Bill Blain: Inflation, Bond Yields & ESG

April 7th, 2022

Erik: Joining me now is Bill Blain, multi asset strategist for Shard Capital and probably more famously known as the author of Blain's Morning Porridge, which is read by 10s of 1000s of institutional investors every single morning. Bill, you are a little different from the average macro investor who will sit in an ivory tower and proclaim to the world you need to be investing in this macro backdrop in real assets not financial assets but real assets. You don't do it that way from your office. You get on a plane, boots on the ground. Why are you in Egypt right now, sir?

Bill: Great, great question. Um, you know, I've got to come clean with all the listeners. I am taking a week off.

Erik: Come on! I set you up to say that you're committed to your investors and you'll make all kinds of sacrifices.

Bill: Yeah, and I am. And you know what, you know what Erik sometimes it's very important to get your head out of the markets and listen to what's going on. But let me tell the whole story. Yeah, I'm taking a week off to go down the Nile because my wife did a degree in archaeology and she's fascinated and I'm getting fascinated in it. But the reason I'm in Egypt is because we're thinking about what the future of investment looks like. And I've got to say, I am very nervous about financial assets. We just had one of the longest blue markets in the equity world that we don't see bonds perform stupendously well since 2007. And everyone's made off like bandits. But of course, we've all got to be realistic. The reason the stock market's been so strong and the reason bonds have been so returning has been distortion caused by Central Bank. The consequences with what they did to keep the world afloat in 2007 with ultra low interest rates, quantitative easing, and then artificially keeping interest rates so low. And then of course, we had COVID.

Now, these are all factors that distorted the markets. We are now beginning to see that correct. And so I think the outlook for financial assets, that's bonds and stocks is no longer as exciting as it used to be. Because as that distortion disappears, as the Fed and the Bank of England reduce their balance sheets, that distortion effect begins to vanish. So you got to think about what kinds of things should I be invested for, for the future in a highly inflationary market. And that's why I find myself in Egypt because we're no longer just thinking financial assets or assets that generation returns such as aircraft used to do before Putin confiscated half of them. But we're thinking about real assets that are going to generate future businesses. So one of the areas we're looking at is what is going to be the future of our business post climate change when we no longer see oil as a primary source of energy but we see oil as a vital commodity for all the goods that we need for the modern economy, like paints, adhesives, plastics, and by plastics, I mean develop plastics that are biodegradable. So there's still a teacher for oil. So we're looking at a big investment that we'll get involved in. And so for the last couple of months, I've been running around the Middle East putting together what looks like it will be a very exciting project. And when we get inked, I will be telling you Erik all about it first because we will be targeting real returns for that. And you need these returns, and what's going to be a long term inflationary scenario that I can see developing as a result of current energy insecurity. So that's why I find myself at the banks of the River Nile tonight looking over the most fantastic view and you know wondering what's going on in the rest of the world?

Erik: Well with that introduction, I know you've listened to the show. So you know what's coming next. I'm asking just about everybody about inflation seems like the consensus of most of the macro guys I've talked to is they mostly think that it's pretty close to what the Fed has been telling us transitory except that, you know, if I look at bond yields, it kind of looks like it's not. What's going on here.

Bill: Look, I think we've got a very very changed world. We have a long term, inflationary scenario. And I think, you know, to figure that out, we need to go back to basics. Inflation is not just about the supply chain lockages we've seen in the last two years. It's not about sudden shortages that have been created by the COVID backwash. What we're actually seeing create real inflation now are some fundamental changes in geopolitical trade patterns. We're also seeing this enormous energy insecurity shock, hitting Europe in particular but it's going to have knock on effects elsewhere. And the one thing I always think economists as a trade we miss is consequences, consequences, consequences. So when you have gas prices and I mean proper gas as we Europeans call it, which is not gas, which is petrol as you'd Americans mistakenly call it. But when we see gas for heating prices quadruple in Europe because of the shortages from taking Russian oil that has not short term effects but long term effects. Yes, we will bring in American liquid petroleum gas LPG but it will take two years to build the reception facilities in Germany and start importing it. We do have other facilities throughout Europe to import American and Guattari gas. But getting them into an infrastructure system to get into Germany is going to take time.

