REFINITIV STREETEVENTS

# EDITED TRANSCRIPT

TXN.OQ - Texas Instruments Inc at Goldman Sachs Communications & Technology Conference

EVENT DATE/TIME: SEPTEMBER 06, 2023 / 3:10PM GMT





REFINITIV

## CORPORATE PARTICIPANTS

**Rafael R. Lizardi** *Texas Instruments Incorporated - CFO and Senior VP of Finance & Operations*

**Mike Beckman** *Texas Instruments Incorporated - Director, Investor Relations*

## CONFERENCE CALL PARTICIPANTS

**Toshiya Hari** *Goldman Sachs Group, Inc., Research Division - MD*

## PRESENTATION

**Toshiya Hari** - *Goldman Sachs Group, Inc., Research Division - MD*

Good morning. We'd like to get started. Thank you for joining us on Day 2 of the conference. My name is Toshiya Hari. I cover the semis and semi cap equipment space at Goldman Sachs. Very honored and very excited to kick off the semiconductor portion of Day 2 with the team from Texas Instruments. We have Rafael Lizardi, Chief Financial Officer; and we have Mike Beckman from the IR team as well.

I'll kick off with a list of questions, but hopefully, we can keep this somewhat interactive with questions from the audience as well. First of all, thank you, guys, for coming here.

---

**Rafael R. Lizardi** - *Texas Instruments Incorporated - CFO and Senior VP of Finance & Operations*

Thank you.

---

## QUESTIONS AND ANSWERS

**Toshiya Hari** - *Goldman Sachs Group, Inc., Research Division - MD*

Really appreciate the time. So Rafael, I want to spend most of our time discussing strategic elements of your business, but I do want to hit on a couple of near-term questions. On your recent earnings call, you guided September quarter revenue essentially flat on a sequential basis, which I think is subseasonal, although seasonality has sort of gone out the window.

What's embedded in guidance? What are some of the puts and takes from an end market or a geographical perspective? And to the extent you've seen any volatility around kind of the central case so far? What have they been in the quarter?

---

**Rafael R. Lizardi** - *Texas Instruments Incorporated - CFO and Senior VP of Finance & Operations*

Yes. So as we said at the earnings call, the quarter came in about as expected. All end markets were weak, except for automotive; that remained strong.

---

**Mike Beckman** - *Texas Instruments Incorporated - Director, Investor Relations*

Yes. And then I'd just say, as we looked at first quarter and second quarter, as we looked into the guide for third -- didn't see a significant change to point out. So I think the way you described it, what we saw, automotive continued to be strong, and we saw weakness at other end markets.

---

**Toshiya Hari** - *Goldman Sachs Group, Inc., Research Division - MD*

Okay. So for the September quarter outlook as well, it's auto that sort of stands out in terms of still being resilient. Other parts of the business from a market standpoint remain fairly subdued or muted.

---

**Rafael R. Lizardi** - *Texas Instruments Incorporated - CFO and Senior VP of Finance & Operations*

We don't break the guidance for the next quarter into pieces. We kind of stick to what happened in the quarter and unless there's something significant to point out, which we didn't.

---

**Toshiya Hari** - *Goldman Sachs Group, Inc., Research Division - MD*

Okay. Got it. I realize you're not in the business of predicting cycles.

---

**Rafael R. Lizardi** - *Texas Instruments Incorporated - CFO and Senior VP of Finance & Operations*

We're not.

---

**Toshiya Hari** - *Goldman Sachs Group, Inc., Research Division - MD*

You're not, which is good and fine. But you have been in the business of semiconductors for a very long time, and you've experienced many ups and downs. As you compare and contrast this current cycle with past cycles, any similarities or fundamental differences that you'd kind of point to?

---

**Rafael R. Lizardi** - *Texas Instruments Incorporated - CFO and Senior VP of Finance & Operations*

Yes, sure. So to me, there's always three things that are going on. One is the cycle itself, the semiconductor cycle, and that's just a function of inventory, right? Customers build too much or not enough inventory, and that's what drives the cycle.

