

# Capital Markets Day 2018 – Keynote Presentation Transcript Q&A November 20, 2018

## Keynote Presentation

Capital Markets Day  
Ludwigshafen, November 20, 2018

**Dr. Martin Brudermüller**, Chairman of the  
Board of Executive Directors and CTO

**Dr. Hans-Ulrich Engel**, Vice Chairman of the  
Board of Executive Directors and CFO



**Christian Faitz (Kepler Cheuvreux):** Two questions if I may:

First of all, I guess a good part of your capex plans for 2019 and beyond is also on the new acquisitions, including Bayer's crop science remedies. What nature are those capex plans? Is there anything out of the ordinary that Bayer has not done over the past few years that you will do now? Can you elucidate this a bit?

Secondly, China in your view will be making up pretty much half of the global chemical market by 2030, I believe. Can you walk us through your way of thinking how China will grow so much, even from the base of more than 40 percent share today?

**Dr. Martin Brudermüller:** Regarding capex, there is nothing uncommon from the acquired business, that there are some misses where we now have to catch up. There are just normal things that come with it, I would say.

About China we can talk many hours. I think we have to look at it on a long-term basis. When we did Nanjing, there were also big concerns about China. We took the decision during the Asian crisis. I can say it was a good decision to do that, because if you look at the operations, they are really great, and they work well, and they are very nicely contributing to earnings.

I personally believe that the currently bumpy road which we might have for one or two years will come from frictions with the US. The people I talk to tell me that this is not going away fast. The trade issue is on the surface. The real discussion is about what is the place of the super-powers in the future in the global arena. China will not walk away from being blackmailed by the US. That will be a longer-term struggle. The China business, over the next few years, will most probably be a little bit more challenged than we have seen this in the past. Still, I think the fundamentals are right.

It is impressive to see what they have in terms of long-term strategies for key industries. They have plans for 10, 20, 30 years. In my experience, having lived there for ten years in the past, they will mitigate this. For that reason, I have no doubts that with the growth rate of 4 percent, China will reach these numbers. It will just be striking, because a lot of the production involving chemicals will be in China.

We could talk a lot about innovation. Meanwhile, we have extremely innovative customers. They are Chinese, they have become big customers, also in the automotive industry. A lot of the business in China is not with the OEMs from the Western hemisphere anymore, it is with the regional guys. I think there are so many things from the potency, from the devotion, also from the orchestration of the government. Will it be bumpy sometimes? Yes – as, by the way, it is in the Western world, too – but I don't have any doubts that, in the long run, this will be the right thing to do.

**Oliver Schwarz (Warburg Research):** My question is more or less about your ROCE target. Is there a number attached to that, or is this just ROCE above the cost of capital, as it has been over the past five years where you, so it seemed, achieved that figure easily?

When I look at your guidance "volume growth above the chemical industry, EBITDA to grow by 3 to 5 percent on an annual basis," it seems to imply that there is no real margin progression tied to those targets, despite the fact that the ROCE in Surface Technologies as well as Nutrition & Care is way below the levels that you want to have. So, is that likely to remain the way it currently is, or are you envisaging changes in that regard?

**Dr. Hans-Ulrich Engel:** I will start with ROCE. There we follow a similar concept to the one we followed in the past. We have not attached a specific target figure to that. We want to consistently earn a nice premium on the cost of capital. I am not so sure that what you said is correct that it has easily been done over the past years. Please keep in mind that, when you look at the capital base, there is the investment now in the ag assets.

There is capex coming, in part, as already mentioned, for the Chinese projects. So, while Martin explained nicely how this works in the chemical industry – you invest, you depreciate over ten years, and then you enjoy for the following years – there is capex coming. I think what we have there as a ROCE target is an ambitious target.

The 3 to 5 percent EBITDA: Let's look at this in a way where 2018 still benefits significantly from high isocyanate margins. They go into Q3 of 2018. One of the slides showed the normalised EBITDA growth that we had between 2012 and 2017. We will start with the EBITDA that we have for 2018, and what we want to achieve is, on that basis, an increase of 3 to 5 percent every year.

One thing is absolutely clear: All businesses need to contribute to that, which then would also address the Functional Materials & Solutions or the Performance Products business that saw some criticism, in particular in 2018.

**Tim Jones (Deutsche Bank):** Two questions, if I may. You talked about 20,000 employees being affected and changing part of their job. How quickly will it take you to implement those changes for those 20,000 employees, and how quickly do you think those benefits will be seen in the actual P&L for BASF?

And secondly, on the segment head remuneration, when you look at their variable compensation, are you changing at all the way you remunerate your segment heads?

And also – maybe this is a third question – what would their variable remuneration targets be? Do they differ by segment, or is it all the same?

**Dr. Martin Brudermüller:** Tim, about the 20,000 people: They will move fast. There will be a high number already moving basically at the beginning of January, and the rest will be moving a few months later. So, that basically is all done in the first half of 2019. That means that it shakes up the company and needs also a little bit to settle. The intention is that the functions move into the operating divisions and they have to settle themselves and redefine a bit their processes. I cannot exactly tell you how long that takes in each of the divisions, but it has to be rather fast; that's very clear.

This is also why we do a lot of the measures. We now have somehow scratched on the surface of the corporate strategy, I can only tell you, that has been developed over the last six, seven months. Behind all these levers which we just have quickly touched, there is a huge amount of well-defined measures. A lot of this is happening at the same time in 2019.

We do that because we also need the returns of this very quickly. This is why I think the €2 billion until end of 2021 is also not a walk in the park. But certainly, we can only achieve this if we do it quickly. So, don't expect too much in 2019 because we have to initiate first. So, it will come more in 2021, that's clear. But clearly, we try to get also something home in 2019 already.

About the segment heads: We don't have a segment head. We have the segments, but we still have the divisional presidents. We will not have a segment head because basically the segment head is one in the Board who takes care of a specific segment.

We have also talked about the remuneration of that. We will also change the bonus system in the way that we will have two pieces now. We have one that is very, very clearly only the number part. That is the number part of the achievement what this business has to contribute in the respective years. Either you miss it, or you hit it, or you outperform. That is how your bonus is defined.

Then there is a second part – it's less than half – which also defines what the person does to make the strategy happen. If we only go for the number part, they all don't do the investments it takes to really make the change happen. So, we have this part where we say, it is more a mid-term arrangement where you go for digitalization targets, where you go for innovation targets, sustainability etc.