So you're going to see a maintenance of these elevated energy prices for some time. And that's feeding very quickly into the real economy not just in terms of consumers. And I can tell you that in the UK, consumers who they normally pay 100 pounds a month for their electricity are now getting hit with bills for 200-300 pounds. And in a society where we've seen zero wage growth for 15 years but 2 to 3% real inflation that means people are really beginning to struggle. But you're also seeing this effect on the supply side of the economy where businesses are finding that their costs have shot up. So when I hear people talking about transitory inflation or these are just short term effects will very quickly hit the top of the oil market. Well, I'm just not seeing that. I think we're into a period where consequences drive further inflationary pressures. So you're going to start seeing demand for wages heating up. Now, I think what's really interesting if you take a look at the employment numbers not just in the US but across the west of the occidental West. Every economy seems to be pretty much at [inaudible], you know, they're all at full tilt. So you're bound to see inflationary wage pressures start to emerge, it already has but one of the other factors I talked about right at the beginning of this little spiel was how the geopolitics have changed. I mean, we can see that immediately with the reaction to Russia. Just how quickly we've tried to cut Russia off. And we can also see how difficult it is for the Europeans to actually close down the Russian gas spigots. But it is going to change the way that everybody thinks about their supply chains.

Bill: I mean chips are the obvious ones. Everyone wants to have their own chip, their own foundries nationalized again so global trade, the end the globalization, or the redefining what globalization is, and people or nations beginning to understand that it's not just energy security, it's supply security, strategic goods security, and where they get all these things from. We're beginning to wake up to the fact that the world is an enormously complex place. And central bankers telling us we will all very quickly recover assumes a very two dimensional model but in fact it is multi dimensional, all the things that move prices. I guess that's a long winded way of saying I just don't agree that we're in for a short period of inflation. I think we're going to see long term inflationary pressures. And my big concern is that in some nations. I'm particularly worried about the UK where we're beginning to really understand just how much damage Brexit has done to our export economy and particularly parts of Europe. We're going to see I think stagflation which is where you have this horrible combination of a declining economy and inflation. I remember vaguely from my childhood in the 1970s.

Erik: Bill, I'd like to run my latest thoughts about inflation past you and ask for your critique because they've actually changed quite a bit since the situation with Ukraine and Russia has broken out. Now previous to that as our regular listeners know, I've been thinking for a long time that we're headed toward secular inflation and okay, I don't know if we're there completely yet now but, you know, we're getting in that direction. And I don't believe the transitory thing. I think it's going to be persistent, and probably secular. But you know, I'm not smart enough to know that for sure. Bill, I think the war with Russia is the game changer. Wars are always inflationary. But in this particular case, the thing I say is, you know, you can say you don't like Vladimir Putin. You can say you don't approve of his morals, of his tactics, and so forth. That he's a horrible guy, whatever you want to say. But he is a competent leader. He's not stupid. And he has accepted the loss have a huge, huge amount of business. He knew these sanctions were coming if he did what he did. He knew that he was going to lose all those international businesses. He knew all of those things. He didn't make those sacrifices just because he wanted to annex the Donbass region. He obviously has bigger plans. There's more to this. There's more coming. We haven't heard what chapter two is going to be yet that's my take. Seems like most of the world and this is where I see a huge variant perception. Most of the macro world is kind of feeling like oh this thing with Ukraine is almost over now. The Russia thing is all coming down. I don't see it that way. I see that we're in a new worse than Cold War era. It's a different kind of world war three, and I think it's super inflationary. What do you think?

Bill: I'm not gonna agree with you completely on your analysis on Putin. But I do think it is a complete game changer. And let me start by trying to explain that. I think there's a very cozy consensus in the West that Putin is absolutely mad. The man is barking. What's he been doing, why has he done this? This is terrible. I mean, we must stop him. And we, you know, in the West, it's very easy for us to explain exactly what he's done wrong and why it's so unacceptable. From the Russian perspective. You know I think frankly, even put in British terms, Putin's being a bit of a chancer. He saw the writing on the wall. I think he looked at the Trump administration and said okay America is no longer going to stand behind NATO. We have energy security in our hands over Germany, therefore, Europe's most productive zone. I think we can push here and we can get what we want. And he probably expected a negotiated settlement where he got the Donbass or whatever. And let's not forget until recently, people were calling Ukraine one of the most corrupt nations on there. But I think, you know, that's all in the past now. The lines in the West are drawn. You're absolutely right, the economic effects on Russia are going to be highly significant.

