Pembroke Virtual Lunch Summary
Andy Flynn: Portfolio Manager, William Blair

March 30th, 2020

Welcome to this virtual lunch hosted by Pembroke on the topic of managing wealth during uncertain times with a focus on international growth stocks. My name is Ian Aiken and I'm the Managing Partner of Pembroke. The purpose of this call is to provide insights that will help you during these turbulent times and to share with you how we are positioning the portfolios for the eventual recovery of the economy and the markets.

The pandemic has had a dramatic and rapid impact on financial markets and on our day-to-day lives, and I hope that you and your family stay safe and healthy during this challenging time. While most businesses in Québec, Ontario, the United States and around the world have closed, I can report that Pembroke remains very much open for business. As a financial services firm, we are deemed to be an essential service. However, with social distancing in place, all of us are working from home. We are operating at 100% in terms of our ability to conduct research, manage the portfolios, access our systems speak with each other and service our clients.

I can share with you that I, along with other partners of Pembroke, had been putting fresh money into the funds that we manage. Why would we do that now? Because we remain confident in the long-term wealth creation opportunity offered by the companies that we invest in.

Finally, I can share with you that we have reassured all our staff that there will be no layoffs in 2020.

With that quick update, I would now like to turn the microphone over to Andy Flynn, who is a Portfolio Manager at William Blair, the sub adviser for the GBC International Growth Fund.

Andy, who is known to many of you, will make some opening remarks and then answer questions that have been submitted by e-mail.

So, with that, Andy I turn it over to you.

I want to thank everyone for the opportunity today to catch up and talk about the market. What I'd like to do is cover five quick topics and then we will open the Q & A.

The caveat is I'm sure we'll be talking about today, this is a very fluid situation, the path and direction of the COVID-19 outbreak and its direct impact on global economic growth are developing on a day by day basis. We're sharing what we represent as our very best thoughts at this point in time.

The five topics I'm going to cover quickly in terms of my introductory comments are:

- What has really taken place these last five weeks. It's been a very remarkable and volatile period.
- What is our updated economic outlook from here?
- Quick thoughts on COVID-19 - we happen to have an analyst here from William Blair, who's got a doctorate in health and who led our discussion during our team meeting that just wrapped up and will tell us what she thinks is going to happen with COVID;
- Then quickly, very high-level performance, how we perform both as a team and our strategy for you as well.
- Finally, to touch on Ian’s point, how we've gotten by as a team working remotely.

First, just to touch on the last five weeks, it's been a remarkable, remarkable ride. Just going back to the first half of February which seems like it's been a long, long time ago, we were in a period of extremely favorable global economic growth. We had low interest rates, we had consistent strong earnings growth. China a bit of a first in first out, in terms of what impact they had experienced, they were very much on the way out. Interest rates were staying low forever, central bank easing was assured. I think we thought, and frankly, the market thought the best chance of a recession was in 2022. So, what's happened?

The real change was five weeks ago, around February 22nd, the market realized over that weekend that what they had thought was wrong, that the COVID-19 outbreak would be largely contained within China and would not travel. We learned that weekend that it entered Europe through Northern Italy and, given the lack of preparation that Italy had not had the chance to put forth that it would likely spread throughout the continent.

The next two and a half weeks, that is the first half of this five-week period, we saw as we all know, a very high degree of market volatility, a clear downward path. That was rational behavior in our mind. The market was simply discounting a higher chance of probability of a global recession, caused by not only the impact of the COVID-19 from a humanitarian level, but also probably more importantly, as we all know, the huge disruption to economic activity. So, I would say the call was at that point in time, we were going to see a sharp, strong, but sharp recession in Asia led by China led by a V-shaped recovery. Europe would be impacted but the US would not.

Two weeks ago, as we all know, I would say around March 12th if I had to pick a date, we saw a clear acceleration in cases in North America led by United States. This meant and we saw, not the week we just went through, but the week before, really a massive

slowdown of economic activity, state by state, across the country. Week before last we put down a shelter in place initiative, we did that a week ago on Friday in Illinois. So, anything other than essential activity was put in place. The market then had, during that period, another slowdown to reflect the fact we're very likely going to have a global recession, not just Asia, not just Europe, but across the country.

