COMMENTED SLIDES / CONFERENCE CALL H1 2018

SCHAEFFLER

Results H1 2018 Schaeffler AG

Conference Call
August 7, 2018
Herzogenaurach

Company Representatives

Klaus Rosenfeld, CEO
Dietmar Heinrich, CFO
Renata Casaro, Head of Investor Relations

Conference Call Participants

Akshat Kacker - *JP Morgan Chase & Co.*
Harald Eggeling - *ODDO BHF Corporate & Markets*
Henning Cosman - *HSBC*
Julian Radlinger - *UBS Investment Bank*
Kai Alexander Mueller - *BofA Merrill Lynch*
Marc-René Tonn - *Warburg Research GmbH*
Raghav Gupta-Chaudhary - *Citigroup Inc.*
Sascha Gommel - *Crédit Suisse AG*

Operator

Hello, and welcome to the Schaeffler AG H1 2018 Results Conference Call. (Operator Instructions) Just to remind you, the conference call is being recorded. Today, I'm pleased to present Renata Casaro. Please begin your meeting.

Renata Casaro

Thank you very much, operator. Dear investors and analysts, good morning, and welcome to the Schaeffler Group First Half 2018 Earnings Call. Mr. Rosenfeld, CEO and Mr. Heinrich, CFO, will present the results and comment with slides we uploaded earlier this morning on the website. A Q&A session will follow. Mr. Rosenfeld, the floor is yours.

Klaus Rosenfeld

Thank you, Renata, and good morning, ladies and gentlemen. Thanks for joining the call on our half-year results. We're going through this in the same pattern as usual. I will start with the overview and end a little bit inside in the business development and then hand over to Dietmar for more details on the numbers.

1 Overview

Solid H1 results – On track to achieve targets for 2018

SCHAEFFLER

	H1'17	H1'18
Group		
Sales	7,046 mn	7,193 mn (+5.8%[1])
EBIT margin[2]	11.1%	11.1%
Automotive OEM		
Sales	4,528 mn	4,587 mn (+4.8%[1])
EBIT margin[2]	10.7%	9.2%
Automotive Aftermarket		
Sales	928 mn	925 mn (+3.6%[1])
EBIT margin[2]	17.3%	19.0%
Industrial		
Sales	1,590 mn	1,681 mn (+10.0%[1])
EBIT margin[2]	8.6%	11.6%

Key aspects

1. Solid H1 Group results – Sales H1 +5.8%[1], EBIT margin[2] H1 11.1% (PY 11.1%) after 11.0% in Q1, FCF slightly better than PY
2. Automotive OEM – Improved growth momentum with sales H1 +4.8%, EBIT margin[2] 9.2% (PY 10.7%) due to weaker Q2 (9.0%). Book-to-bill ratio 1.8x
3. Automotive Aftermarket – Strong Q2 bringing growth rate back to +3.6% in H1[1], EBIT margin[2] H1 of 19.0% (PY 17.3%) includes positive one-off effect
4. Industrial – Continued above-average sales growth of 10.0%[1] in H1, EBIT margin[2] H1 significantly increased to 11.6% (PY 8.6%)
5. Good progress of Agenda 4 plus One – BCT reorganization on track, EUR 22 mn restructuring provision already booked in Q2
6. Schaeffler acquires Drive-by-wire technology – Unique move to position Chassis business for significant growth potential in autonomous driving market
7. Environment remains challenging – Group guidance FY 2018 confirmed, sales growth guidance Industrial increased to 6-7%[1] (previously: 3-4%[1])

1) FX-adjusted 2) Before special items 3) Before M&A

4 August 7, 2018 Schaeffler AG H1 2018 Results

Let me start on Page 4 with my overview page. We posted this morning results that we think could be categorized as solid results. Sales first half, 5.8%, up with positive momentum. Q2 growth rate, 7.9% for the full Schaeffler Group. I think that clearly points in the right direction. Also margin-wise, we are posting 11.1% margin for the first half, exactly the same number as in the previous year.

When you also look here, the quarterly progression, the second quarter is definitely in line with the first quarter, 11.0% to the 11.1%. Also, free cash flow is slightly better than the previous year.

I think that frames it, as I said, a solid base, and Schaeffler Group on track to achieve the targets for 2018. When you look at the divisional numbers, the picture is a little bit more mixed. We have in Automotive definitely improved growth momentum. After a weaker first quarter, now sales growth FX adjusted up to 4.8%, with a solid growth in the second quarter. EBIT margin for the half year is 9.2%. The second quarter was a little weaker than expected, and Dietmar will explain later on the reasons for this.

On the positive book-to-bill ratio in the first half 2018 up to 1.8x what clearly shows that all our initiatives are paying off at the customer-end project.

So Automotive aftermarket a positive surprise. You remember we were at a negative growth rate in the first quarter. We have now on the first half 3.6% and second quarter up 12%. What clearly needs to be looked at, again, the baseline that was low in Q2 2017.

EBIT margin up to 19% with a very strong margin in the second quarter. The second quarter includes a positive one-off effect from the release of a provision, EUR 8 million, if I deduct this from the quarterly results, we end up still at a half-year margin that is surpassed our target range.

Industrial and other, I think positive developments continued above average sales growth of 10% now in the first half. And EBIT margin then has increased to 11.6%, 3 percentage points more than last year, what clearly shows that the business is on track.

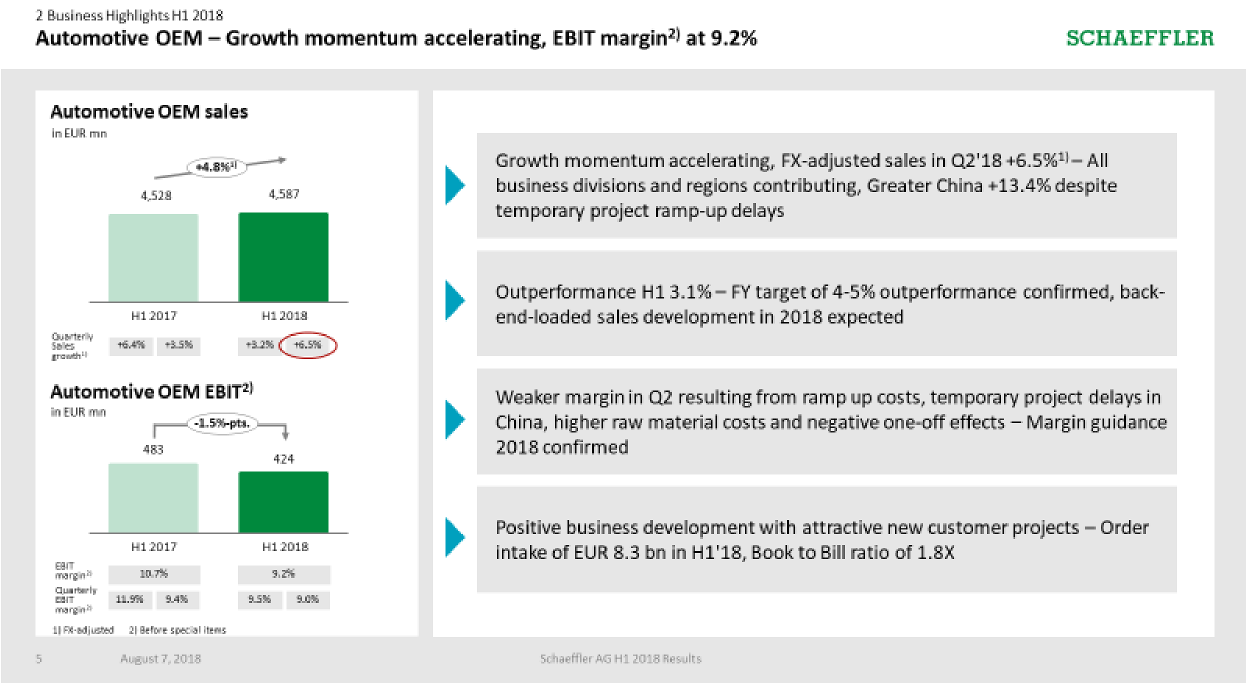
You also should note at this point already that this is supported by a positive market environment, and we need to see how that develops further.

In terms of the strategic and the more mid-term initiatives, I can report good progress on the Agenda 4 plus One. The Agenda 4 plus One, as we explained for the full year 2017, certainly has a negative impact on the numbers, but that is exactly in line with what we had last year and also here we're on track to deliver the initiatives we want.

On top of this, BCT reorganization on track. You recall last quarterly presentation we initiated a next initiative to optimize our cost structure, promised for 2021 EUR 60 million cost improvement with EUR 50 million restructuring cost. We've now been able to book EUR 22 million of these restructuring costs already in Q2, while the initiatives moved little faster than what we expected. And it could well be that we don't need to -- all the estimated EUR 50 million but a lower number that remains to be seen clearly depending on the further negotiations with our employee representatives.

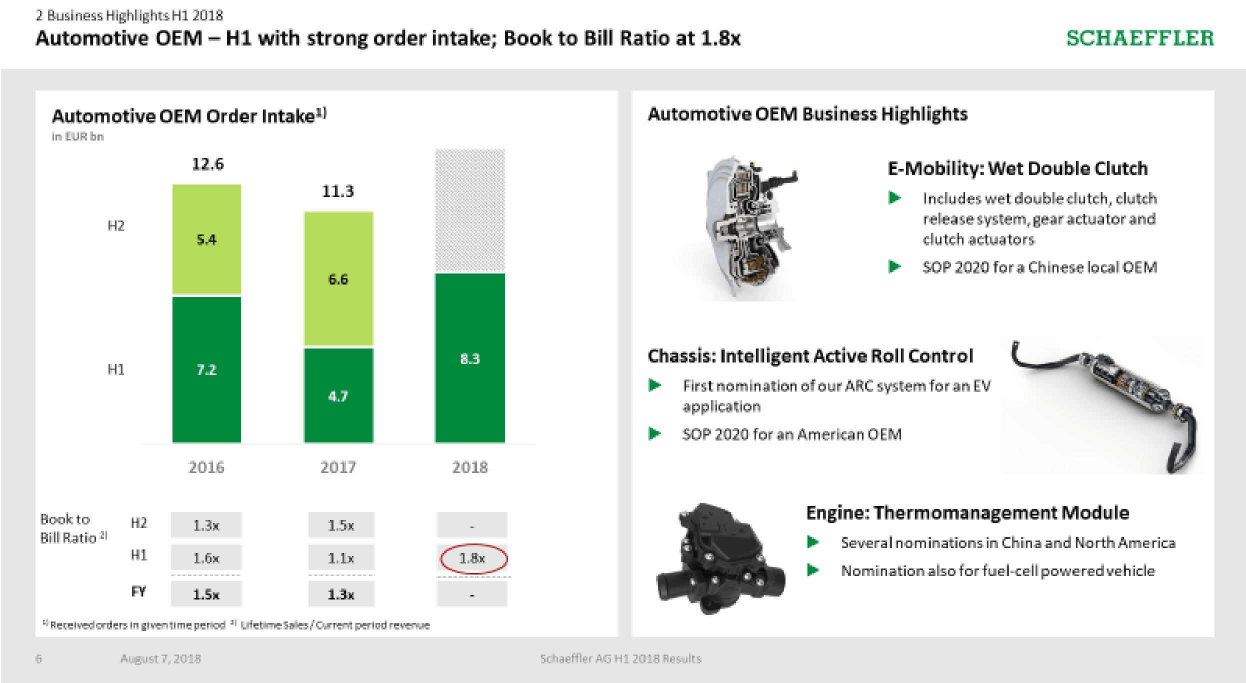
It's not only cost cutting and cost containment that counts, but also the future technology. And I think all you know and it's all been announced in yesterday we delivered on our M&A strategy and acquired a pretty unique technology called Drive-by-wire. I would explain this in more detail. It gives us a unique edge now to position our Chassis business for significant growth potential in the autonomous driving market.

To sum it all up, the environment in [sufficient] also remains challenging. There are several factors that are difficult to quantify and difficult to cope with, but we think that with this first half, which is a solid base that we have now achieved, we are confident that we are able to deliver our group guidance. And on the sales side for industrial, I think it was logical to increase the number from 3% to 4% to 6% to 7%. So there will be further growth in the second half expected, but probably not at the same pace as we saw in H1 2017.



