Beyond roads, bridges, and tunnels: the megatrends shaping infrastructure investments

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Allison Nathan: If there's one corner of Wall Street that's benefiting from recent legislation and higher inflation, it's infrastructure. So, where are the potential opportunities and risks?

Teresa Mattamouros: Even though infrastructure as an asset class has not been in the headlines as much as other asset classes such as private equity, the reality is that it has provided really stable and inflation-adjusted returns, especially in the past couple of years.

Allison Nathan: I'm Allison Nathan and this is Goldman Sachs Exchanges.

[MUSIC INTRO]

When most of us think of infrastructure, we think about toll roads, bridges, and tunnels. But is that definition still appropriate? To help break down the opportunities and outlook for the sector, I'm sitting down with Teresa Mattamouros, a managing director in infrastructure investing within Goldman Sachs Asset Management. Teresa, welcome to the program.

Teresa Mattamouros: Thanks for having me, Allison. Very happy to be here.

Allison Nathan: So, Teresa, as I just said in the intro, when I think of infrastructure, when I think most people think of infrastructure, they're thinking about tollways or thinking about bridges, tunnels, that kind of thing. But has the definition of infrastructure evolved? How would you define it today?

Teresa Mattamouros: And I think you're absolutely right. I think when people think about infrastructure, they think about steel and concrete. So, just like you said, tolls, bridges, airports, and things of that nature. And in reality, that's how infrastructure investors thought about it

initially.

The fact is that the definition of infrastructure has been evolving over time. And there's a couple of reasons why that has happened. The first one, very simple reason, is that infrastructure as an asset class is a relatively new asset class. It's, let's call it, 20 years old. And so, it's only normal that the definition continues to evolve, and investors test the boundaries of what's an infrastructure asset.

The second point, which is very relevant, is that the definition has been evolving because of the changes that are occurring in society. And what I mean by this is that as societies evolve from an economical, technological, environmental standpoint, there are a number of assets that became part of the infrastructure fold. Just to give you an example, as you think about energy transition, you start including renewable assets in infrastructure. As you think about digitization, you include data centers. If you ask an investor five years ago if the data center was an infrastructure asset, I think the answer would probably be no. But today, it's clearly an infrastructure asset.

So, to answer your question, the way as an investor I would define infrastructure is that assets and services that provide critical services to the functioning of society, they're really the backbone of the economy.

Allison Nathan: Right. So, there's a much wider definition of infrastructure today. So, with that in mind, what are the defining characteristics of an infrastructure investment?

Teresa Mattamouros: Sure, absolutely. So, these are assets and companies that provide critical services to society. So, they tend to have very strong market positions. They have good downside protection. A lot of the times they're, like, asset heavy, asset backed. They do have predictable and defensive cash flows. Most of the times, but not always, they are able to generate a cash yield. And very importantly, that's been super relevant in the past couple of years, they have inflation protection.

And that inflation protection can be achieved in a couple of ways. It can be regulatory. Think about a utility. They have the returns on their assets regulated and it's indexed to inflation. It could be contractual. That means that you're

signing contracts with your customers that have some type of CPI or inflation indexation. But it could also just be pure purchasing power. And what I mean by this, there are companies that have either a dominant market position or operate in markets where there's a strong demand/supply imbalance and so they have the ability to pass on these cost increases through their customers.

Allison Nathan: And so, if we think about the universe of infrastructure investments today, we are seeing investors flock to it. We are seeing financial services firms buying up many capabilities in this space. So, what's really driving that? You mentioned inflation. Is this really mostly about the inflation environment we've been in in the last couple of years? Or are there also other factors?

Teresa Mattamouros: I think it's broader than that. Obviously, inflation has helped. And the class has performed well in the past couple of years. But there are three main drivers where you've seen capital come into the space. The first one is just structural underinvestment from central governments in infrastructure. The second is very strong secular tailwinds that support investment in the space and those we like to call it the four D’s. It's

decarbonization. It's digitization. It's deglobalization and it's demographic changes.

Decarbonization, the important part here is just the sheer cost of it. And the physical nature of it. In order to reduce, remove, and capture emissions, you actually need to build or upgrade or transform assets. You can't create a software or an app that solves the problem. So, there's a lot of capital that needs to be spent to support the decarbonization goals.

