Series 1Q	i-3 Q4	4 series	7 Series (ng)	5 Series Q4
	X5 1Q	7 Series 4Q	X1 4Q	X3 (ng) 4Q	1 Series 3Q	7 Series 3Q (facelift)	4 Series (3-Series Coupe)	X4, 2 Series	X6	Z4 Q4
							5 series facelift	X3 facelift		X1
			5 Ser. GT 4Q	5 SW 4Q	X3 Q1	6 S GC 2Q	X5 (4Q)	i-8		
Mini		Clubman 1Q	Cabrio 2Q	Countryman 4		Coupe 1Q		Mini Hatch(ng) 3Q	Clubman	
Rolls-Royce		Ph'm Cab 1Q	Coupe	RR Ghost		RR Ph'm II 2H	Wraith Q4			Ghost

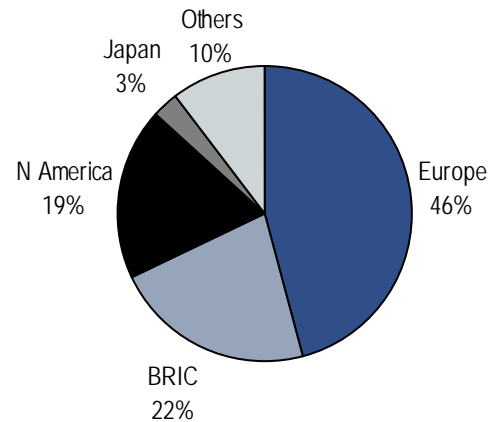
Source: Company Reports, LMC Auto, Various Trade Press and Citi Research. Launches show next generation vehicles not facelifts, unless stated

Figure 12. BMW – Product Age and WE Market Share, 2000A – 2016E



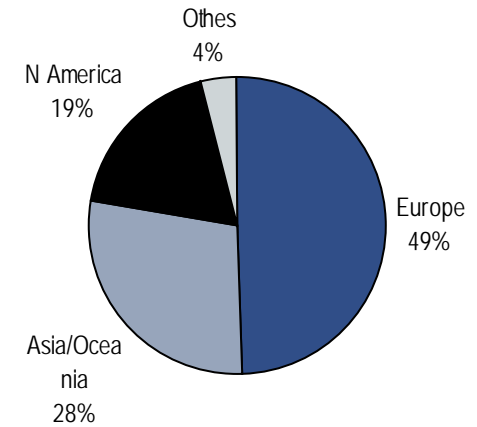
Source: Company Reports, Citi Research

Figure 13. BMW – Unit Sales by Region, 1H13



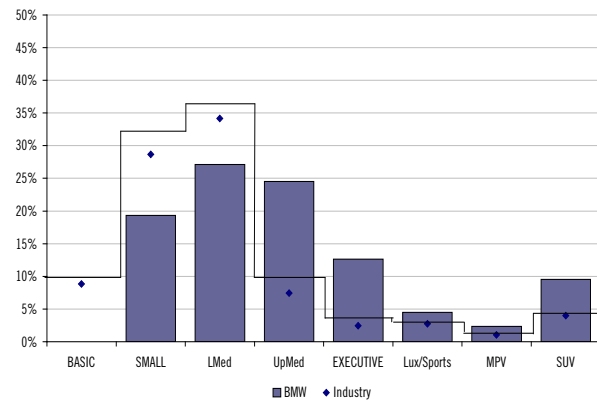
Source: Company Reports, Citi Research

Figure 14. BMW – Revenue by Region, FY13E



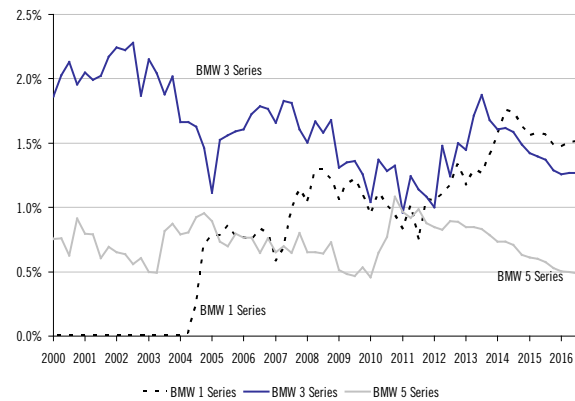
Source: Company Reports, Citi Research

Figure 15. BMW Group – European Sales Mix, 2013E



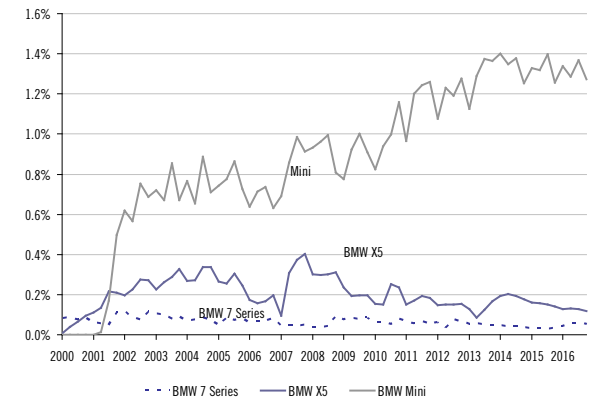
Source: Company Reports, Citi Research

Figure 16. BMW WE Market Share by Model, 2000A – 2016E



Source: Company Reports, Citi Research

Figure 17. BMW WE Market Share by Model, 2000A – 2016E

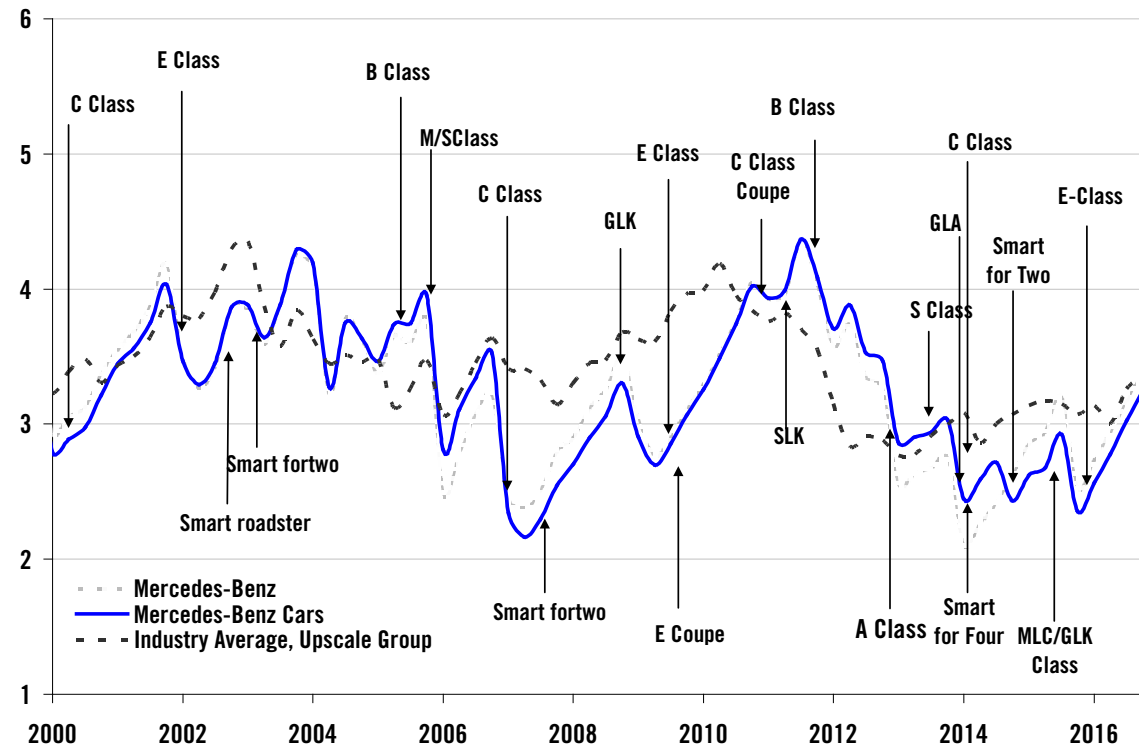


Source: Company Reports, Citi Research

Daimler Product Summary

- **Sweet-spot in H214** – MBC is the standout in Europe again with the best volume and mix weighted improvement in product age. Most of the bigger volume products are being refreshed with positioning more likely to appeal to a younger audience. Rollouts also fill gaps such as SUVs (GLA/MLC). We see average fleet age falling from 3.7 years in 2012 to 2.5 years by 2014. In 15E it should have the lowest fleet age in Europe.
- **Sedans/small cars** – Beyond 2013's new S Class (20% of MBC EBIT), we see a new C Class in 2014 (10% of EBIT first on new RWD architecture) followed by a new E Class in 2016 (also on RWD architecture). S Class competes with Audi A8 and BMW 7 Series facelifts, however. Sports cars should also get a focus with SLK and CLS facelifts in 2014/5.
- **SUVs** – MBC has fallen behind in SUVs (particularly small) but 2014E brings advance with a new GLA compact SUV (Jaguar Evoque, BMW X1, Audi Q3 challenger), the fourth member of the new small compact family based on front/all-wheel drive MFA platform. This platform should be completed in 14E with launch of shooting brake CLA. There should also be a new GLK in 15E and an all-new MLC (X6 rival) based on ML (X5 rival) due in 15E.

Figure 18. Daimler Product Portfolio Age in Pictures: Age (years since launch) of portfolio, 2000A-2016E



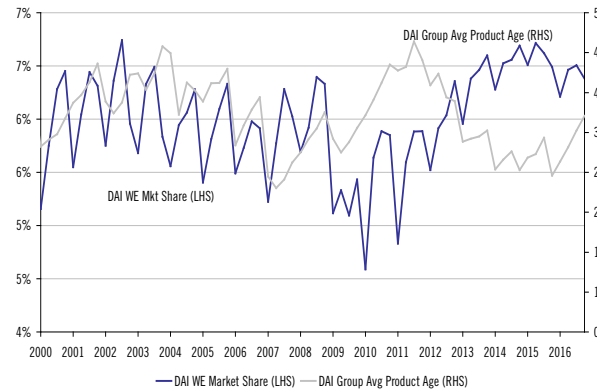
Source: Company Reports, Citi Research

Figure 19. Daimler Product Introduction Summary, 2007A-2016E.

Daimler	2007	2008	2009	2010	2011	2012	2013E	2014E	2015E	2016E
smart	ForTwo 1Q							Smart for 2 & 4		
Mercedes	C Class 2Q	CLC 1Q	E-Class 1Q	E- cab 3Q	CLS, SLK 1Q	A-Class 3Q		C-Class		E Class
	C Class SW 4Q	SL 2Q	E- coupe 2Q	SLS 2Q	C coupe 3Q	GL-Class 4Q	S Class 3Q	GLA	GLK	
				CLS 4Q	ML-Class 3Q	SL-Class 2Q	CLA 3Q	S Class Coupe	MLC	
								CLS, ML facelift	SLK facelift?	
		GLK SUV 4Q	E-Class SW 4Q		B-Class 4Q					Sub-SLS/SLC

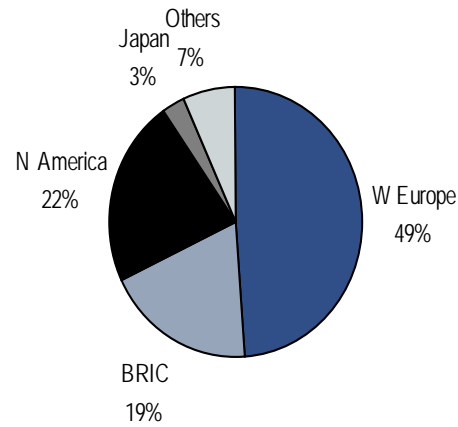
Source: Company Reports, LMC Autor, various Trade Press and Citi Research. Launches show next generation vehicles not facelifts, unless stated

Figure 21. Daimler – Product Age & WE Market Share, 2000A – 2016E



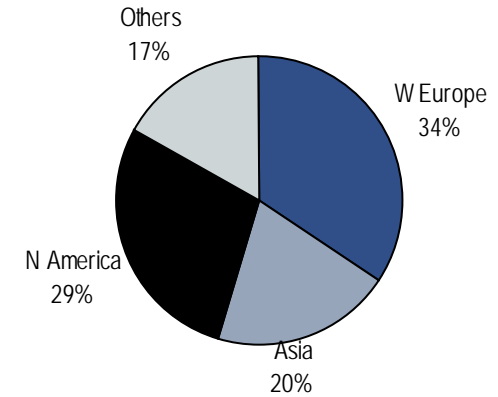
Source: Company Reports, Citi Research

Figure 22. Daimler – Unit Sales by Region, YTD13 (July)