And just bring us up to current events, last week what happened, and we all saw, the strongest rallies in history of the stock market. This is driven in my mind by three things. We saw that the markets frankly gained confidence that the central bank effort done on global scale to provide liquidity and that had a huge impact. A lot of fixed income markets were beginning to seize up and they began to open again towards the middle of last week, which is very important. As you all saw the Federal Reserve put forward four trillion dollars in stimulus to the markets globally. It's a huge effort.

The second one of course, was massive spending by governments across the world. This was led by, on Friday, President Trump who signed a two trillion-dollar fiscal support program, again, much greater combined at six billion. Much more than was done during the global financial crisis.

I think the third thing that happened, this was a big deal and it happened over the weekend too, President Trump and his administration now realized this is a very serious effort and they very much caught up with the rest of the world and adapting on a whatever it takes approach. So those three factors have really driven out. I'll stop right there on that topic.

I think the second topic is what does this mean for economic growth? So much has changed in the last five weeks. Olga Bytell, I think you folks have had chance to meet Olga. She's our economic strategist and she's had a chance to put paper to pencil last week and she's presented to the team a base case economic outlook by which our entire investment group is forming their assumptions and we will talk about this in our Q & A session I'm sure, our triage in stocks and our many strategies. Right now, our current thinking, we communicated this again today at the team meeting, we think during the second quarter of 2020, we will see the largest drop in economic activity on a global scale since World War II.

Beginning in the third quarter and into the fourth quarter, we will see the largest rebound in economic activity since World War II. So, the biggest drop and recovery for many folks during our lives. Olga's numbers are, using the US as a benchmark, she thinks growth is going to be down 6% this quarter so a sharp fall, down 24% next quarter, that's a remarkable drop, but a very strong recovery up to 12% in the third quarter but 10% in the fourth quarter - for the year subscale growth down 4%.

To be open and direct, we think like past recessions, economic activity on a global scale will take two and half to three years to return to levels before the COVID-19 outbreak happened. This recovery will really be led by China as we all know they were the first in,

first out. We think that will be followed by other regions. Europe will come out second, North America will come out third. It will be the last most important region to come out. We'll talk a lot about this also during our Q & A, but the key to the world markets bottoming is they are keyed to the economic growth bottoms, which is tied to the COVID virus.

I'll just offer a couple of quick thoughts to kind of jump start what I think will be rich a Q & A discussion. I mentioned Camilla who is on our health research team at William Blair. She's been a huge help to me and the team. She's got a health care doctorate in the field. She has a scientific background and she's been a strong voice of reason just by way of reference.

I met with Camilla about six weeks ago before my Japan trip, which was scheduled for March. At that time, people thought this was going to be a European issue. This won't blow up really beyond those two markets and she and I both reached the conclusion that we actually had a lot more work to do in terms of things getting a little tougher and she led me to suspend my trip then, which we pushed back until the summer. So again, thoughtful, good voice of reason. Again, I'll caveat her thoughts on COVID, with the same assumptions, daily, things are changing very quickly.

Here's what we think. We think the number of infections has obviously peaked in Asia, China's on the way down, led by South Korea and Japan. We think in Europe we're very close to the number of new infections peaking. We've been reading a lot about this. What they call this flattening of the curve. The number of cases can increase every day, but if the rate by which they increase is less, then the curve is flattening. We think that the number of cases in Europe is close to or has flattened from that perspective.

We had some very encouraging numbers overnight. We have lots of data at our fingertips to track all this, and one day doesn't mean a lot, but just to give you folks a sense of direction here, using the information that we have, there's a wonderful feature in Bloomberg. There's twelve major countries that just yesterday, overnight have announced the slowing in the number of new cases and new deaths and these are big countries, so globally that's happening - South Korea, Italy, Germany, UK, Canada, France, Sweden and Spain as well as Brazil and Iran. The only country in the world right now that's showing accelerating cases in new deaths is both China, which is a very fractionally low, the US is not showing that, but we think we'll see a real surge here in the next seven to ten days as all the testing which has been very slow here, will catch up with the rest of world. I'm not saying we're through the worst it. But I'm saying there's cause to see light at the end of the tunnel. China has had a peak in cases and Asia has slowed. We think we're seeing that right about now. The timing on this is tough to get right, but we think that once the cases peak, economic activity will slowly resume like it is in Asia. That's what's happening in Asia, that's what's happening in Europe.