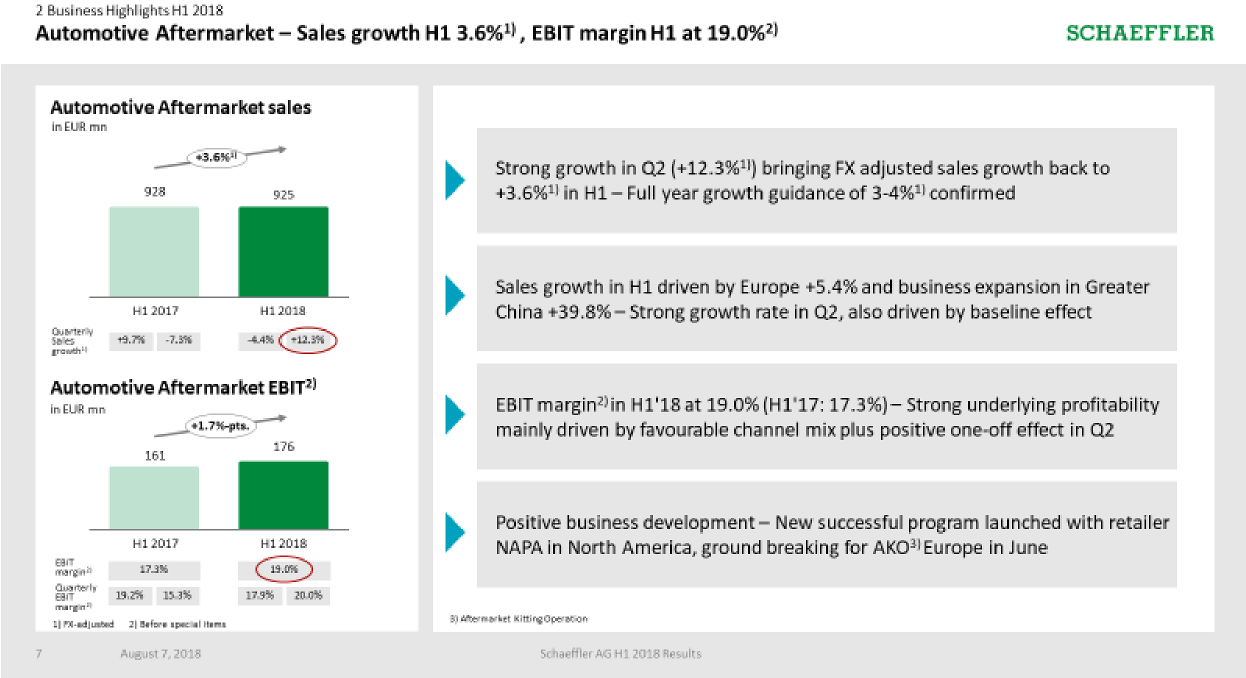
Page 5, it's more or less what I've just explained. I will do this very quickly and just focus on the more or less last bullet points. As I said, the 9% margin in this Q2 is a more or less a result of delays in projects in China where we incurred the ramp-up cost, but have not seen the effect on the sales side. So that is basically explained the main fact why the margin is not where it should be. We also had a little headwind from the raw material cost side. And in the second quarter, we also had to cope with some negative one-off effects that are to some extent related to the extension reviews where we cleared certain things and gave up certain up businesses.

However, we are also very confident that we will bring in the automotive margin at the range that we promised. I want to highlight the last bullet point. I think we can say that we are seeing a positive business development with respect to new customer projects.



You see it on Page 6, order intake improved to EUR 8.3 billion, what is a quite a jump compared to 2017. You all know that it is depending on some larger projects, and some of them are listed on the right side here.

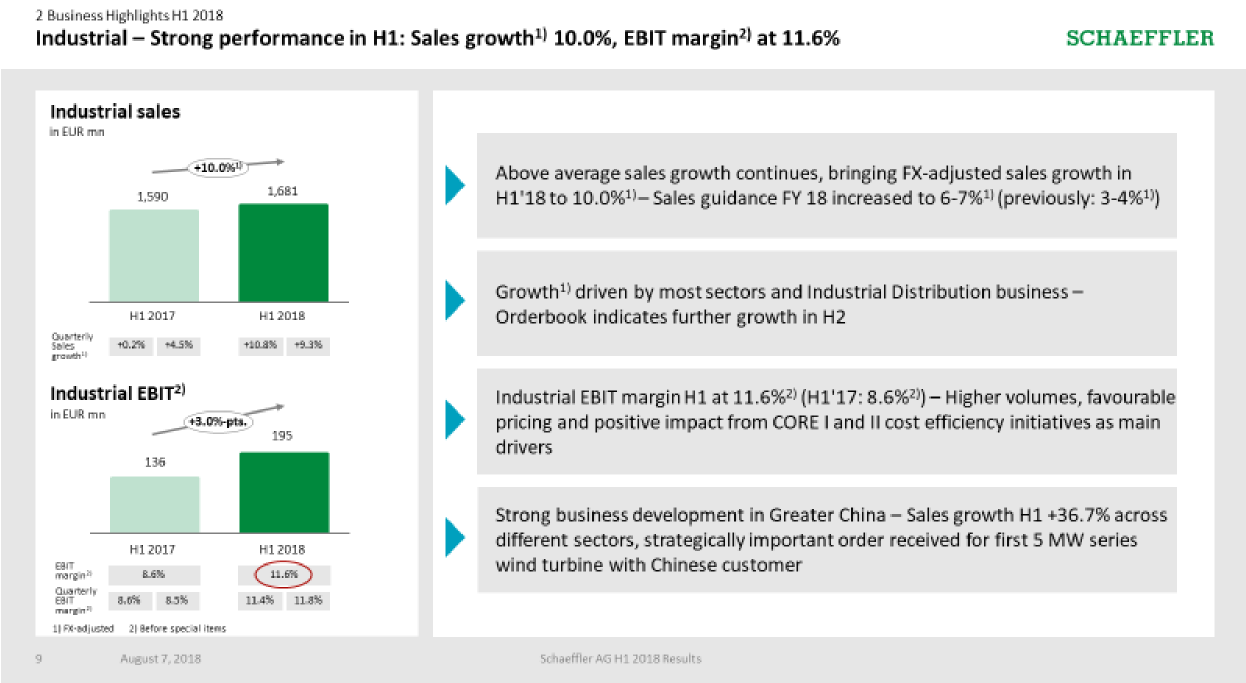
In E-Mobility, we -- and you all know our E-Mobility definition for the business division is broader than just e-axles and hybrid modules. We gained a significant contract with another Chinese local OEM with a modern wet double clutch solution combining several elements, a clutch release system, actuator and also clutch actuator. So something innovative here that clearly supported this number. But also on the other side of the securing engine, the Thermomanagement Module is a success. And also on Chassis, we are making good progress with our intelligent active roll stabilizer. So that's a promising development. We need to see what happens in the second half, but we are confident here that we will see a continued good project development.



In Aftermarket, Page 7, I also mentioned the key drivers for this. You all know that this is predominantly a European business with a very solid position in United States, with strategic challenges in Greater China. Then you see here 39.8% growth in Greater China that comes from a very low base, so it's should not distract that. We are still there working strategically to establish a good footprint.

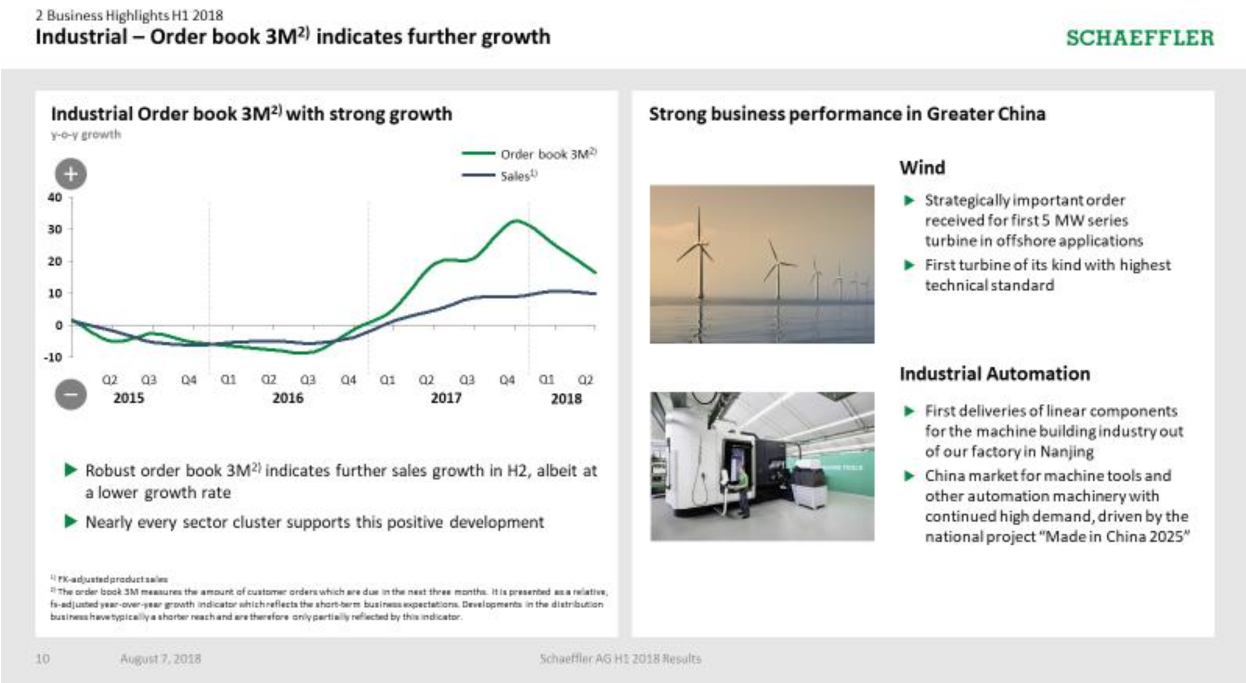
In terms of the margin, I said, yes, there -- to be aware of the 20% in the second quarter is inflated by this positive one-off effect, EUR 8 million. If you deduct this, you still end up with 18.4%, 18.3%, so still above the threshold.

And in terms of business development, I wanted to highlight two things. You all know how important the kit business is -- kitting business for us is. And on AKO, an important Agenda 4 plus One initiative, the ground breaking happened and I think we are on track here to support the business from improved kitting operations. More importantly, from my point of view, in particular, for the short term, we entered into a new program with NAPA in North America concentrating on bearings and seals. That is for us a good success because NAPA is the most prominent distributor in the United States. And this collaboration will clearly help us to support ourselves. Also, in terms of the breadth of the program, we're talking here about a bearing and seals program with approximately 9,000 parts. We had to buy into this program by also on the working capital side, but we see that as a significant investment and a step forward to broaden our position in the United States.



Industrial. Also, here I mentioned the key aspects already in my outlook. I want to cut this short. The industrial margin was 11.6%. It's clearly on the high side, driven by the positive volume by favorable pricing impacts. And then I want to mention that also with a big thank you very much to our industrial colleagues. They have shown now for the last year that what we promised in terms of CORE 1 and CORE II, our main cost initiatives and cost efficiency initiatives, that's what they have delivered and it also gives us confidence that BCT will be equally successful and that we are not only good in terms of profitable growth, but also in terms of managing our cost base.

What was exceptional in industrial in the second quarter and the first half was the strong business development in Greater China. You all know that China has always been for Schaeffler an area of growth, in particular the automotive side. While automotive grew, and I alluded to this, slightly slower than in the previous years, we're seeing significant sales growth increase in China for the industrial business and in the first half, FX adjusted more than 35% comes across a variety of factors. One big business success is explained on Page #10.



In the wind business, we won and for us strategically important order for the first 5 megawatts series turbine. Series turbine means it's not a prototype, it's a series of turbines for offshore application. That's a breakthrough success for us and we're very happy to hear that we could win this also based on our technical competence.

Industrial automation is another example where we made significant ingrowth and also gained market share with Chinese market for machine tools and other automation machinery is critical for us to continue high demand. And we think we are even better now positioned here to also grow this business in the future.

When you look at the left side of the chart, where you see the order book 3 months, it's not the order intake, but the order book. That clearly indicates that the company will grow further in H2, but at a lower growth rate. That is also why we think the 6% to 7% was a weaker growth rate in the second half, it's well huge.