From my own perspective knowing a little bit about Russian Soviet economic history, I think that made a tremendous error. It's going to put them back decades. But they're no longer really significant. I think this is Russia out of the geopolitical game. In the rest of the world, that it's important. And having spent a long time in the Middle East. Recently, you hear a very different view to the one that you hear in the Occidental West, you hear a perception? Well, everybody agrees that what Russia is doing in Ukraine is unforgiveable. The apparent massacres bombings, nobody is saying that's acceptable. But what people are saying is, you know, the West has got itself into this problem. The West is responsible. I turn around and say how can you say that you cannot invade anyone else's country this way? So well, you know, you guys can't agree on anything. And I start to lecture them on politics, and they turn round, and they just say, Boris Johnson, Brexit, Donald Trump, and these are all very difficult to argue with investors from countries outside the Occident who are turning around and say, we've got investments with Russia, we've got things that we're trying to do with China, we like the possibility of new markets.

So if you look at what happened immediately after the Russian invasion where President Biden immediately moved the latest patriots to Saudi Arabia, yet still could not get Crown Prince then Solomon to take his call about increasing oil supply. That's where a lot of the inflation is going to be generated because the rest of the world is not going to slavishly follow what's happening in the Occident. And by that, I mean, Australia, Japan, North America, and Europe. The games have changed. And this is all part of what I was saying earlier but the geopolitics of trade, absolutely moving around. So it's not just what Russia does in terms of the next two years of energy insecurity and inflation in Europe. It's about where the future goes, where the Gulf states go, where India aligns itself, and how will the bigger known as how do the Chinese play? Well, it's clearly in the Chinese interest to continue as much instability as they can in Eastern Europe. But I think they've seen the effect of weaponizing the dollar and the last thing they want at this stage in their economic conflict with the West is to find themselves in the same kind of exclusion zone from the dollarized economy. Now there's lots of chat about how this is a disaster for the dollar, about how it spells the end of dollar dominance, that the weaponization of the dollar will have people questioning it. I don't buy that at all. I think this just confirms to people that there isn't a real alternative to the dollar, at least not yet.

Erik: Let me just test that one because first of all, I agree emphatically with everything you said just one caveat. I would go so far as to say bill that I predict there will be no viable alternative to the US dollar as the world's global reserve currency. Until we get a global scale, fully decentralized digital currency probably not Bitcoin, more likely to be a central bank backed system, but I think it's a digital currency that eventually takes that title away. And as much as cryptocurrency is all the fad right now, that technology is not ready for primetime. We can't run the global economy on a proof of work validated blockchain. We needed proof of steak or whatever the next thing that comes after proof of stake is. Ethereum is getting there. We're making progress. We're it's years away. But I say that there's no replacement to the dollar until it gets replaced by a digital currency system. And that's where the entire world changes overnight completely and freaks everybody out. And nobody knows what to do. It's probably at least a decade off. But I think that's coming. What do you think?

Bill: I don't see any real relevance to the cryptocurrency debate. I think they're terribly interesting, terribly, terribly interesting from you know in terms of how innovative and whatever it is they've managed to find something to use the blockchain for. But I don't think there is there a solution desperately looking for a problem. I don't think they're, you know, they're anything except an evolutionary dead end and sorry to be so negative. But I think some of the issues you raised there will be very interesting. I think what is going to happen is that governments are going to take the opportunity to digitize currency because it just makes it more, it becomes easier for them to control and to keep a complete record on who's doing what. It will simply move parts of the economy off balance sheet, effectively into the dark bar. I'm not entirely sure how it's going to play out. But I don't see digital currencies being an answer to man's inherent desire to make money and not pay taxes. I guess that's how it boils down.

