AI: Boom or Bubble?

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ALEX BERNSTEIN: Hello, I'm Alex Bernstein and you're listening to The Alger Podcast, Investing in Growth and Change. I'm excited today to be joined by Alger's Director of Market Strategy, Brad Neuman, who's just released the commentary "American Business Spending Boom," which you can find on www.alger.com. In this paper, Brad discusses a wide-ranging thesis with some eye-opening numbers behind it, and we'll explore why Brad thinks this moment marks a real turning point for both the U.S. economy and investors. Brad, thanks so much for joining me this afternoon.

BRAD NEUMAN: Yes, it's great to be here. Thanks for having me.

ALEX: Just to get started, could you just give us a brief overview of what this paper is about?

BRAD: Well, it's about a huge boom in business spending. And a lot of times, people think of the economy as consumer driven, but I think now business spending is growing significantly faster than the overall economy, so it's taking share. And there's reason to believe, based on innovation and different forms of economic policy, that it's going to continue well into the future.

ALEX: Brad, like so many of the investment folks here at Alger, you've been talking about AI for a number of years now. What made you decide to take this particular tack, in terms of AI?

BRAD: Well, it's kind of a bigger picture thesis about what's going on in the economy and how the economy is evolving. The NVIDIA CEO talks about AI factories, so we're actually manufacturing intelligence. And so putting up these giant data centers that need to be supported by gigawatts of power that can power millions of homes, these are huge investments. In fact, the overall investment in AI in America over the next several years, through 2030, could be something like $6 trillion. And just to put that in perspective, that's about as much as we spent in WWII, mobilizing and fighting in the war, in today's dollars. So a very significant investment, and it's part of manufacturing. But it doesn't speak to the whole thesis and that there's other parts of it—pharmaceutical manufacturing, advanced manufacturing, energy, et cetera. So, the AI investment just part of a larger piece of overall business investment.

ALEX: The paper seems to indicate that we're either at or approaching an inflection point. How much of this, do you think, is projection, and how much is happening now?

BRAD: Well, the groundwork has certainly been laid, and, tech spending is growing very quickly. But there's a long lead time. We're talking about tons and tons of earth that needs to be moved, and rocks that need to be crushed, and buildings that need to be erected, and

energy that needs to be put in place. So, while the underpinnings are there, the construction of all of these factories and the equipment put in place is really going to come over the next several years.

ALEX: Let's talk about the idea of "compute." As you mention, AI querying can be a thousand times more compute-intensive than say, just a Google search. Why is compute such a key driver of all of this?

BRAD: So, one piece of this we mentioned was building these factories that are essentially manufacturing thought. And I don't know how many of your listeners are familiar with the term "token," but token is going to be a very important term and metric. It signifies a word or a part of a word. And when I ask a large language model, "what is the capital of France?," and it tells me "Paris," that's like ten tokens. Now, that is much more compute-intensive than saying, "what is the capital of France?," and having it Google and ten blue links come up, and you've got to click on a link and find something that talks about France and obviously mentions that the capital is Paris. But then if I ask a large language model, "can you plan a trip for me to France, and I'm going with my family and I've got three kids and a wife, and this is my budget," then it needs to do some reasoning and make several passes at it, and then it could use a hundred or maybe even a thousand times the amount of compute as a simple Google search.

And then if I ask it to act as an agent and actually book the trip for me, which it can do, it can open a web browser and make the plane reservations, the hotel reservations, et cetera. That is extremely compute-intensive, because it has to think and actually take action. So that could be thousands, tens of thousands, the amount of compute of a Google search.

Ultimately, we think there are going to be applications for artificial intelligence that will use millions and maybe billions of times the amount of compute as a Google search. So, picture you have a robot in your house, it's helping with chores around the house, that Elon Musk says will be the biggest product in human history. If you ask it to go take the laundry out of your dryer and fold it and put it where it needs to go, it has to think about how to fold them, it has to think about which clothes are whose and where to put them, and which drawers they go in. All that is a lot of thought that we take for granted, but in artificial intelligence can be extremely compute-intensive.

ALEX: So, to connect the dots, the data centers, and the industrialization that we're talking about building is to handle that kind of intense compute that the compute users are doing now. Is really still in its infancy?

BRAD: Well, two things. First, yes, people are adopting large language models. ChatGPT has many hundreds of millions of users, but it's still maybe only around a billion people using large language models, out of five billion people online. So, we're still in the infancy. And then, we're very much in the infancy of using those queries for things like reasoning and Agentic AI and Embodied AI, which has robots and cars et cetera. So, I think if it's a baseball game, we're just kind of taking the field and looking around at the crowd.

ALEX: And I wanted to get back to something you said a minute ago, which is that you think economic policy really supports this right now?

BRAD: Yes. I mean it's hard to think of another time in history where policy was so aligned with innovation. So, I use a broad term "economic policy" to encompass trade policy, fiscal policy, monetary policy, and rules and regulations. Trade policy is one of the largest drivers. Obviously, companies would rather not pay a tariff. So instead of sending out their manufacturing abroad and shipping into the U.S., they'd rather build inside the U.S., and that's a large driver of the $9 trillion dollars of investment that has been announced so far this year in terms of going into the American economy. So, you have things that are related to AI, like Project Stargate, which is SoftBank, OpenAI, and Oracle's $500 billion commitment to these AI factories. You have NVIDIA at half a trillion dollars for AI infrastructure, Micron and Taiwan Semiconductor, several hundred billions of dollars. But you also have the energy to support this AI.

Fiscal policy also is extremely important. That's mostly around tax incentives. So, with the One Big Beautiful

Bill that was passed on July 4th, there are incentives to write-off investments in domestic manufacturing, research and development, software that encourages companies to make that kind of spending. So fiscal policy is extremely supportive.

