THOMSON REUTERS STREETEVENTS

EDITED TRANSCRIPT

1COV.DE - Q1 2017 Covestro AG Earnings Call

EVENT DATE/TIME: APRIL 25, 2017 / 1:00PM GMT

CORPORATE PARTICIPANTS

Ronald Koehler *Covestro AG - Head of IR*

Patrick Thomas *Covestro AG - CEO*

Frank Lutz *Covestro AG - CFO*

CONFERENCE CALL PARTICIPANTS

Paul Walsh *Morgan Stanley - Analyst*

Patrick Lambert *Raymond James - Analyst*

Geoff Haire *UBS - Analyst*

Andrew Benson *Citigroup - Analyst*

Peter Mackey *Exane BNP Paribas - Analyst*

Thomas Swoboda *Societe Generale - Analyst*

Stephanie Bothwell *BofA Merrill Lynch - Analyst*

Andreas Heine *MainFirst Bank - Analyst*

Laurent Favre *Evercore ISI - Analyst*

PRESENTATION

Operator

Ladies and gentlemen, thank you for standing by. Welcome to the Covestro investor conference call on the Q1 2017 results. The Company is represented by Patrick Thomas, CEO; Frank Lutz, CFO; and Ronald Koehler, Head of Investor Relations. (Operator Instructions). I would now like to turn the conference over to Ronald Koehler. Please go ahead, sir.

Ronald Koehler - *Covestro AG - Head of IR*

Good afternoon and welcome to our Q1 2017 conference call. For your information we have posted our Q1 interim statement and the conference call presentation on our website. We assume you have read our Safe Harbor statement. With that I would like now to turn over the conference to Patrick.

Patrick Thomas - *Covestro AG - CEO*

Thank you very much, Ronald, and good afternoon, everybody, and thank you for joining our conference call. We clearly saw our strong momentum continuing and the first few months of the year, in line with our expectations and as guided at the end of February when we had our full-year conference call.

In the first quarter growth in our industries remained strong, which kept the utilization rates of our assets at a very high level. Once again, we more than proportionately benefited from the slightly accelerating global GDP growth and delivered a strong core volume growth of 9%. We were able to translate this growth with a positive volume leverage into a significant bottom-line development and improved earnings with EBITDA up by 67% and net income up considerably by 157%.

With the strong first quarter in the bag we feel confident to upgrade our full-year 2017 guidance despite the remaining macroeconomic uncertainties. The dynamic demand growth was very broad based and driven by all regions and all key industries. Our sales and our EBITDA are now very well-balanced between the three major regions.

Sales in China are now slightly ahead of the US. For many years China for us was a country with high investments and low returns. This has turned round and we believe that we can now structurally earn returns in China similar to that in the USA and in Europe.

Also in the mature countries we saw a strong underlying demand growth for our products, Germany regaining strength with a double-digit core volume growth of 12% partly due to catch up of the force majeure in quarter four last year. The demand was broad-based in all sectors with major contributions from automotive and the transportation sector together with construction and electronics.

The US continued to deliver strong growth with core volumes progressing at 4%. The sectors of automotive, transportation and construction were the biggest contributors while we witnessed a slowdown in electronics. Overall it seems to us that global demand growth slightly accelerated. Still availability of supply is critical for the success in our industries and we were able to promptly fulfill all our customer commitments everywhere around the globe. Let me know pass over to Frank for the financial highlights.

Frank Lutz - *Covestro AG - CFO*

Thank you, Patrick, and also good afternoon from my side. Our sales development in the beginning of the year was very strong as all three components, volume, price and foreign-exchange, positively contributed. Higher volumes had a positive sales effect of around 10%.

We believe that some special effects like restocking in PUR and pre-buying in CAS might have helped this quarter. The difference between core volume growth and sales volume growth was driven by product mix upgrades, which is of course very helpful for our profitability as well.

As you are certainly aware, reflation kicked in during Q4 of 2016 and we saw the effect intensifying in Q1. Our top line benefited from significantly higher selling prices partly driven by the pass-through of higher raw material prices to our customers. Overall, the positive pricing impact accounted for 13.4% year on year. Finally, we had limited positive exchange rate effects mainly driven by the US dollar.

Our EBITDA increase was driven both by a strong volume leverage in all segments and a positive pricing delta mainly in TDI and MDI. Further improving our utilization rates once again was a strong earnings driver. We achieved a volume leverage, that's a volume driven EBITDA contribution relative to sales, of 45%.

In Q1 we faced significantly higher raw material prices. However, we were able to increase selling prices even stronger due to the constantly high demand. As we have repeated a couple of times, our margins are mainly driven by the supply/demand balance and not by raw material price movements.

Since we started our "no special item" policy in Q1 2016, we now have a fair comparison basis and so we no longer report in adjusted EBITDA. However, as promised, we keep our transparency level high and inform you that we had a positive impact of EUR9 million from the release of provisions this quarter as we decided to suspend the planned closure of our MDI plant in Tarragona from today's perspective for the next few years.

