COVID-19: Where We Are and What Comes Next

Brian Belski: Good morning. Thank you for joining us on behalf of BMO Financial Group, this is Brian Belski, Chief Investment Strategist at BMO Capital Markets. Thank you for joining us for Where We Are and What Comes Next, with respect to COVID-19 and coronavirus. Today, you're going to hear from medical experts and subject matter experts from BMO Capital Markets with respect to those subjects, especially important today on a momentous day in American and world history with the first person being vaccinated here in the United States. This is a reminder: If you do need medical attention, please reach out to your medical professional.

Joining us on today's call, and someone that has joined us for the last 10 months on all of these calls, I'd like to thank Dr. John Whyte personally for everything he's done for our clients and for BMO Financial Group in general; it's just been wonderful. And so, Dr. John Whyte from WebMD is joining us. We also are privileged and blessed to have Dr. Allison McGeer, from Toronto and Sinai Health, to provide us with a Canadian perspective. So, we're doing things a little bit different this time, we'll grab an opportunity here from both doctors in their perspectives and then have an opportunity to speak to one another and give an additional perspective on what they thought of each other's comments. Then we'll hand it off to subject matter experts at BMO, which include Deputy Chief Economist Michael Gregory, as usual, and our head of Fixed Income Currency and Commodity Strategy, Margaret Kerins in Chicago, and then I will also layer in some comments with respect to investment strategy.

Just a reminder for those of you that have joined us online, you can, and please do, send us any questions, comments, concerns that you may have in the chat line that is with you also. There's a tremendous amount of content available to you on bmocm.com to look at all the content that we have been providing all of you as clients, and please reach out to your Relationship Manager if you're not seeing that.

So, let's get this rolling with Dr. John Whyte, who, as I previously said, is the Chief Medical Expert for WebMD, has been there for several years. He also is a former FDA member, which obviously is topical with how fast this vaccine got out, and there's a lot of things that he's going to share with us on how that happened. And also remember, too, that Dr. Whyte is a practicing doctor in the DC area, so he's a frontline soldier and has been all along this journey with respect to COVID-19 coronavirus. And with that, Dr. Whyte, please go ahead.

Dr. John Whyte: Well, good morning, Brian, and good morning, everyone. I'm going to start off by telling you where we are and maybe leave you with some predictions about the future. And I think this is really good news. As you all know, the FDA authorized the COVID-19 vaccine from Pfizer and BioNTech on Friday night. Basically, what it talked about was that it is a safe vaccine and that it is 95% effective in preventing symptomatic COVID-19 infection. And that is really big news, as Bryan had mentioned. It has already started in terms of the vaccination of persons today. It had previously been authorized in the UK, in Canada, and in some Middle Eastern countries. But I also want to talk about what else the FDA recently put out in a factsheet, because some people had brought up this issue of the severe allergic reactions that we saw in the UK. And I just want to read it. It said that people with a history of allergies,

but not for those who might have a known history of severe allergic reactions to any of the contents. So just because you have allergies, doesn't mean that you would not get the vaccine, but if you have severe allergic reactions to the ingredients. So, you know, I printed out the ingredients because everyone has been asking me, "What's in the vaccine?" And it's really very little. It's obviously the mRNA – that I'm going to come back to – it's lipids, which really is a suspension for the vaccine, it's salt and it's sugar. So, I want to put it all out there, because sometimes there is misinformation, particularly about the ingredients.

The FDA also said that there was insufficient evidence for pregnant women or women who are lactating. There's no absolute contraindication, but women who are pregnant or lactating will want to discuss it with her doctor. Now, Pfizer did say that starting in January they're going to study it in persons of less than 16 years of age, because the vaccine is authorized for persons older than 16, and it is also going to study it in pregnant women. So, the big news is 2.9 million doses are being sent out right away. That's over 145 sites today, 425 sites tomorrow, 66 sites on Wednesday; 2.9 million doses right now. There are another 2.9 million doses because, remember, this is two shots and then some are held in reserve.

The CDC did make recommendations about prioritization in terms of health professionals and those that live in long-term care facilities and those that work in long-term care facilities are first. But ultimately, the States and local jurisdictions are deciding exactly how that's going to be given out. Some of them are doing it at the same time. For me, I work in an outpatient facility. Some places are deciding they're first going to do hospitals and then those that work in clinics. So, there's going to be a little bit of differences across the different regions in the United States.