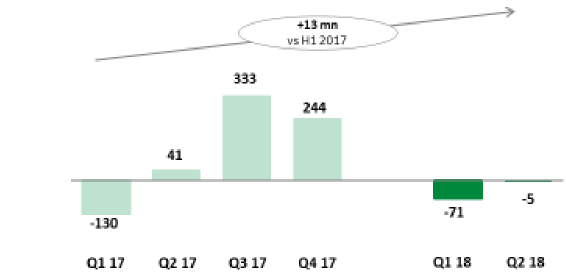
2 Business Highlights H1 2018

Free Cash Flow before M&A at EUR -74 mn – Capex Ratio at 8.3%

SCHAEFFLER

Free Cash Flow

in EUR mn



	Q1 17	Q2 17	Q3 17	Q4 17	Q1 18	Q2 18
M&A	-19	16	0	-24	-2	0
FCF before M&A	-111	25	333	268	-69	-5
FCF conversion ratio[4]	30%	18%	21%	22%	24%	22%

1) Including payments for legal cases and restructuring measures
2) Capex in major logistic projects Aftermarket Kitting Operation (AKO) and European Distribution Center (EDC)
3) Cash in- and outflows for M&A activities
4) LTM FCF before M&A divided by LTM EBITDA before special items

Key aspects

- Free Cash Flow before M&A increased slightly to EUR -74 mn in H1'18 (PY: EUR -86 mn), FCF conversion ratio 22%
- Increased Working capital needs partially compensated by disciplined Capex spending
- Capex to sales ratio maintained at 8.3% (H1'17: 8.4%)

FCF Details

in EUR mn

	Q2 2017	Q2 2018	Δ Q2 17/18	H1 2017	H1 2018	Δ H1 17/18
FCF as reported	**41**	**(5)**	***(46)***	**(89)**	**(76)**	***13***
Non recurring items[1]	57	59	*2*	93	92	*(1)*
AKO / EDC[2]	18	7	*(11)*	40	26	*(14)*
M&A[3]	(16)	0	*16*	3	2	*(1)*
Receivable Sale Program	0	0	*0*	0	0	*0*
	100	**61**	***(39)***	**47**	**44**	***(3)***

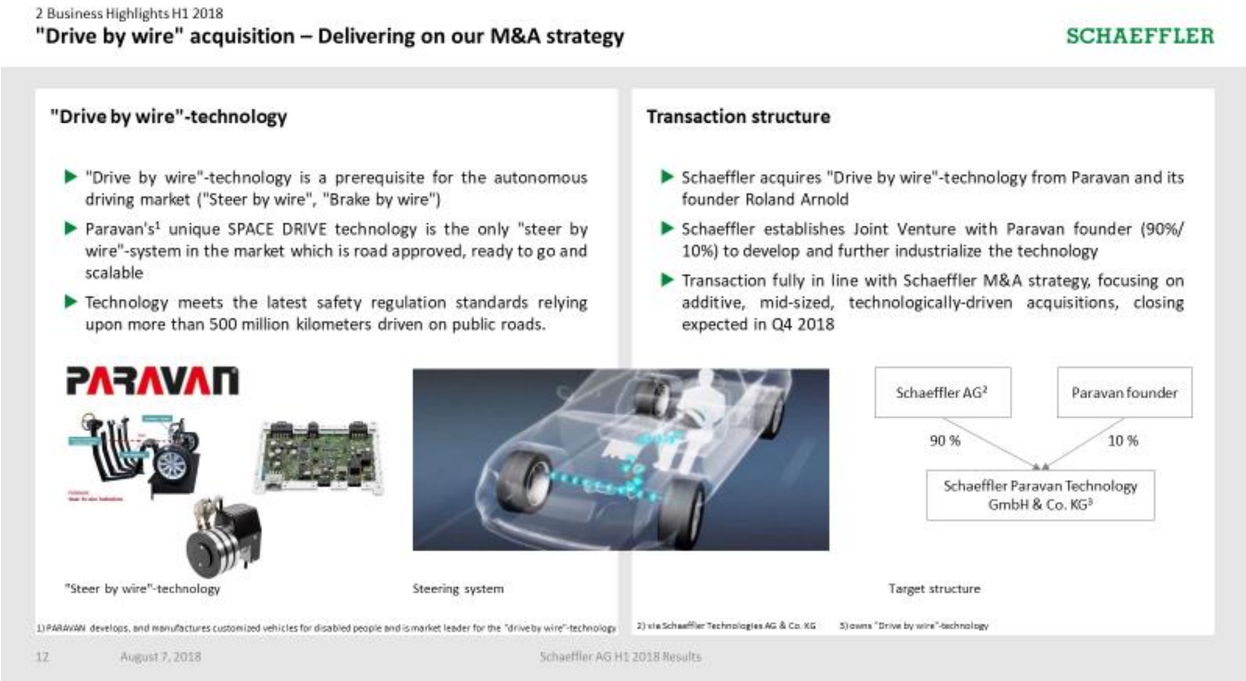
11 August 7, 2018 Schaeffler AG H1 2018 Results

Summing it up before I come to the acquisition on the numbers, free cash flow minus EUR 74 million before M&A, slightly better than last year. The FX -- sorry, the free cash flow conversion ratio stands at 22%. That is broadly in line with the last 3 quarters.

When you look into the details, what you see is that working capital went up, partially compensated by more disciplined CapEx spending. The CapEx to sales ratio was now at 8.3% after 8.4% in the first half. That is clearly something we need to watch out for, also for the second half to manage working capital wisely and we'll see how we also control our CapEx spending.

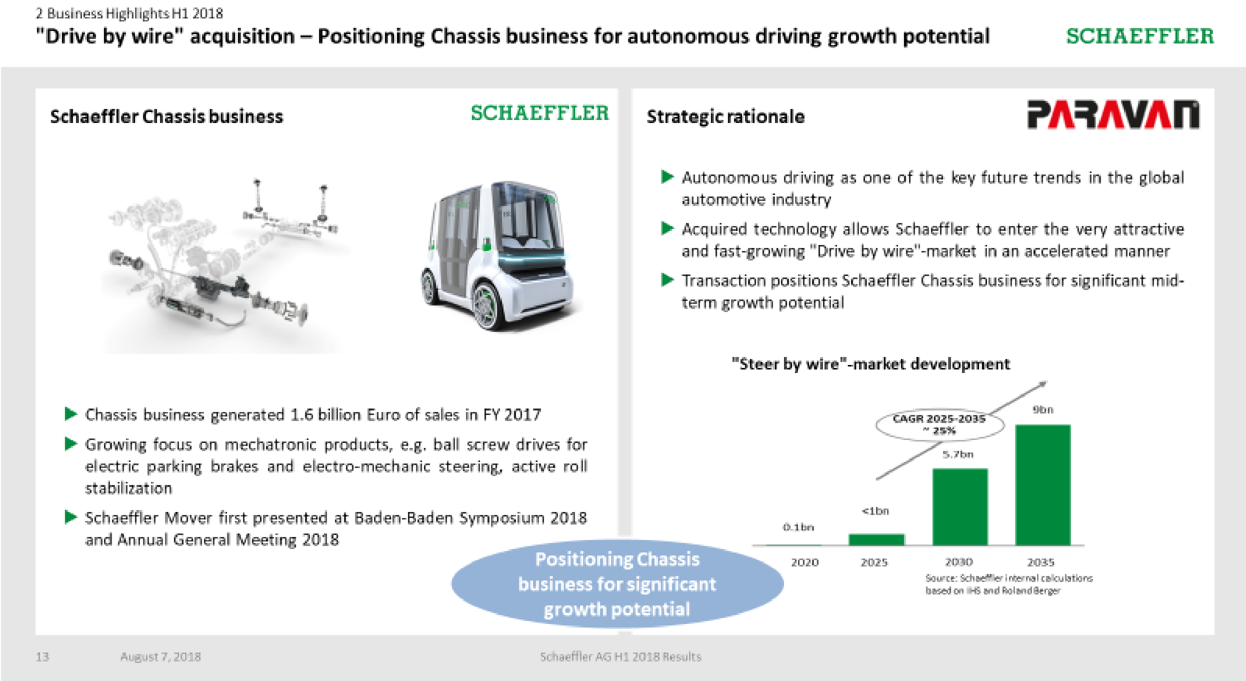
We still think, and Dietmar is going to explain that in more detail, that we will meet our CapEx free cash flow target of around EUR 450 million before M&A. As you see from the normal pattern, all the free cash flow more or less generated in the second half, and we will know more when the third quarter is over.

The underlying free cash flow, as you see in this breakdown, is in fact EUR 44 million compared to EUR 47 million. So that indicates that the free cash flow generation machine won as usual.



12 then gives you a little more detail on the little acquisition that we have done. I don't want to do this in more -- in too much detail now, but what I want to highlight is we are delivering exactly on the M&A strategy that we have proposed. This is an additive, smaller acquisition that is technology-driven, Drive-by-wire technology is interesting because it's a prerequisite for the autonomous driving market. We have always said that Chassis is one of the search fields that we're following under the M&A strategy. This is clearly a unique opportunity here. Why is this interesting? Because of Paravan - the founder of Paravan, Mr. Arnold, has developed over time more or less as a side result a Steer by wire system that is road approved, ready to go and scalable as soon as some serious small company and the business for disabled people, he can show more than 500 million kilometers driven on public roads. That's unique, no one else has this and that gives us a significant timing advantage in bringing this technology to the market.

Some of you asked why this a joint venture. The simple reason for this is we wanted to keep the Paravanes founder in the business. This was not a transaction where we wanted to just pay him off and then let him go, we wanted to make sure that he and his team work with us together, so that we can bring our industrialization know-how and he can bring his technology. That's why we formed this joint venture. We called it Schaeffler Paravan Technology. He is also one of the members of the managing council of this. And we think that's a recipe for success. Don't forget this is to some extent a start-up operation. We still need to further industrialize and develop the technology, but we know that many, many customers, also from the results yesterday, see this as a very interesting step, and it will give us growth potential for the future.



Page 13 is a little more color on this. Those of you had followed the Q1 presentation remember what we said about our Baden-Baden colloquium. Those of you that followed the AGM saw the little People Mover that we established. I can say here, again, we will not become a car manufacturer. The People Mover that we developed is more a demonstration car as we do in other areas as well, but we clearly want to become one of the main players in the rolling Chassis business that is very relevant for the autonomous driving, one of the key future trends apart from the global electrification.

And with this technology, we think we will be able to open up significant mid-term growth potential. There's not much information about the steer by wire market. This is something that we found. And you see that there is clearly a significant opportunity. That is my last page.

And with this, I hand over to you, Dietmar, for more details on the numbers. Thank you very much.

Dietmar Heinrich

3 Financial Results Q2 2018

Key figures Q2 2018

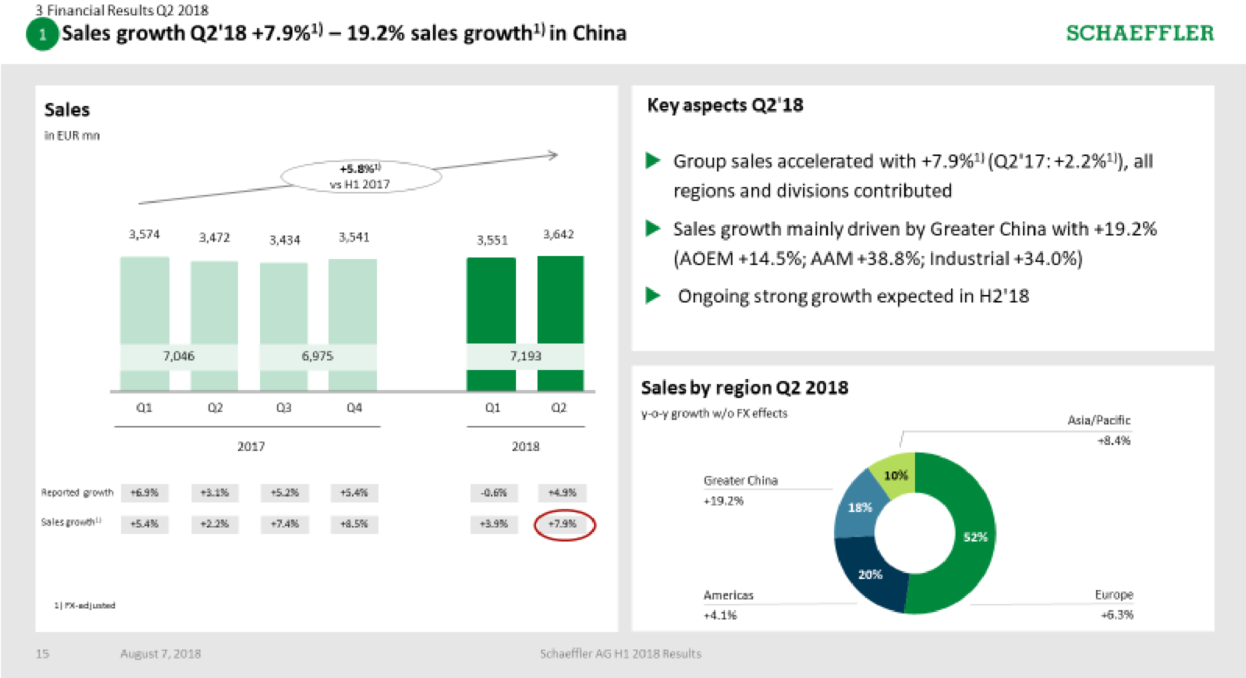
SCHAEFFLER

in EUR mn		H1 2017	H1 2018	H1 2018 vs. H1 2017	Q2 2017	Q2 2018	Q2 2018 vs. Q2 2017
Sales	1	7,046	7,193	+2.1% / +5.8%[1]	3,472	3,642	+4.9% / +7.9%[1]
EBIT[2]	2	780	795	+15 mn / +1.9%	345	404	+59 mn / +17.1%
EBIT margin[2]	2	11.1%	11.1%	+0.0%-pts.	9.9%	11.1%	+1.2%-pts.
Net income[3]	3	485	509	+24 mn	206	269	+63 mn
EPS[4]	3	0.73	0.77	+0.04	0.31	0.41	+0.10
ROCE[2][5]		20.7%	19.8%	-0.9%-pts.			
Free Cash Flow[6]	4	-86	-74	+12 mn	25	-5	-30 mn
Capex	4	594	595	+1 mn	295	289	-6 mn
Net financial debt	5	2,956	2,833	-123 mn			
Gearing ratio[7]	5	136.3%	106.6%	-29.7%-pts.			