We think, by the end of April, early May, cases will peak in another month in the United States. There's lots of hot spots we've all been reading about over the weekend.

Obviously, Washington, Los Angeles, the New York City region, Florida and both Chicago and Detroit. Those are six hot spots that we see overall.

We think that this is a respiratory virus. Camilla thinks like all the other respiratory viruses like pneumonia, like the four earlier COVID Corona virus strains. We think warm weather will lead to a sharp drop in rate of new infections. I'll point out this is our belief, this is not yet confirmed because of course this is the fifth Corona virus. It's new and novel and we don't know yet, but that's our belief.

If that's true, that's a big deal that will give the world a chance to catch up. The reason is because people expel the virus through respiratory droplets, coughs and sneezes and a virus can't thrive in warm environments, it needs cool environments and that's why we see the flu so seasonal. We think that's the same case here. We will know a lot more very soon, but that's a very important development.

One more quick thought to follow my earlier comments, I think President Trump's decision to extend the social distancing in the United States, which was supposed to expire on Wednesday, through the end of April is a very important news. Camilla and I were talking about this. We saw some strong concerning comments over the weekend from Doctor Faucci and others suggesting a potential for 100,000 to 200,000 deaths. That is his worst-case assumption, and that's assuming all the social distancing that we've been successfully using to slow the pace of the growth in both Europe and the United States. If we abandoned that, like President Trump had suggested earlier last week, and get back to full activity, that would be the worst-case scenario. We don't think that's the outlook over here. I want to make that point very clear. Maybe two more quick topics we'll open to questions.

You know, we as a shop invest in the highest quality companies that we can find. We always invest in companies that have, as you folks have heard us all talk about, strong competitive advantages, structural superiority, talent and experienced management teams. Typically, in periods of stress, we perform well and that's been the case again during this downturn. Just because the simple fact that we invest in companies that can put up great results in good times and bad, and this is indeed a bad time. Investors who are a little less dedicated to only the highest quality companies, run back to the companies we've been investing in all along. So that at a very high level we perform well, we've sustained the gains that we performed, that we put in place last year, so we can touch on that in a little more detail.

Then finally, if I can, I'll stop talking then and open the questions and answers, the big question is, as Ian touched upon, the importance of working successfully remotely. William Blair as a firm, has invested in technology throughout its life. We've invested very heavily in the last decade. As you folks have probably heard me talk about, we built an in-house proprietary resource research platform

called Summit. All the research information is in there, the comments from the trader,

portfolio trades are placed in a funnel, my partner and co-portfolio manager in the strategy make, plus all accounts for the research analysts. We can get someone on any device in the world. I have a full desktop setup here at my office at home, on my iPad, on my phone, and it's unbelievably critical to capturing and communicating all the relevant information, so we can do that anywhere in the world. When I travel all around the world looking for great ideas, I'm never out of touch. I'm always easily reachable.

The work from home option, we thought this might happen. William Blair went through a hard test. We sent everybody home for a couple days, tried everything out. Got all the bugs out. Very important. I would say we're now in the third week of work from home. It's worked magnificently. Like

you, we use Teams aggressively. Our team meeting just ended for William Blair's global investment team that Doug and I participate in, just wrapped up fifteen minutes ago and we had 60 people on that. It's just been remarkably successful. Simon and I work very carefully with the small cap team and we have now three meetings a week with them just to keep everybody focused and in touch personally, professionally. It's been very, very successful. I'll stop right there and take a breath and let Ian open for any questions that you or your group might have.

I thank you Andy for those opening comments. You and the team at William Blair have been managing the international growth fund for many years and we appreciate the great work that you've been doing. We look forward to the insights that you'll share with us through this question and answer period.