On top of that, you have macro situation, which that can be different; that could exacerbate or mitigate the cycle. And then in addition to that, you have secular trends, right, which in the case of semiconductor, clearly, we have, particularly in auto and industrial, a lot of the content growth that has been happening and will continue to happen for the foreseeable future. So you can think of those three things and how those are playing out in the current environment.

The last thing I would point out that's clearly different this time is the asynchronous nature of the current cycle, meaning in the past as far as I remember, all end markets moved about the same time. This one has been different. So personal electronics kind of peaked in 2Q '22 or so, and it started weakening since then. Industrial started weakening a few quarters later, not nearly as steep as personal electronics, as we think we talked about that our personal electronics business was down like 50% in this last quarter from the year-ago quarter. Industrial, I can't remember exact figures, but down, but not nearly as much. And as we said earlier, auto has remained strong.

---

**Toshiya Hari** - *Goldman Sachs Group, Inc., Research Division - MD*

And the asynchronous nature of this current cycle, would you sort of characterize that as a good thing?

---







REFINITIV

**Rafael R. Lizardi** - *Texas Instruments Incorporated - CFO and Senior VP of Finance & Operations*

Well, it is what it is. I don't call it good or bad. Things that -- the root cause was the pandemic and a lot of people bought consumer electronics for so long, and there was a shift in demand towards that. And at some point, people had enough laptops and TV monitors at home, and they stopped buying -- our customers stopped buying, started draining their inventory, right?

---

**Toshiya Hari** - *Goldman Sachs Group, Inc., Research Division - MD*

So during the pandemic, you referred to products where lead times were extended as hot spots, right? Are there still hot spots within the context of your portfolio; if so, where, to the extent you're willing to share? And where are average lead times today? How do they compare with prepandemic? And what's considered sort of a good place to be for TI?

---

**Mike Beckman** - *Texas Instruments Incorporated - Director, Investor Relations*

Sure. Maybe I'll take that. So I think we made really good progress in addressing the hot spots that we've mentioned in the past. Obviously, the portfolio of 80,000 products, there's always going to be a device here or there that's going to be a hot spot. But obviously, we've had the opportunity now to build inventory to position us well for the next side of this cycle. And our goal is to have excellent levels of customer service for all of our customers, all of our end markets. It's hard to specifically point to a single lead time number for the whole portfolio.

But as you look at our website, making sure you've got more availability there; customers can come in and get product same day or next day or the second day shipped. We want to make sure we have as many of those as possible, and we've made a lot of progress on that.

---

**Toshiya Hari** - *Goldman Sachs Group, Inc., Research Division - MD*

Got it. During the pandemic, many of your peers introduced long-term customer contracts, right, under different acronyms and names [NCNRs, (inaudible)]. You guys did not. And I don't think you have plans to do so. Why is that the case? And have you had customers come to you and say, "Hey, TI, we'd love to have long-term supply guaranteed."

---

**Mike Beckman** - *Texas Instruments Incorporated - Director, Investor Relations*

Maybe I'll take that one, too. We don't believe that those types of programs create demand. Customers taking product that they don't need is not something that we would prefer. If you think about how we want to make sure we grow our business, it's not just we want to have one or two customers that do well. We want all of our customers, all of our end markets, to be successful.

And so as we think about the capacity we're putting in place, it's for that entire group. Obviously, we've had the opportunity to share the road maps that you all have seen in terms of the fab and the AT road maps with our customers. They're very excited about it. But again, it's built for all of our customers, not just for a few of them. So of course, those conversations happen, but we want to make sure we service our entire customer base.

---

**Rafael R. Lizardi** - *Texas Instruments Incorporated - CFO and Senior VP of Finance & Operations*

And keep in mind, the majority of our products are what we call catalog, so off-the-shelf. So that means that we're not designing -- we don't design them for any particular customer. It's for a broad set of customers, applications, even end markets. So that anchors our view on long-term agreement. I mean, I think -- and this is not a perfect analogy, but I'll throw it out. I think if you go to Home Depot, buy hammers and nails, then so you got to sign a long-term supply agreement and take 10 hammers per month for the next 10 months. And that doesn't make sense, right, for an off-the-shelf product. If it's a custom product, I understand how the dynamics are different, but our strategy doesn't call for it.