We separate these targets. We incentivize management to do the right things for the future, but on the other hand, we are much harsher and clearer in terms of delivering the numbers.

We have also not touched on another topic because this would be just too much for today. But I quickly elaborate on it. We very much steer the company on the SBU level, even more than we have done it in the past. There will be a very clear strategy on the SBU level, where we say: It is not only a strategy that is nice on the paper; what is written in there, you have to deliver. That will directly go into target agreements very clearly.

However, that is also a mandate for empowerment. Once we have defined the strategy, the businesses are in charge to implement it and they also get the decision power to do this. So, it brings more autonomy, but it requires also much more discipline. And it is very much the segment head, the Board who heads a segment, who has to be sure that this is balanced in the right way, that it is the right target and that it is moving fast.

I think we have to move much faster with a lot of things in future in terms of delivery.

**Paul Walsh (Morgan Stanley):** When I look at the returns by the divisions, the notable standouts are Surface Technologies and Nutrition & Care when you look at the peers in terms of relatively low returns versus the peer group there. So, I wondered if that was something that you guys recognized and what you can do to close the gap with the peers, given the growth prospects in those two divisions in particular.

My second question was: Have you guys given any thought to what is going on with the whole push from oil to chemicals and the way that might change the dynamics in the chemical industry longer term? Has that played any role in shaping your strategy, Martin, as you have laid out today? I am talking about the industry dynamics, so if you look at the Middle Eastern producers trying to increase the share of chemicals in every barrel of oil. How does that reshape the thinking of an organization like yours that has got a global presence and where you are seeing competitive threats emerging from players that have not frankly been as interested in chemicals for 30 years?

**Dr. Hans-Ulrich Engel:** Paul, I'll start with your question on the returns in Surface Technologies. It always depends on which peer you are looking at because the range there on an EBITDA margin basis starts as low, if I recall correctly from the work that we did, as 3 to 4 percent and goes, when you go to the pure coatings players, as high

as 18 percent. Admittedly, there are two different businesses sitting in there. But I think, with combining them in one segment – we need to think about what type of data we provide you with – you should be able to even dissect the peer group a little bit more.

**Dr. Martin Bruder Müller:** I think it is fair to say that you can expect a lot of change for the national oil companies. Since the oil business is getting tougher in terms of the oil price, but also in terms of demand dynamics in the future – with the electro mobility – there is a lot of change coming. If that really wins traction, you will see refineries die. So, there is quite an impact on national oil companies.

That is why I think you see a kind of a renaissance that they look at chemicals again. There are considerations and people talk about what they can do. However, I have made that very clear and you see this also with the China investment: We have looked into this again: Middle East or not? But with the trade frictions we have seen, it is more than ever right to be where the market is.

I also cannot imagine that the Chinese government will allow that millions and tens of millions of tons of products are imported without any impact. We have done this in the past already very intensively for other reasons because we wanted to have revenue, cost and income in the same currency to have a low risk. But now, I think, in addition to this currency risk, there comes also the trade risk with all the duties and the restrictions to do business.

In that respect, I think, yes, we might compete with one or the other investment in oil countries which try to participate over there. At the very front end of the basic chemicals, there is most probably more competition coming up. It is not coming up tomorrow, but over time going forward.

But that, again, is why our Verbund is right, because we don't want to compete on these basic chemicals. We want to convert these basic chemicals along the value chain to higher value products. That is why I think our Verbund concept is still the right one and very different.

One last thing maybe on the China aspect: It has become incredibly difficult to open a new chemical site in China because they get closer and closer to what we have in the western world with regard to environmental impact and closeness to residential areas. It has become tough. By having a container [the new site in Zhanjiang] of such a huge size where you now can bundle all the investments you do in there, build up the right-sized infrastructure and everything, this is also the right way to operate chemical plants.

This is a differentiated answer to your question, but I think this moves the whole thing. I think there will also be an impact coming from sustainability. Coal will be more and more scrutinized. We will also have, as much as possible, considerations about bio-based etc. This is why you also find all this in our strategy and associated with the portfolio decision we have.

**Gunther Zechmann (Bernstein):** My first question is just to clarify on your EBITDA target, 3 to 5 percent per year. Is this for every year, the way you define it, or is that a CAGR over certain periods, i.e. should we expect 3 to 5 percent underlying EBITDA growth next year as well? Was that more a run rate?

The second one around buybacks: You mentioned that you would be open to do buybacks if the conditions are right. How do you define the right condition for doing a buyback?

**Dr. Hans-Ulrich Engel:** The 3 to 5 percent is not a CAGR. The idea is to increase EBITDA before special items year over year by 3 to 5 percent.

I tried to argue in an earlier phase of the strategy work that it would be nice to maybe swing a little bit. But in the end, we came to the conclusion that we said, no, we want to have a rock-solid, very clear target for the entire organization and this is to grow the EBITDA before special items year over year by 3 to 5 percent.

**Dr. Martin Brudermüller:** If you refer to the basis, we talk about roughly €300 to €500 million EBITDA more every year. I know there is maybe a little bit the feeling in the room: Is that really ambitious? I mean, this is adding 1 billion every two, three years. I think it is not a walk in the park. It is ambitious, given the current environment.

Share buybacks: I wanted to indicate that it is an active part of the tool box. But we have to decide about this at the time when this could be appropriate. There are several aspects which you have to look at. First of all, it is our financial structure; it is our financial needs also in terms of capex; it is the market environment; they all play into here.

With the contact we had over the last months, some of you perhaps had the feeling this is a no-go for me or for the new Board. I wanted to indicate that this is part of the instruments we have. We then will look into it at the appropriate moment of time.

**Markus Mayer (Baader Bank):** One question on your R&D: You elaborated that meanwhile it is €2.3 billion per year and this becomes a more important part for you. Does it also mean that R&D does not only grow absolutely, but also in relative terms to yourself?

Then two housekeeping questions; one is on your capex guidance. Have I understood it rightly that the number for the next five years is roundabout €20 billion? And €4 billion are coming from the South China Verbund? Maybe you could also elaborate on the phasing of the capex.

The second housekeeping question is on the savings, not only of the cost savings – I think that is more back-end loaded, as you elaborated – but also on the cost for this program and the phasing of the cost.