We'll then have 25 million doses of the Pfizer vaccine by the end of this month, the end of the year, 25 million. That basically will be for 12 million persons, because, remember, it's two shots, and then 100 million doses by March or April. It is going to be free in the United States under the Cares Act. There may be an administrative charge in administering the vaccine, but the insurance companies are going to pick that up. So that's important to put it out there. Remember, I mentioned it a couple of times, it's two doses separated by about 21 days. We think you may have 50% immunity after the first dose and then that 95% immunity about a week after you have the second dose. So, before you have the immunity that we really want, it's going to take about four weeks, because you're going to have to wait until after you got that second shot. How long you're going to have immunity for, we don't know. We're hoping it's several years; we're hoping it's not like influenza, and I don't think it will be. But remember, these studies are going on for two more years, so we're going to continue to find out more information.

The other point I want to put out is by law in emergency use authorization considers the drug investigational. And I point this out because there's some discussion whether this vaccine will be mandatory. I don't think it will be, partly because of that investigational designation. And at the same time, we want to inspire confidence; use the carrot, not the stick. That, I will come back to.

I also want to point out that Pfizer did announce that in April it will apply for full biological application, which is called a BLA. So, full approval. But there's still more good news because, as you may know, Moderna's vaccine is going to be reviewed by the FDA this week, on December 17th, so that's encouraging. That's also an mRNA vaccine. And just in 30 seconds I want to describe how the mRNA vaccine works. mNRA, we're inserting a piece of genetic material that is going to create the spike protein. It's called coronavirus because it has a crown, and these spikes are actually what allows the virus to get into your body, to get into your lung, to get into your blood vessels. So, if I create, using the

code to make this spike protein, which isn't harmful, then when I actually come into contact with COVID-19, I'm going to map an immune response and protect myself. So that's how that works.

But there's also other types of vaccine candidates, J&J has what's called an adenovirus that's going to be looked at by FDA in February. They expect to apply for the EUA. They recently announced they're going down from 60,000 persons in a phase three trial to 40,000, recognizing we need to be moving on this. AstraZeneca, you may have heard about, is also an adenovirus; they've had some challenges in the interpretation of the data. First it seemed to be about 60 to 70% effective, but that was with a half-dose followed by a full dose. It didn't completely make sense. Maybe 90% – or that as 60% at first and then the half-dose and the other doses. It all gets very confusing. See, even I am confused reporting it, so we're going to have to learn more about that.

But the key about these two viruses, the adenovirus, is that it doesn't require that super-cold temperature. Logistically it is going to be easier to administer, and that might be very relevant for the developing world. The other thing is J&J has both a single-dose regimen – that's what they originally started with – but they're also testing a two-dose regimen, as well. And then Sanofi and GSK also have a vaccine candidate and they had some challenges with the formulation and they probably are much further in third and fourth quarter in 2021.

But the point is, this really is a game-changer in our desire to crush COVID-19. It's not the only strategy that we can use. First of all, we still need to do the mask-wearing, the physical distancing, the hand washing, avoiding large gatherings. It's going to be several months before we really see the impact of a widescale immunization, but it really is light at the end of the tunnel. I feel very good today about where we are. We've been limping along and this really gives us a comprehensive strategy. And the reason why I say that is we focused a lot on vaccine development, but operation warp speed is also about therapeutics, as well, and were continuing to study therapeutics. I expect we're going to have a much more aggressive testing strategy, as well.

We've had direct-to-consumer authorization of COVID tests; we've had self-collection at home recently authorized, so we have a lot more strategies than we did before. What I also want to end with is, this really is a success story of innovation, of science, of engineering. We should be celebrating the progress and the success that we have, not just in vaccine development, but also where we are in therapeutic actions, as well, and testing.

So, it's really exciting where we are in terms of just over 9 or 10 months, and I'm going to come back to this when we talk a little more about vaccine confidence. Let's celebrate the innovation that we have, the scientist, the engineer, the doctors. As well, appreciate all the frontline workers, the health professionals, the bus drivers, the essential workers, law enforcement. It's been a long process over the past 10 months, but we're in a much better place by far today than we were just a week ago. And with that, I'll turn it back over to Brian.