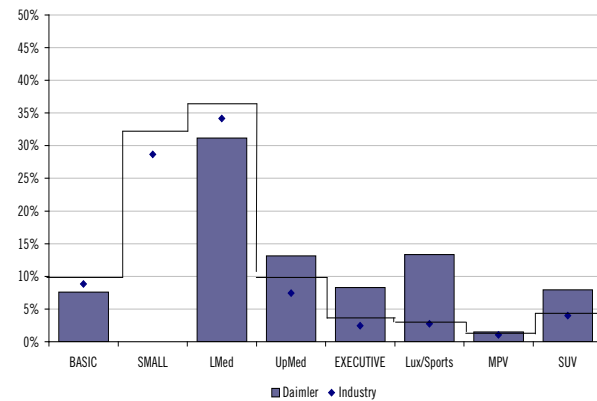
Source: Company Reports, Citi Research

Figure 23. Daimler – Revenue by Region, FY13E



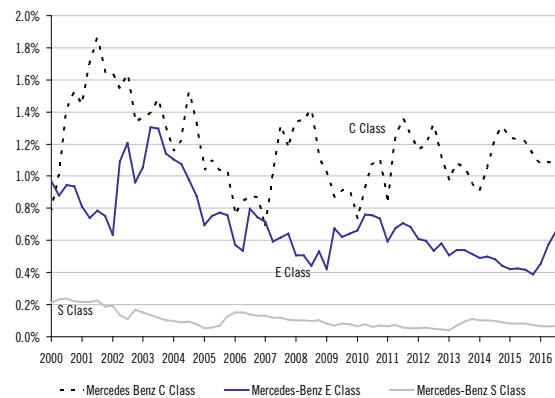
Source: Company Reports, Citi Research

Figure 24. Daimler Group – European Sales Mix, 2013E



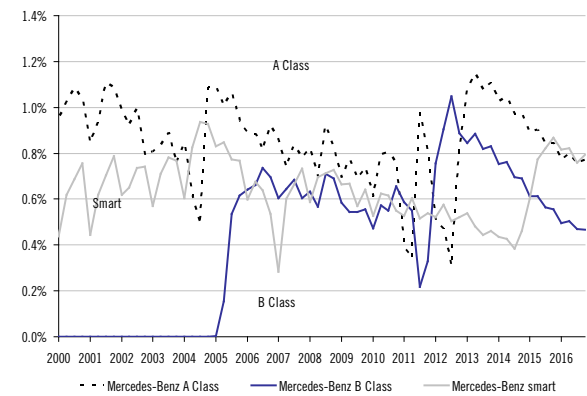
Source: Company Reports, Citi Research

Figure 25. Daimler WE Market Share by Model, 2000A – 2016E



Source: Company Reports, Citi Research

Figure 26. Daimler WE Market Share by Model, 2000A – 2016E

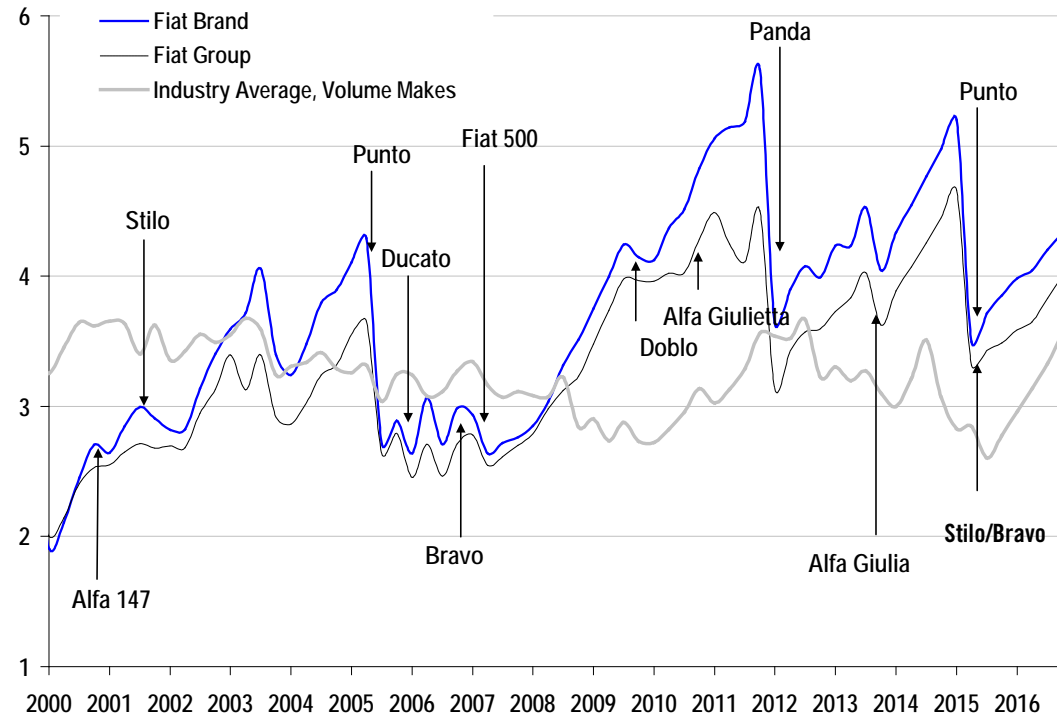


Source: Company Reports, Citi Research

Fiat Product Summary

- **Laggard** – Fiat's product age continues to lag its peers at c.4 years at end 14E. However, we think its product strategy is modestly less unimpressive than fleet age data suggests. The Fiat brand is essentially about three models, 500, Panda and the Punto. The primary lack of investment we think mostly applies to the Punto, with no news on a new model keeping group model age high.
- **500 matters** – 500 variants are now 30% of Fiat brand's European volumes, bigger than the Panda and here Fiat has continued to invest with 2013's 5-door Mini-MPV 500L. We see a 500 compact SUV coming in 2014, which should though face stiff competition from BMW's new mini range too. The basic 500 is also getting older.
- **Luxury/Alfa** – Aiming for 50k units by 2015 (6k in 2012), Maserati could be threatening its exclusivity but does improve its scale through broadening to five models and becoming more like Jaguar. 2014 brings BMW 5 series rival Ghibli with 2015 bringing an SUV Levante. Alfa product seems relatively old but we still see little evidence of Fiat looking to exit the brand; we expect a new Giulia likely for end-14 and a new Spider in 2015.
- **Chrysler** – Still unlikely to have much success in Europe but North America is active with H213 bringing new Jeep Grand Cherokee and Heavy Duty pickup.

Figure 27. Fiat Product Portfolio Age in Pictures: Age (years since launch) of portfolio, 2000A-2016E



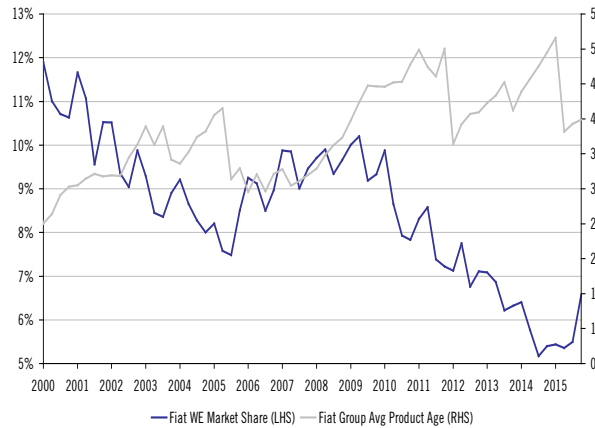
Source: Company Reports, Citi Research

Figure 28. Fiat Product Introduction Summary, 2006A-2015E.

Fiat Group	2007	2008	2009	2010	2011	2012	2013E	2014E	2015E	2016E
Alfa Romeo	8c 2Q	MiTo 2Q		Giulietta 2Q		8C, C-SUV		Giulia	Spider ng	
Fiat	new 500 3Q	Minicargo 2Q		Doblo (ng) 4Q	Panda	500-L		500 suv	Punto	
	Bravo 1Q	Ulysse (ng) 2Q	G Punto F/L		Freemont 3Q	new C-sedan			Stilo/Bravo	
Chrysler N America							Jeep Cherokee	Jeep Compass		
							Jeep Grand Cherokee facelift	Chrysler Sedan		
							RAM ProMaster	B-Segment SUV		
							RAM 2500-3500 pickup			

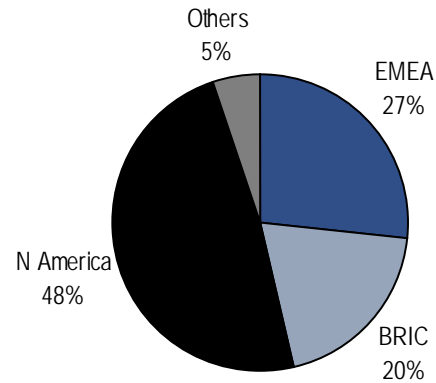
Source: Company Reports, LMC Autor, various Trade Press and Citi Research. Launches show next generation vehicles not facelifts, unless stated

Figure 29. Fiat Product Age & WE Market Share, 2000A – 2016E



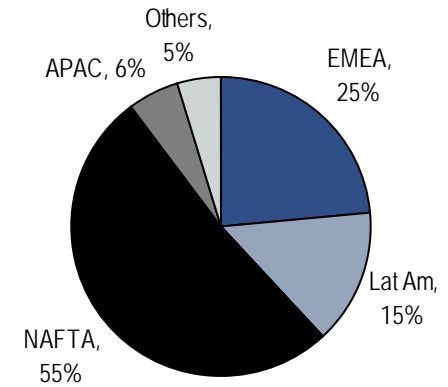
Source: Company Reports, Citi Research

Figure 30. Fiat-Chrysler Unit Sales by Region, 1H13



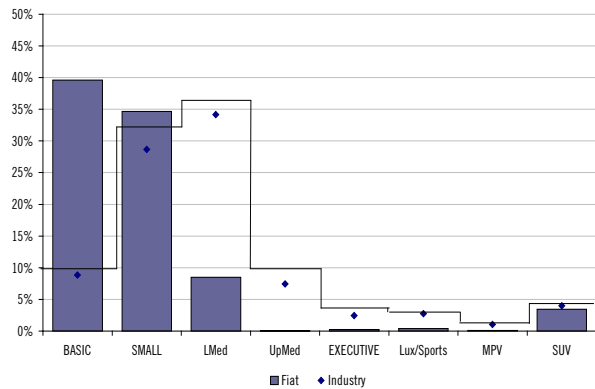
Source: Company Reports

Figure 31. Fiat-Chrysler: Revenue by Region, FY13E



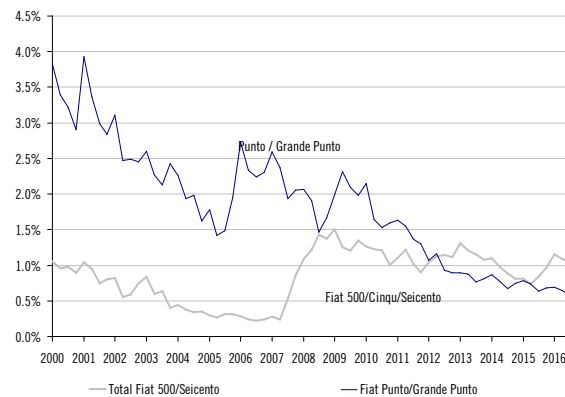
Source: Company Reports, Citi Research

Figure 32. Fiat Group – European Sales Mix, 2013E



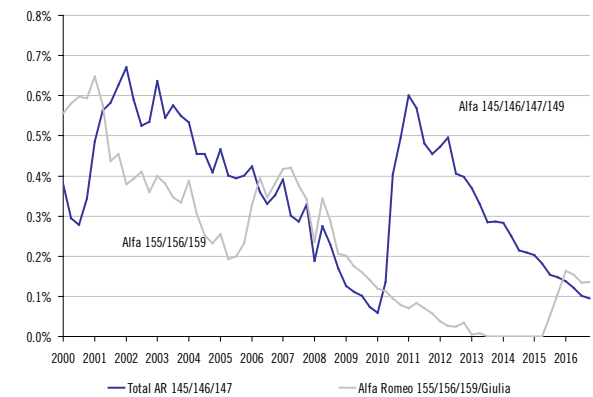
Source: Company Reports, Citi Research

Figure 33. Fiat WE Market Share by Model, 2000A – 2016E



Source: Company Reports, Citi Research

Figure 34. Fiat WE Market Share by Model, 2000A – 2016E

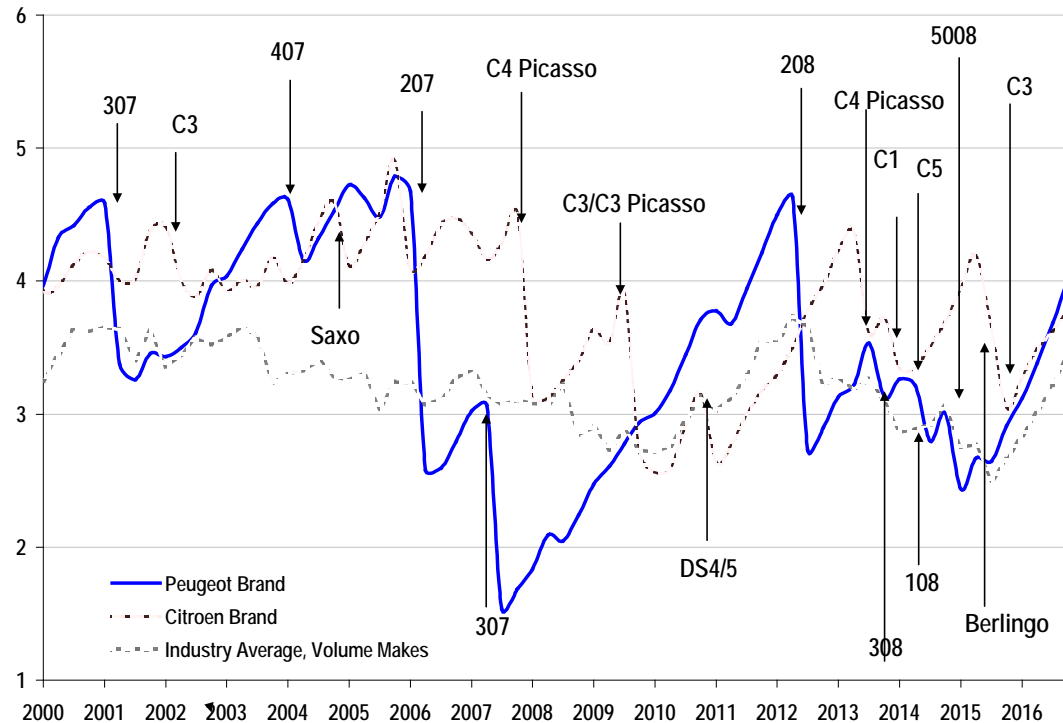


Source: Company Reports, Citi Research

Peugeot Product Summary

- **No delays to schedule** – Despite worries about underinvestment PSA it is not letting up on its product launch schedule; indeed we forecast the average age of its fleet falling to 3.1 years in 2015 vs 3.6 years end-13E helped by a new 308 (high mix, 6% of group sales) and A class vehicles in 2014 with a further move upscale. Product cycle does not though stand out enough vs peers to justify the stock's recent outperformance, we believe.
- **Product mix** – Furthermore, we see risks for a mass-market player moving upscale as the market polarises between upscale and budget offerings. Nevertheless, we still acknowledge that better-than-expected pricing in 2013 has been helped by improved offerings recently including the new 208.
- **2014** – Of the potential launches for 2014 we see the most significant as a likely to be new A class C1/107 successors and a new 308 (15% of volumes). The new 308 (like the C4 Picasso) is also based on new GM shared EMP2 platform focused on C/D models. PSA is moving to two platforms with GM, with a smaller car due in 2017. New Citroen C3 and C5s seem possible in 14/15 too and a DS Hatch/SUV for China.

