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**Mark Noble**

Welcome to the latest episode of Generation ETFs. I'm Mark Noble, Executive Vice-President of ETFs Strategy at Horizons ETFs. On this latest episode, we discussed the war in Ukraine and its potential short-term and long-term consequences for the global economy and capital markets. The war in Ukraine is arguably the most significant geopolitical event, certainly since COVID-19 more than two years ago, and by far the most concerning military action in the European region since the end of the second world war. Now those of us in the investment management industry try to account for a lot of different sort of macroeconomic risks, and typically we're looking at metrics such as economic growth, commodity prices or even consumer demand. There really isn't much of a playbook in terms of understanding how a major military conflict can impact the global supply chain and what unintended, or in some cases very intended, consequences could be.

**Mark Noble**

That's a crucial point I want to highlight today. The humanitarian crisis in Ukraine will be catastrophic as potentially thousands of people die, millions are displaced and critical infrastructure in the country is destroyed. We don't want to diminish this in our conversation today and we are deeply concerned about the human cost of this war, and in many ways it will directly have long-term economic consequences for the world. There are just so many variables associated with the military conflict that it's impossible to know what the ultimate outcomes will be, but it's still very important to be looking at what we know and what those long-term geopolitical implications could be for investors.

**Mark Noble**

To really help us understand what is occurring in Ukraine and how it might reshape the global order in the next year, here today with us is Angelo Katsoras, Geopolitical Analyst at National Bank. Angelo will help us provide some clarity for Canadian investors on the immediate and more long-term impact this conflict could have on Europe and of course the globe, and very much so what the broader implications could be for investors.

**Mark Noble**

Welcome back Angelo. It's always great to have you on with us.

**Angelo Katsoras**

Thank you for having me.

**Mark Noble**

Look, why don't we just get right into it?

**Mark Noble**

I think the one thing that we should probably start this conversation on is an understanding of what is it, in your view, is Vladimir Putin's ultimate goal with this invasion, because I still think that's quite clear to a lot of investors? As an extension of that, what are the implications for Eastern Europe over the next decade as a result of this action?

**Angelo Katsoras**

Okay, sure. What this is about is basically a matter of Russia regaining control of that region, either indirectly or directly. For example, you make it like a satellite state of Russia or you regain control of it totally. To go back into history, if you look from the Russian government's perspective, they feel that NATO took advantage of Russia's weakness in the nineties to put NATO right to its border, and from their perspective, Ukraine is a red line. Some of them would even say, "how would America react if Canada joined a military alliance, of a number one geopolitical adversary of the United States?" I'm sure the U.S. wouldn't take that very lightly? Now, on the other side of the coin, you have the Eastern European countries saying, "Look, we're sovereign, we're free and we have the right to join any alliance we like, and we shouldn't be following the old-world zone of influence politics."

**Angelo Katsoras**

This is something, by the way, that goes back a long time. For example, 1962, during the Cuban missile crisis, America freaked out when they had Russian missiles in Cuba and the part of the deal was that Russia gets rid of their missiles and America got rid of their missiles from Turkey, which are pointing to them. So, this is something new. So when it comes to this, it's really about Russia trying to regain some of its zone of influence and reconquer some of these territories.

**Angelo Katsoras**

From the longer term perspective, regardless of how long this conflict will last, the trust and the suspicion and just the arm buildup, this is going to be a longer-term type of situation. And for example, if you look at commodities, I think we're all aware, Ukraine accounts for 10% of global wheat exports, Russia, 20%, and planting season begins in 20 to 70 days or so. If this continues, that impacts that. Even in Russia, which not impacted by the war, their farmers are dealing with tight credit, trying to get insurance, trying to get cargo to come in. So this impacts it, you have these longer-term impacts.

## Angelo Katsoras

What I feel also is that it really has fast-forwarded some of these trends we saw that began with tensions with the United States and China, where you're seeing a rejigging of supply chains. Where it started with semiconductors, it started with trying to bring back mining and refining. It started with COVID, to bring back healthcare supplies. Now they're going to try to be less reliant on Russia with energy over the longer term, which will be easier said than done. And this will be the very costly to do. So it's going to be a longer-term process. It's what I've called a low trust type of thing; where you don't rely on adversaries for key supplies.