1) FX-adjusted
2) Before special items
3) Attributable to shareholders of the parent company
4) Earnings per common non-voting share
5) LTM
6) Before M&A
7) Ratio of net financial debt to equity incl. non-controlling interests

14 August 7, 2018 Schaeffler AG H1 2018 Results

Thank you very much. Good morning, ladies and gentlemen. I would like to give you a little bit of flavor in regard to the second quarter development and actually touch up the main points, which are highlighted on Chart #14, but let's directly switch Chart #15.

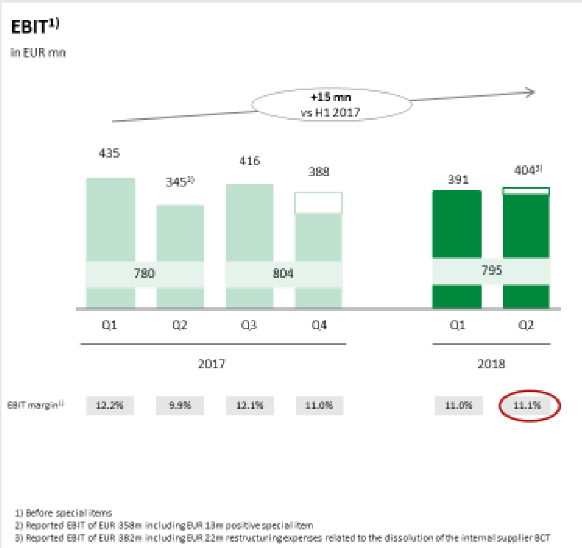


You can see that actually we had a strong sales growth in the second quarter of 7.9%. And this was especially supported again by a strong development in Greater China with 19%, but it's also that the other regions contributed in a range between 4% and 8% to the growth. And as a summary, these are actually an ongoing strong growth also for the second half of 2018.

3 Financial Results Q2 2018

2 EBIT Margin Q2'18 11.1% – 1.2%-pts. above prior year quarter

SCHAEFFLER



Key aspects Q2'18

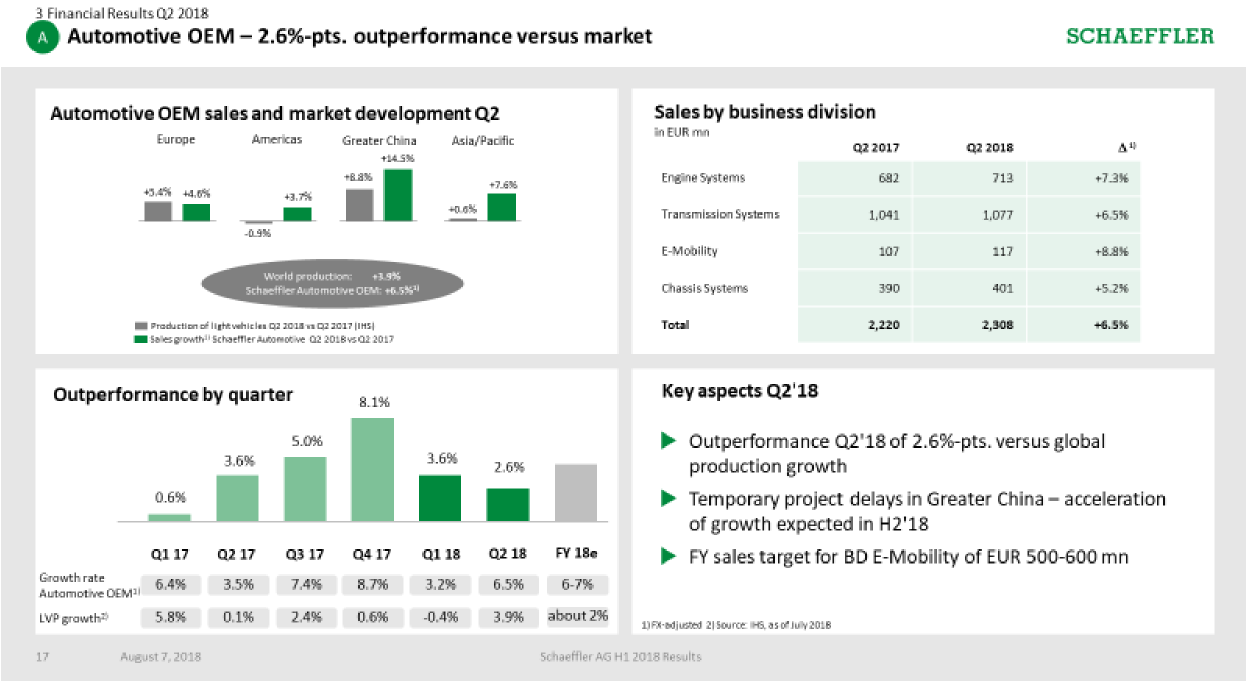
- EBIT margin1) at 11.1% (Q2'17: 9.9%)
- Gross profit margin increased from 26.5% to 26.7% mainly driven by positive volume and mix effects in Industrial and Automotive Aftermarket division
- Reported EBIT includes EUR 22 mn restructuring provision related to BCT reorganization

EBIT margin1)

	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018
Automotive OEM	11.9%	9.4%	10.7%	11.2%	9.5%	**9.0%**
Automotive Aftermarket	19.2%	15.3%	23.1%	17.9%	17.9%	**20.0%**
Industrial	8.6%	8.5%	8.9%	6.1%	11.4%	**11.8%**
Total	**12.2%**	**9.9%**	**12.1%**	**11.0%**	**11.0%**	**11.1%**

16 August 7, 2018 Schaeffler AG H1 2018 Results

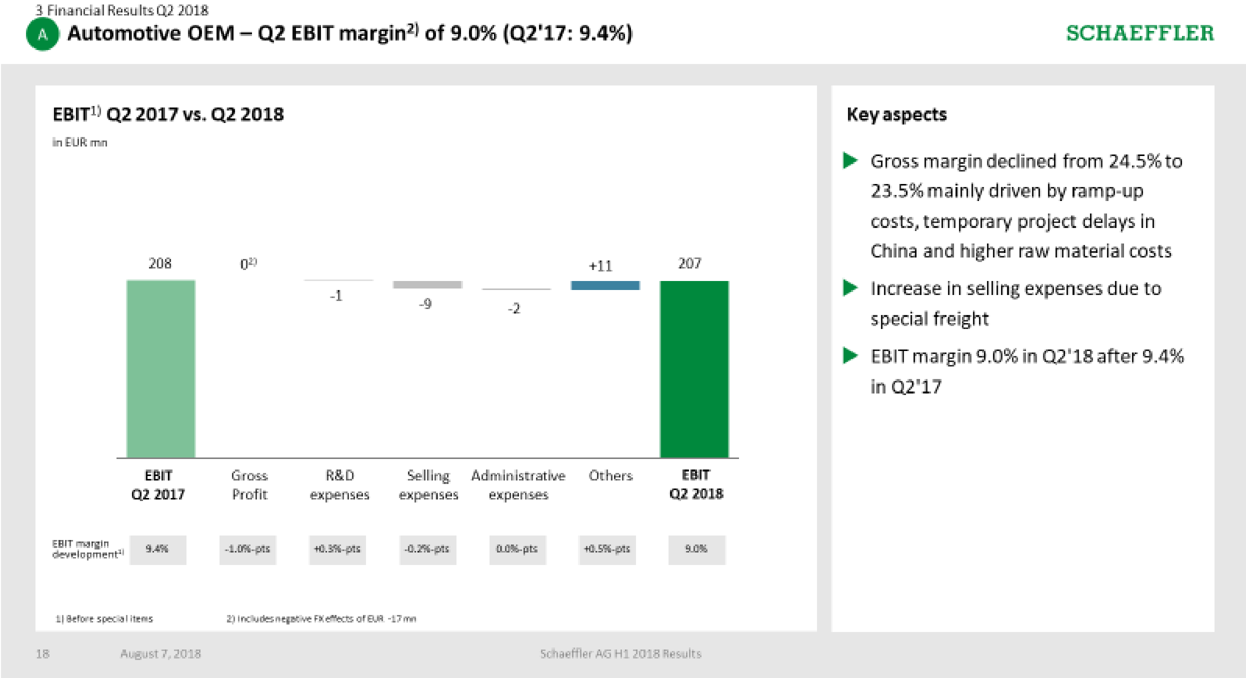
Then moving to the profit development, we can see that in the second quarter we have an EBIT level of 11.8% [IR note: 11,1%], which is supported by an improvement in regard to the gross profit by 0.2 percentage point, which is actually driven by positive volume and mix effects, especially in the industrial and automotive aftermarket division.



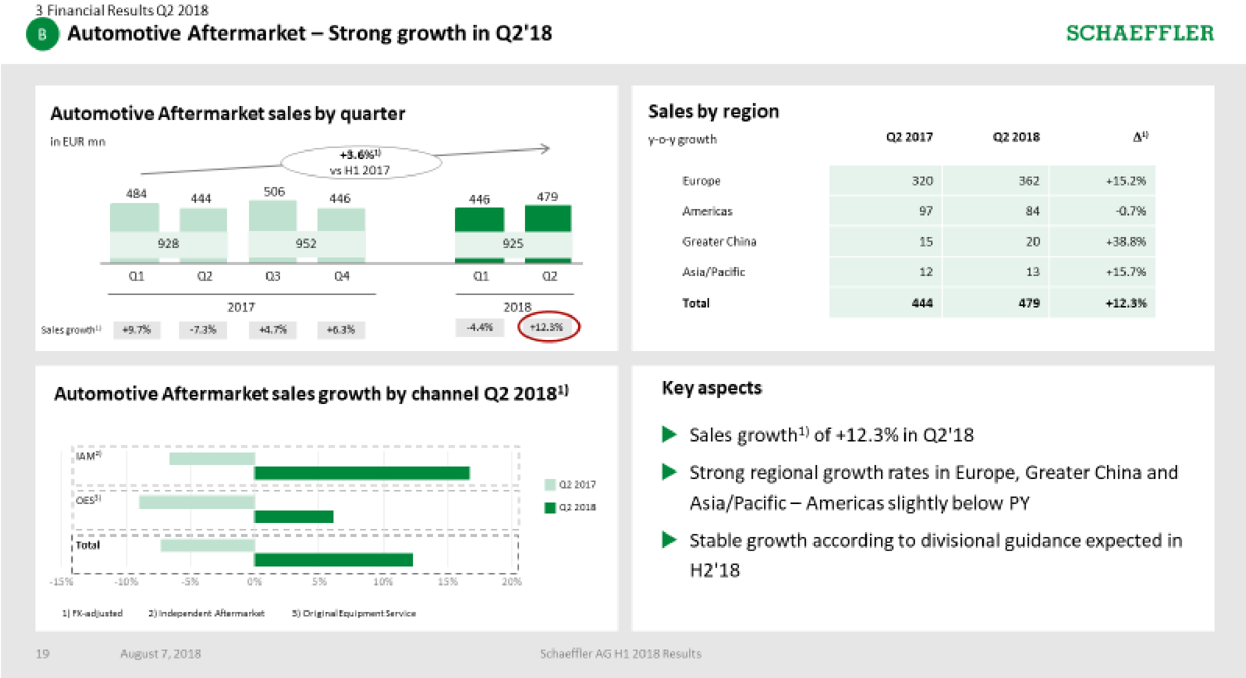
And let me switch actually to the individual segment or division and switch to Page #17. So we can see on the automotive OE side that we achieved an outperformance now in the second quarter of 2.6%, a comprehensive market development that is on the upper left side in the chart. Again, China contributed, but also strong contributions regard to the outperformance by Europe, Americas and also Asia/Pacific.

We move now to the sales development. Nevertheless, we had some influence which have not been so positive. So, we had some temporary project delays in Greater China, but this is also which actually makes us confident that we see the positive development in the second half of the year with an acceleration of the expected growth.