Figure 35. PSA Product Portfolio Age in Pictures: Age (years since launch) of portfolio, 2000A-2016E



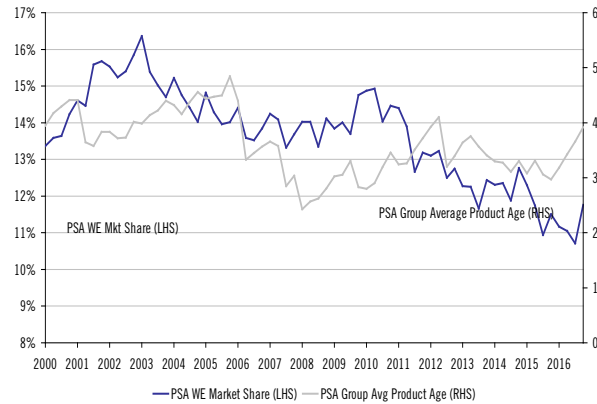
Source: Company Reports, Citi Research

Figure 36. Peugeot Product Introduction Summary, 2007A-2016E.

PSA Group	2007	2008	2009	2010	2011	2012	2013E	2014E	2015E	2016E
Citroën	Minicargo	C5 1Q	C3 Picasso 1Q	DS3 1Q	DS4 1Q	C-Elysee	C4 Picasso	DS9 (rollout China)	Berlingo ng	
				C4 4Q	DS5 4Q			C5	C3	DS3
		Minicargo 1Q	C3 4Q	C5 (China)						
		Berlingo 2Q		C-Zero H2				C1 3Q		
Peugeot	207 CC/SW 3Q	Partner 2Q		3008 1Q	508 1Q	208	2008			
	Bipper/Exp. 1Q,4007/308		5008 4Q	iOn H2	3008 HY4 4Q	301, 4008	308 4Q	108 2Q	5008	Partner, RCZ

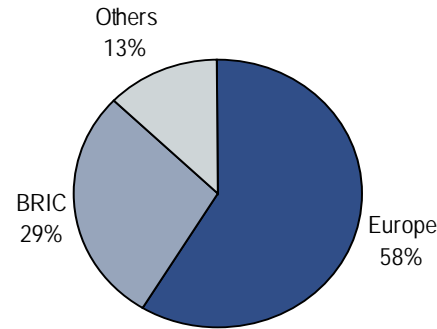
Source: Company Reports, LMC Autor, various Trade Press & Citi Research. Launches show next generation vehicles not facelifts, unless stated

Figure 37. PSA – Product Age & WE Market Share, 2000A – 2016E



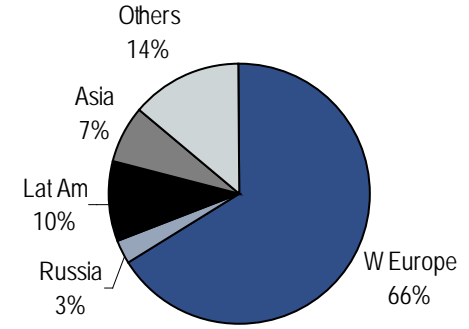
Source: Company Reports, Citi Research

Figure 38. PSA – Unit Sales(assembled vehicles) by Region, 1H13



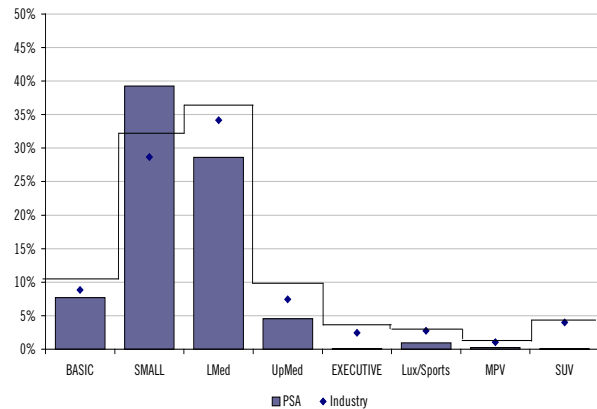
Source: Company Reports, Citi Research

Figure 39. Revenue by Region, FY13E



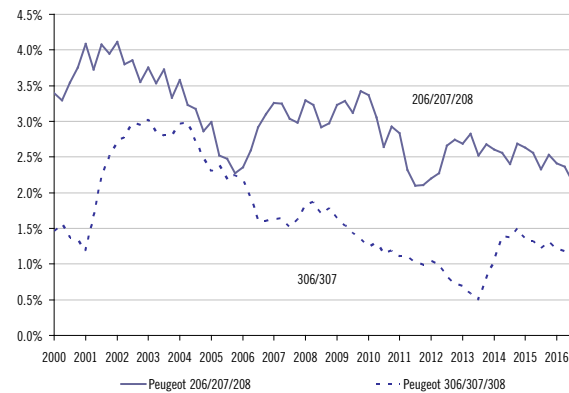
Source: Company Reports, Citi Research

Figure 40. PSA Group – European Sales Mix, 2013E



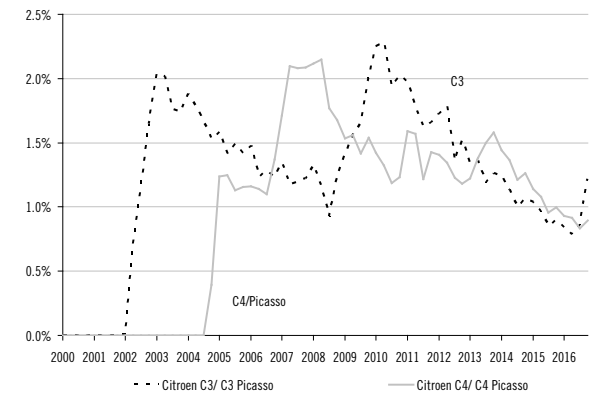
Source: Company Reports, Citi Research

Figure 41. PSA WE Market Share by Model, 2000A – 2016E



Source: Company Reports, Citi Research

Figure 42. PSA WE Market Share by Model, 2000A – 2016E

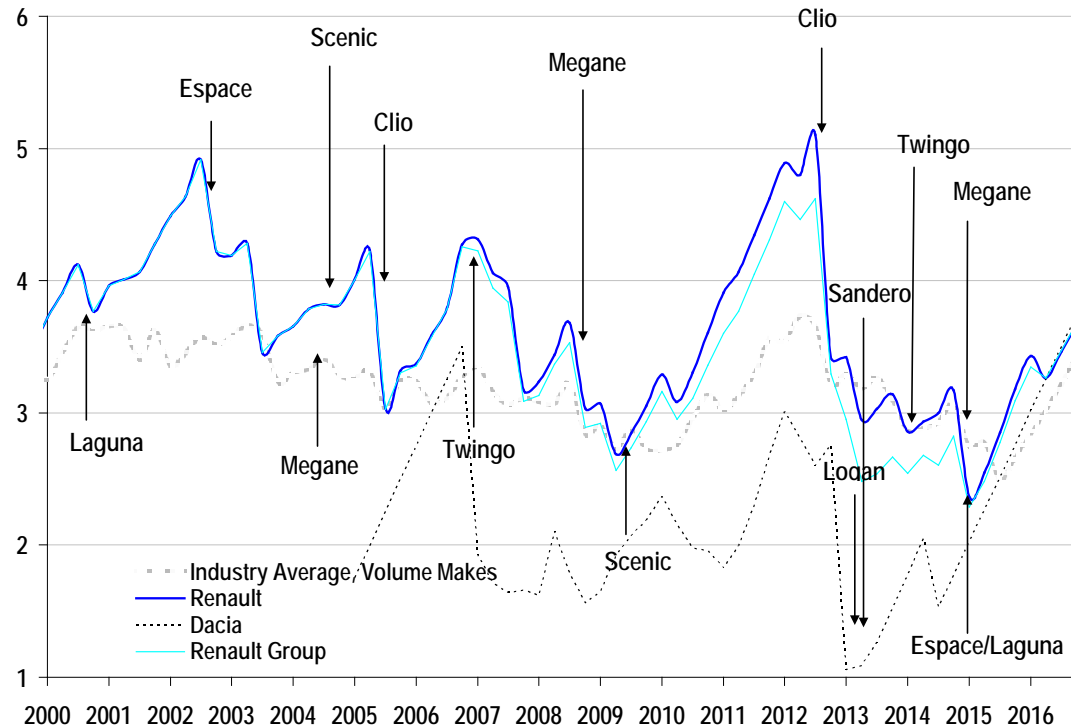


Source: Company Reports, Citi Research

Renault Product Summary

- **Still in sweet-spot** – The RNO group ends 2013 with model age down substantially to 2.7 years v 4.3 years at end-12 with rollout of the new Clio, the Captur crossover and next generation Logan and Sandero models. Model age stays relatively flat into 15E when we expect new Laguna, Espace and Megane.
- **Focus on 2015** – In general model age remains competitive vs peers and is younger than PSA's even though most new activity will be in 2015. 2014E is relatively light for RNO brand with ng Twingo. In general, we see other mass -market peers moving upscale leaving RNO well positioned to dominate the entry level which we think should help it particularly in Emerging markets where consumer sentiment could weaken in 14E. For Dacia we can expect a Phase 2 Duster in 14E and rollout of new Logan and Sanderos in Russia and Brazil.
- **Platform sharing** – Platform sharing is key to cost cutting; 2014E's new Twingo comes on a shared A-segment platform with Daimler. Late-2014 and 2015's new Espace, Laguna and Megane are on a shared C/D platform with Nissan. It also will be based on Nissan's MQB-like Modular strategy CMF.

Figure 43. RNO Product Portfolio Age in Pictures: Age (years since launch) of portfolio, 2000A-2016E



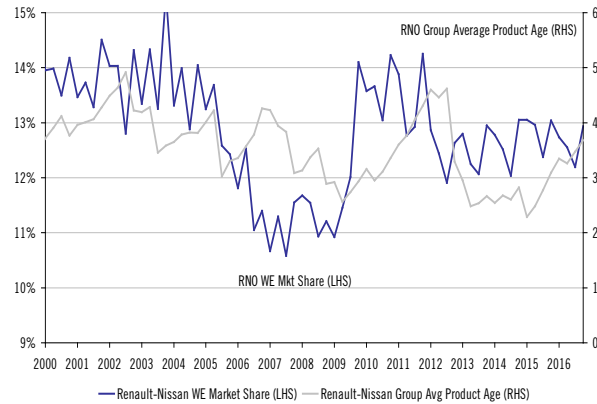
Source: Company Reports, Citi Research

Figure 44. Renault Product Introduction Summary, 2007A-2016E.