**Dr. Martin Brudermüller:** On the R&D budget. The €2.3 billion is no automatism. It is also not clear whether it stays exactly on this level or if it goes up or it even goes slightly down. That is simply what is the outcome of our planning for our legacy business, plus what we acquired from Bayer. To be very clear, the Bayer acquisition was also an investment in R&D. It is a super R&D platform. We have also 2,500 people in R&D coming to us. So, we are not blindly stepping in this. That is also exactly what we wanted to have: a business to differentiate by innovation.

But it is also clear and fair to say that I have stopped over the recent years the automatic R&D budget increase. You saw that this was somehow automatically almost 5 percent per year in the past. We have kept this rather flat, R&D expenses even went down a little bit over the recent years because at such a huge number there is also efficiency in R&D.

I mentioned to you that the supercomputer – Hans showed you a nice example – has to have an impact also on the financials. That basically means, if we make the processes faster with this impact of the supercomputer, you should do more with the same money. This is also what we expect. There will clearly be also efficiency gains on the R&D budget. I would not exclude, once we are through the discovery phase, that our own R&D program in ag has overlaps with that of Bayer and that we define some corrections.

I think it can also even be going down slightly over the next years because of these efficiency gains. But as a ballpark number, it is right.

For the capex guidance. This was also a rough indication. When we come in February 2019 with the new operational planning, we will communicate the exact number for the next five years. But roughly, you have been right. It is the €4 billion I mentioned for the China part, very much back-end loaded towards 2022, 2023 because we are now in the conceptual phase. There is not so much spending yet.

Then we also have to look into certain businesses. It is also very clear: For a 3.1 percent chemical growth – and we want to be above that; it is something 3.5 percent or even higher – you need capacities across the board. That also needs capex. But we will provide you with a better number for the next five years in 2019.

**Dr. Hans-Ulrich Engel:** On the one-times: Your question was ramp-up of the one-times. Think about it as the majority in 2019 and 2020. I can't give you an exact split there.

**Patrick Lambert (Raymond James):** I have just one question. It is regarding your assumptions about the automotive industry, which on a pro-forma basis accounts for 18 to 20 percent of sales. How do you see the next three years in terms of underlying demand and your outperformance on production, which is about 400 basis points? How can you sustain that? How much budget do you need to get to that 400 or surpass it? What is your view on the automotive over the next three years?

**Dr. Martin Bruder Müller:** Two points. First of all, we do not only grow with the number of cars. We also grow with the content of chemicals in cars. So, it is two pieces. Particularly in the Chinese cars, there is still on average much less chemistry than in Western cars. So, we have an opportunity here to also catch up with the growth, even if the unit numbers are not going up so much.

I think there are some indications that 2019, like 2018, is not getting a super year for automotive. If you look at the forecast, it is a rather low growth. The forecast for China indicates a slightly higher, almost stagnating car production.

On the other hand, we also have to make very clear: If we move towards e-mobility, that will hamper our emissions catalysts business, but it will open up opportunities for battery materials, as well as for much more light-weight materials, because there will be even more plastic materials in the car to reduce the weight.

The most important part in terms of that value creation is the business with battery materials. You know that we have announced this investment in Finland which is also the first CAM [cathode active material] plant in Europe – very important and appreciated also by politics because they want to build up the European value chain. We bring a major contribution in here.

I mentioned it earlier; you might not be aware that this is a very capital-intensive chemical part. So, it is something where we have to look at the returns after the first step. We also have to clearly say, we need capital to grow this business. This is also why the Surface Technologies portfolio will need a lot of capex in this distinct part.

On the other hand, it is also the largest growth area by far, in anything we see in the chemical arena at the moment, driven by innovation and by the materials and also by the speed of growth.

With that, automotive is in a big transition; some products we supply are challenged, but it is also opening up new opportunities, as automotive always was somehow. It was always an important industry for us, but also a very exhausting one because these guys are very demanding in everything.

**Patrick Lambert (Raymond James):** So, for the next three years, on contribution to EBITDA of 3 to 5 percent, it is almost like the past four years. Will you continue to outperform automotive production?

**Dr. Martin Bruder Müller:** We clearly want to outperform the automotive industry. If the 3 percent go down to zero, you can say, doubling zero is still zero. We still want to grow.

**Sebastian Bray (Berenberg):** I have two questions, please. The main goal of a new segmental structure seems to be promoting transparency and making benchmarking at profitability compared to peers easier. I just want to ask: Why hasn't the agricultural segment been split into seeds and crop protection, given those business models often operate differently? Am I correct in saying that you will still disclose the sales for those separately, if not for profitability? That's my first question.

The second is on the underperformance of BASF volumes over the last five years identified in the slides. Dr. Bruder Müller, what do you think was the key cause of this? Was it that you didn't have enough capex to service the demand growth when it came or was it that the sales network either in terms of how flexible it was with price or able to bring volumes to market was not quite quick enough?

**Dr. Martin Bruder Müller:** On the first one: You are right, a major part of the new segment structure is to provide more transparency to you. This was brought up in a lot of roadshows: We cannot compare you with anyone. So, we have taken up this challenge. The new segment structure is much more uncomfortable for us than the last one because it is really more transparent. But we are going for that.

On the other hand, we also clearly used this, with the roadmaps, to really sharpen what is going to happen in the segments. It is also some kind of an educational process. You cannot acquire to repair a business which is not okay. So, we rather allocate resources to growth businesses. This is even a step further in terms of being consequent with capital allocation.

If you look at ag and the idea of separating these two businesses, this is not the reason why we bought it. We did not buy the seed business because we now think the seed business separately is a business we have to be in. We have to admit that this industry moves into a more integrated approach with seeds and the chemical part.



There will be many more challenges in the way that, with digital farming, precision farming and also regulation are coming in. There will be most probably less chemistry on the field. So, you have to organize this differently and you have to create value differently, with different offerings. For that reason, it is very important that the seed and the traditional crop protection part come really together. This is also how we have established the organization. We have integrated certain things as much as possible in the structure we have, but we also have created a new structure with a global business unit seeds and traits. This is also very closely linked to the R&D part and to the traditional part.

I think the chance is really innovation here in any dimension: digitalization, business model etc. We will look at the numbers separately, but business-wise that has to be an integrated part.