## Mark Noble

Yeah. Well, if you look at Europe, the natural gas inflow from Russia is extraordinarily high in terms of it's need, especially in the largest economy, Germany. As you mentioned, it's also the bread basket for Europe. So even while North America might be able to create a little bit more of its own kind of regional zone for some of these key commodities, when you get into Europe, which is a major global economy, the European region, they don't really have an alternative at this point, do they?

## Angelo Katsoras

No, and the problem with Europe from an investment perspective is that even before this, I've been telling clients for a while, number one is that if you look at Europe, geographically, it's a very unlucky continent. It's surrounded by levels of political stability, right? So you have North Africa, Libya, you had Turkey and Syria, the Middle East. Now you got Belarus and Russia, for example, Ukraine. While in Canada, we're surrounded by two oceans and the United States. So just geographically speaking, Europe's challenged. Then you throw in the fact when it comes to energy, even before this crisis, energy prices in Europe were much higher than they were, and in a world that's becoming increasingly automated, energy's the new labor in terms of defining competitiveness, and I recommend to clients when you analyze companies or even sectors, analyzing electricity prices becomes crucial.

## Angelo Katsoras

The problem with Europe, when it comes to their environmental targets, is that even if you decide to make some changes, a lot of the challenges they face themselves in, is like years in the making. So if you decide to not store as much natural gas, reduce natural gas production, close your nuclear reactors, close other electricity plants using a different source of energy before assuring that alternative energy is really able to beat the demand, even if you make a course correction, this stuff could be years in the making. So if you say you're going to make LNG, that's years in the making. If you say you're going to try to produce more gas, that's years in the making. Even if they've called a nuclear reactor, for example, okay, that's 15 years of ...

## Mark Noble

At least. Yeah.

## Angelo Katsoras

We'll be retired by the time the first one comes online.

## Angelo Katsoras

Then you have the fact, they called natural gas a transition fuel even before this conflict, but it's only until 2030 with a lot of stringent requirements. So at the very best you might import more natural gas, but you're not going to produce more. Right, and so it leaves Europe in a very difficult situation and unlike past financial crises in Europe, you can't rely on quantitative easing to undo an energy supply bottleneck. Then you throw in the fact that once they do eventually make a transition to alternative energy, there's a risk that you'll go from being dependent on imports of oil and gas, to imports of the minerals and the refined minerals for the green energy revolution from the likes of Russia and China.

## Angelo Katsoras

The challenge with the west is that we've told a lot of people, especially younger people, that a lot of people in the west have tended to equate mining with environmental degradation. Now we're telling them we need the mines for the green revolution.

## Angelo Katsoras

In North America, if we're lucky, will make some progress. It takes 16 years an average to get a mine up and running when you first discover it. If you're lucky, according to the International Energy Agency, and in Europe it'll even be tougher to do. So you see in Europe these challenges are tremendous. That's why if you look at it from an asset allocation perspective it requires, I would argue before even this, you're reducing your asset allocation to Europe, for example, or you choose those companies that I call, Europe in name only. The ones that are not only export abroad, but have production abroad because they're not as impacted by the higher energy costs. For example, just making chemicals, 70% of the cost is natural gas as an input. So, those are the difficulties facing Europe.

## Mark Noble

I guess, and to a certain degree, it also creates a price shock because as you highlighted, in North America, we have energy with the Bakken basin and the Permian basin and obviously the oil sands in Canada. But trying to get excess capacity online, to your point, takes years. Maybe you can get something up in 18 months, but in North America, we're having a hard time trying to find people to work at McDonald's and Tim Horton's, let alone find people to come out to the oil field. So in your view, does this create maybe like a systemic price shock that maybe goes longer than people anticipate?

## Angelo Katsoras

The cure for high energy prices tend to be high energy prices, but if you don't get the supply coming in for many reasons, then you have to deal with it from the demand front, right? This will be the challenge. The challenge with Europe is, if all goes well, maybe you can produce more natural gas, but you have to deal with it from a social acceptance perspective. You have to deal with it from a regulatory perspective. All these things, which Europe has invested a lot of political capital in trying to make this transition, and you'd have to try to accept that you're going to not move this quickly as you once would.