Brian Belski: Thank you, Dr. Whyte. Yes, I think we should celebrate and we need to all over the world. So, with that, I'm going to hand the ball over to Dr. Allison McGeer, who is A Canadian Infectious Disease Specialist at the Sinai Health System, a Professor at the Dalla Lana School of Public Health, and a Senior Clinician scientist at the Lunenfeld-Tanenbaum Research Institute. Dr. McGeer has led investigations

into the severe acute respiratory syndrome outbreak in Toronto and worked alongside Donald Low. During the COVID-19 pandemic. Dr. McGeer has studied how SARS COVID-2 survives in the air. And with that, Dr. McGeer, it's all yours.

Dr. Allison McGeer: So, the first thing I want to start with, this is absolutely a day for celebrating. It is incredibly exciting to be watching the vaccine roll out in Canada and the United States, and as has been pointed out, a triumph of literally warp speed for the development of vaccines to get us out of this pandemic. But maybe it's just being Canadian, I want to spend just a minute talking about the tunnel before we get to the light at the end of it, because one of the things we need to be really careful about in the next three months is that we don't get so excited about the vaccine that we lose control of the pandemic in between.

So, this slide shows you our current instance per capital in Canada. One of the things that you have to recognize is where Canada is, we may think we're one country, but really, we're 13. You can see on this slide that over on the right-hand side is our Atlantic bubble with very, very low rates of COVID-19. Really great success story of controlling transmission. And on the left-hand side, Alberta, our province with the current most difficulty. In Alberta, we are already well over our ICU capacity. It's important to remember that we have much less capacity in terms of hospital beds and ICU beds in Canada than the United States does, so we hit our limits much more quickly, and Alberta is clearly going to be in very difficult health care circumstances for the next two months at least.

And just to give you a sense of how we compared to the United States, this is that Rhode Island was the top last week in terms of incidents, Hawaii was bottom, and you can see that Canada is well down the list, but we're not that dramatically different from rates in many American states. And the big question, of course, is how much trouble are we going to be in? So, in Canada what we're looking at at the moment is we started our increase in COVID in the middle of October, shortly after Thanksgiving holidays, and we have gradually in each province at slightly different times, been increasing our COVID control measures. And that has slowed the rate of growth, but it hasn't stopped it. So, we're sitting in Canada at the moment at a reproductive ratio just a little bit above 1. Pretty consistently, cases are still climbing, but they're climbing very slowly. And all of us are living in fear that over the holiday time, people will just not be able to bear to maintain social distancing. And the consequences of that is that we'll start to see cases increase. Remember, there's a lag time between when people are exposed and when you start to see cases, which is 10 days to two weeks, three weeks to hospitalization, four weeks to ICU, so people are very worried, particularly in Alberta with very high rates, that we're going to have a serious problem with intensive care unit capacity and health care capacity in general in February and March.

So, you hear now the plea going out from public health authorities and politicians all across the country to say, just see if you can delay Christmas; do your holidays virtually so that we don't get into a crisis in health care in January, February, March, and we don't have this large excess of deaths that if we can delay them, will be prevented by vaccines.

And then as with the United States, okay, we have, before the end of December, 294, 000 doses of vaccine coming to Canada, so that's just about exactly the same rate per population as Americans are getting. And, like you, the Pfizer and BioNTech vaccine coming first. Hopefully, Moderna will get

approved this week, and then I'm told that it will start coming next week. And that's really helpful to us because our protocols for vaccination in Canada start with long-term care residents. And Pfizer has been so worried about the stability of their vaccine in transport, particularly when it's thawed, that we are only giving Pfizer vaccines at specific health centres. That means we can move staff to those health centres, but we can't move, obviously, residents of long-term care, and so the residents of long-term care who are right at the top of our list are not going to be able to get the vaccine probably until either the Moderna vaccine comes in, or Pfizer gets enough stability data to allow vaccines to be thawed and moved outside of centres when they are thawed.

Where are we going from here? Well, as Dr. Whyte has already said, there's going to be a little bit of variability between provinces and what we do. In Ontario, we're very clear that our major problem at the moment is in long-term care and will be focused on residents of long-term care, health care workers in long-term care, essential caregivers for long-term care. Alberta, on the other hand, which has a much bigger problem in acute care at the moment, is going to start with acute care hospital health care workers, and that makes sense. And all of us are then going to be trying to deliver as much vaccine to our designated high-risk groups as we can.