Underperformance of BASF volumes. First of all, yes, we have shared that with you. In all openness, this is the major thing. This is what the strategy is about: bring us back on the growth track. There are several aspects to this. I mentioned the split. If you have 40 percent of your business in Europe growing by 1 or 2 percent, and China grew by 6.5 percent, then you have to do so much more in Europe to outperform the market to catch up with the global growth number. It is just a starting disadvantage.

Maybe we also lost a little bit competitiveness in one or the other area because there are Asian guys stepping up. You feel the heat; I also say this very clearly. If you preserve margins, you may be also more defensive on the volume part in one or the other business; this also may be one of the reasons for slower volume growth.

Then we very much talked about the structure. We are too complicated in some areas and, with the complicatedness, also too slow. I can give you one example; it is in the automotive part. A company that just started three years ago to build electrical cars, started now to sell cars, 5,000 units per month. They have a target of 50,000 cars next year. It is a Chinese company. When they approached us about coatings, it took just weeks from the demand to the approval. When we talk to a classical, established automotive company, that takes two years. To have this responsiveness, particularly the Asian companies are on a totally different speed path.

Our functional organizational set-up is not adequate anymore. That was also what partly delivered on that. They walked away and said: You are so slow. You have good stuff. You are not the cheapest one – which we always like because if we were called the cheapest one, it would not be good –, you have good stuff, but you are slow.

There are a few things that come together; there is not one reason to which it boils down. It even varies by the businesses throughout the portfolio; this is very complicated. But these are some of the major attributes why we haven't grown fast enough.

One thing is very clear: The cost part is important. That is why we addressed it. You cannot save yourself on cost into a profitable future. However, it is very clear, that this is a kind of hygiene. That partly goes away again by inflation. We also have to step up our capital base because we grow. That also will eat up some of that.

In essence, the new strategy is an enablement for growth. The important part for delivering also on our EBITDA target is to bring the contribution margin from new businesses. This is why we do all that.

I think that gave you some reasons in the composition why we have not been good enough and why we address it in the strategy.

**Andrew Stott (UBS):** I come back to this whole concept of decentralization. There are sort of two aspects in my head: 17 percent of your workforce are going to be sent out into the regions, which is a huge number. What is it that they will be able to do differently from mid next year that they can't do from the centre? I guess there are some things you won't want to tell us, but from the point of view of what you can tell us, I'd appreciate the practical changes.

The second side of this is: It is almost a confession that the centre has failed in some way. So, what does the centre bring now beyond raw materials?

**Dr. Hans-Ulrich Engel:** I will give it a try. I try to make it more tangible in the beginning. We are not sending people out in the regions. What we do is, we move people who may be in centralized service functions at this point in time into or closer to the business. A very specific example: We have centralized customer service organizations. We take the centralized customer service organization and we move the customer service person or the group of customer service people right into the business.

This is a very easy change. The person may not even have to change the building, but what changes is the code and the reporting line, from a centralized organization to the operating division or the business unit.

We may have maintenance people who sit on a platform. We take the maintenance people, move them into the plant, into the business. So, there are a lot of these, what I would call, smaller changes happening which in BASF took us quite a while to get there. But we will not be putting everything upside down and we are moving people 5,000 kilometres or 5,000 miles. Does that help to put things in perspective?

**Dr. Martin Bruder Müller:** To quickly add on this engineering part: It's a difference if you have a project in a plant and every time a different engineer comes, or whether you have an engineer embedded which is part of the operations team and this guy is there for years and knows the plant inside out. Then there, I think, come totally different dynamics in terms of what kind of solutions, how well you know everything. Immediately, the maintenance guy feels the pulse. If the production has a problem, he is in the middle of it. If he is a service guy, he might move to another plant and say: Okay, this is not my business, I am not part of that team.

So, I think we will generate a totally different spirit to look in the overall processes, where they feel an ownership culture actually. It's an empowerment. These people are sitting there, and they have to decide.

So, our operational excellence budget is now a very simple administrative process. There is a database where you assign what you want to do and there is a check whether this is profitable and makes sense. But then you can execute very quickly and get the funding for it, because a lot of this stuff has actually a very, very short return. You have to do it and a few months later you basically already have the money back again. This is why we also need a different authorization process. It cannot take endless approvals through many pieces because then it is getting slow and there is no personal identification.

It looks simple to change the code, but the feeling of the people – I am part of it, I have ownership of this whole thing – can move mountains, I think.

**Andrew Stott (UBS):** Sorry, can I follow up: What will a customer see that is different?

**Dr. Martin Bruder Müller:** The customer will see it, first of all, in the service offering and in the response time, in the flexibility to offer something that is tailor-made. Sometimes our people come to a customer and say: Well, that's not the way BASF does it. We do it in that way. So, they will be much more responsive and say: Okay, if that is the way you need to do it, let's accept it and do it.

I think we will become much more interesting for the customer and they will experience that we are fast, provide quick response, the right answer, good offerings, tailor-made. That makes us, a much more interesting supplier for them. We never had a problem with the products and the quality and everything – that is always what BASF is associated with, but not necessarily the service part.

**Dr. Hans-Ulrich Engel:** Agility and speed, that will be a key difference. That should be noted immediately.

**Dr. Martin Bruder Müller:** Andrew, you said the centre has obviously done everything wrong. I think this is not right either. I think we just have squeezed out the potential such a functional organization has. For years, this has delivered a lot of contributions. This was also part of the former excellence programs. I mean, they all have delivered, they have actually delivered more than promised.

But now we come also to a point where you say: In this organizational structure, you cannot do much more. This is why we have to move this.

**Chetan Udeshi (J.P. Morgan):** First just a clarification: 3 to 5 percent organic EBITDA growth, is that on 2017 basis?

**Dr. Hans-Ulrich Engel:** No, that is on 2018 basis.

**Dr. Martin Bruder Müller:** It's translated into roughly €300 to €500 million per year.

**Chetan Udeshi (J.P. Morgan):** In terms of motivation for these additional cost savings – it's not the first time you are doing something like this or have achieved with the previous plan –, so was the underperformance of the share the key motivation or do you see some incremental challenges over the coming years which prompted you guys to maybe do more than what you have done in the past?