Renault-Nissan	2007	2008	2009	2010	2011	2012	2013E	2014E	2015E	2016E
Nissan		Maxima	Pixo	Murano	Micra	Pathfinder	Note(HB)	Qashqai(SUV)	Infiniti Q70(Sedan)	Micra(HB)
								Infiniti Q50 (3 series rival)		
		Patrol		Juke			Logan 1Q, Infiniti G	X Trail(SUV)		
Dacia		Sandero		Duster		Lodgy 3Q	Sandero 1Q	Duster Phase 2		
Renault	Twingo 2Q	Kangoo 1Q	Scénic 2Q	Megane CC 2Q	Twizy (EV)	Clio Q3	Captur		Megane ng	
	Clio Wagon	Laguna Coupe 2Q		Wind CC	Kangoo (EV)	Zoe City (EV)			Espace ng	
	Laguna 4Q	Koleos 3Q		Master	Fluence (EV)				Laguna ng	
	Grand Modus	Megane HB 4Q		Latitude				Twingo		

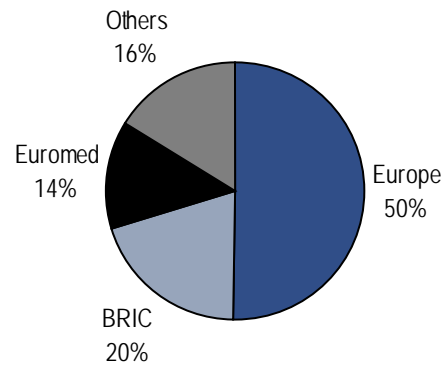
Source: Company Reports, LMC Autor, various Trade Press & Citi Research. Launches show next generation vehicles not facelifts, unless stated

Figure 45. RNO Product Age & WE Market Share, 2000A – 2016E



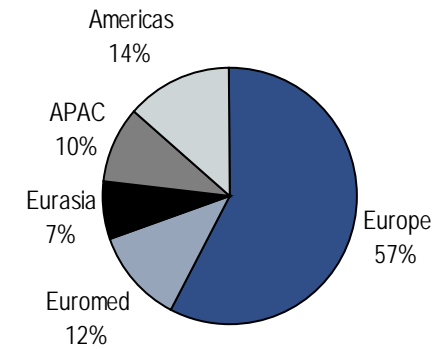
Source: Company Reports, Citi Research

Figure 46. RNO Unit Sales by Region, 1H13



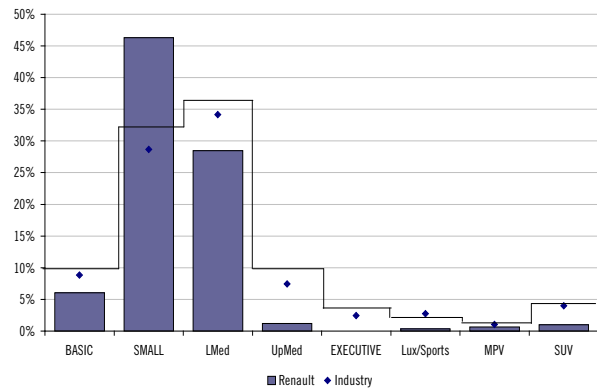
Source: Company Reports, Citi Research

Figure 47. RNO Revenue by Region, FY13E



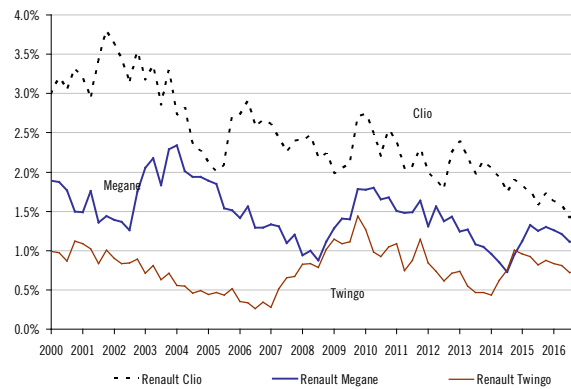
Source: Company Reports, Citi Research

Figure 48. RNO Group – European Sales Mix, 2013E



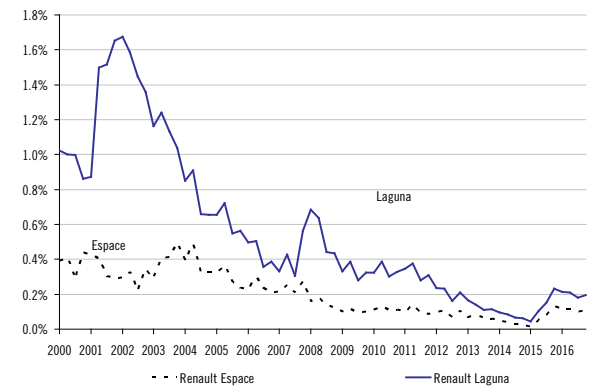
Source: Company Reports, Citi Research

Figure 49. RNO WE Market Share by Model, 2000A – 2016E



Source: Company Reports, Citi Research

Figure 50. RNO WE Market Share by Model, 2000A – 2016E

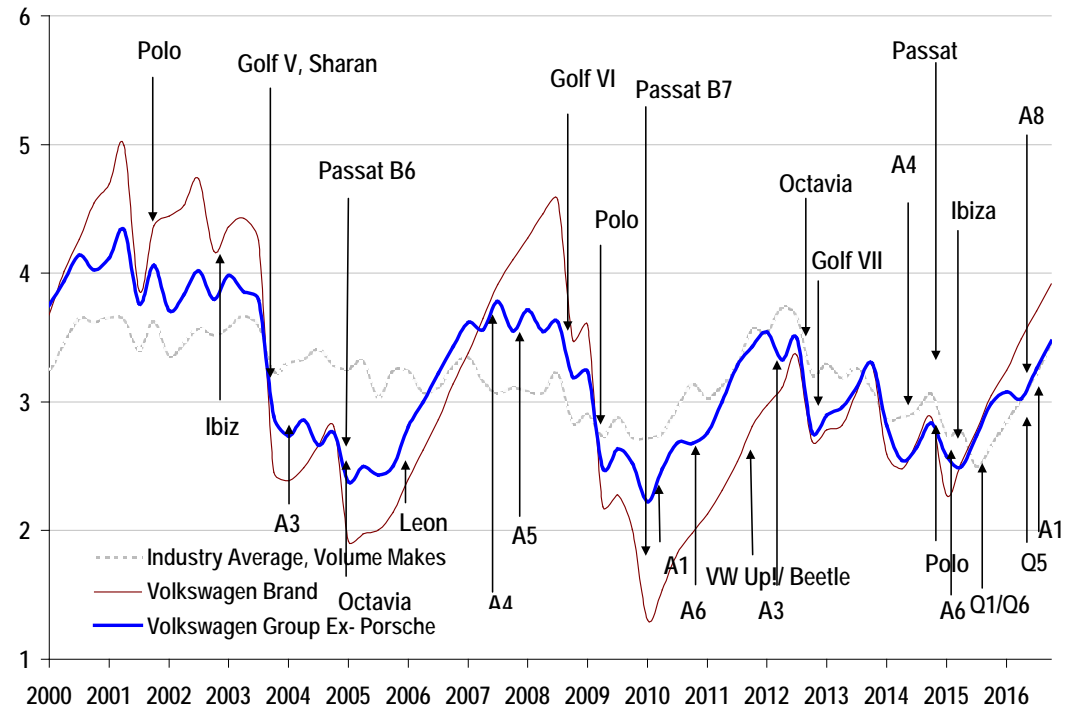


Source: Company Reports, Citi Research

VW Product Summary

- **Broad palette** – A broad brand palette ensures VW retains the steadiest fleet age in Europe, hovering around 3 years for the next few years. Indeed, the rollout of the new Passat should bring model age below 3 years by end-14 (2.7 years) and below the sector average making it an underappreciated model story.
- **MQB dominates product flow** – With the prospect of 2m units by 2014 and 4m by 2016, the expansion of the MQB architecture has been the key product focus enabling easier SUV, Cabrio derivatives etc. The next-generation Passat, which we see as likely in 2014 and next generation Polo which we expect in 2015 will be based on MQB. We see the new compact crossover Tiguan and a new mid-size crossover Touareg in 15E. The increasingly crowded small SUV segment likely gets a new VW Taigun in 2015 or 2016 (Up based).
- **Skoda/Seat** – Skoda product has also moved to MQB, including the new high volume Octavia in 2012. Beyond this we see little on the horizon for Skoda until a new Fabia in 2015/16. Seat also benefits from a new Toledo and Leon in 2012 but then little until 2015 when a new Ibiza seems due.

Figure 51. VW Product Portfolio Age in Pictures: Age (years since launch) of portfolio, 2000A-2016E



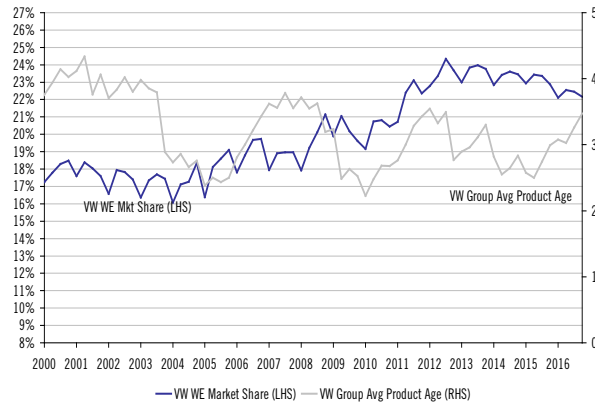
Source: Company Reports, Citi Research

Figure 52. VW Group Product Introduction Summary, 2007A-2016E.

VW Group	2007	2008	2009	2010	2011	2012	2013E	2014E	2015E	2016E
Seat		Ibiza 2Q	Cordoba 1Q	Ibiza SW		LEON 4Q			Ibiza	
		Exeo 4Q	Exeo 3Q	Alhambra		Toledo 4Q, UP!				
Skoda	Roomster 1Q	Yeti 2Q	Superb 2Q		Skoda Up!	Octavia 4Q	Yeti facelift			Fabia
	Fabia 2Q		Superb SW 4Q			Rapid 4Q				Taigun
Volkswagen	Tiguan 4Q	Scirocco 3Q	Polo 2Q	Polo Van 2Q	NMS (US) 3Q	Golf VII 4Q	Golf + Mini MPV	Passat	Tiguan	Polo
		Passat CC 2Q	Polo 3-dr	Touareg 2Q	VW Up! 4Q	Up!5dr	Golf station wagon		Touareg	
		Golf VI 3Q		Jetta US	Beetle 3Q				Passat CC	
			Gol (SAm) 3Q	Passat 4Q	Jetta Q1					

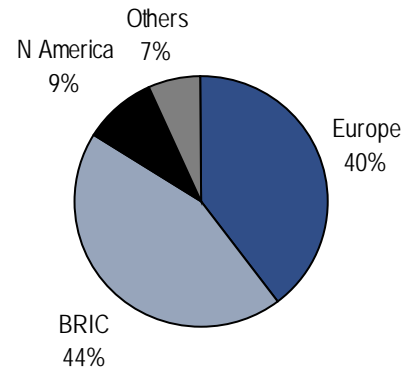
Source: Company Reports, LMC Autor, various Trade Press & Citi Research. Launches show next generation vehicles not facelifts, unless stated