In Q1 we increased both sales and earnings. All segments contributed to this development. Our core volume growth came out above the guided range for the year due to the constantly high demand, a tight supply situation but also helped by some restocking and pre-buying. PCS was the main driver for growth followed by CAS and PUR.

The EBITDA margin improved from 17.7% to 23.6% in Q1 2017, that is an impressive 590 basis points increase. Overall we were able to increase our EBITDA each quarter versus the respective prior year quarter in the last nine quarters.

In PUR we strongly increased our core volumes. Main contributors were the product groups MDI and TDI. We observed an intense demand in the global construction industry as well as in the furniture industry segment in NAFTA and APAC. Sales increased by 35% to reach EUR1.894 million.

Volume growth contributed with 7.6% while selling prices went up 25.8% year on year. EBITDA reached EUR482 million this quarter, more than doubling the Q1 2016 level.

A key question is obviously the sustainability of such high margins. In our view, roughly half of the absolute EBITDA improvement should be sustainable as it was driven by structural factors.

Firstly, we now operate on significantly higher utilization rates, which provides a much better fixed cost leverage. Even if new competition might lead to some market share loss, we do not assume that our absolute sales volumes would decline in a growing industry.

Secondly, we assume that the industry utilization rate in MDI will continue to increase as demand growth should outstrip supply additions at least for the next five years. Therefore we do not believe that the current margin in MDI represents a short-term peak level.

As a third pillar we assume a slightly increasing margin in polyols as our current margin is below the long-term average.

The current high demand for TDI facing a limited availability of industry capacity led to some fly-up margins in Q1. So far, we expect a similar margin level in Q2. However, with new capacities entering the market, the margin might come down during the second half of 2017. Therefore, we assume that the above mid-cycle earnings contribution will normalize during the year.

Polycarbonates again generated an impressive double-digit core volume growth reaching almost 15% in Q1 2017. Growth was driven by all three regions. Strong contributors were the automotive and electrical segments.

Sales increased by 21.4% reaching almost EUR1 billion in the first quarter, mainly driven by volume. Sales prices increased by 2.9%. The EBITDA margin increased from 22.5% in Q1 2016 to 24.3% this quarter. The margin increase was mainly driven by a positive volume leverage and a continued product mix improvement. We certainly benefited as well from our capability to supply the market with our two new production lines in China.

In CAS our core volume growth increased by 8.1%, especially driven by APAC and EMLA. In February this year, we announced price increases for parts of the business. We believe some pre-buys might have occurred in addition to the general high demand in this quarter. Sales reached EUR564 million registering a double-digit growth driven mainly by volume. Prices were down 0.3% year on year.

EBITDA improved by 5.0% to EUR146 million driven by the strong volume leverage and despite higher operating costs. We were able to keep a high EBITDA margin level with 25.9%.

In the first quarter we were able to generate a record free operating cash flow of above EUR200 million in a seasonally low quarter. Overall, apart from some positives and negatives, the free operating cash flow mainly followed the EBITDA development. Let me give you some more color on the components.

In Q4 2016 reflation kicked in. This was clearly reflected as well in Q1. Firstly, it led to a higher valuation of stocks. With regard to volume, the inventory level stayed flat versus year-end 2016, in value, however, we saw an increase due to the higher raw material prices.

Secondly, raised net sales led to higher trade accounts receivables. CapEx was up year-on-year mainly driven by the expansion of our MDI plant in Brunsbuettel.

The cash tax rate in the first quarter was disproportionately low in contrast to the increased earnings before tax. The main reason here is that for most countries the improved business performance in Q1 compared to 2016 is not yet reflected in higher tax payments since those prepayments are typically determined by tax authorities based on prior year results. So we can speak about a quarterly facing phenomenon. For the full year 2017 we still expect a cash tax rate in line with the effective tax rate of slightly below 30%.

Finally, we previously assumed a cash outflow of EUR60 million in 2017 due to the closure of Tarragona. As we decided to suspend the planned closure for the time being this will obviously not happen.

The ratio of total net debt to EBITDA slightly decreased further to reach 1.1 times end of March compared to 1.3 times end of 2016. The high free operating cash flow generation continues to reduce our total debt level. In addition, higher interest rates slightly decreased our pension provisions. With that, our equity ratio further improved to 44%.

Thank you for your attention. I would now like to hand back to Patrick.

Patrick Thomas - *Covestro AG - CEO*

Thank you very much, Frank, and thank you for your clear explanation of our situation. So, after this very strong start into the year and continued positive momentum, we feel confident to upgrade our guidance. Nevertheless, we are still aware of the macroeconomic uncertainties and the political risks around the world.

To be precise, we are updating the guidance for two of our three KPIs. We reiterate our guidance of a low- to mid-single-digit core volume growth. This may sound conservative after achieving 9% in quarter one. However, we believe it is a fair view and realistic given several factors.