**Toshiya Hari** - *Goldman Sachs Group, Inc., Research Division - MD*

Right. I like to think of your product as being more sophisticated than hammers and nails.

**Rafael R. Lizardi** - *Texas Instruments Incorporated - CFO and Senior VP of Finance & Operations*

Some of our products are cheaper than hammers and nails.

**Toshiya Hari** - *Goldman Sachs Group, Inc., Research Division - MD*

I guess in terms of the long-term growth drivers of your business, you've consistently called out automotive and industrial as key focal points for the market. And it's been the right call given how the various markets have played out. I know at TI, you don't focus on one or two or three things. But within the context of automotive and industrial, if you had to sort of point to a couple of applications that you're really excited about, what are they? What would they be going forward?

**Mike Beckman** - *Texas Instruments Incorporated - Director, Investor Relations*

Yes. And I would start with -- there are great opportunities, all of the end markets. So obviously, we have had a strategic bias toward automotive and industrial in terms of where we invest, but there's great opportunities everywhere.

Maybe if I was to -- and this is one of the beauties of the type of products that we make is that they go in everything. But if you look at industrial, just for a moment, you have 13 sectors there. What's driving that? Automation. And what's driving automation? Access, cost and safety of labor is a piece of that.

You look at things like building automation, the grid buildouts, motor drives, reduction in energy use and greenhouse gas is a big part of what's driving those markets. You look at medical, the fact that you had probably 20 years ago instruments that you wish you could even have in a hospital now or in your home. You go through every one of those 13 sectors, and there's a long-term growth driver underneath it. And we play in all of them, which is what's exciting.

And that's before you even get into automotive, which, as you know, when you transition to an EV, you remove the transmission, you remove the belts, you remove all the hydraulically -- most of the hydraulically driven things and they become electrically driven. And that's more opportunity. So you got -- instead of the gas tank, you got a battery. It's got to be monitored. It's got to be charged. It's got to have a traction inverter. So all those things mean semiconductor opportunity, and I think we're in the early phases of that.

So we are fortunate that because of the portfolio, we don't have to take a single winner. We can be in all of those things. So probably the areas I'd point to is a few of the many that we're excited about.

**Toshiya Hari** - *Goldman Sachs Group, Inc., Research Division - MD*

Got it. There isn't a single session that goes by without mentioning the word or term AI. Within TI, again, I know you guys are a massive company, you're very broad. But do you see AI or data center sort of moving the needle for your business? Or again, is it one of dozens and dozens of applications or end markets?

**Mike Beckman** - *Texas Instruments Incorporated - Director, Investor Relations*

Enterprise is about 6% of our revenue, is an important end market for us. Our products don't really care what the workload is, whether it's traditional workloads and AI workload. But if there is a processor there that's doing AI processing, it's going to need power, it's going to need telemetry. It's going to need data communications. Those are all the types of products that we participate in. So we do have exposure there. It's not the only thing we are exposed to, but that's certainly an interesting and exciting market for us as well.

---

**Rafael R. Lizardi** - *Texas Instruments Incorporated - CFO and Senior VP of Finance & Operations*

And beyond that, obviously, inside TI, we have many business processes that we're always looking at for improvement, and AI is another tool that we can plug into those business processes to make those better.

And that applies to R&D, sales and marketing, manufacturing and even some of the support functions like in finance; for example, looking at ways that we can incorporate AI into our processes and be more efficient.

---

**Toshiya Hari** - *Goldman Sachs Group, Inc., Research Division - MD*

And since you bring that up, Rafael, are you kind of early in that process in embracing AI and sort of leveraging AI as part of your operations?