Figure 53. VW – Product Age & WE Market Share, 2000A-2016E



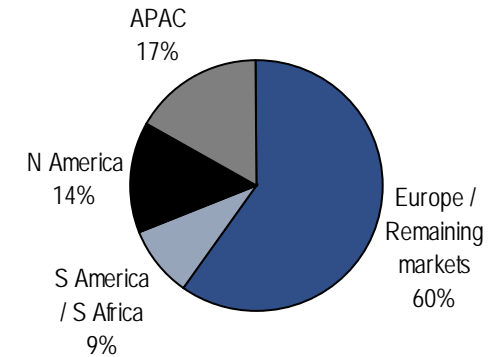
Source: Company Reports, Citi Research

Figure 54. VW Unit Sales by Region, YTD13



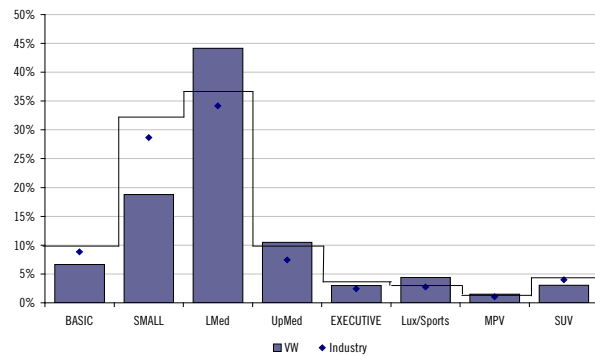
Source: Company Reports, Citi Research

Figure 55. VW – Revenue by Region, FY13E



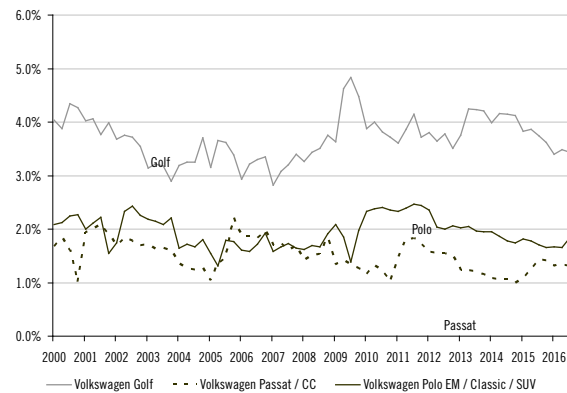
Source: Company Reports, Citi Research

Figure 56. VW Group – European Sales Mix, 2013E



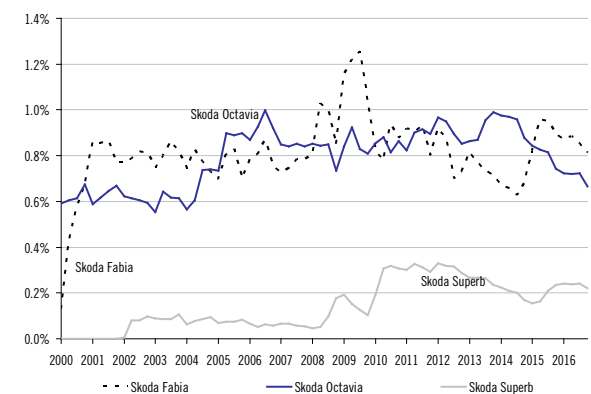
Source: Company Reports, Citi Research

Figure 57. VW WE Market Share by Model, 2000A-2016E



Source: Company Reports, Citi Research

Figure 58. VW WE Market Share by Model, 2000A-2016E

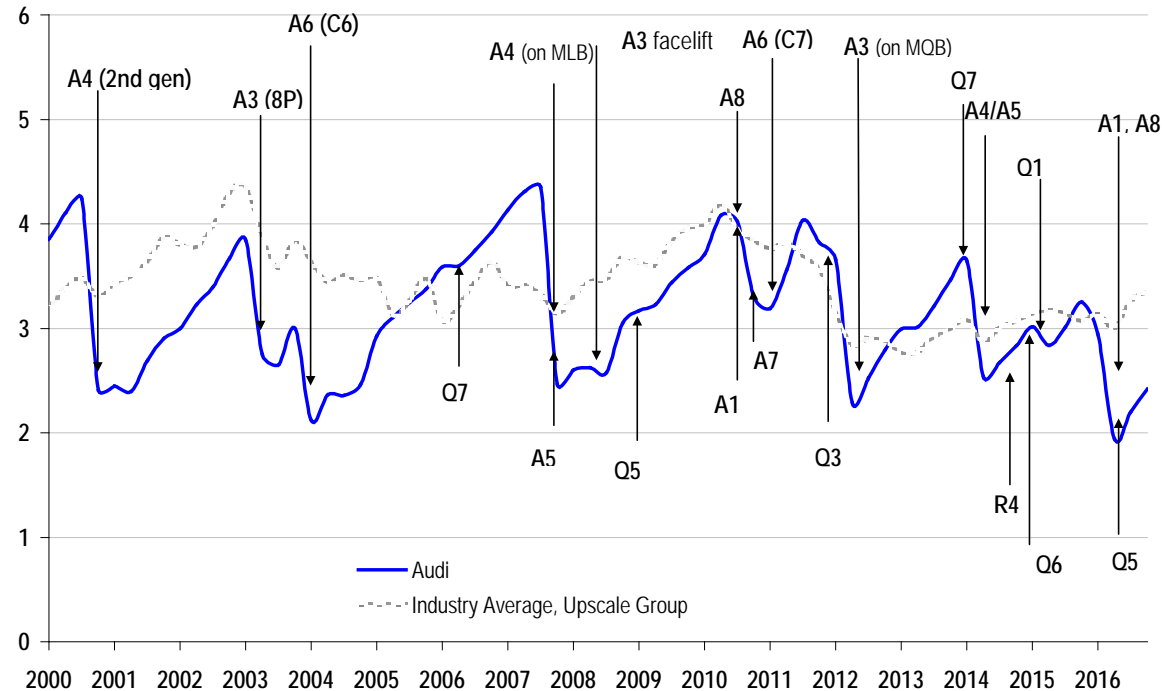


Source: Company Reports, Citi Research

VW: Audi/Luxury Product Summary

- **SUVs** – Audi has been assiduous in developing crossovers (Q3, Q5 and Q7) to compete with BMW and looks set to add a Q6 (X over coupe) and Q1 (Mini SUV) and next generation Q7 by end-2015.
- **A brand** – The further developed Audi MLB EVO platform underpins upcoming launches for A4, 5, 6, 8. We expect a new A4 by 2014, a new A5 in 2015 and a new A6 in 2016. A new A8 is likely in 2016, but 2013 brings a facelift here.
- **Model age** – An active product rollout for Audi keeps its model age very young at 2.4 years by end-16E, even lower than MBC at 2.9 years making it an ever-present threat.
- **Porsche** – Porsche is broadening its offering with an all-new small SUV Macan in 2014 (Q5 based). Though this has promise we also feel there is a little too much hype here with some seeing it as adding €1bn to EBIT. By 2015 we think it could add €350m to profit on 50k units, but little to 14E EBIT on launch costs. It also enters a crowded space, risks cannibalising the Q5 and will compete with a new Jaguar XQ.

Figure 59. VW Product Portfolio Age in Pictures: Age (years since launch) of portfolio, 2000A-2016E



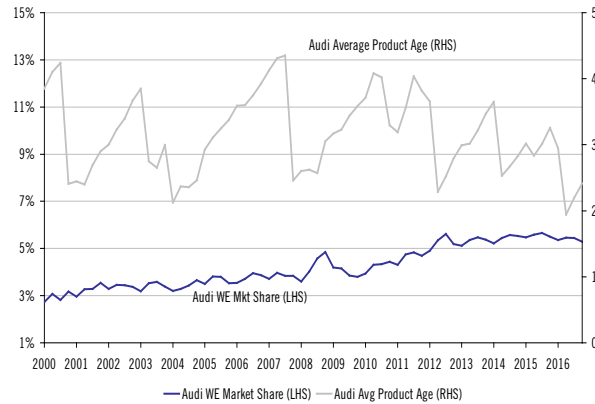
Source: Company Reports, Citi Research

Figure 60. Audi Product Introduction Summary, 2007A-2016E.

VW Group	2007	2008	2009	2010	2011	2012	2013E	2014E	2015E	2016E
Audi	Audi A5 2Q	Q5 4Q	A5 Sportback	Audi A1 2Q	A6 1Q	A3 2Q		A4	Q6	A1, Q5
	Audi A4 4Q			A8 3Q	Q3 4Q			Q7?	Q1	A6
				A7 4Q	A6SW 4Q		A8 Facelift	R4	A5	A8 (ng)
Bentley				Mulsanne (ng)	Bentley Cont 2					
Porsche	Cayenne f/l 1Q	911 f/l 3Q		Cayenne II 2Q	Cayenne H	Boxster Q3	Porsche 918	Macan		Sedan?
				Panamera 3Q		911 (991) 4Q				

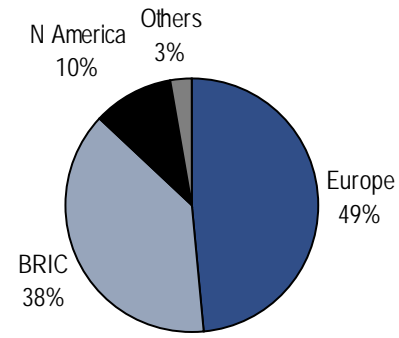
Source: Company Reports, LMC Autor, various Trade Press & Citi Research. Launches show next generation vehicles not facelifts, unless stated

Figure 61. Audi – Product Age & WE Market Share, 2000A-2016E



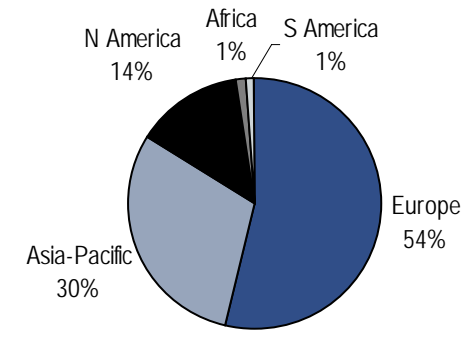
Source: Company Reports, Citi Research

Figure 62. Audi – Unit Sales by Region, YTD13



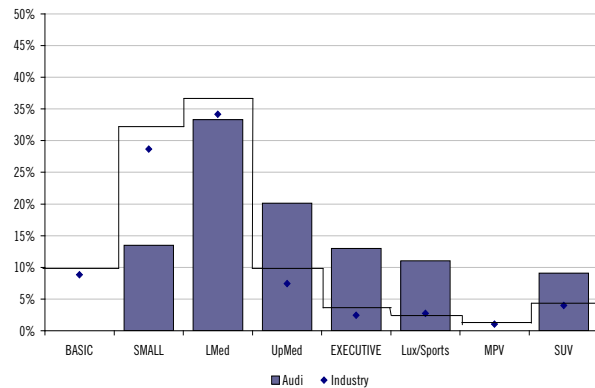
Source: Company Reports, Citi Research

Figure 63. Audi – Revenue by Region, FY13E



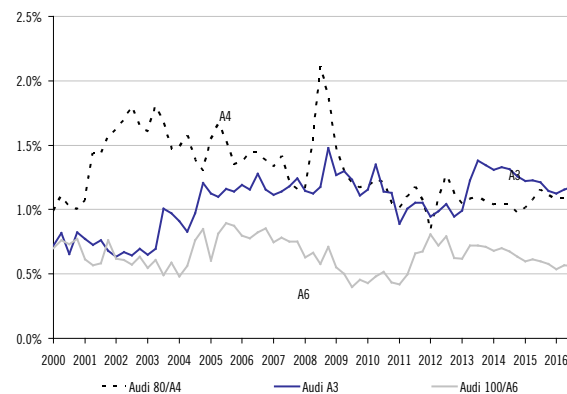
Source: Company Reports, Citi Research

Figure 64. Audi Group – European Sales Mix, 2013E



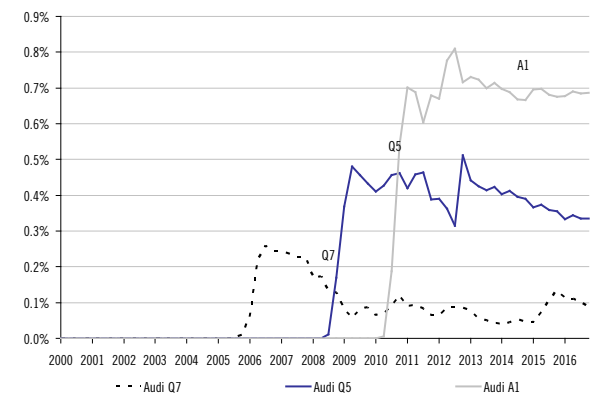
Source: Company Reports, Citi Research

Figure 65. Audi WE Market Share by Model, 2000A-2016E



Source: Company Reports, Citi Research

Figure 66. Audi WE Market Share by Model, 2000A-2016E



Source: Company Reports, Citi Research

Figure 67. Autos Model Cycle Summary 2006A - 2016E

	2006	2007	2008	2009	2010	2011	2012	2013E	2014E	2015E	2016E
BMW Group											
BMW		1 Coupe 1Q	X6 1Q	Z4 2Q	5 Series 2Q	6 Series 2Q	3 Series 1Q	i-3 Q4	4 series grand Coupe	7 Series (ng)	5 Series Q4
		X5 1Q	7 Series 4Q	X1 4Q	X3 (ng) 4Q	1 Series 3Q	7 Series 3Q (facelift)	4 Series (3-Series Coupe)	X4	X6	Z4 Q4
								5 series facelift	X3 facelift		X1
				5 Ser. GT 4Q	5 SW 4Q	X3 Q1	6 S GC 2Q	X5 (4Q)	i-8		
									2 Series		
Mini	Mini (ng) 2Q		Clubman 1Q	Cabrio 2Q	Countryman 4		Coupe 1Q		Mini Hatch(ng)	Clubman	
Rolls-Royce			Ph'm Cab 1Q	Coupe	RR Ghost		RR Ph'm II 2H	Wraith Q4			Ghost
Daimler											
smart			ForTwo 1Q						Smart for 2 & 4		
Mercedes	GL 3Q	C Class 2Q	CLC 1Q	E-Class 1Q	E- cab 3Q	CLS, SLK 1Q	A-Class 3Q		C-Class		E Class
	CL 3Q	C Class SW 4Q	SL 2Q	E- coupe 2Q	SLS 2Q	C coupe 3Q	GL-Class 4Q	S Class 3Q	GLA	GLK	
					CLS 4Q	ML-Class 3Q	SL-Class 2Q	CLA 3Q	S Class Coupe	MLC	
									CLS, ML facelift	SLK facelift	
		Sprinter 1Q	GLK SUV 4Q		E-Class SW 4Q		B-Class 4Q				Sub-SLS/SLC
Fiat Group											
Alfa Romeo	159 SW 2Q	8c 2Q	MiTo 2Q		Giulietta 2Q		8C		Giulia		
	Spider 2Q						C-SUV	4C 3Q		Spider ng	
Fiat	Scudo 4Q	new 500 3Q	Minicargo 2Q		Doblo (ng) 4Q	Panda	500-L		500 SUV	Punto	
	Ducato 3Q	Bravo 1Q	Ulysse (ng) 2Q		G Punto F/L	Freemont 3Q	new C-sedan			Stilo/Bravo	
Ferrari/Maserati								Quattroporte		Levante SUV	
								Ghibli			
		Linea									
Lancia						Ypsilon 1Q	C-sedan	Ypsilon (facelift)		Delta	
		Coupe-Cab	Delta 1Q				300/Minivan				
Chrysler N America											
								Jeep Cherokee	Jeep Compass		
								Jeep Grand Cherokee facelift	Chrysler Sedan		
								RAM ProMaster	B Segment SUV		
								RAM 2500-3500 pickup			
Ford Group											
Ford Europe	S-Max 2Q	Mondeo 2Q		Kuga 4X4 1Q	T Connect ng	Focus 1Q	Explorer		Transit		Fiesta
	Galaxy 2Q		Fiesta 2Q		C-Max 4Q	B-Max	Escape/Kuga		Eco-sport	Galaxy	
	Transit 2Q		Ka 4Q						Mondeo	S-Max	