Erik: Well, I do think digital currency is a solution to Triffin's dilemma in the sense that you could have a supranational fully decentralized global reserve system where no one nation is in charge of issuing the money for the rest of the world. Everybody has an equal stake...

Bill: I'm going to struggle with that one because I think that money is so confused and complex at the moment because the amount of just how indebted every single government. How indebted everybody effectively is. And if you take a look over the last 10 years or the last 20 years ever since its inception, one of the big conversation topics, usually after a few beers is how long is the Euro going to last. And you get statistics bandied around saying that any currency union only lasts 30-40 years before it starts to creak under its own pressures. And we can see that happening with the Euro. But you know, what, the Euro has proved tremendously resilient. And I think Euro is moving into a different phase where effectively it's managed to take financial sovereignty from all the European nations, and it's now moving to become a common money for the mall. Now, that will create long term stresses. And they will only succeed if the polity of Europe can get German taxpayers to pay Italian pensions. And I think they might actually get there. If you'd asked me that three years ago. I've said no chance the Euro won't survive the next tensions. But in fact, the world changes and as the facts of the world change, you have to amend your opinions. And I've actually gone positive Euro thinking yeah well it might just happen because the kind of unanimity of the political response to Ukraine has really been quite encouraging. As for a single global currency, well, you know what? I'm getting on. I'm getting old, and I very much doubt I'll be around to ever see it happen. Which is another way of saying I just don't know.

Erik: Bill, let's move on now to where the rubber meets the road for investors. Let's start with the bond market. With all this discussion we're having of inflation and so forth. I've been surprised actually, there's been some really smart people really really accomplished fixed income guys like Alex Gurevich, for example, have come on the show and said look, despite what's going on, yeah, there's inflation but it's not going to last forever. And this is an incredible buying opportunity for bonds. The bond markets not going to crash. Everything is this is the time to get in. I'm not seeing it that way. I'm struggling here. It seems like there's a lot of good sounding arguments but the yields go in the other direction.

Bill: Okay well the bond market is the most important thing on the planet. In bond markets there is truth. But there's also an awful lot of rubbish written about the bond markets by people, I don't think really understand them. Now, I've been forced to understand them. I've spent 40 years in bond markets. And they are actually, they're really basically simple at the end of the day. But what you need to understand is bond math. And I say math, not as you Americans say math. But Bond maths is very simple. You pay an upfront cost, you get a return on a bond and at the end of that period, you get your money back. That's the way a bond works. Every year, you get your interest on that bond. People are looking at the collapse in prices of very long bonds. And they're thinking of them must spell the end of the market. Great example. In 2020, the Austrians were able to launch a 100-year bonds carrying a coupon of point 0.85%. Yeah, that's 85 cents in every 100 Euros for the next 100 years. And because interest rates were falling in Europe, because of COVID. At one point, that Bond went up from its issue price 100% to 133%. Now, of course, interest rates have increased and the price of that bond is now 60%. Oh, no, the price has halved. That's destruction and destruction. Well, you know, if you were silly enough to buy a 100-year bond on the basis interest rates weren't going to get any higher for the next 100 years? Well, that's your outlook. But, the key thing for the bond market is inflation. Now, think of inflation as the apex predator of bonds. If you have 5% inflation for 10 years, that's gonna eat away something like 25%-28% of your principle in terms of its real value. So when you get your $100 back in 10 years time, you can only buy 72% of what you could buy today. That's the effect of inflation. It eats away your principal. But here's the thing, you're still getting your $100 back with equity. You just don't know. And to what's really important about bonds though is that they set the base level.