---

**Rafael R. Lizardi** - *Texas Instruments Incorporated - CFO and Senior VP of Finance & Operations*

And you say early, I don't know, compared to the companies, I don't know. But we -- it's something that we're doing and we'll continue to do. I guess maybe the key point is I don't see -- our emphasis is on the business processes, and whatever tool makes sense to put in those processes to make them better, we do. AI is one tool. We don't get overly excited about the hype in one place or another. But if it makes sense to do something along those lines to -- in that particular process, then we'll deploy that.

---

**Toshiya Hari** - *Goldman Sachs Group, Inc., Research Division - MD*

Got it. Shifting gears a little bit, a couple of questions on the geopolitical backdrop and how it's affecting your strategy and how you think about it. Obviously, the backdrop is extremely challenging, difficult for everyone. Can you remind us how much of your revenue or how much of your products are being actually consumed in China, what your exposure there is?

And again, just given how the relationship is going between the U.S. and China, has your strategy in China to approach resource allocation? Has any of that changed at all over the past, call it, 12 to 18 months?

---

**Rafael R. Lizardi** - *Texas Instruments Incorporated - CFO and Senior VP of Finance & Operations*

Yes. So a couple of angles to that. You asked the question consumed. Let me reframe it a little bit and try to get to consume. About 20%, and it's all in our 10-K and 10-Q. About 20% of our revenue ships to -- it's for customers that are headquartered in China, so kind of Chinese customers, right? Now does that mean that is where consumption happens? Not necessarily, right? Many of those customers are -- they're obviously shipping in China, but they're shipping to many parts of the world.

I mean, you take BYD, for example, they're shipping electric EVs in South America, right, and in Europe and in other places. So as far as consumption, our best, frankly, guess on that, it's just a percent of GDP, right? So whatever percent of China is of worldwide GDP, that's probably about of the percent of our products that end up being consumed ultimately in our customers, maybe then customers' customers' product. The second part of your question, sorry...

**Toshiya Hari** - *Goldman Sachs Group, Inc., Research Division - MD*

Your strategy and your approach towards China as a market. Has that changed at all or evolved at all?

**Rafael R. Lizardi** - *Texas Instruments Incorporated - CFO and Senior VP of Finance & Operations*

Yes. It has. We have sales, obviously, in China. We have some R&D in China. We also have manufacturing in Chengdu, and that's -- I mean, pretty much everything we do, you would categorize as legacy. We prefer to categorize it as optimal manufacturing technologies for auto and industrial, analog and embedded.

But we have one fab and one AT -- assembly/test in Chengdu in China. Now only a vast majority was our -- the entirety of our fab investments over the last couple of years and going forward, that's all in the United States. The vast majority, clearly. So we have our RFAB which is Richardson fab; it's just north of Dallas. We have two fabs there; they're next to each other.

In Sherman, Texas, is just south of the border of Oklahoma, we are building two of what will be at least four factories over the next few years. So two of those will be shell ready, and one of those two, we'll actually equip and have a pilot line there by about 2025 or 2026 or so. And then in Utah, we bought a factory there about 1.5 years, 2 years ago from Micron, and we've already qualified it, and now we announced plans to build a second factory there.

So those are all 300-millimeter state-of-the-art factories; [four] are 45 to 90 nanometer, 130-nanometer. We include the analog part technologies, optimal for those end markets. And that provides us control over our manufacturing footprint. It also gives us the best cost structure because it's 300-millimeter. And like we were saying, is geopolitically dependable. So meaning it's in the United States. It will not be affected by any issues between the United States and China and potentially Taiwan.

**Toshiya Hari** - *Goldman Sachs Group, Inc., Research Division - MD*

And that sort of brings me to my next question. You're probably one of the beneficiaries of this, if you will, just given your presence in the U.S. And I think you've shared a couple of times some anecdotes as it pertains to customers coming to you asking for more 3 years out, 5 years out. Can you share some of those conversations what they're like?