Firstly, we benefited in quarter one from some restocking and pre-buying. This is expected to mitigate growth during the next quarters.

Secondly, we will face more scheduled maintenance turnarounds especially during quarter two and quarter three. This will limit the availability of some of our products.

Thirdly, at the beginning of the year we shifted our strategy from just increasing our global utilization rate to improving the overall product mix. As higher margin customers require a just-in-time delivery, we plan to increase our strategic inventories of higher value added grades in order to maximize over profitability.

All these factors are likely to limit our ability to grow during the next quarters.

Due to the strong quarter one results, and some factors like the suspension of the planned Tarragona plant closure, we now assume a free operating cash flow significantly above the average of the last three years. We also expect a further improving ROCE leading to a level that will significantly exceed the one of 2016.

In addition to the guidance on our major KPIs we provide an additional outlook on EBITDA. We now expect that our EBITDA will significantly increase for the full-year 2017 compared to 2016. We also foresee a significant year-on-year increase of EBITDA in quarter two.

The availability of industry capacity remains limited and global demand growth continues to be healthy. As a consequence, we assume that we can achieve a pricing delta of around EUR200 million in quarter two, almost as good as the level seen in quarter one. However, as stated before, we expect very limited core volume growth in quarter two and consequently a significantly lower volume leverage compared to quarter one, although product mix improvements should positively contribute.

In addition, we divested our United States based spray foam business in April and we expect a book gain of around about EUR35 million from that disposal that will be booked in quarter two.

As a brief pause and after so many figures and before closing our session with a summary, let me just share with you a success story from our CAS business segment, which you will probably not have come across. To be more precise, this is how collaboration between three major players along the value chain has made it possible to paint the first car with a clear coat containing a bio-based hardener under near serial conditions.

Automotive manufacturers and suppliers are constantly working to reduce energy consumption and CO2 emissions in their production processes. A project team from BASF's coatings division, the automotive manufacturer Audi and Covestro recently achieved a new milestone. For the first time ever, Audi Q2 test bodies were successfully painted with a clear coat containing a bio-based hardener under near serial conditions at the Ingolstadt plant.

BASF developed the clearcoat using the bio-based hardener Desmodur eco N 7300 from Covestro, 70% of the hardener's carbon content comes from renewable raw materials which reduces the use of fossil-based resources. This close collaboration between the three companies is an important step to becoming a more sustainable provider of automotive coatings.

Now let me close the session with a summary. We saw some favorable changes in the industry over the last quarters, the continued robust demand being the most striking. The respective consequences will influence our investment case for the years to come.

On June 29 we will host our next Capital Markets Day in London. At this event I will be pleased to talk to you about some of our business considerations for the future, whether it is on our supply options or on the use of cash. In case you haven't seen your invitation yet, please be aware that registration is now open and I really look forward to seeing all of you there.

So thank you very much for listening to our presentation and we are now open for your questions.

QUESTIONS AND ANSWERS

Operator

(Operator Instructions). Paul Walsh, Morgan Stanley.

Paul Walsh - *Morgan Stanley - Analyst*

First question is just with regards to your own utilization rates, Patrick. I probably underestimated where utilization rate stood a year or so ago. But with the strong volumes you are seeing coming through, I guess I just want to rule out the fact that you might be getting capacity constrained on some of these product lines given how strong volumes have been. So that is my first question and maybe you can make a comment on MDI, TDI and PCS against that backdrop.

My second question is just around autos. Can you help me understand how much of your growth is coming from autos at the moment? Obviously we are getting some mixed messages from the car industry right now and wondering whether or not you have seen any of that.

Final question, are you seeing any signals that companies are looking to go on the CapEx trail again with regards to announcing new capacities? I have seen one or two announcements but I am just wondering with your closer view on some of these markets whether or not you think competitors will be tempted to start building new facilities again? Thank you.

Patrick Thomas - *Covestro AG - CEO*

Okay, thank you very much, Paul. Good morning to you too. Yes, first question utilization rates. Let me just start off in the MDI area. This is probably the most difficult from the point of view of calculation because there is a lot of misstatement I suspect out there around capacity and what is available.

So what I have to say is what I believe the current utilization rate is in the industry. And I think it is probably in the low 90% level. And we would represent a similar sort of level somewhere in that space. So MDI has been sucked up remarkably quickly. And as you know, some of the facilities that were expected have been either handicapped or delayed.

And this was part of the reason why we decided to continue to operate Tarragona. And thankfully our rather ingenious procurement team managed to find a source of chlorine which is economic for us to keep the plant running. So that will be the MDI position.

And in terms of the CapEx and announcements, if I can take your third question sector by sector as well. What we see there are a number of well established announcements and a couple of new ones. For the new ones, remember my mantra that out of all announcements 30% never come true and 40% are delivered late.