Again, a little bit of a breather, those of us who are not in those high-risk groups are going to have to wait. If you add up all of our high-risk groups in Canada, the first tranche of vaccine, that means we need 6.4 million doses of vaccine, everybody gets vaccinated, and that's how much vaccine we expect to have by the end of March. So, it's going to be the end of March before we are through the first high-priority group. Getting to that group will allow us to get health care back, it will stop deaths in our long-term care facilities, hopefully it will stop outbreaks in our long-term care facilities, and then we will be able to move on to the vaccination program for everybody else, which will get us our life back, and normal life back, but that's going to take probably until sometime September and October.

So, it's really an incredibly exciting time to watch, but it's also we also need to be taking a breath, saying, okay, we just need to be keeping this up for another five or six months until we get enough people vaccinated to slow the spread. Thank you.

Brian Belski: Thank you so much, Dr. McGeer. I think we're going to shift now to back and forth between two doctors, if that would be alright? And Dr. Whyte, listening to Dr. McGeer's comments and knowing what you know about Canada and everything that's all wrapped up into the last 10 months, is there something you'd like to interject or speak with Dr. McGeer now that you have this forum?

Dr. John Whyte: You know, I think the issue here has been vaccine confidence. Are people willing to take the vaccine? And that's why I talked about celebrating innovation. As many people know, there has been in some ways an attack on science and some days I feel like instead of saying I don't understand science, people are saying I don't trust science. So, I was wondering your thoughts on kind of the cultural differences that exist, even though we're neighbours between Canada and the United States, and whether you think acceptance of a vaccine will be a challenge in Canada as we're concerned it might be here in the United States?

Dr. Allison McGeer: I do think acceptance of the vaccine is a going to be a challenge. You know, this is new technology, this is a new disease, this is a new vaccine, and of course people are worried about it and have questions about it. I think our success in vaccination is going to be in how well we communicate what's been going on with the vaccine, why it's come so fast, why it kind of looks like it's rushed, when in fact although it's rushed, it's actually very carefully rushed. And it's also going to depend on what happens with the rollout and how we manage it. You know, every year when we do influenza vaccination campaigns, something happens that causes you to worry about the influenza vaccine. And how we deal with that in public health, how the media deals with that, really has a huge impact on what happens with vaccination programs. So, I think one of the things is, in all the countries, we can expect a bumpy ride, okay? This is going to be a – there are going to be some adverse events, probably not associated with the vaccine, but you're not going to know that for sure when they start. There's going to be children who die from COVID that are going to drive up demand, so I think demand is going ebb and flow as the new cycle ebbs and flows, but it's also really going to be very heavily dependent on how well we do as a profession, in medicine and nursing, in communicating information about these vaccines and their efficacy and safety to people. I'd say that that's on us for the next 6 to 9 months.

Dr. John Whyte: No, I agree. You know, I almost hesitate to say the words "genetic material", because people get concerned and I purposely didn't say it was a chimpanzee adenovirus. Do you think language matters a lot here? I think we have to be transparent and put the data out there. And even if people aren't experts, for it to be out there so they can look and see themselves. But does that worry you at all in terms of kind of the language that we use at times?

Dr. Allison McGeer: You know, there's a lot of things about the specific technical language you use in vaccines that is guaranteed to make people anxious. It's easy to get upset about, you know, if you – you can. So, I can say to you, okay, Pfizer vaccine has very few things in it and they are lipid and salt and sucrose. And then you go online and one of those lipid names has 27 syllables, and it just looks dangerous when you look at it, you know, and then it takes trust in a chemist who can just say to you, "Oh yeah, you know, here's the chemical components of that and that's pretty simple and that's just something that gives you a long chain that makes little my cells to protect the mRNA to get it in cells," and it kind of makes sense. But, you know, there's no doubt that when you get into technical language, that it can be relatively scary for people.

I think we're better off just to tolerate that. I think we have to. It's going to be available online, people are going to see it. We have to get people sort of up to speed on this. You know, when I was talking earlier, I used the term reproductive ratio, you know, and who would have thought that that 11 months ago I could say productive ratio to anybody in the world and they would know what it was, right? I think we're going to be like that about vaccines, and that's going to be a really good thing for vaccination, going forward, because we start to have this discussion in detail about understanding what's in your vaccines. That can only be good in the long term. What do you think? How much trouble are we going to be in with vaccine hesitancy in United States?