## Angelo Katsoras

It's probably no coincidence that these carbon trading ETFs have now taken a bit of a hit, and some rumors or feelings that they're going to have to readjust some of these things. But once again, once you've made these changes, they're years in the making and that's why Europe's in a really difficult position right now. North America, despite our challenges, you are right, we have the farmland, we have the water supplies, we have the oil and gas. As a real country, we can react quicker. Sometimes in Europe, it's like herding cats when you deal with this. So I think when you look at it, say even if this conflict were to end tomorrow, just the divide in Europe will be long lasting.

## Angelo Katsoras

And the cost of just trying to bring back supply chains, just look at Ukraine for neon. I think it's neon that's an important component for semiconductors. Just trying to move that somewhere else and build it up and get it going, this is a years-long process, the cost of which cannot be underestimated.

## Mark Noble

Let's specifically focus on Russia here in terms of economic impact. We've obviously seen unprecedented level of economic sanctions put on them, but in terms of your view, what do you think the long-term impact is on Russia? It is a major economic player, much bigger on the geopolitical school sphere than its economy, but do you think that these sanctions do much to deter their actions on a go forward basis scenario?

## Angelo Katsoras

Well, one of the reasons why I was surprised by the length of this, the impact of this major invasion, was that one of the few things that would've elicited a major European response, would've been a bloody land invasion. And we got that. So I think Russia was surprised by it, even though there's a [inaudible] for oil and gas. But I think when you look at long term sanctions, there's a lot of unintended consequences. So back in 2014, when they put in place sanctions on Russia, which were a lot less severe, they hit their agriculture sector and Russia at that time was an agriculture under performer. But because necessity became the mother of all invention, they actually in a few years you woke the sleeping giant, so to say, and they became one of the biggest agriculture producers in the world.

## Angelo Katsoras

Now, this shock here is probably going to push them into China's arms a lot more, right. It's going to probably speed up plans with China to digital currencies. So you trade directly without going through the U.S. system, alternative payment systems. All this takes a tremendous amount of time. So I think that's where you're going, but if you're China, first, when you look at it, in the beginning on the one hand, it could be the gift that keeps on giving because you divide the west, you keep it distracted, Russia goes more into your arms, you get more energy supplies on a discount. But over the longer term, if you're China, you start getting a bit worried because oil and gas prices are rising, material prices are rising, the global economy weakening; is this what you want?

## Angelo Katsoras

When America used to hit them with sanctions, Europe was always reluctant. If China starts to, which they'll probably try to do, circumvent some of these sanctions, well, the impact of a U.S. and EU combined in putting in place sanctions, is something that might keep China up at night. Also what we're seeing is I think we're seeing a fast forward to two economic blocks, [inaudible]. So if you look at it already, there's already two separate internet systems. There's two separate GPS systems. There's two separate 5G infrastructure systems. There's two separate payment systems. If you look at the financial system, where to Russia's shock, one of the most efficient sanctions of being, where you stop them from using a good chunk of their foreign reserves.

## Angelo Katsoras

So if you're China and you say to yourself, "Look, we got a good chunk of money at U.S. dollars, can this be repeated against us?" You're going to take measures, or you're going to try to take measures to be less vulnerable to what Russia got hit by. That's another kind of decoupling of financial law. And if you're these American firms, which are trying to balance Russia's geopolitical competition with America, well, with trying to gain market share in China, these wall street firms, it just gets even more difficult, right?

## Mark Noble

But you also have a spillover effect too, where countries especially, not the major economic players, but countries that are in this economic sphere of those benchmark nations, whether they're China or United States, they kind of are going to have to make a choice, I would imagine in the next few years, in which system they want to be, and similar to the communist and Marshall plan kind of arrangement we had in the sixties, going into the 1970s where, do we want to be in the Chinese economic sphere and make inroads there or do we want to be in the American economic sphere? It seems like a little bit of de-globalization as you highlighted, which could have serious ramifications in terms of where people draw their line.