So, let's see what happens with some of those. We are following them through their environmental permitting processes and, from what I can see, all of them are suggesting operation dates which would be impossible to achieve.

So if we look at the compound average growth rate, if we look for the next five years, on MDI I would expect a capacity addition rate of 2.6%, significantly below the expected growth of the market. So that is where I think we are with MDI.

If we go to TDI, there is slightly more transparency here we think. We think we are operating somewhere in the low 90% as an industry. And you can certainly see that this is well above the normal fly up point. So that would be entirely consistent with pricing development at the moment.

In terms of compound average growth rate of capacity addition over the next five years, it is running somewhere close to 6%, which is slightly ahead of the expected growth rate of the TDI market, which is somewhere in the range of 3% to 4% probably. So there is room for some recovery there in terms of the supply and demand balance.

On polycarbonates we are operating in the mid-80%, which is pretty tight. Mid-80% for a set of polycarbonate assets is really quite tricky and you start hitting problems as you change grades on the plants.

In terms of the growth of the expected investments over the next five years, I have it at about 3.7%, which is below the expected growth rate industry demand rate or closely matching to it I would expect about 4% growth rate. So I think that -adds answers to questions one and two.

And then let me just talk a little bit about automotive on volume growth and give you a little bit of color. We saw the largest growth on automotive in polycarbonates somewhere between about 12% to 15%.

Polycarbonates is round about 15% growth in automotive. MDI polyurethane principally in interior trim and in seating roundabout 13%. And TDI, which is of course a lot less represented nowadays in automotive seating, round about 2% growth.

By region obviously Europe is a bit mixed, there is slowing I believe in Western Europe, but Russia is growing quite strongly, it is about 7%. NAFTA fairly weak expectations I think. China, China is quite a confused picture because for conventional vehicles a lot of the incentives are now being reversed back out, so the tax cuts are being reduced. But not for electric vehicles.

So the electric vehicles, which really drive a lot of our growth at the moment, are still very positive. And we saw about 400 million units produced last year. The expectation this year is probably about 100% growth on that. And I think that we see that not only in the volume of material that is used because we use about three times as much material in an electric vehicle as a conventional vehicle.

But also what we have just seen grow dramatically is the charging infrastructure for electric vehicles. That is growing at about 150% to 160% a year. And the Chinese government is now putting in place, even in quite small cities, significant infrastructure. And every charging station contains about 8 kilograms of polycarbonate. So it is a very nice business development for us at the moment. So hopefully that answers your questions. Is that okay, Paul?

Paul Walsh - *Morgan Stanley - Analyst*

Yes. That is extremely thorough as always. I guess it just begs one question, Patrick, which is, why do you see that the price raw material delta being less in Q2 than Q1 then? Is it simply the base effect is higher or is it something else?

Patrick Thomas - *Covestro AG - CEO*

I think to guess where we are going to end up in that delta in quarter two is quite difficult. But I mean, let's wait and see on that one because I think even within the team we have some different views.

(Technical difficulty)

Paul Walsh - *Morgan Stanley - Analyst*

Thank you.

Operator

Patrick Lambert, Raymond James.

Patrick Lambert - *Raymond James - Analyst*

Congrats. Two questions around -- the first one around CAS. And to be frank, a bit below our estimations on pricing. If you can come back to put some colors on the negative price development there; is it mix, is it regional? And for the second, your outlook for the next three quarters, I know you increased prices mid of Q1. If you can give us a bit of color of how they're sticking, these price increases.

And second about Tarragona, when -- and basically the supply coming on stream or being taken out for maintenance in the next few quarters. You mentioned that you had some, but you are not the only one. It looks like there is plenty of maintenance going on especially in Europe. And how does Tarragona fit into that? How quickly should we start to put some volumes in Tarragona? And the short-term outlook, I mean what are you trying -- how long do you think we can have a plan for Tarragona itself, a long-term plan for Tarragona? Thanks.

Patrick Thomas - *Covestro AG - CEO*

Well, thank you, Patrick. So Tarragona, first of all, the plan will just be to continue the operation in Tarragona without interruption. And we will achieve that by running with an alternative chlorine supply that is not based upon mercury-based cell rooms that have to be closed by the end of 2017.

Essentially that would give us up to full operating capacity on the plant, although we may be restricted by the volume of chlorine that is available depending upon our method of logistic supply. So that is the Tarragona story, it is not a step up, it's just a continuation. What we see in our supply demand balance is the expected expansion thereafter of Brunsbuttel, which you know all about.

On CAS, the decline on CAS was principally around about existing contracts because we had put out our price increase for April 1. I think we said last time our price increase round about 15%, somewhere of the order up between half to 10% that is sticking. Let's see how that develops across the full spectrum. There is a lot of prices which are holding at 10%. So I think if you wanted to model I would use something of the order of a 10% price increase, although there is a complicated mix with so many products involved. Did that help, Patrick?