Dr. John Whyte: I think it's going to be a challenge, particularly in minority populations where there has historically been a distrust. But I am confident that as we have this transparency, as scientific experts talk about how it's not rushed, and that we also weigh risk versus benefit, let's be honest, we all want schools fully reopened, we all want businesses reopened. And anything that we can all do to contribute to returning to some sense of normal, I think at the end most folks are going to get behind. In the media world, we have to be careful to put it into context. You're right, people are going to have some adverse reactions. There's going to be some logistic challenges, just as we saw in testing, just as we saw in PPE. We're going to have to be patient, but recognize a lot of people have been comparing COVID to, you know, a house fire, and we have to treat it as that house fire and quash it all at once. And the vaccine is going to give us one of the strategies in combination with improved testing, on improved therapeutics.

Brian Belski: Thank you, Dr. Whyte, thank you, Dr. McGeer. We're going to switch gears now and hand it off to BMO Subject Matter Experts, and we're going to start it off with Michael Gregory, who is Deputy Chief Economist at BMO Financial Group, live from Toronto. Go ahead, Michael.

Michael Gregory: Thanks, Brian. Well, I guess the answer to the question as to sort of where are we right now, and as the two doctors have emphasized, it's great news that we've developed and are distributing a vaccine much more quickly than was believed would be the case just several months ago. And I think most people are looking at the prospects for the economies on both sides of the border and saying that the second half of next year and in 2022, those prospects are brightening. And unfortunately, we have to get from here to there. And where we are here is those infection rates rising. And as a result, we're seeing provinces and states and local jurisdictions increasing restrictions. I mean, just within the last sort of week or so we saw restrictions increase in California, and in Alberta. Just today went to enforce the restrictions on indoor dining in New York City, and also today, the expansion of restrictions in the Greater Toronto Area.

And these restrictions are going to have a hit to growth, and we do expect that the very strong growth we had in the third quarter is going to peter out as we turn the year. Now, the good news about this, is that this is not going to be sort of an impact that we had, say, in the spring, with the first wave of lockdowns. We're a little more targeted this time, trying to keep schools open, where possible, which is critically important for labour force participation and things like that. And besides, I think businesses have gotten accustomed to operating under COVID protocols, so it does make it a little bit easier, yes. If businesses can't open their stores anymore, we can resort back to sort of the curbside pickup, online, that kind of stuff, which may not have been as easy to do because it hadn't been set up yet back in the spring. And let's face it, that first wave of the virus had a lot of casualties on the business front and, you know, that means there's potentially more customers available for every surviving business. And besides, I do think that the hit to business and consumer confidence from the second wave is going to be much more dampened than was the case in that first wave, because we all know we're starting to see those vaccines being distributed as we speak.

And yes, it's true it's going to be some time before that gets to the general population, and therefore the economy is vulnerable in the interim. And that's why it's critically important at this stage for governments, government policy, to try to get us over this COVID winter hump. And we've seen that, for

example, in Canada with the latest fiscal update. It tacked on a budget deficit now that's for the fiscal year ending in March, some $382 billion. It was $343 in its first pass back in the summer; extending some of the programs through the spring to try to make sure that the economy has that support that it needs. And we're kind of waiting to see what comes out of Washington. There already is a bipartisan bill, $908 billion to provide some support and particularly expansion, or rather extension, of the unemployment insurance support programs, the expansion of the moratoriums on evictions, the extension of the forbearance on student loans and other mortgage program.

So, these things are there, unfortunately it's getting caught up a little bit on the political side. It's unclear whether we'll get that passed before the end of the year, which is critically important because a lot of these programs do end at the end of the year and there are some 13 million Americans that are collecting some of these extended and expanded UI benefits, and they all will lose those benefits come January 1st. So, you know, we do think we will get that support, but it is critically important that we do get it to get us through this hump. But I think beyond that, you know, we're going to see growth in Canada probably grind to a halt through the turn of the year as these restrictions begin to show up in the economic activity. Let's put it this way, we had growth of 40% annualized rate, slightly more than 40%, in the third quarter. We think we'll probably be down about 2.5% for the full fourth quarter, and that includes a little bit of slowdown, literally potentially on a month-to-month basis, a slight contraction through the turn of the year. And in the early part of next year, roughly around that sort of 2% range, give or take a little bit, in the United States.