**Rafael R. Lizardi** - *Texas Instruments Incorporated - CFO and Senior VP of Finance & Operations*

Yes. Let me make one more comment about the previous question. And Mike, if you want to address that, but I forgot to mention assembly/test. Don't forget that's an important component of manufacturing. And we're -- we have a really tremendous footprint in Malaysia and the Philippines, and we're expanding in both places. It's also we consider that geopolitically dependable capacity.

And as we announced at the beginning of this year in capital management, those investments will take us from about 80% internal on the fab side to 90%, 95% internal, and on the assembly/test -- the ATs -- from 60% to about 90%, 95% internal. That is huge as far as the owning our future, our destiny, but also the cost structure because now it's internal. You don't have the double -- the margin stacking problem. So -- and as you bring things from outside to internal, you get immediate return on that investment. So sorry, I just want to mention that.

**Mike Beckman** - *Texas Instruments Incorporated - Director, Investor Relations*

And in terms of the customer interaction, the last couple of years have been really interesting, I think, eye-opening for a lot of customers, especially their executive levels. Where you think of an industry where it was historically electromechanical -- I'll just throw an example like construction equipment or tractors -- there was very little chip content in one of those 20 years ago. Now, full of chips. And when you're building a module for a piece of equipment like that, you're not just looking for something that's going to be designed in for two years. It's something you have to be able to supply to your customers for like 20 years.

And so what we found was that there was a large group of executive leadership, that realizing the importance of these devices, they have seen our road map, as I mentioned before, and are really excited about where it's located, but also that they can -- as they design it in, be confident in where they can get it for the long term. You span that across the entire industrial base, the entire automotive base, and that's where some of the confidence you've heard us talk about comes from. And so that's what's really exciting. If you think about what we're putting in and that differentiation, customers aren't looking for more suppliers, they are looking for fewer that can address those challenges. So that's the type of conversations we're hearing.

---

**Toshiya Hari** - *Goldman Sachs Group, Inc., Research Division - MD*

And the intensity or the volume of these conversations, have they stayed elevated? I imagine they really picked up during the pandemic, given the shortages, et cetera, et cetera. But this is more of a permanent dynamic where -- I mean the geopolitical landscape isn't changing anytime soon. So I'm guessing you're still pretty busy with these conversations?

---

**Mike Beckman** - *Texas Instruments Incorporated - Director, Investor Relations*

Yes, what's interesting is the shift went from -- initially, I'd say the specific product that's needed or something like that was where the conversation started. And then it evolved to, okay, what about 10 years out? What's that road map look like? What's that footprint look like? And those conversations continue because, of course, our customers believe in the growth of EV and believe in the growth and what you see in those sectors in industrial I mentioned before. They're not less excited about the opportunity in front of them. So they're certainly wanting to have those conversations, and they're more strategic and long term in nature than they probably were two years ago.

---

**Toshiya Hari** - *Goldman Sachs Group, Inc., Research Division - MD*

And given what you just said, I'm sure you got the question, you talked about spending $5 billion in CapEx every year, what would you need to see for that to change? The short answer is probably you're not going to change it given those conversations.

---

**Rafael R. Lizardi** - *Texas Instruments Incorporated - CFO and Senior VP of Finance & Operations*

So yes, so let me address that broadly. So as we said, that's -- well, earlier this year in February, during our annual capital management call, we announced our -- that we're going to -- we had a CapEx plan of about $5 billion per year for the next 4 years, so $20 billion. That was up from -- the previous year, we talked about $3.5 billion per year, so call it $14 billion going to $20 billion, and that's to enable a potential revenue growth of about 10% CAGR through 2030, and we have some charts that talked about that.

A few comments on that. Well, one that enables -- that's not a forecast of revenue, but it enables -- it could enable that much growth. That's just great optionality to have there. And keep in mind that is capital that lasts a long time. That equipment, even though we depreciate over 5 years, it lasts for decades. So it's really, what I say, it's a solid investment that doesn't go bad. And that's part of the dynamic and the reason why we make it like that.