Patrick Lambert - *Raymond James - Analyst*

Yes, thank you very much.

Patrick Thomas - *Covestro AG - CEO*

Perfect, thank you.

Operator

Geoff Haire, UBS.

Geoff Haire - *UBS - Analyst*

I just wanted to ask two questions. One is: do we have an update on what your thoughts are on the Sadara MDI and TDI capacities in terms of when they will come on stream? And just staying on Tarragona, I was wondering if you could just update us as to what the CapEx requirement may be in terms of going forward and also when we would expect that to be fully up and running in terms of the MDI supply.

Patrick Thomas - *Covestro AG - CEO*

Okay, Geoff, thank you. Question on Sadara is probably best answered by looking at what Dow said most recently, which suggested that these plants would be started up somewhere between the middle and the end of the year with a suspicion that they will probably be closer to the end of the year. I think the exact phrase was all of the 2017 year will be a startup year for non-plastic derivatives. So that was the quote that I had from Dow.

Tarragona there is no immediate capital requirements, we're just carrying on. We found an alternative supply route to get chlorine that is based upon the correct technology, which is not being banned. It is a third-party supplier, it is not our own. I think this runs a little bit into the question we had before about Tarragona.

We have got about three years of a supply agreement that we can deal with Tarragona. And during that period of time, and we will talk a little bit more about this maybe at the Capital Markets Day, we are looking at what are the options for us to expand MDI capacity through bottlenecking particularly at very low capital levels in Europe both in Brunsbuettel and in Tarragona.

So, we are looking at a number of options that are available to us given the growth rates of MDI that we have seen. But they would be more debottleneck type activities rather than significant major CapEx.

Geoff Haire - *UBS - Analyst*

Okay, thank you.

Operator

Andrew Benson, Citi.

Andrew Benson - *Citigroup - Analyst*

You talk about maintenance projects in the I think second and third quarters that will constrain your volumes. And I was wondering if there was a cost to it and whether that will be material. I remember a couple years back, you had a EUR50 million cost associated with the Shanghai kind of universal closure.

You talked about the need for higher stocks because of the wish to provide better customer service. I just wanted to dimensionalize that. And you hinted about higher or a more rapid rate of debottlenecking. I just wanted your thoughts on the CapEx outlook because clearly market conditions are better than they were at the time of the IPO. And perhaps it is time to reset your growth aspirations in the light of these much stronger markets. Thanks.

Patrick Thomas - *Covestro AG - CEO*

Thanks, Andrew. Yes, on the shutdown situation as I look across 2017; in quarter two and quarter three we have a number of shutdowns across a number of locations. So it is a number of small things which all add up together. In any one quarter -- in quarter two it affects about 40,000 tons of capacity, something of that order, and about 50 in quarter three. But that is just rough estimates of how much material will be affected.

Clearly we will try and cover that material from building stock, so it will not be a loss in that sense. And big problem always with turnaround is that you discover things which are a surprise. And in our budget for turnaround we always include what we call a discovery amount, which is budgeted to cover for some of these surprises. So until we get into the shutdown and actually have the plant opened up we don't know what some of those costs might be, but we budget ahead for those when we sanction the project.

On CapEx in general I think this is a topic we want to take up on the Capital Markets Day because we would like to share with you some of the ideas we have got. Because round about 60% of our assets are less than 10 years old, we are in a rather unique position in the industry compared to others to be able to debottleneck at reasonable capital costs and to achieve growth without any major greenfield or major big throws in the immediate term.

So, we thought that would be a good topic to talk about in some more detail during Capital Markets Day together with how we see the supply and demand pattern shaking out over time. So, probably that will be the best time to answer that question because we can answer it with specific graphics, specific material which we can share then during CMD. Is that okay, Andrew?

Andrew Benson - *Citigroup - Analyst*

Yes, just like -- you talked about the theoretical potential loss of production over two quarters of 19,000 tons. But is -- we can roughly equate that in terms of revenues and that gross margin unless you are able to make that up through stock building ahead of that. Is that reasonable?

Patrick Thomas - *Covestro AG - CEO*

I think the way to look at it, Andrew, is it is in our guidance. So we factored that into our guidance. So I think -- my problem is I have got a list in front of me of about 30 different items all with tiny little amounts. And they are all different products and different streams and different pieces of turnaround. We factored all of that to what we have guided. So it doesn't need to be changed considerably.

I think the important thing is that in our guidance we have been clear about growth and we have said there will be a significantly lower volume leverage compared to quarter one because we can't deliver as much growth in quarter two. So that is really the only important thing and that is really part of the guidance that I think I gave earlier.

Andrew Benson - *Citigroup - Analyst*

It really does entirely -- it is just if you look back historically, [certainly] the problems you had in nitric acid availability in the past, you were cleverly able to mitigate those and outperform expectations. So if you have incorporated to your guidance then and you again demonstrate agility, then there is some upside there.