Digitization, I think we all know — it’s obvious. The world is becoming more digital by the second. But in order for that transformation to happen, there are a number of assets, physical assets that need to support it. In order for people to have access to high-speed internet, you need cable in the ground. In order for you to use your cell phone, you need cell phone towers. In order to have all of your data stored in the Cloud and processed in the Cloud, you need data centers. And here, AI to bring an obvious and very hot topic, AI is only going to accelerate the demand for data centers.

Deglobalization, a more recent one, I think one of the many

things that the pandemic showed us is that supply chains are complex and very prone to single points of failure. And so, there's been a trend in the past couple of years to bring some of these capabilities, manufacturing capabilities, onshoring, nearshoring, and build the necessary supply chains to support this added manufacturing capacity.

And then the final one is just demographic changes. Obviously, the population is growing. The demographics are changing. And this just requires a need for hospitals, for schools, for water treatment plants, for waste facilities.

And then finally, there's been a very supportive regulatory and legislative environment that gives investor comfort to invest in the space. The Inflation Reduction Act is a great example of that. The bill passed about 18 months ago. But Europe also with Repower EU and the Green Plan for Industrialization just creating a lot of incentives for capital to come into the space.

Allison Nathan: So, let's dig into that first one you mentioned, which is the underinvestment relative to the capital that we need to be spending to achieve economic growth. Talk to us more about that.

Teresa Mattamouros: To give you a specific data point, to put things into perspective, in 2022, the G20 countries spent about $1 trillion in infrastructure. That's about 5 percent of their central government budgets. About 1 percent of their GDP. The number necessary to support economic growth and to support all the environmental, net zero targets that these governments have put in place is closer to $5 trillion. So, there's a big gap between the one that they're spending and the five that is required to be spent. And this is where private capital and private infrastructure, in particular, really comes into play to fill some of that gap.

Allison Nathan: But let me ask about that, because as you said, there's a huge gap between what's being spent and what needs to be spent. And so, we are seeing some of this legislation coming through to help motivate that. You mentioned the US Inflation Reduction Act, which we often refer to as the IRA. What have we seen in terms of the impact of the IRA so far, for example? And is there more to come? Or have we largely seen the impacts playing out already?

Teresa Mattamouros: I'm pretty sure there's more to come. And I'm hopeful there's more to come. Although, that being said, I think we're off to a great start. The IRA is really the most supportive clean tech bill that has ever passed in the world. And what it did is that it really expanded the scope of the available incentives. Before the Inflation Reduction Act, these incentives were very targeted to solar and wind, so renewable power generation. That what the bill did was really expanded this to other parts of the ecosystem. And if we want to go through a decarbonization path for our energy system, we really need it to be multidimensional and not just focused on renewables. So, the IRA really provided the incentives to do that.

I'll give you a couple examples. As you know, wind and solar can be intermittent and seasonal. And there are a number of technologies that really can mitigate those two things. Battery storage, for example. There's been a lot of spend, both on battery manufacturing, but battery storage projects that are connected to these renewable power generation assets and can really reduce the intermittency aspect of renewable energy.

Hydrogen and other forms of green molecules, I've seen a

lot of interest in additional capital investment from the bill. Hydrogen also helps with seasonality. It can work well as long-term storage for these renewable assets. But it can also help emissions and decarbonize other parts of the industries as fertilizers, as ammonia. There are a number of other utilizations of hydrogen.

Another important point to make is that there is a lot of capital that needs to be spent to decarbonize the existing infrastructure assets. It's not just building new assets; it's actually spending capital decarbonizing ports and transportation. Think about all the trucks and boats and planes that operate right now and how much emissions they emit. So, we are seeing a lot of investments being announced. Private capital is stepping in, taking advantage of these incentives.

So far there's been, let's call it, $400 billion of investment that's been announced in connection with the bill, which is, I want to say, 280 gigawatts of clean power generation. Just to give you a sense, one medium sized town in the US takes about 1 gigawatt of power. So, it's a lot of new power generation. And there have been 100 new manufacturing facilities that have been announced. These are newer

expansions in the US. So, there's a lot of activity happening already. I think we're going to see more of this. There's still a lot of capital waiting on the sidelines.