You know, we had the 33% expansion in the third quarter. The fourth quarter we figured they'll do a little better. The restrictions are coming a little bit later than they came in in Canada, therefore the economy didn't get hit by as much. But it's really about 5% growth in the fourth quarter. But even in the first quarter of next year, we think, again, as things slow down even further through the turn of the year, we'll be down around about a 1% growth rate, which is pretty slow comparing where we went before. Now, we do think that what these restrictions will do, they're going to dent this recovering, but they're not going to derail that. But it is critically important that we get further support. We're getting it in Canada, I suspect we will get it in the U.S., if not before the end of the year, if not immediately after those Senate runoff elections in Georgia. And if not then, then presumably very early in the first few days of a Biden administration. So, I'll leave it at that for now and I'll pass things over to my colleague, Margaret Kerins.

Margaret Kerins: Thank you. Thank you very much, Michael. We agree with the setup that Michael has just outlined, and in this backdrop of extreme monetary and fiscal stimulus, next year we do expect 10-year Treasury yields, Treasury yields in general, to remain range-bound. We expect that credit spreads will actually make a run toward all-time types breaching the prior types of about 85 basis points, which is an incredible recovery over what we had seen in March. That said, we do think there will be some bumps along the way as also mentioned by Dr. McGeer.

In Treasury rates, we do think that we could possibly reach the lows of 2020 in that 50 to 60 basis point range, and also make a run toward the 1% to 125 range. So, range-bound within a classic range, but the lower end defined by what we did see in 2020. This basically is due to the backdrop of we expect that if we make a run towards 1%, 125, better buying will emerge because rates are low globally. We've got a global environment of fiscal and monetary stimulus, and U.S. rates are still relatively attractive. The view

in credit spreads of making a run toward the all-time types is basically supported by a very accommodative Fed and Treasury market and a reach for yield environment. We do agree with Michael and our economics team that the economy is set to slow down in the first quarter due to these re-shutdowns that are occurring across the United States. And while that normally would be credit-spread negative, we think the market looks past that and continues on the liquidity and reach for yield binge that's been occurring.

You know, in terms of one of the big stories in the backdrop is the market will try to price inflation next year just given the amount of monetary fiscal stimulus that has occurred or will continue to occur. We think that the Fed will be bound by that feedback loop where, if you get any real pricing of inflation, the equity market sells off, financial conditions tighten and the Fed, again, has to step in and increase some sort of accommodation. In addition to that, we completely retain our conviction that the long-term demographics, technology and globalization that are still occurring in the marketplace will suppress long run inflation. Now, when I said bumps along the road, some of the bumps will be because of the market trying to price in those inflation expectations as the economy rebounds once we're more fully reopened on the back of what these doctors just explained to all of us.

We also think the market is going to try to price some tapering. The Fed has learned their tapering lesson from the prior crisis, and we don't think they're going to go down that path next year at all. And more likely, they will remain extraordinarily accommodative with an open door, and that should keep financial conditions pretty steady. So, while it doesn't sound too exciting with the range-bound market, which is very, very typical, there will be some bumps along the road, but we think back up to the upper end of the range in either credit or in rates will be a buying opportunity. If I was asked, you know, what could be an outside risk? Obviously, we've got the geopolitical risks that are always in the background, and any kind of heating up there could become a problem next year.

We also have the fact that Treasury is set to issue a record amount of coupons, and that's not bills on the front end, it's coupons. We're estimating $1.7 trillion. To put that in perspective, prior to the crisis 2019, we were probably just under a trillion, so we're going – and this is not issuance, net issuance added to the market, this is net issuance going into the public market post-Fed-buying, assuming that the Fed continues to buy. We're looking at $1.7 trillion in coupons that will be needed to be absorbed by the private markets next year. Not really a lot of focus this technical currently in the marketplace, and I really think that's because of the Fed backdrop with repo facilities in liquidity, etcetera. It's not really being seen as a problem, but definitely something to watch, I think, as the story unfolds next year.

So, basically, that's all I have. I do encourage everyone to please take a look at our 2021 outlooks, and also if you have any questions or concerns, please reach out to myself or the rest of our team, and also if you have any questions. And I wish everyone a happy end to the year and a good next year.

Brian Belski: Thanks, Margaret. Before we go to questions from the field, and thank you so much everyone for sending in your questions. We do have questions that were going to ask the docs. I thought I'd kind of wrap this up into a little bow with respect to what we're saying in terms of investing for both the United States and Canada.