## Angelo Katsoras

Well, if you're China, you introduce a digital currency, one of the main reasons is that you don't have to go through U.S. financial system. Theoretically, they can go through their central banks. That's what their plan is. If a country that's just on your border and they trade 80% with you, China's not going to ask them to use that currency. They're just going to tell them. So, because America's biggest weapon with regards to China or Taiwan is not the warships, it's the ability to do massive U.S. financial sanctions, you could see the complications of sanctioning Russia, right? Imagine how much more complicated it would be for Chinese supply chains, in terms of that. So if you're China, and you're saying maybe in five to seven years, we trade more with this digital currency.

## Angelo Katsoras

Then if U.S. ever tries to hit us with this, they won't have the same impact as before. So I think one of the longer term consequences of these sanctions is that plans to create alternative payment systems and digital currencies are going to be fast-forwarded and more regionalization, right? More efforts to regionally integrate things with North America or friendly countries as well. But I don't think we should underestimate the costs of these things. The world has changed, but we could all say it is fast-forwarded. It started with China-U.S. tensions, semiconductors, COVID, healthcare supplies and now we're dealing with trying to diversify your energy supplies, which are going to be easier said than done.

## Mark Noble

Do you think the military conflict, and then this is a big X factor question, but do you think the military conflict could expand beyond Ukraine? Like, are there other Eastern European, former Soviet Bloc nations that might befall a similar faith?

## Angelo Katsoras

Well, for me, the longer this conflict goes on, the greater the risk of something happening where Russian troops chase Ukrainian planes into Poland's airspace, shoot them down, Poland gets involved and it's NATO, right? But you could argue when it comes to Poland or the Baltic states that since they're part of NATO, and there's already NATO troops in each one of them, they have the nuclear shield. So similar to how America doesn't want to get involved in a direct conflict, no flight zone, because that would be World War III if you're shooting on Russian planes, it would be the same, you're assuming, for Russia getting involved or attacking Baltic states because American troops are already there.

## Angelo Katsoras

So are other countries troops that who have nuclear weapons as well. But you have these unintended consequences. The least worst scenario for me would be that Russia declares that they're going to take control of east Ukraine and keep Crimea, which is always the case. Then Ukraine says we're going to have a neutrality and then there's a deal, but perhaps in six months they each blame each other for breaking it; that's the least worst scenario area. That's not even a great scenario from Ukraine's perspective, but it's the least worst scenario. I know that the leaders are meeting on Thursday, but who knows how this will play out. Will Russia feel they've gone too far and want to take it to the conclusion or will they declare victory and leave parts of Ukraine in rubble, but then have a cease fire? We'll see.

## Angelo Katsoras

Regardless, I think it's important just to say that the suspicions created and the divide created, I think it's regionalization, you could say, on steroids now.

## Mark Noble

Well, we had this conversation the last time you were on here about sort of the rollback of 40 years of globalization, and it just seems that this war warp speeds that even further.

## Angelo Katsoras

Yeah, and that's it. If you're an investor, you have to say to yourself, in addition to the quality of a product or service, whether the company in question fits the geopolitical objectives of their market. So, it's not always going to be the best product that wins and I think that this is will repeat itself because a lot of bringing back, whether it's neon or copper or natural gas production into Europe if they would be shocked into accepting more natural gas production, this will all come at higher costs. It's security over efficiency. There are tremendous things to rejig these things, as we all know.

## Mark Noble

So if I'm an investor, Angelo, how do I de-risk my portfolio from this? Like, what are some new lessons for a portfolio that I need to start really taking seriously?

## Angelo Katsoras

Well, I think, just from a geopolitical perspective, I think when you analyze just from a company perspective, you have to analyze what zone of influence it's in, for example. What the risks are of losing control of your project, for example, if you're in another country zone of influence. There's also the fact that from a geopolitical perspective, when you see great demand for something, whether it's minerals for a transition to green energy or demand to try to diversify your energy supplies like Europe, but at the other end let's say you see a supply bottleneck, there tends to be, in the middle to be like higher prices. From an investment perspective, it can be a situation where you benefit from, ironically, these tragic events but you have a price spike. So these significant demand trends followed by this unmovable object of supply bottlenecks, which in some cases in the shorter-term, be met with lesser demand or a slowdown. That's something you take into consideration.