US Treasuries are a great example of the base rate that the risk free rate and the market from which every other financial asset prices, yes, even equities, price of the rate that the bond is priced at the big problem has been for the last 13 years, interest rates have been kept artificially low by governments controlling that bond rate through quantitative easing, which basically means buying bonds and circulation to keep the price high, which means that yield is low. As a result, it's become a terribly distorted market. And it makes equities look more attractive. Now as rates normalize, you're going to see that knock on effects into equities making equities more difficult, because they will look less valuable on a relative basis to the rising bond yields. And of course, you're going to lose, you're apparently going to lose money on your bond, because the price of a bond will fall, which means you have to hold them to maturity, and run that inflation risk. I think the big worry here is that while people are still saying and I disagree with them that inflation will be transitory. If it's long term, the value of that bond takes a considerable hit over time. But because of all the distortion that the central banks have inflicted on markets, I rather suspect that they see the only solution to the enormous amounts that governments have borrowed and the effects of quantitive easing on the economies is going to be a good dose of fairly long term inflation, which they will say they're trying to control by raising interest rates. So it's very important to look at what bond markets are doing because they set that risk free rate. But also understand that the moment bond markets are highly distorted. And I think that's why we're seeing so much panic in the market about non-functional bond markets. Now, bond markets are what we call sticky, especially the non-government bond markets where prices will become distorted by how illiquid they are. That's what I mean by their stickiness. And this is certainly going to be something I think we'll see dominate the financial press in the coming months as it becomes clear that inflation is not going to be transitory.

Erik: As a public service announcement for our listeners, I'm not sure whether or not those eight basis point 100-year bonds are still on offer in Austria. But if you're interested in buying an eight basis point 100-year bond we'll be happy to sell you a macro voices 100 year eight basis point bond contact. I can't say we'd be marketing unregistered securities scratch that we didn't mean it. Just kidding folks.

Bill: Okay well, I'll tell you what Erik, you can get them to give me a call because I can sell them that .8% bonds at a yield of 1.63 1.63% every year for the next 90 years. Lovely. That's a bad buy.

Erik: Yeah, but we'll give you the full 100 years. You're selling off the run, you only got 88 years, I'll give you 100 years worth at eight basis points. Let's move on to something that's really important Bill. I want to go on record saying this ESG trend, I don't think there is any greater calling or better idea that's ever existed than the notion that investors, owners of capital should finally take responsibility for the way that they invest that money to do good for the world. I'm all for it. Yay there is no greater calling than investors focusing on environmental, social, and corporate governance values. I get it. I'm on board. But you know what? I think this entire ESG trend on Wall Street is 100.0% unadulterated bullshit. I think it is a con job being perpetrated on investors by Wall Street. And I think that the guys selling most of that stuff really believe that

ESG stands for extremely stupid and gullible, which is what they think of their clients when they're selling them greenwashed crap that has nothing to do with advancing any of those goals. And particularly, what I'm seeing is that they're vilifying energy producers. And I think that's going to create an energy crisis that could be a major historical event in the course of world history. Am I crazy to think that it's that?

Bill: You know what Erik, it's actually worse. It's actually worse then what's happening with ESG. Now, I am an absolute believer in stakeholder capitalism. I am probably one of the very few people working in the City of London who got slung out the Labour Party in his youth for being too left wing. As one of my good friends once told me as we were laughing about it, we were all former socialists. Some of us grown up, but not all of us.

But I absolutely believe that ESG environmental, social, and good corporate governance should play a major role. But here's what's actually happened. It's been taken over by the marketing departments of big funds. They'll say that they got very clean ESG credentials, is going to attract concerned money in because, you know, everyone is concerned about climate change. Everyone's concerned about the future prosperity of the planet. And this is something we can talk about. And I'll use Egypt as an example in a moment. And everyone's concerned about good corporate governance. And if we can invest to make all these things better. Hey, that's a great point but what's happened? Let's start off with energy. Everyone's immediately said right. ESG means environmental goodness. So we got to be good. That means no more fossil fuel, no more coal, no more oil, no more gas, you got to go and build renewable power. Well, you know what, everyone stopped then funding coal, oil, and gas. The result is a situation we now find ourselves where we have energy insecurity. And they've all gone out, and they piled into wind farms and solar arrays covering up the countryside with solar farms. And these are not proving as good as everyone thought they would. And the problem is everyone wants to show that they've got these green renewable assets on their balance sheet, which means they all bought them at massively over price level. And then they're discovering that wind farm out in the ocean is really really difficult to maintain, because there aren't enough boats to go and do it. And they're finding that to make a wind farm, you need something like 140 to make a single wind turbine need something like 140 tonnes of steel. And you know what you can't make steel without mining the iron ore and then refining it with coal, metallurgical coal, you need about 200 tons for every single 100 tonnes of steel that you produce. So you can't buy metallurgical coal that is dug up in the West anymore. You got to buy it from Australia and then you get your steel made in China which creates an enormous amount of carbon miles. And that's just one little example of what's happened.