Patrick Thomas - *Covestro AG - CEO*

Yes. I mean when we go into these projects we always put in - it turns out about 25% of the project budget- for this concept of discoverable work, but we don't actually find out until we start opening things up. Sometimes we don't spend it at all because there are no surprises; sometimes the surprises are bigger than we expect.

So there is always going to be uncertainty around the cost of these. But we have factored that in overall because it is actually a large number of individual turnarounds in different parts of the world on different plants. So it is on average going to be what we expect it to be and we have taken a judgment on that and built that into the guidance.

Andrew Benson - *Citigroup - Analyst*

Okay, thanks, Patrick, thanks so much.

Operator

(Operator Instructions). Peter Mackey, BNP Paribas.

Peter Mackey - *Exane BNP Paribas - Analyst*

I have got a couple of questions if I can, please. First to go back to what appears to be today's favorite topic, Tarragona. At the dinner in London a couple of months ago, Frank, you talked about it was pretty clear at that stage that Tarragona was going to close. And obviously we understand the issue around the chlorine availability.

What -- you were talking about clever procurement guys or team. Was that -- I mean the decision to pursue alternative supply options there, is that because you feel that in the current operating environment you can afford to, let's say, pay more for your chlorine, in other words the economics have changed?

And the implication of that being of course that if the current environment did weaken again, and I realize that is not your base case, but if it were to, that you would perhaps revisit the closure of Tarragona? Or did you sort of effectively stumble across some sort of new chlorine supply that you hadn't previously expected? That is question one.

And question two is on CAS. Could you -- I know you don't reveal it, but could you give us some color on the EBITDA bridge in Q1? I'm thinking about the obviously significant volume leverage versus I guess raw material input pressures, where the -- how you see that in Q2. If we have much lower volume leverage, do you think that effectively the margin in the second quarter is likely to remain around the Q1 level? Or do you think you have lost or gained margin in Q1 from high volumes at higher input costs, if that makes sense? Thanks.

Frank Lutz - *Covestro AG - CFO*

Peter, hi, it is Frank. Let me give you a little bit more color on Tarragona and the chlorine situation so that you get a better understanding. We told you in 2015 when we took the decision to shut down Tarragona that we had to do that given that mo more chlorine that is in line with European regulation would be available to us as of the end of 2017.

The chlorine supplier at that time did not have the financial ability to build a new production facility that would be able to produce this chlorine in line with European regulation. However, in the meantime this chlorine supplier found a financial sponsor who invested into a new technology -- not a new technology in the sense that it is new, but in a new technology for them. And offered to us -- and that just happened recently, offered to us that they now would be able to provide us with some chlorine. And that is the background to that.

It is not that we now have to spend significantly more money or that we have found somebody coming out of the woods suddenly providing us with some chlorine. You also know that we tend to avoid that we have to transport chlorine. So it was a lucky coincidence that this producer who is right across the fence from us is now able to produce chlorine. And that is why we decided, also of course given the overall market situation, to continue production in Tarragona for the time being.

Peter Mackey - *Exane BNP Paribas - Analyst*

That is clear, thank you. And that new technology, that shift to the new technology, will it -- we will be seeing this as far as you are concerned?

Frank Lutz - *Covestro AG - CFO*

Yes, absolutely. I mean that is membrane technology, the technology that we are using in the plants where we are producing chlorine ourselves.

Peter Mackey - *Exane BNP Paribas - Analyst*

Yes, yes, thank you.

Patrick Thomas - *Covestro AG - CEO*

Okay. And on the CAS point, I think you answered the question mostly in your own question. I think the simple answer is probably the margin will be similar in quarter two to quarter one, I think that is what we would expect to see on CAS.

Peter Mackey - *Exane BNP Paribas - Analyst*

Great, thank you very much.

Patrick Thomas - *Covestro AG - CEO*

Perfect. Thank you, Peter, for not breaking the technology.

Operator

Thomas Swoboda, Societe Generale.

Thomas Swoboda - *Societe Generale - Analyst*

I have two questions if I may. Firstly, on your comment on polyols and the currently below average margin. I am just wondering how long a recovery to normalize levels or historic levels could take? Is it just a function of the low availability of TDI recently and with TDI flowing more normally in the future, polyols should come back? Or is it more complex? And that is the first question.

And the second question very quickly, your ability to grow volumes; you made the comment on Q2, which is perfectly understood. I think you haven't been able to build any additional inventories for the maintenance shutdowns. My question is how long the rebalancing of your inventory situation might take. Is it something you should overcome in the next two quarters or is it taking longer? Thank you.

THOMSON REUTERS

Frank Lutz - *Covestro AG - CFO*

Thomas, you kind of answered the question on the polyols yourself. You're absolutely right, it is right in line with the TDI to some extent. And therefore we expect a gradual recovery there and also an increase in margins.