GM Group											
Opel	Astra TT 1Q	Agila (ng) 3Q	Insignia 3Q	Insignia SW	Vivaro (ng)	Zafira (ng)	Chev Aveo		Captiva	Astra	Insignia
	Corsa 3Q		Combo (ng) 2Q	Astra (ng) 4Q	Astra ST 4Q	Ampera	Mokka		Tahoe	Antara	
					Meriva	Roadster					
Honda Group									Fit SUV		
									Jazz(HB)		
PSA Group											
Citroën	Picasso B58	Minicargo	C5 1Q	C3 Picasso 1Q	DS3 1Q	DS4 1Q	C-Elysee	C4 Picasso	DS9 (rollout China)	Berlingo ng	
					C4 4Q	DS5 4Q			C5	C3	DS3
	C6 1Q		Minicargo 1Q	C3 4Q	C5 (China)						
		Jumper 1Q		Berlingo 2Q	C-Zero H2				C1 3Q		
Peugeot	Boxer 2Q	207 CC/SW 3Q	Partner 2Q		3008 1Q	508 1Q	208	2008			
	207 2Q		Bipper/Exp. 1Q	5008 4Q	iOn H2	3008 HY4 4Q	4008	308 4Q	108 2Q		RCZ
			4007/308 3Q				301			5008	Partner
Renault-Nissan											
Nissan			Maxima	Pixo	Murano	Micra	Pathfinder	Note(HB)	Qashqai(SUV)	Infiniti Q70(Sedan)	Micra(HB)
									Infiniti Q50 (3 series rival)		
			Patrol		Juke			Infiniti G	X Trail(SUV)		
Dacia		Logan MCV 2Q	Sandero		Duster		Lodgy 3Q	Sandero 1Q	Duster Phase 2		
			Logan P/up					Logan 1Q			
Renault		Twingo 2Q	Kangoo 1Q	Scénic 2Q	Megane CC 2Q	Twizzy (EV)	Clio Q3	Captur	Megane facelift	Megane ng	
		Clio Wagon		Laguna Coupe 2Q	Wind CC	Kangoo (EV)	Zoe City (EV) Q3			Espace ng	
		Laguna 4Q	Koleos 3Q		Master	Fluence (EV)				Laguna ng	
		Grand Modus		Megane HB 4Q	Latitude				Twingo		
			Symbol 4Q								
Tata Group											
Jaguar								F-Type 3Q	Q-Type	Crossover	XJX 360
	XK8 1Q		XF 1Q	XF Coupe	XJ (ng)		CX16				
Land Rover		F/lander 4Q			RR/Disco f/ls	Evoque		RR ng	Freelander	Defender	
VW Group											
Audi	R8 4Q	Audi A5 2Q	Q5 4Q	A5 Sportback	Audi A1 2Q	A6 1Q	A3 2Q		A4	Q6	A1, Q5
	TT coupe 3Q		Audi A4 4Q		A8 3Q	Q3 4Q			Q7	Q1	A6
										A5	
		Audi Q7 1Q			A7 4Q	A6SW 4Q		A8 Facelift	R4		A8 (ng)
Bentley	Azure				Mulsanne (ng)		Bentley Cont 2			SUV	
Seat		Altea XL 4Q	Ibiza 2Q	Cordoba 1Q	Ibiza SW		LEON 4Q			Ibiza	
			Exeo 4Q	Exeo 3Q	Alhambra		Toledo 4Q				
							SEAT Up! 1Q				
Skoda		Roomster 1Q	Yeti 2Q		Superb 2Q	Skoda Up!	Octavia 4Q	Yeti facelift			
		Fabia 2Q			Superb SW 4Q		Rapid 4Q			Fabia	

Volkswagen	Golf SW	Tiguan 4Q	Scirocco 3Q	Polo 2Q	Polo Van 2Q	NMS (US) 3Q	Golf VII 4Q	Golf + Mini MPV	Passat	Tiguan	Polo
	Eos 2Q		Passat CC 2Q	Polo 3-dr 4Q	Touareg 2Q	VW Up! 4Q	Up!5dr	Golf station wagon		Touran	Taigun
			Golf VI 3Q		Jetta US	Beetle 3Q				Passat C shooting brake	
				Gol (SAm) 3Q	Passat 4Q	Jetta Q1					
Porsche	911 Turbo 2Q	Cayenne f/l 1Q	911 f/l 3Q		Cayenne II 2Q	Cayenne H	Boxster Q3	Porsche 918	Macan		Sedan?
					Panamera 3Q		911 (991) 4Q				
Hyundai					Verna	ix 20	i-30 IQ	i-10 ng		ix35 ng (SUV)	
							Santa-Fe 2Q			i20 ng (HB)	
Toyota										Prius(HB)	
	Auris	Corrola	iQ	Verso	Yaris		Auris	Lexus IS(Sedan)	Aygo(Compact HB)	Avenis(Sedan, Wagon)	
								Corolla			
			Avenis				Lexus GS	RAV4(SUV)	Lexus NS	Verso(MPV)	

Source: Company Reports, LMC Auto, Citi Research

Figure 68. Company by Company average model age in years 2000-2016E

COMPANY OVERVIEW	Years																
Average Product Age	00A	01A	02A	03A	04A	05A	06A	07A	08A	09A	10A	11E	12E	13E	14E	15E	16E
BMW Brand	3.07	3.86	4.68	4.60	3.75	2.12	2.25	2.80	3.71	4.43	4.33	3.15	1.48	2.24	2.62	3.03	3.45
BMW Mini	0.00	0.50	1.38	2.38	3.38	4.38	3.94	0.62	1.63	2.62	3.42	3.75	4.15	4.07	1.64	1.83	2.09
BMW Group	3.07	3.71	4.12	4.19	3.69	2.49	2.50	2.42	3.34	4.07	4.15	3.28	2.01	2.61	2.43	2.78	3.18
Mercedes-Benz	3.13	3.82	3.52	3.89	3.65	3.62	2.89	2.53	3.20	2.96	3.66	4.03	3.49	2.67	2.36	2.89	3.06
smart	1.63	2.62	3.62	4.19	3.80	4.52	5.78	0.47	1.38	2.38	3.38	4.38	5.38	6.38	5.40	0.79	1.82
Mercedes-Benz Cars	2.97	3.70	3.53	3.92	3.67	3.74	3.20	2.33	3.00	2.89	3.63	4.07	3.66	2.95	2.56	2.64	2.90
Fiat Brand	2.29	2.88	3.06	3.72	3.61	3.52	2.82	2.85	3.18	4.04	4.47	5.27	3.92	4.27	4.66	4.01	4.14
Alfa Romeo Brand	3.31	2.56	3.22	4.16	4.62	5.37	3.12	3.84	4.17	3.00	2.73	2.13	2.89	3.77	4.73	4.78	4.27
Lancia Brand	3.55	4.58	5.45	2.23	1.66	2.78	3.67	4.63	5.06	5.41	6.43	3.66	3.27	3.11	3.13	4.13	5.13
Fiat Group	2.28	2.68	2.88	3.22	3.12	3.18	2.57	2.73	3.05	3.79	4.16	4.39	3.45	3.81	4.17	3.68	3.77
Ford group	3.37	3.70	2.83	3.34	3.44	3.00	3.29	3.39	3.37	2.55	3.40	2.61	3.57	4.12	3.82	2.97	2.89
Volvo Brand	3.52	3.91	4.77	4.32	3.51	4.39	5.32	3.97	3.18	3.67	4.41	4.13	4.53	3.16	3.03	3.89	4.67
Opel Brand	3.37	2.55	2.63	2.86	2.53	2.73	2.89	2.97	3.28	3.43	2.82	3.52	4.13	2.85	3.05	3.00	2.72
GM Group	4.60	3.20	2.90	2.89	2.52	2.61	2.76	2.84	3.20	3.37	2.95	3.32	3.93	2.85	3.07	3.18	3.06
Citroen Brand	4.07	4.16	4.13	4.05	4.30	4.46	4.31	4.35	3.24	3.47	2.81	2.90	3.64	4.11	3.53	3.73	4.11
Peugeot Brand	4.35	3.83	3.64	4.33	4.53	4.68	3.29	2.40	2.09	2.70	3.34	3.92	3.81	3.29	3.11	2.67	2.86
PSA Peugeot Citroen Group	4.24	3.97	3.85	4.20	4.43	4.58	3.76	3.32	2.63	3.06	3.10	3.44	3.73	3.67	3.30	3.11	3.38
Nissan	4.94	4.22	5.39	3.49	4.28	4.72	4.55	3.63	4.59	2.48	2.81	2.98	4.00	4.68	3.47	3.30	3.73
Dacia	0.00	0.00	0.00	0.00	0.00	2.12	3.13	1.69	1.76	1.95	2.16	2.20	2.79	1.22	1.79	2.39	3.38
Nissan	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Renault	3.86	4.10	4.62	3.94	3.79	3.73	3.75	4.01	3.38	2.94	3.35	4.24	4.59	3.16	3.00	2.73	3.52
Renault Group	3.86	4.10	4.62	3.94	3.79	3.72	3.74	3.90	3.27	2.80	3.18	3.93	4.28	2.67	2.67	2.66	3.49
Audi	3.62	2.61	3.33	3.13	2.33	3.17	3.74	3.77	2.72	3.37	3.78	4.36	2.80	3.17	2.91	3.04	2.38
Seat	4.16	4.90	2.03	2.87	3.32	2.97	3.15	3.86	2.67	2.37	3.14	4.01	4.18	2.99	3.51	2.56	2.58
Skoda	3.12	2.91	3.74	4.66	4.11	3.12	3.97	2.27	2.49	2.99	3.81	4.75	4.73	3.29	1.87	2.31	3.58
Porsche	3.21	4.18	5.00	4.14	3.00	1.44	2.05	3.17	4.19	4.92	2.98	2.66	2.31	2.48	2.89	3.15	3.02
Volkswagen Brand	4.12	4.46	4.47	3.83	2.59	2.02	2.76	3.76	4.20	2.48	1.67	2.45	3.02	2.99	2.66	2.66	3.59
Volkswagen Group Ex- Porsche	3.97	4.05	3.84	3.62	2.77	2.48	3.12	3.62	3.53	2.71	2.52	3.27	3.27	3.07	2.71	2.71	3.21
Volkswagen/Porsche Group	3.96	4.05	3.85	3.63	2.77	2.46	3.11	3.61	3.54	2.73	2.53	3.27	3.26	3.06	2.71	2.71	3.21
Jaguar	2.31	2.19	2.38	2.62	3.61	4.56	4.95	5.77	3.26	3.75	2.60	3.35	4.38	4.38	4.54	3.87	3.68
Land Rover	5.70	6.60	7.08	8.13	7.69	5.75	5.41	4.14	5.81	6.66	6.31	6.67	5.35	4.65	5.11	3.84	3.53
Tata	4.67	5.10	5.29	6.08	5.95	5.22	5.15	4.48	4.92	5.59	5.28	5.92	5.16	4.60	4.97	3.84	3.58
Industry Average, Volume Makes	3.5	3.5	3.3	3.2	3.2	3.2	3.1	2.8	2.9	3.3	3.5	3.2	2.9	2.7	2.9	3.0	3.2
Industry Average, Upscale Group	4.0	3.9	3.5	3.3	3.3	3.3	3.5	3.8	4.0	3.7	2.9	2.9	3.0	3.1	3.2	3.3	3.4
Industry Average	3.6	3.6	3.4	3.2	3.2	3.2	3.1	3.0	3.1	3.4	3.4	3.1	3.0	2.8	3.0	3.1	3.2

Source: Company Reports, Citi Research



Notes

Citi Research



Notes

Citi Research

Appendix A-1

Analyst Certification

The research analyst(s) primarily responsible for the preparation and content of this research report are named in bold text in the author block at the front of the product except for those sections where an analyst's name appears in bold alongside content which is attributable to that analyst. Each of these analyst(s) certify, with respect to the section(s) of the report for which they are responsible, that the views expressed therein accurately reflect their personal views about each issuer and security referenced and were prepared in an independent manner, including with respect to Citigroup Global Markets Inc and its affiliates. No part of the research analyst's compensation was, is, or will be, directly or indirectly, related to the specific recommendation(s) or view(s) expressed by that research analyst in this report.

IMPORTANT DISCLOSURES

Within the past 12 months, Citigroup Global Markets Inc. or its affiliates has acted as manager or co-manager of an offering of securities of Fiat SpA, Volkswagen AG, Renault SA, Continental AG, BMW AG, Porsche Automobil Holding SE, Daimler AG, Peugeot SA, Faurecia.

Citigroup Global Markets Inc. or its affiliates has received compensation for investment banking services provided within the past 12 months from Fiat SpA, Volkswagen AG, Renault SA, Continental AG, BMW AG, Porsche Automobil Holding SE, Michelin, Valeo SA, Daimler AG, Peugeot SA, Faurecia.

Citigroup Global Markets Inc. or its affiliates expects to receive or intends to seek, within the next three months, compensation for investment banking services from Fiat SpA, Volkswagen AG, BMW AG, Porsche Automobil Holding SE, Peugeot SA, Faurecia.

Citigroup Global Markets Inc. or an affiliate received compensation for products and services other than investment banking services from Fiat SpA, Volkswagen AG, Renault SA, Autoliv Inc., Continental AG, Nokian Tyres plc, BMW AG, Porsche Automobil Holding SE, Michelin, Pirelli, Valeo SA, Daimler AG, Peugeot SA, Faurecia in the past 12 months.

Citigroup Global Markets Inc. currently has, or had within the past 12 months, the following as investment banking client(s): Fiat SpA, Volkswagen AG, Renault SA, Continental AG, BMW AG, Porsche Automobil Holding SE, Michelin, Valeo SA, Daimler AG, Peugeot SA, Faurecia.

Citigroup Global Markets Inc. currently has, or had within the past 12 months, the following as clients, and the services provided were non-investment-banking, securities-related: Fiat SpA, Volkswagen AG, Renault SA, Autoliv Inc., Continental AG, BMW AG, Porsche Automobil Holding SE, Michelin, Pirelli, Valeo SA, Daimler AG, Peugeot SA, Faurecia.

Citigroup Global Markets Inc. currently has, or had within the past 12 months, the following as clients, and the services provided were non-investment-banking, non-securities-related: Fiat SpA, Volkswagen AG, Renault SA, Autoliv Inc., Continental AG, Nokian Tyres plc, BMW AG, Porsche Automobil Holding SE, Michelin, Pirelli, Valeo SA, Daimler AG, Peugeot SA, Faurecia.

Analysts' compensation is determined based upon activities and services intended to benefit the investor clients of Citigroup Global Markets Inc. and its affiliates ("the Firm"). Like all Firm employees, analysts receive compensation that is impacted by overall firm profitability which includes investment banking revenues.

The Firm is a market maker in the publicly traded equity securities of Fiat SpA, Volkswagen AG, Continental AG, BMW AG, Valeo SA, Daimler AG, Peugeot SA.