Allison Nathan: Maybe I'm stating the obvious, but I still think we need a lot of capital in our roads and bridges and tunnels. There is a lot of disrepair. That has got to be some aspect of this still. Or no?

Teresa Mattamouros: Absolutely. And I think public infrastructure capital from central governments, from state, from counties tends to spend most of their capital in these basic, essential assets at their level. And so, most of the capital in roads and bridges is spent by public entities. And then the private capital comes in to fill in the gap for all of the other needs that you need for economic growth and for the net zero targets.

Just to give you an example, there's plenty of infrastructure capital coming into waste facility. The trash that you produce at your house has to go to a facility to be treated and in some cases be transformed into some form of energy. The same with the water you have at your house. How does it get to you? There is plenty of private capital

going into adjust infrastructure assets there, not just roads and bridges.

Allison Nathan: Interesting. And so, how is money being deployed in the US versus how the European initiatives are deploying capital? What differences or similarities are we seeing off the back of the EU initiatives that you mentioned?

Teresa Mattamouros: Yeah. It is a little bit of a different approach in the US and Europe. In the US, it's very much government enabled, private led incentive. So, it's a bottoms up. You provide the incentives for private capital to come in and invest. And Europe tends to be a tops down approach. So, Europe comes with a very broad framework that sets directives and goals and targets. And then companies are forced to invest to meet those targets and goals.

I think another difference is that in Europe the framework is a lot broader. And what I mean by this is that includes things not only related to energy transition, but to biodiversity and pollution and a number of other things. The Inflation Reduction Act is much simpler and much

more targeted. And I think that really helps in unlocking the capital faster. It's simpler to take advantage of these incentives.

Allison Nathan: So, essentially the incentives are boosting returns. And therefore, capital is filling it.

Teresa Mattamouros: Uh-huh.

Allison Nathan: So, ultimately, these government incentives are boosting the return profile of infrastructure investments. So, investors are chasing those returns. Are there other factors that are also boosting returns in these infrastructure investments? Or is this really more about this game-changing legislation?

Teresa Mattamouros: It is more than that. And I think that even though infrastructure as an asset class has not been in the headlines as much as other asset classes such as private equity, the reality is that it has provided really stable and inflation-adjusted returns, especially in the past couple of years. And there are a couple of things that are also very interesting for investors. One of them being it tends to be a low volatility and low correlation asset class,

especially with public equities. So, it's a really good tool to provide diversification for portfolios.

The other thing that I think is a very underrated characteristic of infrastructure is that it tends to be very long-term asset, long life, economic and physical, life assets. And so, it tends to be a little bit of a longer holding period. And because of that, getting both the timing at entry and exit right is a little bit less relevant. And that can be very difficult in other asset classes. Think about public equities again. It's very hard to time the market at times. And so, that's a really good feature of infrastructure investments.

The other thing that I think is also relevant is just because of the long-term nature of these investments, the exposure to debt is a little bit better. There's less refinancing risk because these assets tend to be financed with long-term fixed rate debt. And the costs can also be a little bit lower.

Allison Nathan: And so, it's a defensive asset class in your portfolio. So, that sounds like something everyone would want to own in a way. But can everyone own this? Who is the target investor for infrastructure investments?

Teresa Mattamouros: So, traditionally it has been targeted towards institutional investors. But it has been opening up. And there are more and more people who have access to it. Private wealth management has really caught up to it. And it's an increasing part of the allocation in these infrastructure funds.

Allison Nathan: And if you were looking to invest in the infrastructure asset class, how is it organized? Is it asset by asset? Or are assets aggregated? So, do I have exposure to a wastewater facility? Or do I have exposure to data centers?

Teresa Mattamouros: So, if you are an instructor investor, you have exposure to a fund. And the fund is diversified. So, in the same infrastructure fund, you can have a waste facility, you can have a data center, you can have a fiber to the home, you can have renewable energy. So, there are a number of sectors that infrastructure funds focus in. And so, you get a diversified portfolio of assets that all have very strong infrastructure characteristics. But touch on different parts of the economy in different sectors.