Patrick Thomas - *Covestro AG - CEO*

Okay, thank you, Frank. And then on the rebalancing, obviously this is quite a complicated question because it is actually a product level that we have to look at rebalancing. If you take it to a macro level, we would expect our working capital to sales ratio to stay in a corridor of about 15% to 17%. So that is I think the way to look at it from a point of view of financial impact. That means product by product it is going to take a couple of quarters to get back to where we should be to give good customer service.

Thomas Swoboda - *Societe Generale - Analyst*

That is perfect, thank you very much.

Operator

Stephanie Bothwell, Bank of America Merrill Lynch.

Stephanie Bothwell - *BofA Merrill Lynch - Analyst*

Just one point of clarification really from me. In your introductory remarks you commented on the structurally higher margins mainly in TDI. And you commented on the tightness that you are currently seeing in the market and the near-term visibility that we have at the moment in terms of supply additions.

I just wanted to confirm with you, is that structural tightness merely a function of the supply/demand balance or is it also a function of you having upgraded the product mix specifications within MDI? And indeed any cost savings that you have undertaken? Thanks.

Patrick Thomas - *Covestro AG - CEO*

Yes, thanks, Stephanie. So it is a complete supply and demand story because TDI is a very limited range of products. There is not a lot of opportunity for differentiation in TDI. TDI is a very attractive more commodity type business because on average its margins in history have always been above those across the cycle of MDI. So TDI is a nice attractive business but there is no room for differentiation or upgrading in the TDI part of the business itself. So I think that is clear.

Stephanie Bothwell - *BofA Merrill Lynch - Analyst*

Apology. It was actually on the MDI part of the business, I am sorry if I misstated that.

Patrick Thomas - *Covestro AG - CEO*

Sorry, I misheard. On MDI, yes, we have some ability to upgrade and improve the mix and we use whatever opportunities we have for that. Typically when customers use new technologies in applications; so one example in Europe would be the introduction of a triple star plus refrigerator which require completely new foam technology. And at that point where we have made those breakthroughs with Liebherr then clearly that involves upgrading of the portfolio.

It is more common though in the polycarbonate sector and that is where we've really seen the difference where volume increase and sales increase have become disconnected because we see the mix improvement taking place in polycarbonate. And that is achieved because we do more steps in the process of manufacturing polycarbonate. We make a sort of basic polycarbonate and then we compound it with other materials.

Stephanie Bothwell - *BofA Merrill Lynch - Analyst*

Okay, thanks. But when I think about the structurally higher margins that you have seen in MDI and the improvement in absolute levels of profitability year on year, really I should think about that structural improvement just as an improvement in the underlying supply/demand balance of what you have good visibility on over the course of the next few years?

Patrick Thomas - *Covestro AG - CEO*

Yes, exactly.

Stephanie Bothwell - *BofA Merrill Lynch - Analyst*

Okay, perfect. Perhaps just one follow up question. I think this was the first quarter where your overall group volumes were actually higher than your core volume growth. You made some comments in your introductory remarks around upgrading the product mix and specification there. Could you perhaps just provide a bit more additional color on that and whether that is a trend you expect to continue going forward?

Frank Lutz - *Covestro AG - CFO*

Yes, I think, Stephanie, you can clearly see that within polycarbonates where we are now selling higher grade polycarbonates at higher prices than before. We use, for example, the optical data storage or the water ball business only opportunistically and try to sell polycarbonate which doesn't sell at EUR50 per kilogram but rather at EUR10 or even EUR15 per kilogram, which is kind of the maximum that we have seen in the market.

So therefore, without having to increase prices we can already increase our sales volume in euros. And then on top of that of course there come also the price increases. But that is how you see the differentiation between core volume growth in kilo tons and sales volume growth in euros.

Stephanie Bothwell - *BofA Merrill Lynch - Analyst*

Okay, thank you very much.

Operator

Andreas Heine, MainFirst.

Andreas Heine - *MainFirst Bank - Analyst*

Basically two questions I have. Looking on the operational leverage, which is quite strong in your group, in the range of 45% last year this year. Is it possible that you give an idea where this operational leverage is highest and lowest as it comes to polycarbonate MDI and TDI?

And looking on what the question before was on this core volume was in general volume growth and in tonnage and in let's say product mix effects. So, as this product mix effect is part of the volume, if you in the future would see let's say more and more of this mix effect rather than tonnage increases would that change the operational leverage on the volume?

And then one question on the MDI. So you refer to the structural increase in margins beyond this volume leverage saying that the utilization rate across the industry has structurally improved. Looking on all the delays we have seen I can fully agree on what you said until 2020, that the capacity addition is in line or less than the demand growth is.

But if you look into 2018, so in the next year, and if all the delays happen to come to be solved, so Sadara and the BASF plant, would that not interrupt this structural margin improvement in this specific year?

Patrick Thomas - *Covestro AG - CEO*

Okay, very good question, thank you. Andreas, if I just take your last question first, to give Frank little more time to think about how he is going to answer the question on operational leverage by sector, let me see whether we can do that. He is playing around with the numbers at the moment.