For important disclosures (including copies of historical disclosures) regarding the companies that are the subject of this Citi Research product ("the Product"), please contact Citi Research, 388 Greenwich Street, 28th Floor, New York, NY, 10013, Attention: Legal/Compliance [E6WYB6412478]. In addition, the same important disclosures, with the exception of the Valuation and Risk assessments and historical disclosures, are contained on the Firm's disclosure website at https://www.citivelocity.com/cvr/epublic/citi_research_disclosures. Valuation and Risk assessments can be found in the text of the most recent research note/report regarding the subject company. Historical disclosures (for up to the past three years) will be provided upon request.

Citi Research Equity Ratings Distribution

	12 Month Rating			Relative Rating		
	Buy	Hold	Sell	Buy	Hold	Sell
<i>Data current as of 30 Jun 2013</i>						
Citi Research Global Fundamental Coverage	48%	40%	12%	6%	88%	6%
<i>% of companies in each rating category that are investment banking clients</i>	53%	50%	45%	58%	51%	49%

Guide to Citi Research Fundamental Research Investment Ratings:

Citi Research stock recommendations include an investment rating and an optional risk rating to highlight high risk stocks.

Risk rating takes into account both price volatility and fundamental criteria. Stocks will either have no risk rating or a High risk rating assigned.

Investment Ratings: Citi Research investment ratings are Buy, Neutral and Sell. Our ratings are a function of analyst expectations of expected total return ("ETR") and risk. ETR is the sum of the forecast price appreciation (or depreciation) plus the dividend yield for a stock within the next 12 months. The Investment rating definitions are: Buy (1) ETR of 15% or more or 25% or more for High risk stocks; and Sell (3) for negative ETR. Any covered stock not assigned a Buy or a Sell is a Neutral (2). For stocks rated Neutral (2), if an analyst believes that there are insufficient valuation drivers and/or investment catalysts to derive a positive or negative investment view, they may elect with the approval of Citi Research management not to assign a target price and, thus, not derive an ETR. Analysts may place covered stocks "Under Review" in response to exceptional circumstances (e.g. lack of information critical to the analyst's thesis) affecting the company and / or trading in the company's securities (e.g. trading suspension). As soon as practically possible, the analyst will publish a note re-establishing a rating and investment thesis. To satisfy regulatory requirements, we correspond Under Review and Neutral to Hold in our ratings distribution table for our 12-month fundamental rating system. However, we reiterate that we do not consider Under Review to be a recommendation.

Relative three-month ratings: Citi Research may also assign a three-month relative call (or rating) to a stock to highlight expected out-performance (most preferred) or under-performance (least preferred) versus the geographic and industry sector over a 3 month period. The relative call may highlight a specific near-term catalyst or event impacting the company or the market that is anticipated to have a short-term price impact on the equity securities of the company. Absent any specific catalyst the analyst(s) will indicate the most and least preferred stocks in the universe of stocks under consideration, explaining the basis for this short-term view. This three-month view may be different from and does not affect a stock's fundamental equity rating, which reflects a longer-term total absolute return expectation. For purposes of NASD/NYSE ratings-distribution-disclosure rules, most preferred calls correspond to a buy recommendation and least preferred calls correspond to a sell recommendation. Any stock not assigned to a most preferred or least preferred call is considered non-relative-rated (NRR). For purposes of NASD/NYSE ratings-distribution-disclosure rules we correspond NRR to Hold in our ratings distribution table for our 3-month relative rating system. However, we reiterate that we do not consider NRR to be a recommendation.

Prior to October 8, 2011, the firm's stock recommendation system included a risk rating and an investment rating. **Risk ratings**, which took into account both price volatility and fundamental criteria, were: Low (L), Medium (M), High (H), and Speculative (S). **Investment Ratings** of Buy, Hold and Sell were a function of the Citi Research expectation of total return (forecast price appreciation and dividend yield within the next 12 months) and risk rating. Additionally, analysts could have placed covered stocks "Under Review" in response to exceptional circumstances (e.g. lack of information critical to the analyst's thesis) affecting the company and/or trading in the company's securities (e.g. trading suspension). Stocks placed "Under Review" were monitored daily by management and as practically possible, the analyst published a note re-establishing a rating and investment thesis. For securities in developed markets (US, UK, Europe, Japan, and Australia/New Zealand), investment ratings were: Buy (1) (expected total return of 10% or more for Low-Risk stocks, 15% or more for Medium-Risk stocks, 20% or more for High-Risk stocks, and 35% or more for Speculative stocks); Hold (2) (0%-10% for Low-Risk stocks, 0%-15% for Medium-Risk stocks, 0%-20% for High-Risk stocks, and 0%-35% for Speculative stocks); and Sell (3) (negative total return). For securities in emerging markets (Asia Pacific, Emerging Europe/Middle East/Africa, and Latin America), investment ratings were: Buy (1) (expected total return of 15% or more for Low-Risk stocks, 20% or more for Medium-Risk stocks, 30% or more for High-Risk stocks, and 40% or more for Speculative stocks); Hold (2) (5%-15% for Low-Risk stocks, 10%-20% for Medium-Risk stocks, 15%-30% for High-Risk stocks, and 20%-40% for Speculative stocks); and Sell (3) (5% or less for Low-Risk stocks, 10% or less for Medium-Risk stocks, 15% or less for High-Risk stocks, and 20% or less for Speculative stocks).

Investment ratings are determined by the ranges described above at the time of initiation of coverage, a change in investment and/or risk rating, or a change in target price (subject to limited management discretion). At other times, the expected total returns may fall outside of these ranges because of market price movements and/or other short-term volatility or trading patterns. Such interim deviations from specified ranges will be permitted but will become subject to review by Research Management. Your decision to buy or sell a security should be based upon your personal investment objectives and should be made only after evaluating the stock's expected performance and risk.

NON-US RESEARCH ANALYST DISCLOSURES

Non-US research analysts who have prepared this report (i.e., all research analysts listed below other than those identified as employed by Citigroup Global Markets Inc.) are not registered/qualified as research analysts with FINRA. Such research analysts may not be associated persons of the member organization and therefore may not be subject to the NYSE Rule 472 and NASD Rule 2711 restrictions on communications with a subject company, public appearances and trading securities held by a research analyst account. The legal entities employing the authors of this report are listed below:

Citigroup Global Markets Ltd

Philip Watkins

OTHER DISCLOSURES

Citigroup Global Markets Inc. and/or its affiliates has a significant financial interest in relation to Volkswagen AG, Renault SA, Continental AG, BMW AG, Valeo SA, Daimler AG, Peugeot SA. (For an explanation of the determination of significant financial interest, please refer to the policy for managing conflicts of interest which can be found at www.citiVelocity.com.)

For securities recommended in the Product in which the Firm is not a market maker, the Firm is a liquidity provider in the issuers' financial instruments and may act as principal in connection with such transactions. The Firm is a regular issuer of traded financial instruments linked to securities that may have been recommended in the Product. The Firm regularly trades in the securities of the issuer(s) discussed in the Product. The Firm may engage in securities transactions in a manner inconsistent with the Product and, with respect to securities covered by the Product, will buy or sell from customers on a principal basis.

Securities recommended, offered, or sold by the Firm: (i) are not insured by the Federal Deposit Insurance Corporation; (ii) are not deposits or other obligations of any insured depository institution (including Citibank); and (iii) are subject to investment risks, including the possible loss of the principal amount invested. Although information has been obtained from and is based upon sources that the Firm believes to be reliable, we do not guarantee its accuracy and it may be incomplete and condensed. Note, however, that the Firm has taken all reasonable steps to determine the accuracy and completeness of the disclosures made in the Important Disclosures section of the Product. The Firm's research department has received assistance from the subject company(ies) referred to in this Product including, but not limited to,

discussions with management of the subject company(ies). Firm policy prohibits research analysts from sending draft research to subject companies. However, it should be presumed that the author of the Product has had discussions with the subject company to ensure factual accuracy prior to publication. All opinions, projections and estimates constitute the judgment of the author as of the date of the Product and these, plus any other information contained in the Product, are subject to change without notice. Prices and availability of financial instruments also are subject to change without notice. Notwithstanding other departments within the Firm advising the companies discussed in this Product, information obtained in such role is not used in the preparation of the Product. Although Citi Research does not set a predetermined frequency for publication, if the Product is a fundamental research report, it is the intention of Citi Research to provide research coverage of the/those issuer(s) mentioned therein, including in response to news affecting this issuer, subject to applicable quiet periods and capacity constraints. The Product is for informational purposes only and is not intended as an offer or solicitation for the purchase or sale of a security. Any decision to purchase securities mentioned in the Product must take into account existing public information on such security or any registered prospectus.

Investing in non-U.S. securities, including ADRs, may entail certain risks. The securities of non-U.S. issuers may not be registered with, nor be subject to the reporting requirements of the U.S. Securities and Exchange Commission. There may be limited information available on foreign securities. Foreign companies are generally not subject to uniform audit and reporting standards, practices and requirements comparable to those in the U.S. Securities of some foreign companies may be less liquid and their prices more volatile than securities of comparable U.S. companies. In addition, exchange rate movements may have an adverse effect on the value of an investment in a foreign stock and its corresponding dividend payment for U.S. investors. Net dividends to ADR investors are estimated, using withholding tax rates conventions, deemed accurate, but investors are urged to consult their tax advisor for exact dividend computations. Investors who have received the Product from the Firm may be prohibited in certain states or other jurisdictions from purchasing securities mentioned in the Product from the Firm. Please ask your Financial Consultant for additional details. Citigroup Global Markets Inc. takes responsibility for the Product in the United States. Any orders by US investors resulting from the information contained in the Product may be placed only through Citigroup Global Markets Inc.

The Citigroup legal entity that takes responsibility for the production of the Product is the legal entity which the first named author is employed by. The Product is made available in **Australia** through Citi Global Markets Australia Pty Ltd. (ABN 64 003 114 832 and AFSL No. 240992), participant of the ASX Group and regulated by the Australian Securities & Investments Commission. Citigroup Centre, 2 Park Street, Sydney, NSW 2000. The Product is made available in Australia to Private Banking wholesale clients through Citigroup Pty Limited (ABN 88 004 325 080 and AFSL 238098). Citigroup Pty Limited provides all financial product advice to Australian Private Banking wholesale clients through bankers and relationship managers. If there is any doubt about the suitability of investments held in Citigroup Private Bank accounts, investors should contact the Citigroup Private Bank in Australia. Citigroup companies may compensate affiliates and their representatives for providing products and services to clients. The Product is made available in **Brazil** by Citigroup Global Markets Brasil - CCTVM SA, which is regulated by CVM - Comissão de Valores Mobiliários, BACEN - Brazilian Central Bank, APIMEC - Associação dos Analistas e Profissionais de Investimento do Mercado de Capitais and ANBID - Associação Nacional dos Bancos de Investimento. Av. Paulista, 1111 - 11º andar - CEP. 01311920 - São Paulo - SP. If the Product is being made available in certain provinces of **Canada** by Citigroup Global Markets (Canada) Inc. ("CGM Canada"), CGM Canada has approved the Product. Citigroup Place, 123 Front Street West, Suite 1100, Toronto, Ontario M5J 2M3. This product is available in **Chile** through Banchile Corredores de Bolsa S.A., an indirect subsidiary of Citigroup Inc., which is regulated by the Superintendencia de Valores y Seguros. Agustinas 975, piso 2, Santiago, Chile. The Product is made available in **France** by Citigroup Global Markets Limited, which is authorised and regulated by Financial Services Authority. 1-5 Rue Paul Cézanne, 8ème, Paris, France. The Product is distributed in **Germany** by Citigroup Global Markets Deutschland AG ("CGMD"), which is regulated by Bundesanstalt fuer Finanzdienstleistungsaufsicht (BaFin). CGMD, Reuterweg 16, 60323 Frankfurt am Main. Research which relates to "securities" (as defined in the Securities and Futures Ordinance (Cap. 571 of the Laws of Hong Kong)) is issued in **Hong Kong** by, or on behalf of, Citigroup Global Markets Asia Limited which takes full responsibility for its content. Citigroup Global Markets Asia Ltd. is regulated by Hong Kong Securities and Futures Commission. If the Research is made available through Citibank, N.A., Hong Kong Branch, for its clients in Citi Private Bank, it is made available by Citibank N.A., Citibank Tower, Citibank Plaza, 3 Garden Road, Hong Kong. Citibank N.A. is regulated by the Hong Kong Monetary Authority. Please contact your Private Banker in Citibank N.A., Hong Kong, Branch if you have any queries on or any matters arising from or in connection with this document. The Product is made available in **India** by Citigroup Global Markets India Private Limited, which is regulated by Securities and Exchange Board of India. Bakhtawar, Nariman Point, Mumbai 400-021. The Product is made available in **Indonesia** through PT Citigroup Securities Indonesia. 5/F, Citibank Tower, Bapindo Plaza, Jl. Jend. Sudirman Kav. 54-55, Jakarta 12190. Neither this Product nor any copy hereof may be distributed in Indonesia or to any Indonesian citizens wherever they are domiciled or to Indonesian residents except in compliance with applicable capital market laws and regulations. This Product is not an offer of securities in Indonesia. The securities referred to in this Product have not been registered with the Capital Market and Financial Institutions Supervisory Agency (BAPEPAM-LK) pursuant to relevant capital market laws and regulations, and may not be offered or sold within the territory of the Republic of Indonesia or to Indonesian citizens through a public offering or in circumstances which constitute an offer within the meaning of the Indonesian capital market laws and regulations. The Product is made available in **Israel** through Citibank NA, regulated by the Bank of Israel and the Israeli Securities Authority. Citibank, N.A., Platinum Building, 21 Ha'arba'ah St, Tel Aviv, Israel. The Product is made available in **Italy** by Citigroup Global Markets Limited, which is authorised and regulated by Financial Services Authority. Via dei Mercanti, 12, Milan, 20121, Italy. The Product is made available in **Japan** by Citigroup Global Markets Japan Inc. ("CGMJ"), which is regulated by Financial Services Agency, Securities and Exchange Surveillance Commission, Japan Securities Dealers Association, Tokyo Stock Exchange and Osaka Securities Exchange. Shin-Marunouchi Building, 1-5-1 Marunouchi, Chiyoda-ku, Tokyo 100-6520 Japan. If the Product was distributed by SMBC Nikko Securities Inc. it is being so distributed under license. In the event that an error is found in an CGMJ research report, a revised version will be posted on the Firm's Citi Velocity website. If you have questions regarding Citi Velocity, please call (81 3) 6270-3019 for help. The Product is made available in **Korea** by Citigroup Global Markets Korea Securities Ltd., which is regulated by the Financial Services Commission, the Financial Supervisory Service and the Korea Financial Investment Association (KOFIA). Citibank Building, 39 Da-dong, Jung-gu, Seoul 100-180, Korea. KOFIA makes available registration information of research analysts on its website. Please visit the following website if you wish to find KOFIA registration information on research analysts of Citigroup Global Markets Korea Securities Ltd. <http://dis.kofia.or.kr/fs/dis2/fundMgr/DISFundMgrAnalystPop.jsp?companyCd2=A03030&pageDiv=02>. The Product is made available in Korea by Citibank Korea Inc., which is regulated by the Financial Services Commission and the Financial Supervisory Service. Address is Citibank Building, 39 Da-dong, Jung-gu, Seoul 100-180, Korea. The Product is made available in **Malaysia** by Citigroup Global Markets Malaysia Sdn Bhd (Company No. 460819-D) ("CGMM") to its clients and CGMM takes responsibility for its contents. CGMM is regulated by the Securities Commission of Malaysia. Please contact CGMM