The other angle to that, as we announced at that point, is those numbers are growth numbers -- are not including the benefits from the CHIPS Act. We talked about at that point that we expect on the ITC -- so there's investment tax credit and there's grants as part of the CHIPS Act -- on the ITC, we expect about $1 billion per year for 4 years. So $4 billion of cash that should offset that $20 billion CapEx bill.

On the grants, because it's uncertain -- you have to apply, and we're still through that application process even today -- we don't know what we're going to get, but we certainly expect to get something. It's comprehended in our numbers, and we believe it's a great legislation, puts the U.S. on an even playing field, and we are just very well positioned to -- and we're, we think, a tremendous candidate to be part of not just the ITC, but the grant program.

---

**Toshiya Hari** - *Goldman Sachs Group, Inc., Research Division - MD*

Got it. Pricing has been a pretty significant tailwind for many of your peers in the analog space and the microcontroller space. And we had the NXPI management team here yesterday, and they talked about low-single digit pricing growth in '22, mid-teens in '23 and continued growth, if you will, in pricing in '24, more cost plus, right, cost push-based inflation.

You guys, I don't think have talked about pricing all that much. You've sort of kept pricing relatively stable. I guess the question is, how do you go about pricing your products? We've heard through industry conversations that TI has been relatively aggressive in the marketplace. Has there been a change in your pricing posture? Is that a fair characterization of how you're competing in the marketplace today?

---

**Mike Beckman** - *Texas Instruments Incorporated - Director, Investor Relations*

Well, I'd start with our pricing strategy hasn't changed. We are competitive where we compete for a device. We have the benefit in that we have a lower cost structure that we don't have to subselect where we compete. But our strategy hasn't changed. And did we benefit from increased pricing in the last few years? We benefited from it, similar to how others did, to the degree to which I don't know, but we did benefit.

Now as we think about the future, what could pricing want to do? It -- I think there's a reasonable argument for either scenario that I think I've heard. And either of those, we'll benefit as well. If pricing continues to be inflationary, we'll benefit in that scenario. If it goes back to kind of how it used to be, we've operated very well there, too, and we've got the internal manufacturing and the cost structure to support it and position well. But the strategy is still the same; price to where the market is for a given device and maintain that over time is how we've done it.

---

**Rafael R. Lizardi** - *Texas Instruments Incorporated - CFO and Senior VP of Finance & Operations*

Let me emphasize a point that Mike just made. You alluded to aggressiveness in our prices. We're competitive. I wouldn't characterize it as aggressive. Our sense is what's really happening, as Mike alluded to, is other competitors have decided to subselect, so meaning get out of price-sensitive end markets. We welcome that. We have the best cost structure with those 300-millimeter factories that we already have and the ones we're building. State-of-the-art. 300-millimeter is 40% more cost efficient than 200-millimeter, which is largely what our competitors have. Plus they rely on foundries, which the foundries are not doing that for free.

So our cost position is the best, and we embrace going after more price-sensitive markets as well as the more traditional higher end double markets.

---

**Toshiya Hari** - *Goldman Sachs Group, Inc., Research Division - MD*

I guess as a follow-up. So as you sort of develop a product and you're sort of thinking how to price something, is it -- are you looking to grow market share over the next 5 years? Is it free cash flow? I know you don't optimize for gross margin.

But what is the debate internally at TI as you price product. I'm sure there's supply and demand and where the market is at, just to Mike's point. But is there one or two metrics that you really, really care about and prioritize?

---

**Mike Beckman** - *Texas Instruments Incorporated - Director, Investor Relations*

It's still true that a customer -- part has to solve the problem well, perform well, has to be available, and it's going to be reasonably priced. And so it is a factor of many. When you price a device in its release, a lot of factors go into how you decide, and part of that is where is the market at for a given family of products. And so there's not one recipe that you do to do that. But it is a factor of many.

Now our ultimate goal is the growth of free cash flow per share for the long term. And changes in price don't necessarily equate to big changes in share in the short term. And so as we think about growth in the long term, it's going to be across those different dynamics to gain share through having great products in a broad portfolio, having an excellent reach of channel, having manufacturing and technology inhouse. Those are the things that are going to help us continue to gain share.