Let me talk about the MDI picture because you are right, of course, that Sadara is late, Chongqing has got problems with supply, the feedstock. There is various issues going on in the MDI arena. That is fine. If you take the underlying growth rate of MDI last year it was round about 6%; one world scale plant is around about 6%. So actually you need a new world scale plant every year and that is not what we are getting because the addition rate is only about 2.6% over the next five years.

Once we get out to -2020, we don't actually see any additions coming in 2020. And in 2021, we see about 1.2%. So, I don't think we will see this structural change disappear at the end of the decade in the way that you describe. What of course can happen is from 2017, you'd need to put about four to five years before somebody can put a plant on the ground which would have a material impact. And actually we need more than that to be on the ground not to constrain growth. So, if growth continues at the same rate, the risk is that the plants are not coming on early enough to satisfy that growth and that is a condition we have been in before in the history of MDI. We have actually seen the market constrained by lack of production capacity.

So, when you think about the announcements in America, which have been made around Chinese and BASF building and so on, that is what will be needed to keep supplying the growth of the MDI sector. So that is the way I look at it. But on Capital Markets Day, we are going to share a bit more of the sort of longer-term outlook, let's try and clarify it then. But I think MDI follows the track that you described in your question, which is steady improvement over the next years. And it is not just one or two years.

Frank Lutz - *Covestro AG - CFO*

On your question regarding operational leverage potential, the potential obviously is highest in those business units where the price differential between the lowest price product and the highest price product is the biggest.

So therefore in CAS I see the highest operating leverage potential followed by polycarbonates. As I said before, we have grades that are selling at EUR1.50, we have grades that are selling at EUR15, so there is a high potential. Then followed by MDI and finally, of course, because there is only a few number of grades, TDI.

On the second part of your question, yes, the more we run into a situation where we can increase volumes in kilo tons only to a limited extent, the operational leverage potential predominately will come from a product mix upgrade, i.e. selling products from higher grades and higher prices.

Andreas Heine - *MainFirst Bank - Analyst*

Wouldn't that be different than having the operational leverage on the tonnage?

Frank Lutz - *Covestro AG - CFO*

Well, it would be different in the sense that we have already used a lot of the operational leverage potentially coming from the tonnage because we are coming closer to full capacity utilization. And once you're getting closer to full capacity utilization, that is what I described before in polycarbonates, you are leaving some low margin business like ODS or water bottle business intentionally and rather trying to sell at higher prices. So it is basically what we call sell out first and then sell up.

Andreas Heine - *MainFirst Bank - Analyst*

Thanks.

Patrick Thomas - *Covestro AG - CEO*

Okay, thank you very much, Andreas.

Operator

We do have a last-minute question in from Laurent Favre, Evercore.

Laurent Favre - *Evercore ISI - Analyst*

Just a quick question as we are seeing a few announcements on new capacity. Could you go through the three commodity products and talk about your view on where replacement costs are for a word scale facility? So 20,000 tons polycarbonates would be, I don't know, $200 million, etc., for the three products. Thank you.

Patrick Thomas - *Covestro AG - CEO*

Wow, that is a really difficult one, Laurent. That would be quite tough to do now. Let's add that to the list of questions we are going to answer in Capital Markets Day, because it depends upon the technology. So let me give you an example.

In polycarbonates the cost for us is very, very different from the cost of a new Chinese player licensing in Asahi technology. We would build one line they would have to build two or three or even potentially four lines. So when you look at the plants they are very, very different. On TDI we would build a gas phase process technology which has completely different operating economics to what is currently being built, for example, by our other major competitors in TDI.

So you have to look at the technology as well as the capital cost per ton at world scale to really derive any sort of insight, plus the availability of scale technology is different from one player to another. So world scale for one player is very different to another. I'm sorry, it is a really difficult question to answer on the phone, it needs a few diagrams and a few graphics, which need to be thought through. We will add it to the Capital Markets Day. Ronald is nodding that we are going to add it to the Capital Markets Day, this question.

Laurent Favre - *Evercore ISI - Analyst*

I love creating work for Ronald.

Patrick Thomas - *Covestro AG - CEO*

Yes, we can do . No, that is brilliant, Laurent, thank you for the question. It is a very intelligent question.

Operator

So, Mr. Koehler, now there are no further questions and you can continue with your final points.

Ronald Koehler - *Covestro AG - Head of IR*

Good. Thank you all for participating. So Patrick obviously said already we're adding it to the list to the Capital Markets Day and that is obviously where we would like to welcome all of you again in London June 29, to remind you again. And happy to answer hopefully then all of your questions.

And so, thank you very much for listening now to the conference call for the quarter. And yes, if you have follow-up questions don't hesitate to contact the IR team. Okay, thanks. Bye.

Patrick Thomas - *Covestro AG - CEO*

Bye-bye.