ESG thematics have overtaken common sense about turning it. Now the big thing here of course is climate change. We need to get to carbon zero by 2050 as all the conferences are telling us. Well, you know what, we can do that. And it is going to be difficult. But it means using gas as a transition fuel. And it's going to take a long time for us to build the renewable energy capacities that we need to replace the current things, it takes 20 years to build it or 15 years to build a nuclear power station in Europe. That's the kind of thing we need. And until we get them in place, we need gas. But we don't have any gas because we stopped investing. That's a disaster. Now, there are other parts of ESG, the social and the governance. I mean, let's just talk about governance for a moment. How can you have a company like Boeing, which is one of my favorites to attack that spend billions in stock buybacks and paying massive bonuses to C-suite senior executives rather than developing a new plane and just fixing up and making mend an old one resulting in 346 people being killed by a system that they never told pilots about. That is bad corporate governance. Yet, if you take a look at Boeing stock price, you wouldn't know it.

And then in terms of social, if you're going to promote social investment, then we really need to look at how do you create a better future for everybody when corporates are doing things as we just had in the UK as 800 seafarers who man the ferries from Dover to France being sacked overnight and replaced by foreign workers at 1/3 of the UK minimum wage. I mean that is not good social service for anybody. So ESG is a great theory. But as always happens, the market has arbitrage it to its advantage. So we're out calling ESG funds to investors who think that they're funding a better world but actually all they're doing is funding more and more energy distortion when it comes to environment. And we've got to do more to ensure that corporates do good in terms of the way they run themselves and do social duty as well. And part of the social good is paying proper taxes. When you discover how little some of the big multinationals pay in taxes, it should really get people angry. Anyway, I could go on and rant about ESG for hours.

Erik: What is going to happen to energy prices, because a lot of people think as the 150 year, you know, period of energy all coming from rock oil, or most of it coming from rock oil ends, that means the price has to collapse. I think it's the opposite. I think what's going to happen is the lack of investment is going to mean that essentially, we have phased out fossil fuels before we fully phased in the replacement. And the result is that there are massive shortages. What do you think?

Bill: Well, I'm actually still trying to figure this one out myself. And I think it's it's all part of this ESG debate. It's a continuation of it. It's about how we transition energy, energy security as the you know, 20 years ago, the world was thinking about how do we get out of our reliance on fossil fuel energy. And that's when all the original ideas about wind and solar as good renewable sources came up. And effectively because wind and solar is easy. We've done that we've spent very little developing alternatives, like tidal energy, which is ultra reliable, which wind and solar is not. And we've basically scaled back completely on nuclear is only just beginning to get the attention. We keep making noises about putting money into things like hydrogen power as well. But everyone's got this kind of idea. No, it's going to be okay, we've got wind and solar. That's great renewables, we just make more and more of them all and then we'll make lots of batteries to store all the energy they make. And that's when I go Hey, wake up smell the coffee boys and girls because lithium is a terrible substance. We all know that to mine lithium and some of the Congolese mines is a social no no of the worst order. It's filthy. It's disgusting. You've got kids digging this stuff up. And that's only one little part of it. We can go and get lithium from other places like turning the famous Atacama Salt Flats into a massive lithium processing mine, which will destroy one of the most unique landscapes on the planet. Hey yeah, but we'll get lithium out of it.

But the fact is demand for lithium is going through the roof, the price is going to double. And that's going to make the price of an electric vehicle go through the roof as well. And we're suddenly going to wake up and say, oh wow the same economics of scarcity apply to lithium, as apply elsewhere. I don't think that's going to be a wake up and see moment, then we've got hydrogen, which is a very interesting potential source of energy. But to make hydrogen, you basically have to burn fossil fuels to make it or you make more renewables to make hydrogen. And that makes each stage of the energy transition process less and less efficient. So if you have to make electricity from a wind farm, and then use that electricity to hydrolyze water to get hydrogen, which then needs to convert into ammonia, to transfer around the world to make ammonium fuel cells to do exactly the same thing as an internal combustion engine does, you know, these are all very complex solutions that aren't really getting us anywhere yet.