---

**Toshiya Hari** - *Goldman Sachs Group, Inc., Research Division - MD*

Correct. Yes, that makes sense. Maybe I'll pause here and see if there's a question right there.

---

**Unidentified Analyst**

Going back to the auto's dynamic. I know you don't want to get granular -- want to give granularity in terms of guidance and so forth. But one thing I'm curious about is we've seen a bunch of sort of higher frequency data that suggest that inventories are building on the lots. We've seen some companies come out and say default rates are going higher for used cars. There was a company that released earnings yesterday that got some attention. And I'm wondering if you have ever done a back test on your operations and your financial model to say, okay, when we see these type of activities happen, inventories go up, default rates go up, there's a lag of X, Y, Z months, quarters where it starts to impact us on the auto side. I don't know if that question makes sense. Maybe you haven't done the work, but I'm curious whatever perspective we have would be helpful.

---

**Rafael R. Lizardi** - *Texas Instruments Incorporated - CFO and Senior VP of Finance & Operations*

Yes. No, I'll take a shot at that. That sounds -- I see where you're coming from. It's just that we sell about 100,000 different parts to 80,000 different customers. It is other way around -- 80,000 parts to 100,000 customers. And they -- the permutations are incredible, right? And the supply chain is incredibly complex, where we sell to our customer that then sells to a customer or customers.

So to get into those type of analysis have generally yielded nothing, nothing that's useful that we can do. Instead, we focus on being ready for whatever the market may throw at us. And particularly, since our products, as I said earlier, are catalog in nature. So they last -- on the shelves they last about a decade. And our customers, the product life cycles with our customers are also decades, right?

So we build the part, we have an inventory strategy to have enough buffers at different stages of finish -- so chips and finished goods -- and then to be ready to support the demand, whatever that may be, and do it on a sustainable basis as far as inventory goes. And speaking of inventory, I think you have some inventory questions, don't you?

---

**Toshiya Hari** - *Goldman Sachs Group, Inc., Research Division - MD*

Yes. You have grown inventory in the past several quarters. You have a pretty wide range as it pertains to what you threw out on the capital management call, but I think you're at the high end. So how should we think about that going forward? I know you're doing it to better serve your customers, which make sense given your shelf life. But as analysts, we've got a forecast...

---

**Rafael R. Lizardi** - *Texas Instruments Incorporated - CFO and Senior VP of Finance & Operations*

Yes. So a few comments on inventory. And the earlier question, I addressed a lot of that, but start with the low risk of obsolescence for those parts. The write-off that we do in any given year, in a year and quarter are minimal. So I'll start with that.

But of course, it's working capital that's tied up, and there's also the sustainability of how long do you keep building inventory. At some point, how much is enough, right? So I understand those concerns. So just keep in mind -- well, before I answer the question, as I said earlier, the key point, though, is supporting potential revenue upside, right?

Once you're behind -- and you look at a history of not just us, any semiconductor company, is the cycles come and go. And go back, I'd refer you to Slide 13 of our capital management presentation, go to our website, look at it. It's a history of the last 20 or 30 years of cycles. They come and go, it's up and down, up and down; it's never been down and stays down. It always comes back, right? So I'm not about to make a prediction on the cycle, but it's likely that at some point, we have an upturn, right?

---

**Toshiya Hari** - *Goldman Sachs Group, Inc., Research Division - MD*

Comes up...

---

**Rafael R. Lizardi** - *Texas Instruments Incorporated - CFO and Senior VP of Finance & Operations*

And when the upturn starts, if you don't have a good inventory position, you're toast. It will take you 1.5 years to get just back to par, right? So we are very conscious of that. That's why we want to have that inventory. And given our cash flow fall-through and our margin fall-through, the upside is much greater than the downside, particularly with the low-risk dynamics.