at Level 43 Menara Citibank, 165 Jalan Ampang, 50450 Kuala Lumpur, Malaysia in respect of any matters arising from, or in connection with, the Product. The Product is made available in **Mexico** by Acciones y Valores Banamex, S.A. De C. V., Casa de Bolsa, Integrante del Grupo Financiero Banamex ("Accival") which is a wholly owned subsidiary of Citigroup Inc. and is regulated by Comisión Nacional Bancaria y de Valores. Reforma 398, Col. Juárez, 06600 Mexico, D.F. In **New Zealand** the Product is made available to 'wholesale clients' only as defined by s5C(1) of the Financial Advisers Act 2008 ("FAA") through Citigroup Global Markets Australia Pty Ltd (ABN 64 003 114 832 and AFSL No. 240992), an overseas financial adviser as defined by the FAA, participant of the ASX Group and regulated by the Australian Securities & Investments Commission. Citigroup Centre, 2 Park Street, Sydney, NSW 2000. The Product is made available in **Pakistan** by Citibank N.A. Pakistan branch, which is regulated by the State Bank of Pakistan and Securities Exchange Commission, Pakistan. AWT Plaza, 1.1. Chundrigar Road, P.O. Box 4889, Karachi-74200. The Product is made available in the **Philippines** through Citicorp Financial Services and Insurance Brokerage Philippines, Inc., which is regulated by the Philippines Securities and Exchange Commission. 20th Floor Citibank Square Bldg. The Product is made available in the Philippines through Citibank NA Philippines branch, Citibank Tower, 8741 Paseo De Roxas, Makati City, Manila. Citibank NA Philippines NA is regulated by The Bangko Sentral ng Pilipinas. The Product is made available in **Poland** by Dom Maklerski Banku Handlowego SA an indirect subsidiary of Citigroup Inc., which is regulated by Komisja Nadzoru Finansowego. Dom Maklerski Banku Handlowego S.A. ul.Senatorska 16, 00-923 Warszawa. The Product is made available in the **Russian Federation** through ZAO Citibank, which is licensed to carry out banking activities in the Russian Federation in accordance with the general banking license issued by the Central Bank of the Russian Federation and brokerage activities in accordance with the license issued by the Federal Service for Financial Markets. Neither the Product nor any information contained in the Product shall be considered as advertising the securities mentioned in this report within the territory of the Russian Federation or outside the Russian Federation. The Product does not constitute an appraisal within the meaning of the Federal Law of the Russian Federation of 29 July 1998 No. 135-FZ (as amended) On Appraisal Activities in the Russian Federation. 8-10 Gasheka Street, 125047 Moscow. The Product is made available in **Singapore** through Citigroup Global Markets Singapore Pte. Ltd. ("CGMSPL"), a capital markets services license holder, and regulated by Monetary Authority of Singapore. Please contact CGMSPL at 8 Marina View, 21st Floor Asia Square Tower 1, Singapore 018960, in respect of any matters arising from, or in connection with, the analysis of this document. This report is intended for recipients who are accredited, expert and institutional investors as defined under the Securities and Futures Act (Cap. 289). The Product is made available by The Citigroup Private Bank in Singapore through Citibank, N.A., Singapore Branch, a licensed bank in Singapore that is regulated by Monetary Authority of Singapore. Please contact your Private Banker in Citibank N.A., Singapore Branch if you have any queries on or any matters arising from or in connection with this document. This report is intended for recipients who are accredited, expert and institutional investors as defined under the Securities and Futures Act (Cap. 289). This report is distributed in Singapore by Citibank Singapore Ltd ("CSL") to selected Citigold/Citigold Private Clients. CSL provides no independent research or analysis of the substance or in preparation of this report. Please contact your Citigold/Citigold Private Client Relationship Manager in CSL if you have any queries on or any matters arising from or in connection with this report. This report is intended for recipients who are accredited investors as defined under the Securities and Futures Act (Cap. 289). Citigroup Global Markets (Pty) Ltd. is incorporated in the **Republic of South Africa** (company registration number 2000/025866/07) and its registered office is at 145 West Street, Sandton, 2196, Saxonwold. Citigroup Global Markets (Pty) Ltd. is regulated by JSE Securities Exchange South Africa, South African Reserve Bank and the Financial Services Board. The investments and services contained herein are not available to private customers in South Africa. The Product is made available in **Spain** by Citigroup Global Markets Limited, which is authorised and regulated by Financial Services Authority. 29 Jose Ortega Y Gasset, 4th Floor, Madrid, 28006, Spain. The Product is made available in the **Republic of China** through Citigroup Global Markets Taiwan Securities Company Ltd. ("CGMTS"), 14 and 15F, No. 1, Songzhi Road, Taipei 110, Taiwan and/or through Citibank Securities (Taiwan) Company Limited ("CSTL"), 14 and 15F, No. 1, Songzhi Road, Taipei 110, Taiwan, subject to the respective license scope of each entity and the applicable laws and regulations in the Republic of China. CGMTS and CSTL are both regulated by the Securities and Futures Bureau of the Financial Supervisory Commission of Taiwan, the Republic of China. No portion of the Product may be reproduced or quoted in the Republic of China by the press or any third parties [without the written authorization of CGMTS and CSTL]. If the Product covers securities which are not allowed to be offered or traded in the Republic of China, neither the Product nor any information contained in the Product shall be considered as advertising the securities or making recommendation of the securities in the Republic of China. The Product is for informational purposes only and is not intended as an offer or solicitation for the purchase or sale of a security or financial products. Any decision to purchase securities or financial products mentioned in the Product must take into account existing public information on such security or the financial products or any registered prospectus. The Product is made available in **Thailand** through Citicorp Securities (Thailand) Ltd., which is regulated by the Securities and Exchange Commission of Thailand. 18/F, 22/F and 29/F, 82 North Sathorn Road, Silom, Bangrak, Bangkok 10500, Thailand. The Product is made available in **Turkey** through Citibank AS which is regulated by Capital Markets Board. Tekfen Tower, Eski Büyükdere Caddesi # 209 Kat 2B, 23294 Levent, Istanbul, Turkey. In the **U.A.E.**, these materials (the "Materials") are communicated by Citigroup Global Markets Limited, DIFC branch ("CGML"), an entity registered in the Dubai International Financial Center ("DIFC") and licensed and regulated by the Dubai Financial Services Authority ("DFSA") to Professional Clients and Market Counterparties only and should not be relied upon or distributed to Retail Clients. A distribution of the different Citi Research ratings distribution, in percentage terms for Investments in each sector covered is made available on request. Financial products and/or services to which the Materials relate will only be made available to Professional Clients and Market Counterparties. The Product is made available in **United Kingdom** by Citigroup Global Markets Limited, which is authorised and regulated by Financial Services Authority. This material may relate to investments or services of a person outside of the UK or to other matters which are not regulated by the FSA and further details as to where this may be the case are available upon request in respect of this material. Citigroup Centre, Canada Square, Canary Wharf, London, E14 5LB. The Product is made available in **United States** by Citigroup Global Markets Inc, which is a member of FINRA and registered with the US Securities and Exchange Commission. 388 Greenwich Street, New York, NY 10013. Unless specified to the contrary, within EU Member States, the Product is made available by Citigroup Global Markets Limited, which is regulated by Financial Services Authority.

Pursuant to Comissão de Valores Mobiliários Rule 483, Citi is required to disclose whether a Citi related company or business has a commercial relationship with the subject company. Considering that Citi operates multiple businesses in more than 100 countries around the world, it is likely that Citi has a commercial relationship with the subject company.

Many European regulators require that a firm must establish, implement and make available a policy for managing conflicts of interest arising as a result of publication or distribution of investment research. The policy applicable to Citi Research's Products can be found at https://www.citivelocity.com/cvr/epublic/citi_research_disclosures.

Compensation of equity research analysts is determined by equity research management and Citigroup's senior management and is not linked to specific transactions or recommendations.



The Product may have been distributed simultaneously, in multiple formats, to the Firm's worldwide institutional and retail customers. The Product is not to be construed as providing investment services in any jurisdiction where the provision of such services would not be permitted.

Subject to the nature and contents of the Product, the investments described therein are subject to fluctuations in price and/or value and investors may get back less than originally invested. Certain high-volatility investments can be subject to sudden and large falls in value that could equal or exceed the amount invested. Certain investments contained in the Product may have tax implications for private customers whereby levels and basis of taxation may be subject to change. If in doubt, investors should seek advice from a tax adviser. The Product does not purport to identify the nature of the specific market or other risks associated with a particular transaction. Advice in the Product is general and should not be construed as personal advice given it has been prepared without taking account of the objectives, financial situation or needs of any particular investor. Accordingly, investors should, before acting on the advice, consider the appropriateness of the advice, having regard to their objectives, financial situation and needs. Prior to acquiring any financial product, it is the client's responsibility to obtain the relevant offer document for the product and consider it before making a decision as to whether to purchase the product.

With the exception of our product that is made available only to Qualified Institutional Buyers (QIBs) and other product that is made available through other distribution channels only to certain categories of clients to satisfy legal or regulatory requirements, Citi Research concurrently disseminates its research via proprietary and non-proprietary electronic distribution platforms. Periodically, individual Citi Research analysts may also opt to circulate research posted on such platforms to one or more clients by email. Such email distribution is discretionary and is done only after the research has been disseminated via the aforementioned distribution channels. Citi Research simultaneously distributes product that is limited to QIBs only through email distribution.

The level and types of services provided by Citi Research analysts to clients may vary depending on various factors such as the client's individual preferences as to the frequency and manner of receiving communications from analysts, the client's risk profile and investment focus and perspective (e.g. market-wide, sector specific, long term, short-term etc.), the size and scope of the overall client relationship with Citi and legal and regulatory constraints.

Citi Research product may source data from dataCentral. dataCentral is a Citi Research proprietary database, which includes Citi estimates, data from company reports and feeds from Reuters and Datastream.

© 2013 Citigroup Global Markets Inc. Citi Research is a division of Citigroup Global Markets Inc. Citi and Citi with Arc Design are trademarks and service marks of Citigroup Inc. and its affiliates and are used and registered throughout the world. All rights reserved. Any unauthorized use, duplication, redistribution or disclosure of this report (the "Product"), including, but not limited to, redistribution of the Product by electronic mail, posting of the Product on a website or page, and/or providing to a third party a link to the Product, is prohibited by law and will result in prosecution. The information contained in the Product is intended solely for the recipient and may not be further distributed by the recipient to any third party. Where included in this report, MSCI sourced information is the exclusive property of Morgan Stanley Capital International Inc. (MSCI). Without prior written permission of MSCI, this information and any other MSCI intellectual property may not be reproduced, disseminated or used to create any financial products, including any indices. This information is provided on an "as is" basis. The user assumes the entire risk of any use made of this information. MSCI, its affiliates and any third party involved in, or related to, computing or compiling the information hereby expressly disclaim all warranties of originality, accuracy, completeness, merchantability or fitness for a particular purpose with respect to any of this information. Without limiting any of the foregoing, in no event shall MSCI, any of its affiliates or any third party involved in, or related to, computing or compiling the information have any liability for any damages of any kind. MSCI, Morgan Stanley Capital International and the MSCI indexes are services marks of MSCI and its affiliates. The Firm accepts no liability whatsoever for the actions of third parties. The Product may provide the addresses of, or contain hyperlinks to, websites. Except to the extent to which the Product refers to website material of the Firm, the Firm has not reviewed the linked site. Equally, except to the extent to which the Product refers to website material of the Firm, the Firm takes no responsibility for, and makes no representations or warranties whatsoever as to, the data and information contained therein. Such address or hyperlink (including addresses or hyperlinks to website material of the Firm) is provided solely for your convenience and information and the content of the linked site does not in anyway form part of this document. Accessing such website or following such link through the Product or the website of the Firm shall be at your own risk and the Firm shall have no liability arising out of, or in connection with, any such referenced website.

ADDITIONAL INFORMATION IS AVAILABLE UPON REQUEST