Eventually, I think we will find the hydrogen solution. But I think at some stage, someone's gonna listen to the government policy, governments are good enough to say, we need to make a massive investment in nuclear fuels. And yes, that does hold us hostage to uranium supply. And then we need to be making a Manhattan Project style efforts to get fusion working, which you know, promises to be unlimited fuel, the problem is always tomorrow, and tomorrow, and tomorrow, rather than when we need it, which is today. So there is no easy energy solution. We simply can't go on burning gas the way that we've been doing in the past. But we simply can't switch it off and expect the world to transition overnight. This is going to be a 30, 40, 50 year transition process before we have proper clean energy. And as I was saying right at the beginning, we are still going to be using oil for all the other things that proper modern society needs. Oil derivatives, the petrochemicals that keep engines running that keeps things lubricated, that you make a piece of photo of. That you make the tires for your car out of, you make paints, all these things mean oil is not going to go away anytime soon.

Erik: Bill, I agree with just about everything you said. I was curious about your comment on fusion being the best path of solution. What I would have said is I agree with you that there's no easy solution. It's it's not something that you simply do overnight. But I would say the thing to focus on is first you got to overcome the psychological society problem with people are afraid of something they don't understand, which is nuclear energy. But specifically, I think what we need to do is get rid of boiling water uranium reactors like these big Westinghouse reactors and we need to replace them with liquid Fluoride Thorium reactors, which still use fision. It's not fusion. It's the old kind of nuclear energy, but it's dramatically safer. Now, the only thing standing between us at that is the government getting its shit together. And I think the reason the government doesn't get its shit together is because society is afraid of anything that has atomic or nuclear in its name. Are you aware of the Thorium technology Bill? And would you agree that that might be maybe a little closer in [inaudible] fusion or am I missing something?

Bill: No, I have not done any in-depth thinking about the thorium salts solutions. But I think there's three stages that we need to consider. And we need to completely reinvigorate the whole argument about nuclear power, which is basically set in policy decisions that were made in the 1940s and 50s. About the supply of weapons grade plutonium. We need to rethink it from first principles, which means looking at other technologies. And one of the other very exciting ones is we have a proposal from Rolls Royce in the UK to build what were called mini nukes. They make the reactors for the British nuclear submarines. And they could effectively make much smaller reactors that could be built quickly rather than the very long weekend times that we have. And I'm sure there are other technologies that are worth exploring until we get to this holy grail of a costless nuclear future with free power. But you know, that's something that's always going to come tomorrow rather than immediately. But we need to be rethinking the whole nuclear debate because, you know, one of the things I've talked about earlier was lithium. We haven't even got on to discussing the costs of disposing of lithium because what you get whenever you discuss lithium is oh it'll be fine. We'll recycle it. Hang on a second. Do you know how difficult it is to recycle it? You know, these questions aren't getting answered properly in the public markets. So we actually need to have some intervention in governments about proper transition strategies to secure energy for the future.

Erik: Well Bill, I can't thank you enough for a terrific interview. But before I let you go, please tell our listeners a little bit more about what you do at Shard Capital and particularly what our listeners will find at www.morningporridge.com.

Bill: Okay thanks very much for that Erik. I wear multiple hats. The first thing I am a strategist for Shard Capital. We're firm in the City of London. We now run a number of different investment strategies. I also wear the hat of being head of capital markets, which is why I'm running around trying to construct big deals. But it also means I'm in direct contact with markets rather than just the theory of them. And the third thing I do that I started about 15 years ago was my morning comments that originally just went to my clients, but no is freely available for anyone to read on www.morningporridge.com and I publish something every morning. Or if you want to pay a minimal subscription, you can get it sent to your email fresh every morning. And that's Blaine's morning porridge. Porridge course being the Scottish food of champions.

Erik: Well Bill, I can't thank you enough for a terrific interview. Patrick Ceresna and I will be back as MacroVoices continues right after this message from our sponsor.