As we take a step back and kind of look at this year, 2020, and I know all of us want to kind of forget about 2020, but I think there's still a lot of things that we can remember about 2020 and implement that in our lives and how we invest, going forward. So, the way I kind of look at it is the three Cs of COVID. The three Cs of COVID: chaos, co-exist and now, cure. Clearly, the chaos that we say in the first quarter was driven by fear and rhetoric, and we didn't know. And that's okay, by the way. That's okay. In no other time in human history did our social, personal and business lives intertwine as we were forced to stay at home and the like. Then as stimulus hit, then, as we began to coexist and learn how to coexist with the virus, from social distancing, to hand washing, to masks, the market continued to recover. And now we've moved into the cure phase, and what we're going to do next with respect investing and how we're going to invest.

And if 2020 taught us anything, it's not going to be as easy as the market is predicting, it's not going to be as easy as buying this stock or this industry or this sector. We really believe that this next phase of the bull market, which we've been talking about now for 12 years, we continue to believe that U.S. stocks are at 20-year bull market, and on March 23rd, 2020, that was the "Ctrl-Alt-Delete" reset for the last 10 years of the bull market, which we continue to believe will look different in terms of how the bull market is going to be trading and acting. Much of the last 10 years, 10, 12 years, have really been driven by macro trading, quantitative trading and momentum. We think the next 10 years are going to be good old-fashioned fundamentals. And if you're looking at good old fashioned fundamentals and looking at equities, there's no better place to look than the United States and Canada, in our view.

So, we believe that at least the next three to five years will be driven by North American stocks and the strength and fundamental strength of North American stocks and, again, good old-fashioned bottoms-up stock picking as we focus on companies, in services, in products, in earnings, in valuation, in themes, in stories. Things that I learned in the business in the '80s and '90s, I think it is kind of coming back to that. And I think we're well-positioned at BMO, given our great research departments in both Canada and the United States, and that leads us with respect to how we're positioned for the U.S. at a 4,200 target in terms of the S&P 500 and $170 of earnings that equates to 35% earnings growth in double-digit upside in terms of prices as of right now. We favour financial stocks, discretionary stocks and industrial stocks for the next 12 months, but over the next three to five years, we remain overweight from a longer term and secular position: technology companies, communication services companies from a sector basis and select health care and consumer discretionary.

In terms of Canada, we believe Canada's undiscovered value is the back doorway to the United States. In fact, Canada, we believe, on a short-term basis, will exceed the U.S. in terms of performance in the fourth quarter. We don't like to talk about quarterly performance, but it's a game of catch up right now in Canada. We think Canada is coming along for the ride. Our theme for several years has been as America goes so, goes Canada, and the strong cross-border relationship with respect to trade fundamentals, we believe is only going to get stronger. And so, we believe that Canada and the TSX index, which is the proper index for Canada, is going to reach 19,200 – I'm sorry, 19,500, in 2021 on $1,100 of earnings. We believe the bull market in Canada, at least on an annual basis, continues. Again, we at BMO Capital Markets have provided a tremendous amount of content to all of you, as Margaret so deftly said. She published her year ahead recently; we published our year ahead in terms of investment strategy on November 19th. Please reach out to your relationship managers at our bmocm.com for those related contents.

So, on to some questions from the field. And I guess the first question is coming – it will go to. I'm sorry, to Dr. John Whyte. You talk about the 95% efficacy with respect to this drug, and if you could talk about what that actually really means in terms of the efficacy, number one. And then, number two, as part of that, as being a former member of the FDA, how would you grade the FDA in terms of how they've done through all of this, the last 10 months, which is quite frankly miraculous? But we'd love to hear your views on both of those things.

Dr. John Whyte: Sure. Here's how they got to the 95% efficacy, Brian. Thirty thousand people, 15,000 in placebo, 15,000 got the vaccine. One hundred and sixty-two cases of COVID in the placebo group; those people that did not get the vaccine. Eight people in the vaccine group, so some people did have vaccine failure in terms of for whatever reason they may not have responded. And there's additional math involved, but that's in general where they got it in terms of 95% in preventing symptomatic infection. The issue becomes: can you be asymptomatic and still have the virus and spread? Possibly. We're going to have to learn a little more. As my colleagues said, it's the novel coronavirus, because it's new. That's why we're still saying: wear a mask, physically distance, wash hands, even when you do get the vaccine.