**Dr. Martin Bruder Müller:** I can only repeat: It is also the customer feedback. As we included your feedback into the strategy, you gave in the study we have done, we also certainly asked the customers. What is good with BASF, what is not good with BASF? I think it was simple: We needed to realize that we can do better. What they all say: You have so great guys, you have all this knowledge, you have all this expertise, why is your horsepower not on the road?

For that reason, and combining this with the fact that we are not growing fast, I think, this was the main driver. We are convinced that with this change we will also deliver.

2019 will be a difficult year, I clearly say this. This is a transition year where this has to work. We will give you more guidance when we see more about that. 2019 might also be, from the environment, a little bit differently than the past. I think you read this also everywhere in the newspapers. We have to analyze this, but it can be that this will be a little bit bumpier with regard to the macro developments. We have to get our clear opinion about that and we will then factor this into the guidance.

So, there are a few components that come together which make 2019 certainly very difficult.

**Andreas Heine (MainFirst Bank AG):** Three questions if I may, the first on the operational excellence program: Basically, BASF over the last decade had always an operational excellence program in place and that was mostly dedicated to work against the cost inflation, to keep the fixed cost and operational cost flat.

This one is now double the size of the last two ones and they were double the size of the two previous ones, so €500 million, €1 billion, €2 billion. Would that also mean that now the inflation costs are just higher, or do you expect a higher percentage to fall to the bottom line?

The second on Nutrition & Care: Quite a few peers are very proud of their innovation. BASF always said they have a different business model because you are one-stop shop and you need to have more standard chemicals, also explained why the margin was lower. Would you be able to share with us how much of this portfolio which you now have separate in your reporting line is more driven by these chemicals like vitamins, carotenoids, surfactants, and how much is driven by service and innovation?

The last question is more on the trading situation. It seems that, with the US being closed for a number of products from China to the US, the trade flow changes very rapidly from China to Europe. Do you see this, that some commodities come more from China to Europe and affect the price situation here?

**Dr. Martin Bruder Müller:** I start quickly with the operational excellence part. What I simply said is: We have this central database where we collect all the ideas from the plants. We can only say: We basically asked for more aspiration, to go for even more. The good thing is: The creativity really steps up. We have many, many ideas.

What we also asked them is: Combine smartly safety topics, debottlenecking and savings. That means you fix some nice thing here and you have also 2 percent creep in the capacity. That is also, I think, the reason why we stepped it up, because we have such a huge nice funnel of good ideas, so that we said: We give more money to contribute more. It has nothing to do with the underlying cost inflation.

But we still will have to work against the cost inflation. If you just take in Germany the last “Tarifvertrag” that was actually 3.6 percent higher salaries, which is just a cost increase. You have to work against this at the very end. So, the major part is that we really step it up because we have even more ideas and we see even more need because capacity creeps which are part of operational excellence, if they contribute 1 or 2 percentage points of stuff you can sell without building new plants, that’s a great profitability. So that is one major source.

It is also bigger because the scope is bigger. We mentioned this: It’s not only the areas where we have been active in the last excellence programs, it’s also about this organizational part, it’s about automation, it’s about first returns coming from digital projects and that is the reason why this is also higher and why we think we can bring in faster, because there are more themes in the new program than in the old one.

Then there was one question on Nutrition & Care. You know our business from the structure. When we talk about the nutrition part, there is a strong part with our value chain in vitamins and carotenoids and fragrance and flavour products etc. We want to widen this portfolio if we can. This is on the one hand more innovation coming from the biotech area, that's why we also indicated: This is still a reasonable area also to add something via acquisition if it makes sense. This is why we said: very selective acquisitions. You saw this also in the relevance of M&A in this area. So, I think both has to come together.

We also have some quite nice things from our own innovation, but we also have to say: This is a rather slow thing to develop. That's, I think, why you need both components here.

From the trade point of view, the impact from the trade frictions is very hard to detect because our primary indicator is what is going on regarding our own flows. We have very much localized our production, but still, as we are a big company, we have some flows between the regions. There we will have most probably a slight impact from higher duties etc. But the major part is – this is hard to predict – we don't know actually where our customers sell their goods. So, if you have a customer in China who buys your stuff, we don't know, and he doesn't make transparent how much of that stuff they sell in the US, e.g., goes to Walmart or wherever. That is, I think, what we have to see over time, how that works and what the real impact is. I think this is the bigger threat than our own stuff flowing. But that is not very transparent. We will learn that over time because our customers also have mitigation measures. They partly changed their customer base. That may be also what we have to do. If some of these fellows are hampered by these things, we maybe have to also do active customer management or customer portfolio management – moving over to others where you, in this new situation, are the better supplier.

**Dr. Hans-Ulrich Engel:** I think, Andreas, if I got your last question correctly, you asked more in the direction of: Do you see specific changes in trade flows already now as a result of the tariffs?

Hard to say. I looked at the export statistics for China this morning. Interestingly enough, the exports from China to the US in September and October are going up. What this most probably has to do with, is the fact that at this point in time for the 50 billion plus package, up to 200 billion, you have a 10 percent tariff and then from January 1, you have 25 percent. So, there may be a lot of pre-buying going on at this point in time in the US.

But specific examples for chemical products showing up in Europe over and beyond what we are actually used to: no specific indications at this point in time, but that may change.

**Peter Clark (Societe General):** I hear what you say on the 3 to 5 percent EBITDA and the normalization you bake in for the upstream business. Obviously, you have got the converse with a recovery downstream. Just taking a business like Surface Technologies: Gauging the margin here ex-precious metals – it is a single-digit number –, how internally are you challenging management to drive that margin up? How much benchmarking goes on? Are there targets etc.?

Then on the auto slide which you gave us again in 2015, I think, with the growth against the industry: How does that translate into bottom-line growth? I presume it's pretty good actually, with the plastics, the coatings and the catalysts, but how does it translate from the sales line to the bottom-line with that 7 percent compound growth rate?

**Dr. Hans-Ulrich Engel:** I'll start with your question on Surface Technologies: Is there benchmarking going on? Absolutely, on a constant basis. Do we set our businesses targets? Yes, absolutely.

You excluded already the precious metals. There is one thing that you please consider when you do your benchmarking in Surface Technologies and there in catalyst. We have our battery materials business which is a business in which we invest heavily. We have clear targets for that business, but at this point in time, it's more a burden for the division and for the segment than a benefit for the segment. That's something that you please need to keep in mind.