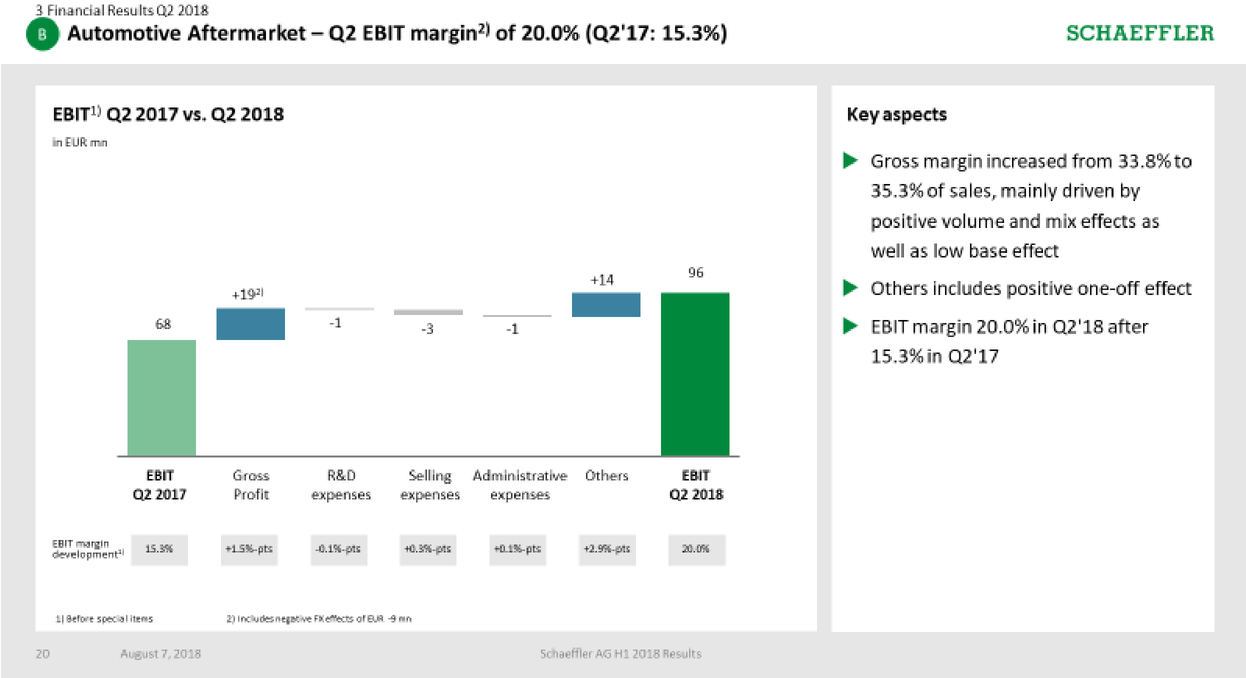
In addition, I would like to highlight that our newly established E-Mobility business division, which actually started operation as a business division as per January 1 of this year should grow to a volume of around EUR 500 million to EUR 600 million for the whole year.



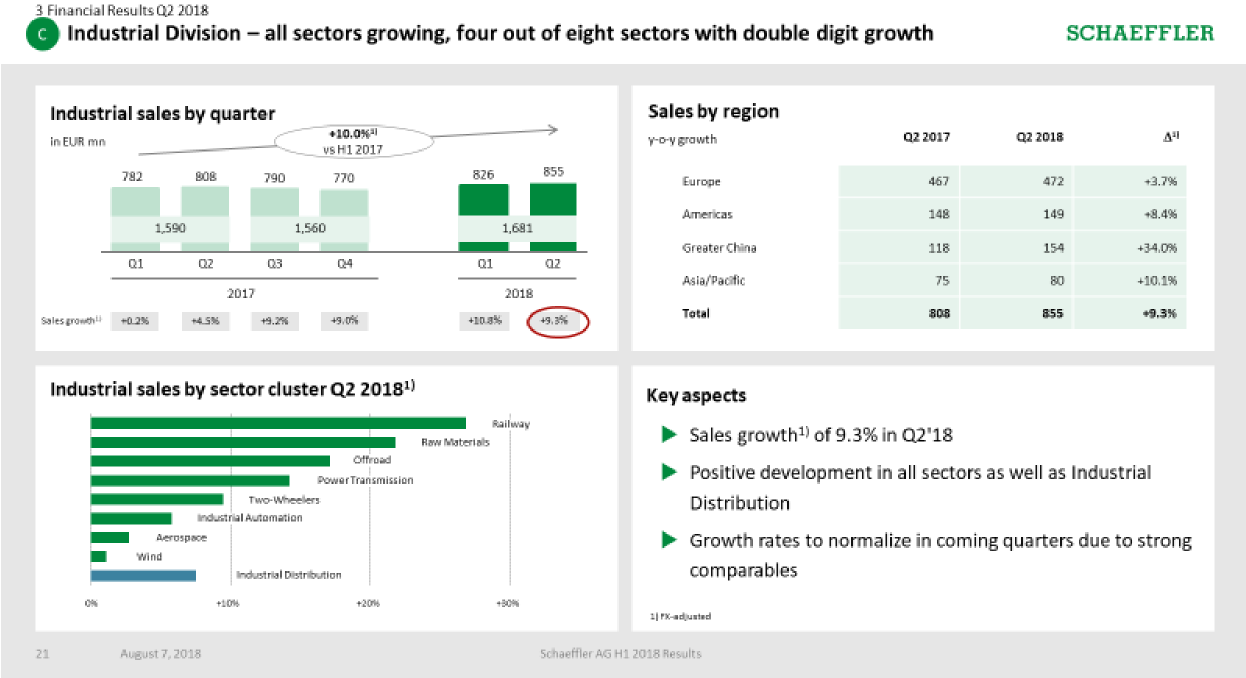
In regard to the profit development of the automotive OE division, we can see that actually in the second quarter we achieved an EBIT margin of 9.0%, after 9.4% in the second quarter of the previous year. This includes a slight decline of the growth margin, which actually was caused by the ramp-up cost, the project delays, but also headwinds coming from higher raw material costs and additionally some increase in selling expenses due to special freights that actually we needed to do and also to enable to growth in China, especially.



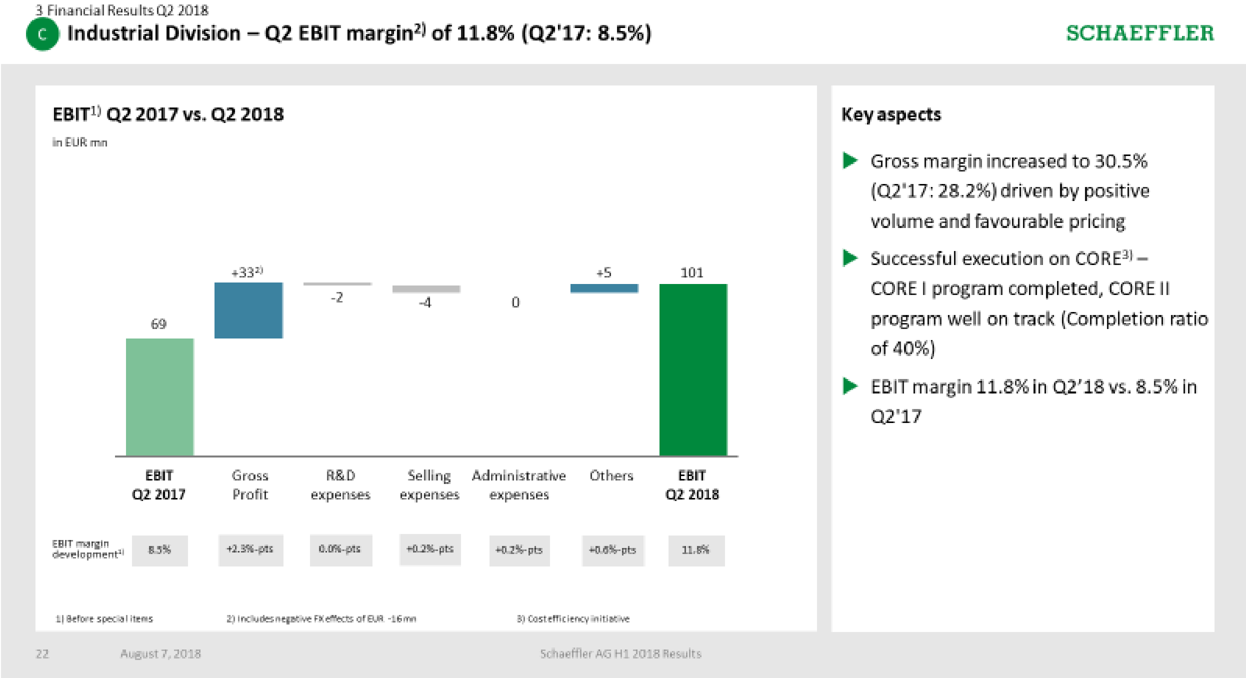
Then in regards to the -- now let's switch to the automotive aftermarket division. After a slow start into the year, we had a very strong second quarter with a growth of 12.3% and now with a half year growth of 3.5 percentage points. We are actually in line with our guidance development, basically, coming from all regions with the exception of Americas. But in regard to Americas, please we keep in mind, as Klaus already mentioned, that we actually started a new business now at end of the second quarter recovery sale of cost NAPA very significantly enhance our product offering that we are actually offering as we already see the first positive impact that the traditional sales coming now from this new business that actually we started in Americas.



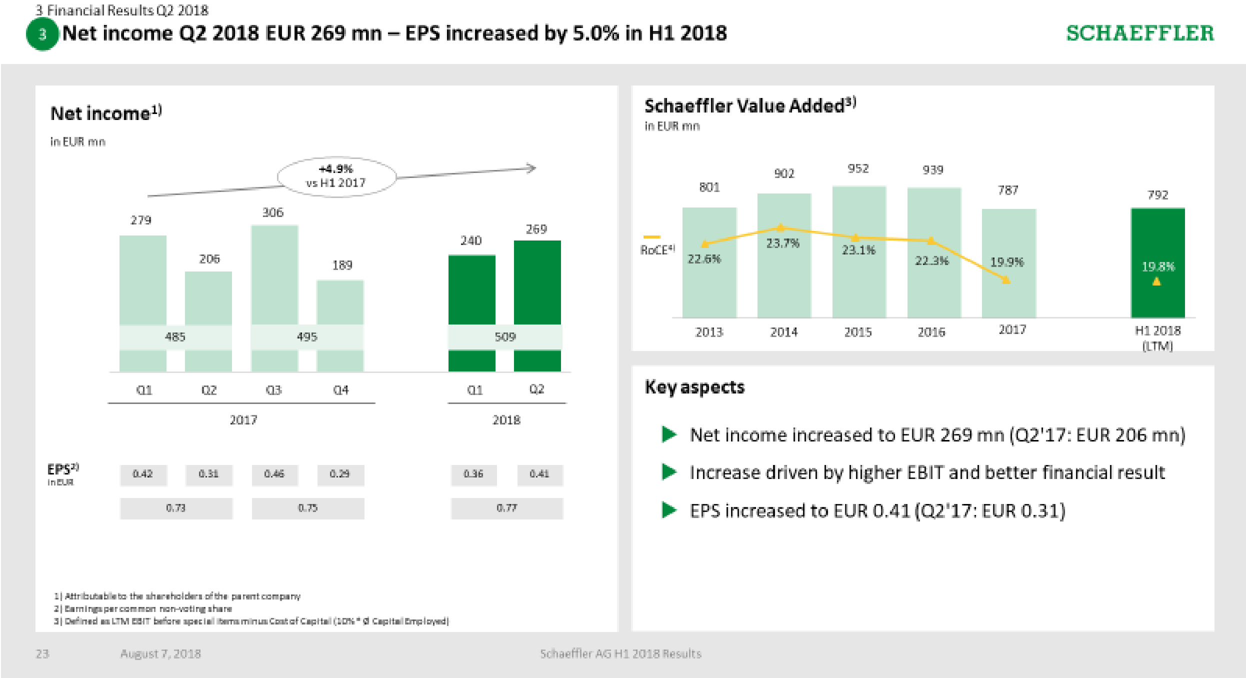
In regard to profit development of the automotive aftermarket in the second quarter, we achieved a level of 20%, which is significantly strong growth than the second quarter of last year. This was driven by an improvement in regard to the gross margin coming from positive volume but also from mix effect. But we also had to keep in mind, as you might remember that last year in the second quarter we had a low base actually some operational issues being behind. So this actually helps now that we are having comparison to second quarter of last year's strong development. And also, to be honest, we have a smaller single digit amount as a one-off effect in the second quarter of the automotive aftermarket business as well.



Now then let's switch to the industrial division, which continues its very positive development. Q2 was at a growth level of 9.3% with actually all sectors growing, especially 4 out of the 8 sectors growing with double-digit growth. And as you can see on the right side, again, a strong contribution of China, but also the other region contributing to the growth in the range of 4% to 10% and overall for the third half of the year, now we actually achieved the growth of 10%, which actually also led us to then the fact that we increased our guidance for the whole year to a range of 6% to 7%, which also then explains that we are in fact actually a normalization in the coming quarters of the second half of the year also being driven by strong comparables in the second half of last year.