Allison Nathan: And so, we've talked at length about how the definition of infrastructure has evolved very dramatically over the last several years, but we are sitting in an election year here in the US and there are many elections around the world. And of course, this infrastructure component still comes to mind in terms of roads and bridges. How do you think the election this year will impact this sector, if at all?

Teresa Mattamouros: Yeah. We're going into the year feeling better than we did last year with inflation being, hopefully, under control and trust rates expected to come down. But the election is a big thing to watch. There is half of the world population that's going to go to the polls this year. And the problem with elections is that elections tend to breed uncertainty and investors don't like uncertainty because they tend to delay investment decisions when there's uncertainty in the market.

In infrastructure in particular, the Inflation Reduction Act is something that investors are really watching. Former President Trump has publicly stated that he would repeal the bill if he comes into office, if he becomes elected again. That's something that people are watching very closely,

especially with the amount of capital that's coming into the space because of the bill. I think you need to watch it, but there are a couple of points to make on that.

First of all, the president won't be able to repeal the bill by himself. It would require an act of Congress. It can reduce. It can reshape. But it can't fully repeal. The second thing is that this bill has really gathered support from the industry. And you see with the amount of investment that just came into this space, it's going to be really hard politically to completely repeal when there's so much industry support.

And then the third point is that the reality is that a lot of these investments that have been announced have been in red states, in red municipalities. So, I think all of these factors combined make it unlikely that the bill is repealed. But it's something that we're watching very closely this year.

Allison Nathan: And I would say even going beyond the election and the implications of its outcomes, there obviously is a tremendous focus on building domestic assets up, reshoring and all of those trends that we have been talking about since the pandemic. So, in the

backdrop, is that driving investors' mentality that this is here to stay?

Teresa Mattamouros: Absolutely. I think it's not only all the manufacturing facilities that are being built and came with the onshoring trend that we just discussed, is the supply chains that go with it. It's the jobs that this is creating. This is really a transition that's here to stay. And I don't think we're going to fully reverse on what's been done so far.

Allison Nathan: So, it seems like the stars are aligning to see infrastructure investment continuing to grow. But what are the risks that could derail that growth?

Teresa Mattamouros: The two main ones would be macro risks, just geopolitical risk. We talked about this, but uncertainty and investment don't go hand in hand. It's tough to invest when there's a lot of uncertainty from a geopolitical perspective. Obviously, the temperature has been rising for the past couple of years. We started with China and the US and the trade issues. Ukraine and Russia. You've seen Israel and Gaza. If the temperature continues to rise, I think that could really become a

problem and the capital can stop coming into the space. Or at least slow down the pace of deployment.

The second one is the interest rates. It's a little bit twofold. The first part of it is the refinancing. These assets have maturities that, at some point, will come up. If the interest rates are still very high and the credit market conditions are tight, it might be hard to refinance these assets at the same rate or even refinance it at all in some cases. And then the second piece is that with higher interest rates, investors cannot use, say, low interest rate debt to boost their returns. So, they really have to shift their focus to structural growth and improving performance.

And so, if interest rates stay high, you really need to focus on the value you can add to these types of assets and these types of businesses in order to meet your target returns.

Allison Nathan: Let me just ask one last follow up which is as you rightly noted, the geopolitical risk seems to be growing every day, but this is a defensive asset. Is it not an asset class that might do relatively better than other assets that are less so?

Teresa Mattamouros: It would. I believe so. And like I said, low correlation to what happens in public markets and how public investors react to it. I think the problem there is that a lot of times these investments are large capital commitments. And when there's a lot of uncertainty, either from a geopolitical or regulatory perspective, it's hard to make an investment decision to invest a billion dollars on something if you don't feel very comfortable that the opportunity is not going to be at risk in the future.

Allison Nathan: Right. And they're long duration commitments.

Teresa Mattamouros: Exactly. Exactly.

Allison Nathan: Thanks so much for joining us.

Teresa Mattamouros: Thank you so much for having me, Allison. It was a pleasure.

Allison Nathan: Thanks for listening to this episode of Goldman Sachs Exchanges, recorded on Thursday, February 22nd, 2024.

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