Your second question was on automotive: How does that flow through to the bottom-line? That is overall, from a margin perspective, an attractive business that BASF has. That is also then fully reflected in the margin.

**Jaideep Pandya (Schroders):** Two questions: First of all, now that you are getting rid of Oil & Gas, can you share what oil price assumptions you are making in your forecasts? What I am trying to ask is: Barring of one cracker, all your crackers are naphtha crackers. So, if oil goes to 100 dollars, what impact does it have on BASF?

And the second question is: I think in the Q3 call you were giving some flavour on portfolio and saying, Construction Chemicals are getting out because it's maybe not a fit and there could be more to come. But obviously, we haven't heard much on this today. So, should we think now that this portfolio is something you are very happy with and BASF is not going to do major divestments going forward?

**Dr. Martin Brudermüller:** May I start with this last one: I am a bit frustrated on this because I think we are quite active. I mean, Oil & Gas goes out, Construction Chemicals goes out, the water and the paper wet-end chemicals go out. We indicated one more billion of sales to go out. It's quite a significant part. We also showed the slide illustrating that we had divestments of €21 billion in annual sales over the last 8 years. So, if you add that up, this is around €30 billion out of 65, which we have today. I would say, this is a major turnover in the portfolio.

But I think, doing all these steps, we now have a portfolio where we think we are pretty much done. This additional €1 billion in sales – here we talk about some businesses, smaller ones – is still to come, but then I think we are set, and I think the rest is very much now tuned to be on the growth side.

**Dr. Hans-Ulrich Engel:** Oil price assumptions – always an interesting one. We have given a clear indication for what we expect in the year 2018, which is on average US\$70 per barrel Brent, and we are relatively close to that. Longer term, our expectation as a result of the underinvestment in Oil & Gas over the last four years, is that we should see an increase in oil price. We haven't communicated anywhere what this means in firm numbers, but trend-wise an increase in the oil price.

**Martin Evans (HSBC):** Following up on Andrew's earlier question about the customer: You do mention them a lot in terms of intensifying customer focus. You say, it's to accelerate growth; that's your first bullet point.

I understand all the sort of new internal strategy and moving people around etc., but from the customer perspective, what will they get, apart from a newly motivated sales force or R&D department that they haven't got now, such that that could, as you say, accelerate growth? In other words: What are you not doing now which will be improved from January 1st?

**Dr. Martin Bruder Müller:** It should not sound as if we discover the customer and we were not sure that we had some in the past. The question is always what you can do better. On the one hand, they say, we are not agile and flexible enough. In certain areas, we have to say, with outages we had, we have maybe not been reliable enough. On the other hand, we have these very, very successful customer stories where we do the things right. We have these cases because we have some key customers where we engaged a team, which is not only the marketing and the sales guys, but it is also the functional guys. We have actually created teams with all these competences approaching the customer. We have great examples where we accelerated dramatically above their chemical demand, by simply gaining market share.

Knowing that, we want to replicate this approach simply on more customers. I think the perception of the customer side is quite good. I think they will test us out on what the value is for them. This is what the art is.

The question is how much we can respond on what they need, be it service level, be it new products, be it innovation, be it linking their data with digitalization etc. We also have some projects where customers say: I need to optimize my inventory. I give you my production data, so you always know how much I consume and you basically deliver more or less right in time and keep the inventory low. This is also an engagement; you cannot choose or change your supplier every month if you are linked via data.

So, it is about this bunch of things where we have to find out what we can give them and what they need. And with this, they say: Hey, BASF is my company to be delivered from. I think it's about this experience which we drive. That has to start from the very top and it has to go through the organization because if you are in an organization, there are some people who very much like to spend their whole time with internal alignment. I want to see these people aligning as rarely as possible, and freeing up their time to take care about the customer. I think, we will see this after some time, first in our growth rate and then also in new customers which we hopefully win with this approach. They decide whether we grow faster. They pay our salaries and they pay the dividend at the very end.

I think we have to make this offering very much customer-oriented or tailor-made for the distinct customer.

**Arne Rautenberg (Union Investment):** The first one is a clarification question, on these €2 billion cost savings. As it is a step up to former cost savings, how much will be additional to EBITDA? Keeping all else equal, will there be a billion more in EBITDA in three years' time, or how do you think about this?

The second one is on the operational leverage. I got the point that you have some extra profits in isocyanates and this will then be more negative going forward, but you have a couple of other sectors which are not at peak, like ag or whatsoever.

So, there are offsetting factors. But in the end, I got it right that you expect EBITDA to grow in line with chemical production over the foreseeable future?

**Dr. Hans-Ulrich Engel:** I'll start with your last one: We see chemical production growing at a rate of slightly above 3 percent and our EBITDA target is 3 to 5 percent. So, take the average and you are already above what chemical production growth is.

**Dr. Martin Brudermüller:** On the €2 billion: Not everything will arrive at the bottom line, this is also very clear. This is also what you saw in the old excellence programs: A part will be eaten up by inflation. As I mentioned, we also need to grow the base actually to be a bigger company. If you grow above 3 percent, after three years you need 10 percent more capacity to serve that growth.

So that will work against the savings. We try to minimize this effect. I don't give you a number now because you nail me down on the net number and not on the gross number. But at the very end, you will not see everything at the bottom line, very clearly.

**Thomas Wrigglesworth (Citigroup):** A couple of questions for clarification: So, the target for EBITDA growth for 2019 is 3 to 5 percent?

Second point on clarification: Capital employed includes goodwill?

The third point is: You seem to be vertically integrating in China. You note that Guangdong is importing 20 million tons. It looks like those tons have got to go somewhere; so, the competitive landscape is intensifying. And yet, you want to take share in chemicals and hold price. So, I am kind of struggling how you secure price in a market in which competitive intensity is picking up, noting that you have a volume growth ambition to grow faster than the market. Can you help me understand that?

**Dr. Martin Brudermüller:** I start quickly with the last one: It's not about replacing anything from the 20 million tons. Guangdong has a GDP growth of 8 percent. So, they need additional chemicals.

The point is that the local government also says: I don't want to increase the 20 million imports to 30 million. This is why I think there is a very strong support. They actually don't look for polyethylene and propylene. This is not sexy for them. They really look for the advanced chemicals. This is exactly what our BASF portfolio is about, that we can serve distinct industries.