And then, monetary policy. In 2024, the Fed reduced rates 100 basis points. They're already down 50 basis points this year, maybe another 25 in December. So, monetary policy is also supportive, and that's making it easier to put these kinds of investments in place.

ALEX: And I hope our listeners appreciate that you're rattling off all of these numbers off the top of your head.

BRAD: Yes, well, it's something that I'm pretty passionate about and that we talk a lot about. So, a lot of research has been done. So, you're just seeing the end product.

ALEX: So, here's where I think we are: even though we've just taken the field and are looking around at the ballpark, this is happening now, and it's not just speculative?

BRAD: I think it's definitely happening now. The $9 trillion that I'm quoting here comes from the White House. Will all of that get built over the next couple of years? No. Some may slip. It may not happen in a timely manner. Some may not happen at all. But if even a portion of that happens, it's a tremendous boost to growth. So, I do think it's happening, but the numbers are so big that even if some of it disappears or slips, it's still a tremendous tailwind.

ALEX: So, Brad, one word that doesn't appear anywhere in this paper is: "bubble." A lot of AI investors are seeing "bubble" headlines regularly, and when I read this paper, I read it as a "boom vs. bubble" piece. How do you respond to that?

BRAD: I think the most important thing of boom versus bubble is that it's pretty clear, I think, that this is being driven by a real need for investment, whereas the tech bubble or the internet build out was obviously fantastic general purpose technology that people had a lot of hope for. But as they were building it, there was a lot of spare capacity. So, there was a lot of dark fiber and routers and equipment being put in the ground that we hoped that people would use because of the great applications that would come on the internet.

Today, if you listen to CEOs talk, they are compute-constrained and power-constrained. They need more power on the grid, they need more manufacturing capability, they need more AI factories, more GPU processors. So there needs to be capacity expansions, and that's what this business spending is about.

Then you get into the stock side, and the valuations are much lower than they were in the tech bubble. The investment spending is driven more by cash flows than borrowing. Today's CapEx is being driven by companies like Google, Amazon, Meta that are free cash flow positive, that have net cash instead of net debt, and their cash flow is far in excess of their capital spending plan.

ALEX: So, if I'm an investor and I'm reading this piece, shouldn't I take some solace that the thesis refutes the idea of a bubble?

BRAD: Yes. I think that the talk of bubble, first of all, is rare when there is a bubble. And I think you have to always know what you're investing in, so you don't get scared about price. And the reason why we write things like this is so people can have confidence in a longer-term investment thesis and strong hands around their investments and hold for the long term. And this is something that Alger really believes in passionately in terms of technology and investments changing the face of the American economy. And I think the better people understand it, the better they'll be able to withstand any kind of volatility.

ALEX: So, how might investors allocate around this?

BRAD: Right. So, we think it's business spending. And we think the obvious companies are the AI enablers. These are the companies that are creating the infrastructure for artificial intelligence. So, anything that kind of goes into the data centers, whether that's designing the chips or manufacturing the chips or cooling the data centers, connecting the data centers.

But then there's also powering the data centers. Alger, to my mind, has never been overweight in utilities. Even though we've invested in growth since 1964, utilities have never fallen in that camp. And they have for the past couple of years. So, we definitely see a shortage of power.

And then there's the companies that are providing all the materials, construction equipment for this WWII-type project, which is constructing all these manufacturing facilities. And so, there's the companies that produce concrete and crushed stone, aggregates, companies that produce construction equipment or rent that construction equipment, even companies that do environmental services, like picking up the commercial and industrial garbage from all of this activity—we think all those companies stand to benefit.

And companies that make items for automation. So, companies that produce sensors and robotic automation in factories are also, I think, well positioned.

ALEX: Brad, the paper seems to be a mostly U.S.-centric piece. But if you apply the thesis globally, aren't the ramifications for investors even more significant?

BRAD: Yes, that is true. It's partly true. The AI piece is very applicable to the rest of the world. The policies are partly attributable. In places like Europe, the fiscal policy is also accommodative. For the first time, they are allowing much more debt spending, which is very helpful. Much more spending on defense, and so that is helping with manufacturing. In Japan and Korea, they are trying to be much more friendly to shareholders. So those policies are evolving in their own way, separate from the U.S.

The thing that I think unites them all is artificial intelligence, because sovereign countries need to have control over it. In fact, the Vertiv CEO—Vertiv is a company that makes the cooling for the data centers and has great visibility into data centers all over the world—he mentioned that countries feel the need to control their own artificial intelligence. No one wants to be dependent on other countries' artificial intelligence. So, a lot of this infrastructure has to be duplicated and rebuilt all over the world.

ALEX: And what do you think the timing is on all of this?

BRAD: Well so, stocks are always ahead of the economic activity. And so, stocks have, I think, begun to discount certainly elements of this thesis. But I think most importantly, it provides a strong underpinning for the economy, which I think looks like it should be strong next year and should accelerate, and that should provide strength to underlying earnings.

ALEX: Brad, last question. This paper and your entire thesis feels like a quintessential Alger story. Why do you think that is?

BRAD: Well, Alger has been investing in growth and innovation for over 60 years, and I think one thing that Alger does really well is understand when there's change. And right now, there is more change than we've ever seen before, as investors. It's not only just a general-purpose technology. It's the first time that humans have ever produced tools that then use tools. So, with software running software, it kind of marks a new chapter for the human race, and we think that that means it's a really exciting time to be an investor. And by any indication, the future is even more exciting.

ALEX: Brad, thanks so much for joining me this afternoon.

BRAD: Alright. Yeah. Thanks for having me.

ALEX: And thank you for listening. For more information on investing in AI, and for more of our latest insights, please visit www.alger.com.

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