In terms of how I grade my former colleagues, many of them who I know well, I'm a tough grader, Brian, so I'm going to give them an A-minus. And I have to say, what I've been impressed by is the transparency. Anyone could go on the FDA website, download the 53-page document, which really explained their reasoning, which I think was very well written, and there's really been an effort to be transparent. And that hasn't always been the case. And these dedicated scientific professionals, and the FDA is mostly scientific professionals, career people, not many political, have been working around the clock for many months. And I say kudos to them for doing a very scientific review of the safety and efficacy, while still asking hard questions. So, there's still some data that needs to be collected, and they're going to continue to monitor, doing the vaccine while also evaluating therapeutics, while also evaluating diagnostics. So, that's where we get the 95%. We still need to get a little more data, but, you know, we're on the road to recovery. So, I feel very good about where we are today.

Brian Belski: Thank you so much, Dr. Whyte. Now, on to Dr. McGeer, I have a question for you from the field. You talked about Canada being one of 13 with the provinces, and you also talk about a North American perspective to this, and we all know that this is a herd mentality type thing. I mean, how many people do you believe from your perspective and your experience working through this to eradicate this, how many people do we need really need to vaccinate in North America, and what would be kind of the way that you would see that following through?

Dr. Allison McGeer: That's a really interesting question to which I don't think any of us have the answer. We do know, you know, we've tended to think of herd immunity as an on/off phenomenon. You know, you get to a certain level and then you're okay. And I think the evidence we have from influenzas and other respiratory viruses is that's actually not true. That herd immunity is gradual and that every added number of people who get vaccinated gives you more protection and less transmission. So, I mean, in some sense is not that fast about a single number, it's absolutely true that the more people we

vaccinate, the less trouble we'll have with COVID-19. But it's also true that we're going to have to learn to live with COVID-19. This virus is here, it's not going away, we're not going to get rid of it, we're only going to have less of it. So, at the same time, as very clearly, the more people we get vaccinated, the less disease we'll have, the faster we'll get back to normal. At the same time, we don't have to have everybody vaccinated. We know some people are going to choose not to get vaccinated, some people won't be able to be vaccinated, and we don't need everybody to get back to normal.

So, I'm going to concentrate on being grateful for each individual person who chooses to get the vaccine in the next few months, because that's what matters, are everybody's individual decision in building us towards protection from this virus.

Brian Belski: Thank you, Dr. McGeer. We have a tradition on this call, and the tradition is – and we've covered some of this already – but Dr. Whyte always leaves us with something positive, and he's hit a little bit, but we've been doing these calls here at BMO for a long time. And I guess the question for you, Dr. Whyte, as we close out, this will be our final point here today is, you know, we've been at this, everybody now, for several months, and you as a doctor and you going through this, what has been the biggest surprise to you? And it can be positive or negative. I'm hoping that it is positive, but what has been the biggest surprise to you as you've gone through this?

Dr. John Whyte: I'm going to be honest, Brian, and we've been talking now for 10 months, you're all my colleagues. Early on, you know, I was a bit skeptical of the vaccine, especially in February and March, and I wasn't sure where we would be today. So, I'm quite pleasantly surprised about the innovation and success. And I said in a couple times, but it's really something to celebrate when you think where we are today versus where we were in February. And I give kudos and props to all the scientists and engineers and health professionals that got – and the vaccine participants that, you know, gave up time and resources to participate. And because of all of their commitment and dedication, we have a vaccine. We're going to have several more vaccines that are going to help us on the road to recovery. So that's what I'm really impressed with it and I'm going to be honest, as I said, I'm a little bit surprised by it, but pleasantly surprised.

Brian Belski: Thank you, Dr. Whyte. And in closing, I'd like to thank Margaret Kerins from BMO Capital Markets, Michael Gregory from BMO Capital Markets, and our great subject matter experts with respect to both Dr. Whyte and Dr. McGeer. As a reminder, as I said previously, there's a tremendous amount of content on bmocm.com on both Dr. Whyte's and Dr. McGeer's comments in content, as well as a written summary of today's call and a recording. And, of course, please reach out to your BMO Relationship Manager to see all of the content from BMO in terms of ourselves from the Investment Strategy, from Economics and Michael Gregory, and of course, Margaret Kerins in terms of Fixed Income, Currency and Commodities.

Please stay safe and stay well. Here's to a fantastic 2021, happy holidays, and on behalf of BMO Financial Group. Thank you so much for joining us today.