So, it is not about replacing anything. It is basically against further, additional imports; they want to have it out of local production. This is why I think there is no risk from this side. 8 percent GDP growth for Guangdong is far above the average of China.

If you look at the investments that are currently executed and that are announced from our customer industries in this area, I think there is not a high risk that this will not be needed. By the way, we can sell the stuff also in the rest of China. We are not limited to Guangdong. But the good thing is that it is close. Also, if you look at our operations in Nanjing: By far the biggest part of what we have produced in our JV has never left the province. 80, 90 percent is consumed in Jiangsu Province. For that reason, I think, with this diverse customer base, this should also be the case over there. We will cater additional demand.



**Dr. Hans-Ulrich Engel:** On the ROCE question: We don't do what I call "waidl reporting". "Waidl" stands for: without anything I don't like. In other words, it's fully included in the ROCE calculation.

**Thomas Wrigglesworth (Citigroup):** 2019 EBITDA?

**Dr. Hans-Ulrich Engel:** Target for every year.

**Laurent Favre (Exane BNP Paribas):** Two questions if I may: The first one is regarding this focus on organic growth and, I suppose, the fact that you are deemphasizing M&A. When you go back through the past 15 years and you look at the M&A that has been done and where perhaps you didn't get your cost of capital back, I guess, when you did that post-mortem, what was the reason for that? Was the issue price, was it your ability of being the best owner of the asset, was it the environment, basically what was it?

A slightly related question to that: You have talked about buybacks as being an option in the case of adjusting capital structure. With the probably 10 billion plus of proceeds over the next three years from the various assets you have talked about, should we be thinking that there is an option where there are parts of that 10 billion that we see in terms of buybacks and that the alternative is basically big M&A in Nutrition & Care and that's the trade-off we should all have it mind?

**Dr. Hans-Ulrich Engel:** I'll start with the last one, I am happy to do so. Proceeds from the divestiture could certainly be what Martin described earlier as one of the triggering points to start a share buyback program. What we do, how we do it, as you know, depends on the situation that we will be in, but that is certainly one of the areas where there is potential.

**Dr. Martin Bruder Müller:** Your second question, about the acquisitions: To be very honest, I think it's a mixed bag. We have done acquisitions that, I think, are doing great. We have some acquisitions that maybe, in hindsight, did not fulfil everything. The reasons for that were also a mixed bag. We talked so much about Performance Products, Ciba and all that. One major part there is: We always knew that this is partly restructuring and active participation we have in there. But what was not expected, e.g., is that there is such a rapid commoditization in these products. We have restructured so successfully and very consequently, but all that was eaten up by commoditization of these products. We have not estimated that part to be so strong.

Also, to be very honest and frank: We talked about the ROCE in some of the downstream businesses. One reason for that is also partially goodwill. We have to be very clear that this is the reason why we say: Actually, organic growth as much as we can do by innovation and by being attractive to our customers, is a very interesting option. It is actually, I would say, the most attractive part for a company. If you have your own innovation, you can protect that. You make that accessible with your own investments to the customer and then you leverage this for a long time. This is attractive. Does this mean that this is all, and you never acquire? No.

It was also something you have always acknowledged: That we don't do crazy things. We have always been very, very cautious on this and also very rational. We had a lot of ideas. We checked and analyzed a lot and often walked away. In the past years, too, we walked away.

We even narrowed it down now where we want acquisitions to happen. I think they should not be repair work for a business. This is why we stepped out of certain businesses, but it should be rather in areas where there is really growth and it fits in nicely. We will be even more consistent, disciplined and focused in the future than we were in the past.

**Chris Counihan (Credit Suisse):** You have talked a lot about capex, a lot about restructuring costs. Excluding those, could you talk about free cash flow generation and conversion into 2019 and beyond, and how that fits with the targets?

My second question is: I remember that recently your Performance Products slide deck had three grey bubbles of opportunistic – or requiring portfolio action – sub-segments within Performance Products. I know one was paper and water chemicals, but where will the other two of those now sit under the new structure?

And maybe the final question is about board structure as well. Previously, segments had their own board member. Should we be expecting any change at the board level under the new structure?

**Dr. Hans-Ulrich Engel:** I'll start with free cash flow. You have seen what we said with respect to dividends. We said that we simply want to increase our dividend year over year. We took out the proviso: Keep it stable at a minimum. That requires us to generate a strong free cash flow going forward, and we are fully committed to that. I guess, Chris, that is all I can say at this point in time.

**Dr. Martin Bruder Müller:** Chris, the grey bubbles on this portfolio chart in the capital market story are stuff that is on this divestiture list. I think this is a very consequent answer to this.

On the board level, there will be no change now. We have reduced it from eight to seven. This is also adequate in this situation. We will announce this very shortly, there will not be so many changes on the allocation of who is doing what, because I think we also need some consistency to have the knowledge about these businesses and drive them. There will be one or two minor changes, but we will basically stick with the board members who also follow up on the distinct businesses today.

**Roland Bosch (Hermes Investment):** I have three quick questions relating to sustainability, people aspects and digitalisation. As regards sustainability, you mentioned the accelerator products. Can you maybe elaborate a bit on those parts of the portfolio where you have identified significant sustainability concerns? What are the plans there?

On the people, human capital, you mentioned that you want to create an entrepreneurial performance culture. How will that work in terms of incentivisation?

And the last part is digitalisation across the firm: With increased digitalisation there is also the risk of cyber-attacks. Are you concerned on that aspect?

**Dr. Hans-Ulrich Engel:** Cyber security is something that we clearly have addressed over the years. Already five years ago, we put together a global team that deals with cyber security 24/7. We stepped up our investment in technology. We stepped up the resources. This may be something that you experience in the same way in your own companies. I guess I would like to leave it at that.

**Dr. Martin Bruder Müller:** I think it is clear in digitalisation, also with outside parties, it means more doors. There is also an increasing risk.

When it comes to sustainability, what we have done is to look at the sustainable development goals and other trends. We have basically done a kind of materiality analysis on distinct businesses. We have then looked into what the opportunity part is, coming from regulation, and what the risk part is. This is very individual by business.

The good thing is that overall there is more opportunity than there is risk. This is basically also the source where these new sales should come from. There is a need by regulation. We need to do things differently. It is associated with new chemical solutions. We have to develop this and it is innovation and later it is a sales and business opportunity.