So that's maybe the overarching thing. Now I will say to your point that at some point, enough is enough, right? And it's just not sustainable to just build indefinitely. So that's why I alluded to it on the last call, but we are lowering the wafer starts in the factory moderately, thoughtfully, so that the rate of growth of inventory will slow down. That means that it's still going to grow. It's just going to grow at a lower pace and a more sustainable pace. And depending on revenue, not just next quarter, but over the next two or three quarters, then that lands at -- will have a soft landing.

Now of course, what happens when you lower utilization wafer starts? It's a noncash charge to utilization, right? So that's just math, that's just basics, is going to happen, but it's a noncash charge, so it doesn't affect free cash flow. And then it just puts us, again, in a balanced position to be able to support the upturn, whenever that may be, and also build inventory on a sustainable basis.

---

**Toshiya Hari** - *Goldman Sachs Group, Inc., Research Division - MD*

Got it. Maybe a question on your go-to-market strategy. Obviously, you've transitioned away from distribution more direct, I think, direct as a percentage of sales has grown from 35% a couple of years ago to 70%. And TI.com has gone from $100 million to $2 billion or something like that. Any sort of positives you've identified throughout the past couple of years as you made that transition? And which, I guess, inning are we in that transition?

---

**Mike Beckman** - *Texas Instruments Incorporated - Director, Investor Relations*

Yes, a lot of positives. If you actually go back, this change started actually probably more than a decade ago when we took control of the design-in process and basically made our teams responsible for finding every socket on every board. When we did that, we found all these sockets that mysteriously weren't there before. And through the last decade, have really benefited from that.

Now in 2020, we made the change where we moved to one worldwide distributor and allowed the customers to go direct with us and went from about one-third direct to about two-thirds, and I think pushing close to 70% direct as of our recent capital management presentation. And having that closer relationship just gives you better insight; first of all, what they need right now, but also what are they working on? What are they going to be needing to do in the future? It just gives you better insight into that. So our view and what we have seen is being closer to your customer, that just helps you and helps them find you a better supplier. And customers have had the option. We basically let them say, "Hey, if you would like to come direct, we've built the piping to do that. So if you want to be a direct customer, you can. If you want to go to TI.com and buy 100,000 parts, you can do that too, and you can get them the next day or the day after. We'll do all the value-added tax, the importer of record, all the shipping stuff, all the messy stuff that you don't typically want to have to do. We know how to do that now."

And so that's just made us an easier supplier to work with. And so that's how we think about it. And I think what inning are we in? I think it's hard to say, and we started it a while ago. But certainly, from the order fulfillment side, we're probably in the earlier innings of that.

---

**Toshiya Hari** - *Goldman Sachs Group, Inc., Research Division - MD*

Got it. Maybe in the last minute, Rafael, just on how you deploy capital. You've got $5 billion in CapEx every year for the next couple of years. Your dividend has grown very steadily for, I forgot how many years, 19 years, 20 years, something like that. How should we think about the cadence of buybacks. Does M&A come into kind of the debate internally at TI? Or is that sort of out of the -- off the table for now?

---

**Rafael R. Lizardi** - *Texas Instruments Incorporated - CFO and Senior VP of Finance & Operations*

So capital allocation obviously is very important. That's essentially our most important job. That's why we have the capital management call where we talk about how we deploy capital. Over the last couple of years and going forward for the next 3 or 4 years, CapEx to enable revenue growth is the #1 call on capital. And we think that it's -- it's going to be the top driver of long-term growth of free cash flow per share. It doesn't mean it is the only one. Dividend, obviously, is very important for sustainability and growth, buyback is a good addition to the repertoire when it makes sense from an accretive shareholder value standpoint. And other -- there are obviously other calls; we just got done talking about inventory. That's a great allocation of capital for the reasons that I talked about earlier.

---

**Toshiya Hari** - *Goldman Sachs Group, Inc., Research Division - MD*

Great. Really enjoyed the conversation. Thank you so much.

---

**Rafael R. Lizardi** - *Texas Instruments Incorporated - CFO and Senior VP of Finance & Operations*

Thank you very much.

---

**Toshiya Hari** - *Goldman Sachs Group, Inc., Research Division - MD*

Thank you.

---