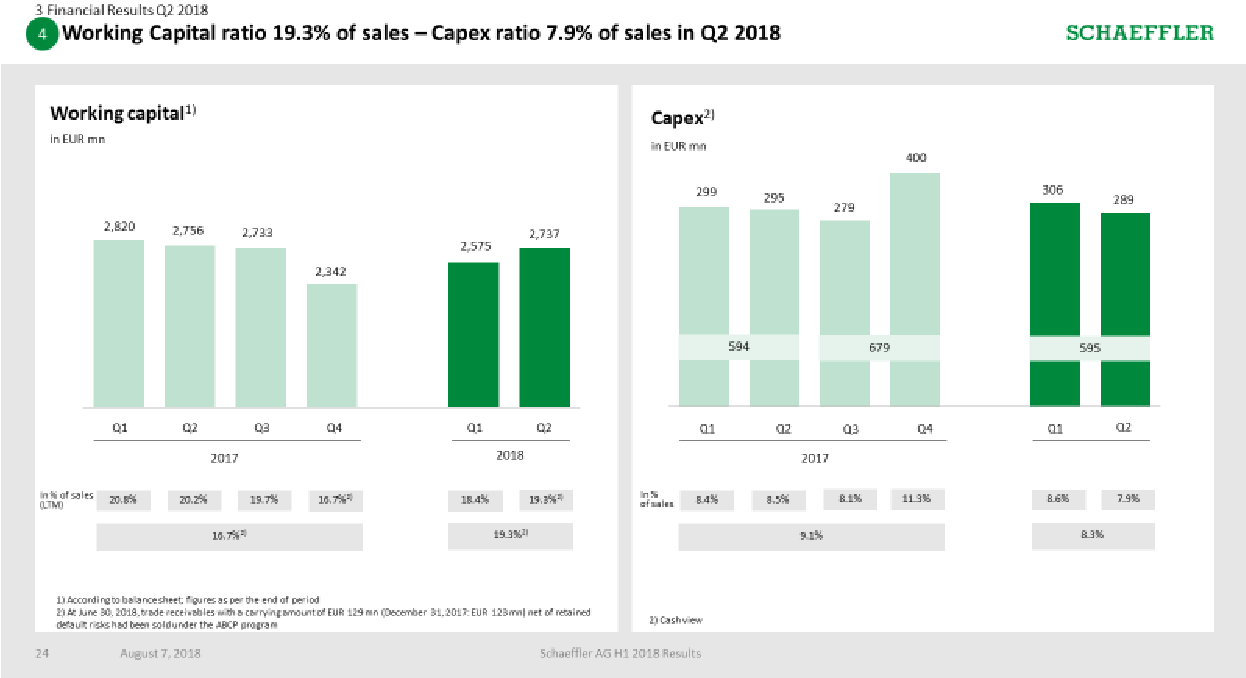


In regards to profitability, the industrial division continued develop positive. The second quarter was at a level of 11.8%. And coming from gross profit margin improvement, which is actually driven by positive volume and favorable pricing. And main reason being behind the profit impact coming from the successful execution of our CORE program through CORE I program targeting the overhead area was completed at the end of the last year, adding slight more positive impact this year due to realizing the full year impact. CORE II targeting the production area is on – well on track. And the completion ratio is now at 4% [IR note: 40%]. So we also had a positive contribution here from the plant side, which actually helped to increase the gross profit margin.



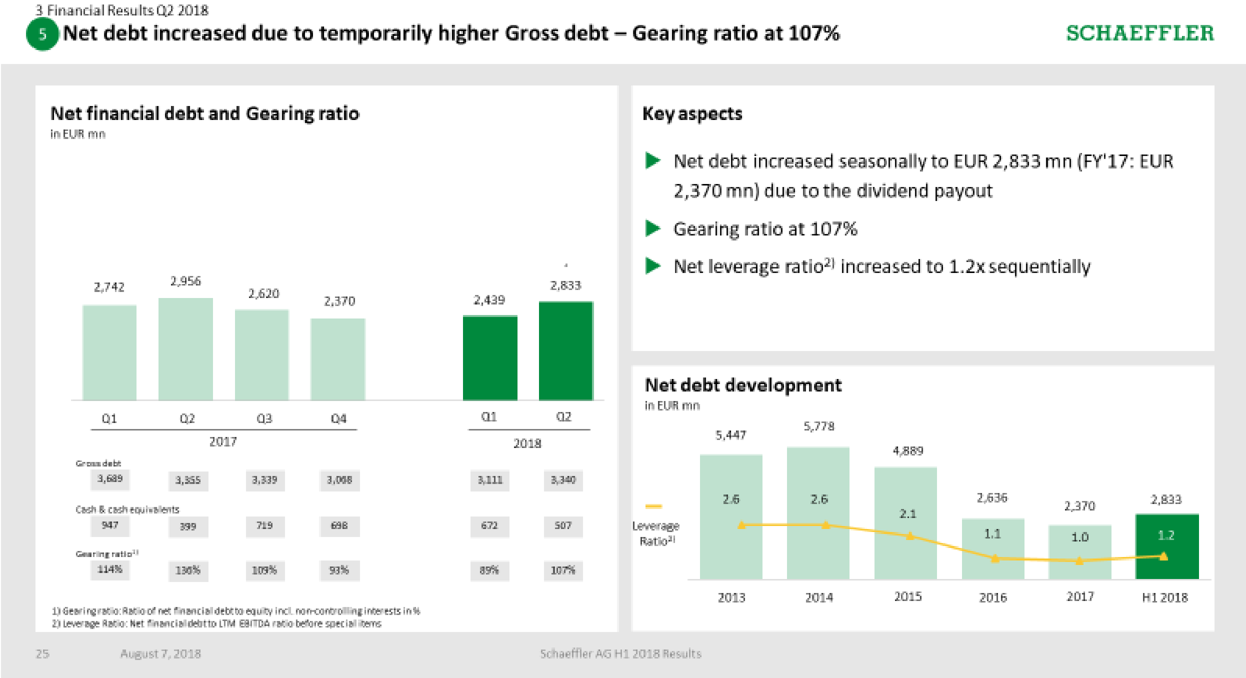
With this, let's shift now the focus from the division. So our overall development obstacles, the net income actually increased in the second quarter to EUR 259 million [IR note: EUR 269 million] for the first half of the year, we have an increase in the net income of 4.9%. And our earnings per share increased by 5% in the first half of this year compared to previous year.

The positive development in regard from a net income is driven on volume side by the higher EBIT, but also by better financial results.



In regard to the working capital development, Klaus already mentioned that we had some development there which actually had a negative impact on the free cash flow development. We [haven't had] normal impact in the sales of the year that actually receivables are building up compared to the last quarter of the previous year and then -- but we have another entry in regard to inventory in the second quarter now as well, we reached now good levels also to improve our delivery capability in regard to the growing demand, especially in the industrial area as well. And we are targeting now to reduce the inventory levels somewhat end of each year compared to the current development because we also had a positive contribution in free cash flow development.

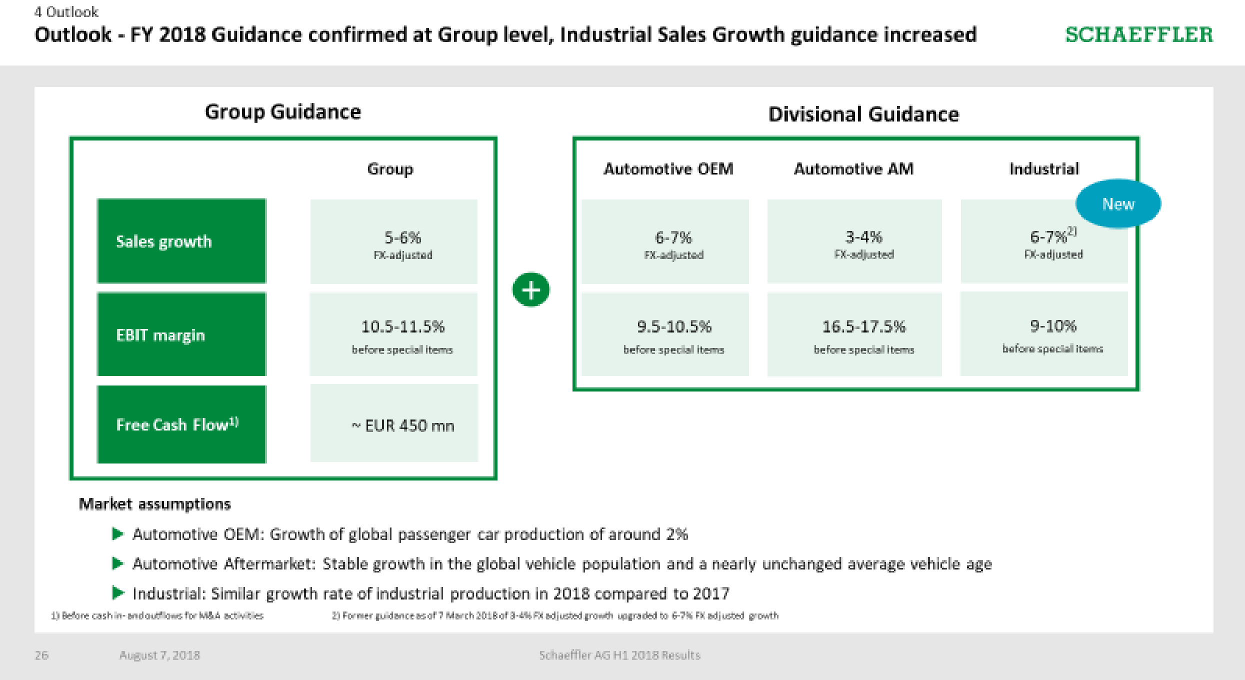
CapEx, as Klaus already mentioned, normalizing now in the first half of the year at a level of 8.3%. And we are managing this in a very disciplined way, so in order also to balance then the cash flow development that we could see is having the negative impact on the working capital side.



In regard to the debt development, we have net debt increase at the second quarter of this year. This is especially caused by the dividend payout. Regardless of this, our gearing ratio is at a low level of 107.1%. And the net leverage ratio increased as a consequence of that slight debt increased to a factor of 1.2, but with the free cash flow contribution now expected in the second half of the year, this was also done in previous year to also further improvement again towards the end of the year.

And with regard to the overview, it improved in second quarter of the year, I would like to hand back to Klaus.

Klaus Rosenfeld



Well, Dietmar, thank you very much. The summary is on page 26 and I've said it Thanks, Dietmar. I think the main message has already been sent, we confirmed our guidance on group level. We consequentially increased the industrial sales growth a little bit. All of this is based on the market assumption that you see on Page #26. I think our estimate for the automotive OEM global passenger car production has been 2%, it's still 2%.

When you look at the IHS numbers, the second half is projected a little stronger than the first half, also supported by the development of the Americas. So I think that gives us a little bit of positive support hopefully from the market. And again, we will do what we can to make sure that this year we deliver what we promised. In terms of the financial calendar, as you all know, that we're going on roadshow now. And Renata and Dietmar will be available in Frankfurt and in London. And we then have our Capital Market Day on the 20th of September in Berlin. All of you are cordially invited to join us there. We'll use that opportunity also to shed a little bit more light on the acquisition we have done and explain the strategic logic, but also the financials behind it. The transaction will close in the fourth quarter, so nothing to be expected in the third quarter here. We are on track, and again the reception was very positive.

7th of November we'll give you 9 months earnings. Clearly, a very important day for us. And once again, you have our full commitment that we deliver on our targets.

Thank you very much. We're now ready for Q&A.

Q AND A SESSION

Raghav Gupta-Chaudhary, Citigroup Inc

Raghav from Citigroup. The first one is on automotive division, specifically on the exceptional growth of orders that you saw in the first half, the up 65% year-over-year. Should we think of first half result is being exceptional because when you think book to bill that you have historically shown, should we expect it to normalize to a more, I guess, average level in the second half? And -- is this going to be a new trend? And I'll ask that first, and I've got a couple of follow-ups and so, perhaps you can answer that and then we'll carry on.

Klaus Rosenfeld

Let me comment on the 1.8x book-to-bill ratio. As I said, this number can clearly -- is clearly dependent because it's a lifetime sales projection can significantly vary when there's one bigger contract or one bigger project coming in. We're late with these numbers in terms of historic development, so we'll refrain from giving any projections here. I think the 1.8x is better-than-expected for us. It shows that we're in the business, but I would not sort of just project this on that level going forward. I would be a little more cautious. It always depend on the quality of these projects. And as the one that clearly drove this up is a very good project. So we would like this. We're happy about the 1.8x. And we're clearly fighting for the right projects going forward, but I can't give you a projection for the second half.

Raghav Gupta-Chaudhary, Citigroup Inc

No, that's fair. I guess in terms of to follow up to that would be -- when you talk about lifetime sales, I think how -- can you talk a little bit about how you expect this to translate into top line of what kind of period and is the inability order -- a longer time period in terms of -- than a conventional -- would they want it to be more classic products as it were and could you just give a little detail on that, please?

Klaus Rosenfeld

What I can't say is Mr. Gupta, the 1.8x is not 1 project. It's a range of different projects. It's not only 1 division. It comes from the E-Mobility division, it comes from the engine division that is positive, but also support from the Chassis division on this. So it's a variety of projects. We try to calculate lifetime sales on a conservative basis. It's always the information that the marketer, the sales guys generate. But I can tell you, we have been very strict on making sure that these numbers are not inflated. And in terms of what's the right sort of discounting factor to -- in terms of normalize growth rate, it's also a little premature because our history is not very strong. But I think the normal contract lifetime is somewhere with the length of phase between 5 to 6 years. Probably on average, it is something that we can probably use as a proxy to be on the safe side. And that would show that there's continued growth in the automotive business to be expected.