On the other hand, we have not talked so much about it, but in sustainability steering we also have challenged products. These are the products where, to a certain extent, you say you cannot go on with them for a long time. It is, fortunately, a very small number of products, but we very forcefully say we have to be consequent on those. That means, you have to have a mitigation plan. Either you solve this issue in a certain application, or this product has to go, very clearly. And then we have to give this up, or maybe we use it only internally but do not sell it anymore.

This is the other part that comes with this, which is, by the way, also an interesting part to do business. There is one product – I won't mention the name here – which is in question whether you can bring it into the public in the future, but you can ask your customer who buys this: Why don't you give me the following chemical step? I don't sell you the product and transport it, but just give me this chemical conversion, I'll do it for you, and I sell you the advanced product in this value chain. With this you have another business opportunity.

These are all things where you have to go into detail, but that is what I mean with tailor-made things. All our customers have their issues with sustainability. They all feel the pressure from their end consumers. They are affected by regulation, by laws and so on. I think this is a huge opportunity where we can help them with new chemical products to solve these issues. This is why I think with this indicator of the €22 billion in sales with Accelerator products it comes very nicely together with addressing sustainability, and we can prove we do something good for the society here, and on the other hand it is a proof point for our innovation capability.

**Niels Pécriaux (Millennium):** I have got one question: What are your EBITDA growth assumptions by region in your target?

**Dr. Hans-Ulrich Engel:** If you allow, we will leave it with a general target for the BASF Group. We have not broken this down for this presentation to regional targets.

**Niels Pécriaux (Millennium):** Yes, but just looking at investments you are making in China, in Asia right now, you plan to invest another US\$10 billion in capex.

**Dr. Hans-Ulrich Engel:** That needs to deliver. No question about it.

**Niels Pécriaux (Millennium):** Assuming that the ROCE is in line with the Group, it feels a bit like you could achieve in Asia on a stand-alone basis 8 to 9 percent EBITDA growth per year, which means that actually the rest of the business is not really growing.

**Dr. Hans-Ulrich Engel:** Keep in mind that these types of investments take a certain time until they actually produce. It is not that you make a decision and, boom, you have got the capacity.

**Dr. Martin Brudermüller:** You have to look at that in a more differentiated way. We still do not have a rate of own manufactured products (OMP) in Asia of 100 percent. We have something like 60, 65; I think that is the figure now. That means that still 35 percent of the business is imported from Europe. You see some contribution margin here in Europe which is actually coming from selling the stuff to a Chinese customer. When you then want to drive your business in China, you invest and build a new plant, so all the burden is on the regional business. You liberate the capacities in Europe of a depreciated plant, and you grow in Europe without investing. Sometimes this is not a very pure figure from one region to the other, which is why I think you have to see it a little bit more holistically.

But be assured that our guys who evaluate the investments have a very rigorous scheme of rules that they apply to make this comparable. There is no burden on any regional part where we say, okay, we go for a lower profitability expectation in a region or in a country than somewhere else. That is rigorously done by an investment decision.

**Niels Pécriaux (Millennium):** Just looking at the numbers and what you have also invested in Asia over the last ten years: Looking at the free cash flow, I know you don't disclose the EBITDA by region. Looking at the EBIT which is disclosed by region and capex invested, it doesn't look like you generate much cash in Asia. So, is it fair to say that actually the cash generation is really coming from developed markets, mainly Europe, i.e. Ludwigshafen, Antwerp, and the growth is actually coming from outside the developed markets with poor cash generation?

**Dr. Martin Brudermüller:** Again, building on what I just said: If you have older plants here that are depreciated where you liberate the capacity because you build something new in the other region, it is easier to deliver cash here than somewhere else.

**Dr. Hans-Ulrich Engel:** Maybe one more topic that you need to keep in mind when you look at Asia is with the accounting changes from 2013 on. There are significant activities where all you see in the EBIT is the net profit. That is the big joint ventures that we have, which typically in China tend to be 50:50 joint ventures.

**Niels Pécriaux (Millennium):** Maybe a last question on Asia and the new aroma site in Malaysia: When should we expect the site to be at full capacity? What has been the contribution in 2018 from this specific site on your top line?

**Dr. Hans-Ulrich Engel:** The 2018 contribution from Malaysia as a result of investment and ramp-up phase is slightly negative.

**Niels Pécriaux (Millennium):** The top line?

**Dr. Hans-Ulrich Engel:** The top line is something that most of the time I actually don't care too much about.

**Dr. Martin Brudermüller:** I don't know it by heart. The plants are now running. The technical topics are solved, and the menthol plant started up. So, this is now ramping up.

**Dr. Hans-Ulrich Engel:** Here is the deal: I will look it up tonight, and if I find out at the same time that in Malaysia we have to file with the authorities and as a result of that it gets published, you have the number tomorrow morning.

[Sales of BASF Petronas Chemicals 2017: €625 million. For 2018, we expect higher sales compared to 2017, also driven by the new aroma ingredients complex.]

**Markus Mayer (Baader Helvea):** I have a question on your fermentation. It seems that this has already been one of the key growth areas of BASF for a while but now it is becoming more prominent. Previously, I always thought that you are particularly focused on enzymes and not so much on bacteria and fungi. Now I saw in the presentation that this is also the case. Are you happy with your technology platform there? Or are you going for more cooperation, as you just elaborated with the CO<sub>2</sub>-into-ethanol cooperation you just had? And is this also an example of bringing down the R&D budget and going into cooperation in R&D?

**Dr. Martin Brudermüller:** Markus, this is certainly a much smaller basis than some of our major competitors have. There are two big ones. They have a much stronger platform. They have an established business. In that respect, we have to catch up with this with a much smaller team. It is very clear that this will take some time.

We also had a setback in the fermentation. You remember, once we had a huge production using fermentation, Lysin, which we sold again. This was also a major step back.

We now have clear targets with the enzyme and ex-Verenium platform in San Diego. In other areas we also have enzymes as catalysts for reactions, for example the acrylamide is a good example. This was formerly a very dirty copper-based catalyst project that is now enzyme-based. As I said earlier, it is not huge yet, but it spreads out, it is becoming broader, which is nice, because that actually fuels such a platform. We are still small compared to Novozymes or Danisco or ex-Danisco, Dupont. But we have very clear innovation targets where we want to go, and we are very distinct in the targets we have there.