## Angelo Katsoras

Oil prices have tended to rhyme with the economic slowdowns, we're not sure if this is going to be the case or not. They also tend to be twined with some other issue that comes along with it. So looking at these issues, and also looking at what's crucial from a country's national security perspective. As we mentioned last time, I think during our podcast, when rare earth prices collapsed back in 2011, we were capitalists. We let all our companies go bankrupt; China subsidized theirs. If rare earth mineral prices, which are crucial for alternative energy and IT products, were to crash this time, the U.S. government and Western governments would have to subsidize it. They cannot let them go under, right?

## Angelo Katsoras

It becomes also analyzing what you consider to be strategic. I also think when it comes to natural gas, which not too long ago many Canadian companies had to write down the value of their natural gas assets. And I think we're going through a bit of a renaissance because a greater societal awareness that it's not just required for heating, but it's for fertilizer, it's for chemicals and even before this, countries like China have been really going hard on natural gas as a way to replace coal because they consider solar and wind at the moment to be too intermittent to fully transfer. Then one of the most underappreciated facts that using natural gas to make electricity is much less water intensive than coal is. Natural gas is like a barbecue, you can adjust it as a backup for solar and wind, which you can't do to the same extent for other fossil fuels. But then you have that question where you have this demand, more LNG coming online, then the question is, well, the west will they adjust their carbon targets or their green targets to allow for more production.

## Angelo Katsoras

If you're a company, you'll say, "Okay, are we going to build a natural gas production facility for the next 20 years, if in five or seven years, these green targets make it less and less profitable?" This is the question. So we'll have this natural gas kind of renaissance, but will there be sufficient demand. Will there be sufficient production to deal with this? So I think we're going to get a greater awareness on [inaudible] natural gas is in the production cycle that perhaps we kind of underestimated.

## Mark Noble

What's your view in terms of the ESG kind of arguments that we've seen? Because what I found really interesting about this year so far is the last decade, really the last six or seven years, there was a real focus on the part of institutional money managers to have an ESG focus, which meant for the most part, they were trimming down their exposure to carbon producing fossil fuels, and didn't even look at military industrials. Now we see almost a complete about face. Does this upend ESG? If these become crucial linchpins of economic security over the next decade, do you think there might be a rollback of ESG or a reframing of ESG?

## Angelo Katsoras

Well, I think, the longer term targets are going to stay, but I think you are seeing adjustments. If you look at Germany, for example, it's a central left government with the green party as their coalition partner and they've said now, the green party hates nuclear energy so they're not going to get rid of the last few reactors. They have three. They've also said they're going to build more LNG. And they've even said, if worse comes to worse, they're going to start using more of their coal fired electricity plants if they have to. They don't want to call it that, but you are seeing a bit of a readjustment. If you look at the energy sector in the United States, I forget the woman's name, she recently said, "We want to see more rigs up and running." It's night and day from what we saw before. You only have to look at the fact that America's going to Venezuela requiring for them producing more when you probably could have got that from Keystone, for example, and in a less polluting manner.

## Mark Noble

Yeah. In a politically stable environment.

## Angelo Katsoras

Yeah. And less human rights abuses, you name it. So I think there'll be some discrete adjustments. So the longer-term targets will be maintained, but they're going to be some adjustments to this. I think ensuring that green energy's ready to take the lead before you completely phase out. That wasn't a talking point before, but now with these prices, as they are, Biden's saying they're toying around getting rid of energy taxes, for example gasoline taxes, it really is an about face. So I would be surprised if Europe even decided to reconsider shale gas production in certain of it's... UK recently banned it, France as well. But once again, even under that scenario years, years and years to make that transition. And so that's the difficulties, but particularly Europe finds itself in.

## Mark Noble

Well. Perfect and thank you Angelo for being with today. I think, if there's a big take home for listeners, it's just that the reorientation of what has been our consensus view of investing has been upended in the last three months as a result of this conflict and this inflationary environment, which means that 2022 is probably one of change for portfolios and how we view investments. I want to thank you today for really coming on here and helping us start to rethink about what does this mean for the long term. And I think the consequences are quite significant, and this is something that we'll have to continue to monitor and have you again on soon probably to follow up in a few months as this situation starts to evolve.

**Angelo Katsoras**

It was my pleasure.

**Mark Noble**

Thank you so much, Angelo.

**Angelo Katsoras**

Thank you very much.



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