Raghav Gupta-Chaudhary, Citigroup Inc
And then the last one on the automotive order book would be and the margin, can you talk a little bit I think about the mix of the sales resulting in some pressure on the automotive margin in the second quarter, or in the first half? Just wondering about the mix of the order book, how do you feel about kind of the potential upside for the automotive OEM margin over the coming few years?

Klaus Rosenfeld
A very good question. I'll hand it over to Dietmar for that.

Dietmar Heinrich
In regard to the growth profit development, actually, it's in line with the gross profit that we are achieving so far. So, it's supporting the development in general. Then and of course the ramp-ups need to be managed, but as Klaus said, that’s moving ahead and we are positive in that regard.

Raghav Gupta-Chaudhary, Citigroup Inc
Okay. And my final one, sorry, would be on the industrial division. Clearly, another strong quarter for growth. And I'd just like to focus on the sequential slowdown that you saw in Europe, 4% growth versus the 8% in Q1. When I think about one of your European competitors and what they reported for Q2, a 9% growth rate, I was wondering if you could provide any detail in terms of what you're seeing? And is that market share loss to one of your competitors in Europe? Can you just talk a little bit about that? I've obviously seen the slide on the order book and how that's trending and kind of why you're perhaps more cautious given the tough comps in the second half, but specifically on Europe and what you saw in the second quarter would be great.

Klaus Rosenfeld
Well, I think we need to -- I don't have this information in hand and all the detail. Again, we're not managing the business by quarter. You're right that the industrial

business in Europe was a little weaker than in the second quarter [and] the first half. On the contrary, we have this very strong business in China. Again, we today enjoy an environment where there's more volume growth than expected. And I think, Dietmar, we need to go back and give more detail on this if necessary, but I'm not in the position to comment on this. What I can say is that more or less across all the regions, we have seen, except for the wind area, positive growth, which obviously was on the slide in the pack. And some of the factors helped clearly driving this growth. And this was railway and off-road, to mention just 2 of them, raw material. And these factors may not be as strongly represented in Europe than in other markets. That may be the explanation, but we need to go back and give you that in more detail.

Kai Alexander Mueller, BofA

The first one is really on the outlook into the second half. In light what we've been, obviously, seeing from some of your competitors with regards to WLTP looking at Q3 and then Q4. Given you have significant exposure to the Volkswagen Group, could you give us a little bit of comment on what you're seeing there? And then the second point is, you highlighted the one-off effect of EUR 8 million the automotive aftermarket EBIT or adjusted EBIT. In your report, you mentioned also something on the industrial division. Has there been also a one-off that's been booked in there?

Klaus Rosenfeld

I'll take the first question on WLTP, the more strategic question. I mean, when you -- what you're describing is correct. We don't have -- there's no real impact in the first half on the WLTP. Forward looking is a situation that's a little difficult to assess. We know that VW has mentioned about 200,000 vehicles. The question now is how strong are we represented in the vehicles they are talking about and how does the buildup of vehicles that are ready to go but have not been through the testing, how that is going to be reduced and what that means for their production strategy?
The only thing I can say is it's a problem that we're following very closely. Our estimate at the moment that in terms of numbers, it is a manageable problem. And that is, clearly, a function of the fact that if people don't buy the VW car, they buy another car. And it's dependent then on where --are we presented in the other car. If they wait, it's just a timing impact. And therefore, I think you should not be over concerned about the problem. The bigger sort of concern in terms -- and that's why I said the environment stays challenging, is that the foresight we have on all these issues is pretty limited. At the moment VW is still on holiday with their production.

And they have their closing dates, so we need to see what the second half is going to bring. We manage this on-site very carefully. But if you ask me what the potential impact for the second half, it's very difficult to quantify. We do think, and again, this is the intelligence from our GKAMs from the global key account managers that are very close to VW, that on our side, it is a digestible and manageable problem. You never know what's going to happen next in the overall context with tariffs, with all this protection stuff, with all the uncertainty that certain Twitter things create in the automotive OEM side, we have a challenging environment that we need to manage through in the second half.

Kai Alexander Mueller, BofA
Okay. Maybe just a follow-up on that one. Did you see any higher call-offs from VW for example, given they obviously pre-produce?

Klaus Rosenfeld
Not at the moment.

Kai Alexander Mueller, BofA
Okay. And then the aftermarket, there was...

Klaus Rosenfeld
The aftermarket one-off just to explain that, is a one-off we have. And you may recall this in the last year, we built a provision for a court case. That was an old court case in the United States where in one of our plants at the time, automotive aftermarket products were manufactured. And therefore, this court case, also the provision was allocated to the automotive aftermarket division as a one-off in a sense that it was adjusted for the EBIT margin. The court case has now being settled. We're very happy about this. And we could release EUR 8 million of the provision. Due to our adjustment rules and you'll remember that we're only adjusting if something is above EUR 10 million, we couldn't show this as an adjusted item. That would've been my preference because when we adjusted, EBIT margin automotive aftermarket would not be 20% in the second quarter, but something like 18.3%, 18.4%. That's why we highlighted it and said the margin here is a little inflated. This is a one-off that will go away. It will not be repeated. We're happy that the case is done, but we don't extrapolate on the point.

Kai Alexander Mueller, BofA
And there's nothing in industrial?

Klaus Rosenfeld
I'll hand it over to Dietmar.

Dietmar Heinrich
In regard to industrial, there was no one-off intake -- into this year. What we're having in the industrial business has already been in the adjusted part. We closed up the restructuring position for BCT so we posted EUR 22 million, but it was then adjusted when we had the EBIT of the automotive and industrial division who are both related to this restructuring.

Kai Alexander Mueller, BofA
Perfect. And then maybe just a last...

Klaus Rosenfeld
Kai, what I can say, I think what we should say at this point, the margin is higher than what we thought. It's definitely positive, has positive support. And again, also here, I would suggest that we don't just extrapolate on this and say it has now increased to 11.8%, the next quarter has 12%. That will not be the case. That's what we said. We confirmed the margin guidance. Yes, we're clearly above the guidance at the moment, but let's be careful what the second quarter is going -- second half is going to bring. Growth will be, what we think, continue, but not at the same pace as we saw in the first half.

Kai Alexander Mueller, BofA
Perfect. Very clear. Maybe a last one just on the industrial. Obviously, you had a very strong organic growth in the second quarter. Can you give us a bit of color how much of that was actually volume and how much was pricing?

Dietmar Heinrich
With the pricing actually, we are also managing successfully to achieve better results from this one after long periods where we have not been able to put through prices, so we are getting up to let it to compensate the negative index that we saw before. Then so, long saying, at the very end, majority of the impact compared to previous year is consisting on one side positive pricing impact, but very slightly only on the other side, of volume impact.

Klaus Rosenfeld
And maybe I add one sentence, Kai, what was positive is, in particular, the industrial distribution business now. That was one of the faster-growing parts. And that's also where the price -- the positive price impact came through.

Julian Radlinger, UBS
I have 2 or 3. The first one is, if we look at North America, I understand in the quarter there was a supplier fire that affected various OEMs from Ford to Daimler and BMW. And since Ford is one of your top 3 clients, if I'm not mistaken, I was just wondering if you could quantify the impact from that on the auto OE sales and maybe also EBIT number for the quarter? That's number one regarding North America. And then the other question a very simple one also on North America is, are you or are you not exposed to the SUVs that Daimler and BMW are exporting to -- from U.S. to China?

Klaus Rosenfeld
Two very detailed questions, Julian. I have to say I don't have a number for you on this fire impact. I can tell you if it would have been a meaningful number, we would certainly have been talking about this. But just, for instance, we need to go back [and find] and mention that we have not been confronted with anything that was negative there. And the same holds true for this SUV thing. I would assume that we are somehow represented in a SUV from BMW and Daimler, but the specific one, I have to say I can't give you more detail. What I can say is as a more general remark on the auto business in North America, we saw a negative market development in terms of production, but in terms of us, our outperformance in the market was, I think on the right side. You have it also in the book when you go to the Page 17, you see that 3.7% growth in North America was okay. It's in any case an out performance there. What was not always the case in the past. So we think North America also in the second half will support the growth trajectory of the Schaeffler Group. We have traditionally very good presence with Ford. And therefore, again, we see that as a supportive market for the second half.

Julian Radlinger, UBS
Okay. That's clear enough. And then other question is regarding CapEx and free cash flow. In the full year '17 results call, you said that CapEx – the CapEx-to-sales ratio will probably higher than 9% this year, partly driven by the kind of exceptional CapEx spending for the AKO and EDC Projects. So given that you hardly had any expenses according to that table on Page 11 for AKO and EDC in Q2, I was

wondering is that still accurate, to expect a CapEx-to-sales ratio higher than 9% this year? And does it also reasonable to continue to expect the ratio to fall below 9% next year, which is also something that you said in one of the previous calls?

Klaus Rosenfeld
It's a very good observation. I mean, when we mentioned, yes, we have increased working capital needs and we want to be disciplined on CapEx spending that is definitely pointing in that direction. On the one hand, you're right, the spending on AKO and EDC it's a little lower than what was projected at the time. That is on the one hand, on the more extraordinary things, relevant. On the other side, we also have with the new COO that we have, Andreas Schick, he has done a very systematic review of the passive utilization and about sort of ways to optimize CapEx spending. So I think probably a little premature, but my expectation at the moment would be that we need to revisit that statement. And that we will probably come out not significantly above, rather probably below 9%.

Julian Radlinger, UBS
Okay. Great. And then just a very last one. I understood that my questions are long, but a simple one here. Also on that table, the free cash flow on Page 11, the EUR 59 million nonrecurring items, excluding the free cash flow in Q2 '18, can you just have a look in there? Is that more legal cases, or is that more restructuring?

Klaus Rosenfeld
Well, you remember that's explained in the footnote. These are basically 2 main drivers. So one is, we're still sort of working on finalizing this project with the cartel issues, where we have to find and then also pay damages to customers. That is running off. And there's a little tail there because some of these payments were not made on the spot, but rather over time. And the second one is, we have under CORE I and CORE II, we built restructuring provisions. We're paying off for those people that are leaving now, so that will continue to some extent, but these are the main reasons behind this. So restructuring payments from restructuring measures and the last payments from legal cases.

Henning Cosman, HSBC
had a few follow-up questions I'm afraid. So maybe to start on Page 6. You said you can't give us any guidance for the order intake in the second half. So this shaded area that you've put there, you don't want us to take that as guidance at all and for you to end up clearly above the 2016 level?

Klaus Rosenfeld

Well, I know that, Henning, thanks for that remark. And no, I don't want to -- don't measure this with centimeters and extrapolate what it could be. It's just -- next time, I'll leave it away, so that people don't get nervous about this. It's clearly our objective to build the order book further. And as I said, we are -- we don't have the new series contract on [electric] or on a hybrid module, but we have become quite [neglective] on what we do. And this is not only E-Mobility that counts here. So take it as a sort of optimistic view on this, but don't take it as an indicative projection.

Henning Cosman, HSBC

Okay. And then the next one, I appreciate the comment that the gross margin of the order book is in line with existing gross margin. But also seeing especially the continuing ramp-up of this very order intake going forward and the associated costs, does that leave any room for margin uplift then if the current gross margin of the order intake is only in line with the current business?

Klaus Rosenfeld

Well, again, this is not a mathematical exercise. I think what Dietmar wanted to say is that we are also here very keen on not just inflating the order book and buying business. How this unfolds overtime is always a function of the ramp-up curve behind and of the market success of the products. But what you saw in the second quarter was exactly that problem that we had ramp-up cost that we could not compensate as we wanted by enough volume and sales. So let's be a little careful here to take away from the statement that there is no margin uplift possible. At the end of the day, you all know that the products that are more systems-related have lower margins than the products that are component-related. And at the end of the day, we're not managing the business solely by margin, we're managing it at the end of the day by SVA and by the targets that Mr. Schaeffler and the market has given us. So therefore, it's a little bit more of a complex answer than yes or no. It's a legitimate question, but I can't just say there is no uplift or there will be an uplift. It remains to be seen how this portfolio or project is going to unfold.

Henning Cosman, HSBC

Okay. And on the cadence of the automotive outperformance, can I just ask if you -- because the outperformance has come down, obviously, a little bit, although the absolute organic growth rate has gone up as a function of the underlying market.

So can you just remind us if you had expected higher outperformance also in the second quarter? Because you had indicated this increasing number of ramp-ups in the course of Q2, 3, 4. Is that partly the Chinese ramp-ups that have shifted a little bit into the second half and therefore, the overall cadence has shifted a bit into the second half? Is that accurate?

Klaus Rosenfeld

Again, it's a very fair observation, but don't overestimate the quarterly development here. When you compare this to '17, you saw -- and don't forget outperformance, always a function of market growth. And last year, Q1, 5.8% market growth and nearly flat in Q2. This year, negative in Q1, 3.5% for Q2. When you look at our sales numbers, 3.2%, 6.5%, I think that is a solid growth dynamic. We're expecting even more now in the second half of the year. So I would kindly ask you to look at the full year perspective. We have said from the beginning, market 2% is what we're expecting. And we feel pretty good about the 6% to 7%. That's an achievable number with the 4.8% when you compare what we see last year. You see it on Page 17, 7.4%, 8.7%. I think that's something we need to watch out for. And therefore, I do believe that the 4% to 5% for the full year, definitely, an achievable number.

Henning Cosman, HSBC

Okay. And maybe just very finally. You don't expect this to have a lower contribution margin, these sort of incremental new orders in the second half because they're still quite immature and in the ramp-up phase diluting the mix?

Klaus Rosenfeld

No, don't forget that the growth that we're now seeing in 2018 second half is generated by projects that are, whatever, 2 or 3 years ago. The new projects that are in the order book don't have an immediate impact on the second half year margin. But again, I just want to also mention here the environment is a challenging environment. We're cruising with the auto margin at the lower end of our guidance. And it's clearly important for us that we make sure that the margin also meets the 9.5% in the half level.

Sascha Gommel, Crédit Suisse AG

First one would be follow-up on Henning's question. The temporary project delays, can you confirm that the delays are now gone and the projects are running in line with expectations? Or are they still delayed, and we should also expect some impacts for the third and fourth quarter? My second question will be on raw materials. I was wondering if you could quantify roughly the on earnings in the first half and what you expect for the second half? My next question would then be on industrial on your let's say, business portfolio. Are you happy with the current business or product portfolio you have there? Or do you see the need to buy or sell anything? And then very lastly, a more general question, on the decision to only change the revenue guidance for industrial because when I looked at the status quo, the group guidance was well on track while the divisional guidance looks a little off for almost all 3 divisions in some sense. That auto looks very ambitious, while the other 2 look rather conservative. So I was wondering if you can share some thoughts around that?

Klaus Rosenfeld

Let me start with the last one. As you know, we are not a capital market-oriented company since 20 years. So this guidance concept is the group guide, the divisional guide is new to us. We need to become acquainted with it. We don't want to misguide anyone. But we also want to make sure that we don't promise something that we cannot deliver. So we decided this and Renata was in the executive board meeting. And we discussed several scenarios also compared to the environment. What we said it's most important there we deliver on the group guidance. I think we are confident. Yes, you're right. We are probably a little conservative on the 2 segments that are at the moment proving at the higher level. But give us a little bit credit here and wait for the third quarter, what's happening here. I don't want to overpromise anything. So it's more a [context] a little bit of a newcomer learning exercise here that we want to show. And again, a quarter is just a quarter. In terms of the industrial M&A question that you mentioned, we feel good about our industrial portfolio. We are catching up with our main competitor. But we also see, and you saw, the transaction that was initiated by SKF. We also see that there are some portfolio transactions where people are buying and selling certain businesses. This is clearly something that we're following. We have our M&A strategy. The M&A strategy is not only an automotive M&A strategy, it's a strategy for the whole group. We feel that our concept of an automotive and industrial supplier is just prudent by this first half year. It's good to have the balance across the businesses. It's also good to have the automotive aftermarket separate second quarter now that we're reporting numbers. It's clearly a more resilient business when it comes to these external developments. And therefore, I would just answer your question: we are following very closely what's happening in the market, also on the industrial side. The M&A strategy is open to certain search fields there. And just wait for what comes next. There is a pipeline building up of interesting transactions. And we'll talk about that when we are ready. In terms of raw material, I hand over to Dietmar for more details there.

Dietmar Heinrich

The raw materials impact on the automotive OE side is around 50 basis points so 0.5 percentage point.

Sascha Gommel, Crédit Suisse AG

And that's a figure for the first half?

Dietmar Heinrich

That's the figure for the first half, yes. And we see, and this is also the reason why Klaus mentioned, we have a challenging market environment. We actually saw the increase in raw material costs accelerate in the second quarter. So we're working on how to compensate it, but as Klaus said, the market environment remains challenging.

Sascha Gommel, Crédit Suisse AG

So you don't have automatic price adjustment clauses that will kick into the second half of the year?

Dietmar Heinrich

We have automated price adjustments, but you need to exceeds certain thresholds in order to be able to realize this.

Sascha Gommel, Crédit Suisse AG

I see. Understood. And the lastly on the project delays. If they're on track, that would be very helpful.

Klaus Rosenfeld

Well, the project delays are not delays that we are -- they are only in our responsibility. It's sometimes also the customer who says I'm not ready for certain things. It's always a joint exercise, if I may say so. And, in particular, in China, we have seen a little bit of cautiousness here and there. So there are no production-related or specific Schaeffler-related reasons for the delays. It's more on the customer side. How this is now going to unfold in the second half, we need to see. But we're still confident that these ramps up are coming, that you can't manage them day by day. Sometimes, it shifts by a week. Sometimes, it shifts by a month. More important is that they're coming in and that our product is on the right car from a customer perspective.

Akshat Kacker, JP Morgan Chase & Co
Just one follow-up on the core auto division. Do you expect a significant pick up in R&D expenditure in the second half on the back of product rollout? Or should we expect a below 8% number for this year? And also on the freight expenses, any comments around that in the second quarter? And should we expect normalization into the second half?

Dietmar Heinrich
So let's first start with the development expenses. We are below 8 percentage point and we actually expect then to stay in that range as well. So below 8 percentage point for the remainder of that year. In regards to the special freight, then we had an increase in the second quarter. And as we mentioned, we expect ramp-up in the second half of the year, especially in China because there might be some impact and we need to see how this unfold finally.

Christoph Laskawi, Deutsche Bank
Just a brief follow-up on the China delays. As I understand it there are so far only delays, no cancellations. Is the visibility actually in a way that you can be certain that they will come in the second half? Or could there also be a shift into Q1 next year? And how big would those be? Second question will be on industrial pricing. You commented that the environment would be quite favorable right now, do you expect that to be a sustainable environment into the second half even if volumes might come off a bit? And then the last one will be only on free cash seasonality. Usually, your Q3 is very strong. Given the working capital build that we saw in Q2, do you have a visibility if that will reverse
already in Q3? Or would it be much more a Q4 thing and hence, the cash flow seasonality might be a bit different this year?

Klaus Rosenfeld

Okay. Let me start with the last one. It could well be that the reversal or the stronger free cash flow quarter is the fourth quarter this year. And again, the working capital, when you look at other suppliers they have the same issue. So we need to see how that will be managed throughout the summer. But I think your observation is right. It could be that it's more back-ended than last year. In terms of industrial pricing, again I said the main pricing impact in the industrial distribution division, I don't think that you can't look at this that we're every quarter changing pricing. We typically do this at certain points in the year. The pricing increase is done. And we're not expecting anything in terms of the pricing initiatives in the second half. The question is how it will impact then in the P&L. That could still be a support in the second half. In terms of the delays, it's -- no cancellation how does that work? It's a very detailed question. It's difficult to project. What you need to take into account, we don't get any volume guarantees from customers. We also don't get any timing guarantees from customers. So that is always something that is dependent a little bit on the overall development. What is important to note is that we have a variety of bigger projects. And so far, all these projects have over time more or less met the expectations. And therefore, yes, it could shift a little bit. It could also shift a little bit into the next year. It remains to be seen. I can't give you a projection now how this changes over weeks. We're following this very carefully because that's the nature of our business.

Marc-René Tonn, Warburg Research GmbH

It's Marc Tonn from Warlburg Research. Just a few questions left. First one would be on the tax rate, which I think was down in the second quarter to about 23% following 28% in the first quarter, if I'm not mistaken. Is there anything as an indication what we could expect for the full year? And going forward, with it, will be in general perhaps a bit lower than thought at the beginning of the year? Second question would be you always, let's say, give very, very comprehensive answers on what you're expecting from the order intake, yes. But that's -- just a further follow-up on that is the R&D you already mentioned would be below 8% in the remainder of the year. Would you also be able to stay at this level in the years ahead given the strong order intake enjoyed in the first half and you're probably, let's say, targeting also to enjoy in the remainder of the year? That would be my second question.

Dietmar Heinrich

Let's take this -- sorry, let's start with the tax rate, first. Our expectation is generally to be in around 28% as the tax rate. In regard to the current half of the year now we had 2 special impacts. On one side we could release the tax provision due to [rather] being behind finally getting out of the consideration so we could release the provision. And the second one was the shift in regard to taxable income between Europe, Germany and countries outside of Germany, which actually had a positive impact in the first half of the year. In regard to R&D...

Klaus Rosenfeld

Maybe you want to mention that pension thing that we did because that was also a cash flow aspect...

Dietmar Heinrich

Thank you Klaus for reminding. We also did an additional payment in regard to the pension funds in the United States to benefit actually from the tax rate change.

Klaus Rosenfeld

There was a U.S. -- the U.S. tax reform allowed for some tax deduction from an early payment into pension funds. And we made use of that as our sister company Continental did this and many others did. That has a little impact on the cash flow as well because the payment is in the second quarter and the benefit will come later.

Marc-René Tonn, Warburg Research GmbH

And then the R&D going forward next year and the years after?

Klaus Rosenfeld

Well, again, we always said R&D is not going to jump and fluctuate very much. And you now see the [3] divisions for the first time see 2 quarters with 8% R&D for automotive OEM only. We're going to project for the next year when we're there. And just right now what we need to see what this number does, but I don't expect any erratic changes for the next years. R&D will remain important, but it's not going to jump dramatically also in the next year. But guidance for this or indications for this will come out when we're ready.

Harald Eggeling, ODDO BHF

Some brief questions on Page 13 to the acquisition, please. That's a nice chart in the bottom right. I was just wondering how did you define markets? Is a rather broad or narrow definition? Especially in regard to your current and also Paravan products and potential products? Second, what are the core assumptions behind this market volume in general and the improvement? And could you give us a bit of color regarding the competitive landscape and also probably some kind of color on patents, please?

Klaus Rosenfeld

Okay. That's a range of questions. Let me start with the last one in terms of competitive landscape. And this technology is called on a broader sense drive-by-wire. And drive-by-wire is, basically, a firm that indicates that mechanical devices are replaced by or [mechatronic] or electric impulses. So you're not braking, or you're not steering the wheel of the car by the usual mechanical steering device, but by an electric steering device. The magic of this acquisition is that the person who founded Paravan has for many years delivered cars, specific -- specifically manufactured cars for disabled people where the normal backup solution that you find in cars today, where the electric device or the mechatronic solution is backed up by a mechanical solution. That is not possible for a disabled person. Because in the case that the first sort of device fails, a person that can't hold a steering wheel will never be able to handle this redundancy. That's why this technology is so interesting. The Paravan founder has then developed redundancies that are based on the same logic like the electric device driven logic. And he had done this with significant timing and experience now. That's why the 500 million driven kilometers globally are so important. This having said in terms of the competitive environment, the technology that he has developed is unique because it is road approved. We know that it is also globally a unique situation because no one else has that road approval, okay and that experience. Can someone else now program software that is able to do the same thing? Yes, certainly someone can do that. That is nothing that is a competitive advantage that cannot be sort of [attacked] by someone else. But the most important thing is that wehave a timing advantage that's probably somewhere 3 to 4 years because of the proven homologation that is behind this technology. That is sort of the clearly the attractive part of that acquisition. That also means will we be the only person that has drive-by-wire technology? No. That's something that others can also do, but the advantage here is very much a timing advantage and gives us at Schaeffler a push into this autonomous driving because we're now able to offer solutions to customers that are more or less ready to go and don't need to go through endless homologation processes. That is a little bit on the competitive landscape. The steer-by-wire market is a submarket of the drive-by-wire market. You have also brake-by-wire because you can use the same technology for this. This technology is not only applicable to automotive in light vehicles. It can also be applied to trucks. It can also apply to off-road vehicles. You can have -- it's a broader technology. And don't forget that something similar is used in airplanes where you also have steer-by-wire solutions. So it's something very broad. If you want more detail on this market development I will need to go back to my files and ask colleagues who have produced it. This is just an estimate. We're saying this will become, as autonomic driving takes off, where people want to build completely different, in particular in big urban cities, urban mobility solutions, then that is a very attractive technology. So it's an estimate that I can't give you now the whole back up for this. We would need to deliver that in a separate call. Again, we said this is just the opening of this. If you want to come to the Capital Markets day, that's where we're going to have a separate session probably on this and explain what that means also in terms of growth potential going forward. It's nothing that is going to come to market tomorrow, but it is for us a major strategic move to also balance our portfolio in terms of powertrain chassis, aftermarket, industrial in a more attractive manner.

Operator

Thank you. We have now reached the end of our Q&A session. And I'm now handing back to our speakers for any closing comments.

Renata Casaro

Thank you very much, operator. If there are no additional questions, we will conclude here today's earnings call. We're looking forward to meet you in the next roadshows and for sure at the Capital Markets Day in Berlin on September 20, which will be preceded by a dinner with the top management and Investor Relations already on December 19, also in Berlin. Have a nice day. Bye.