Q: How has a sudden stop in global economic activity and the massive fiscal and monetary response been factored into your analysis?

A: A great question, and we've never seen something like this, so this is both a supply and demand shock at the same time. The reason is because the COVID virus has led to significant disruption in economic activity, and that's led to a collapse in global economic growth. This is the first time we've seen this in a very long period of time. Like many of us we're all working through this together. Right now, what we're doing is we've just been doing two intensive weeks on this, based on our updated research analysis, is a complete portfolio triage of all the stocks in the strategy. We put them into three different buckets. This is true for your global international fund, as well as our all our strategies.

The majority fall into the middle bucket, which is where it will be difficult sledding, but they have adequate liquidity to get through this valley, as I call this COVID valley, and any related economic disruption. They will emerge just as strong as they are now, and that's the confirmation best effort that we've been doing on very daily basis and it's been led by our sector teams. As you folks know, a lot are organized along sector teams, consumer, healthcare, financials, industrials and tech, are five good examples overall, and they've been driving that process. Every day in team meetings, Doug and I have

heard each team present both the opportunities and risks.

The second bucket is actually very interesting. There'll be a subset of companies which will come out even stronger. This could be companies in technology where distance work at home, communication companies that made some cloud-based products and services. They'll actually become not weaker, but they'll actually come out of this thing stronger.

Of course, the third bucket are companies that may not come out of this economic through as successful as they were going in. That becomes very much a risk reward profile. What's the likelihood? How long will it take them to recover to their past competitive advantage? In some cases, it may not get back there, so that's the triage process that we're doing right now, and we'll talk about that. But by and large we're largely through this triage process. Simon and I caught up with Helena on Friday, who's a real estate analyst, and she was the last box checked there. It's an ongoing process, but it's going to create opportunities and we're working diligently to identify both those risks within the strategy.

Q: Andy, any thoughts on where the sort of percentage exposure to those three buckets might end up?

A: It's a very good question. I would say it was probably 10% to 20%. Might be where things could get even better. And that might be, I would say 10 to 15, maybe 10 to 20%. Obviously, our new idea process, our new idea discovery will be anchored towards companies we've given by Drew Buckley, who is our global small cap technology analyst, the green light to be aggressively identifying opportunities, companies that may allow us to react better. I would say 10 to maybe 10 to 20. I would say that the center bucket you'd have 60 to 70% in there. As you folks know, we invest in companies that don't have high debt levels, that generate their own capital, that grow internally, not through acquisitions.

One ugly story we learned from the global financial crisis was companies that grow very rapidly

based on acquisition and relying on banks for credit lines to get through tough times, those can be withdrawn for fair or unfair reasons, so we're very careful about liquidity, and it's been a big chunk of what we're doing. I think the vast majority of those companies will stay there. Some will be in a slightly better position. Those that might come through to value little quicker, those might be the ones we will focus on more strongly. I would say probably maybe 5 to 10% of companies might just have a tough time getting through this downdraft.

You know the good news, I think this is remarkable, the level of company information, company interaction we've had. Rhea Spitz, who is our global small cap consumer analyst, and as you may imagine, consumer discretionary is the absolute crosshairs of

spending, by definition, everything companies do are discretionary, she's had no less than four calls this morning. I'm going to try to catch two tonight. She has two Japanese companies on the phone tonight, which I'll join in and this morning she had two different companies, I shouldn't say who, but maybe it's a well-known pizza delivery company in the UK. She thinks they will structurally be at an advantage from here going forward, so she wants to make sure she's right. So, we're looking forcibly.

I would say every day goes by and I would say I probably have eight to ten different companies come out and say how they're doing. We had a number again today and this is across the William Blair holdings and everyone's talking, and they're very open, they would love to talk to investors. We are known as a buy-and-hold fundamentally driven, thoughtful investor and we're looking to make long-term and multi year relationships. Management teams look to us because of that strength and durability. If William Blair reached out to them and said how are you guys doing? I would think that would be a very high priority for them to take that call. Happily, no one is sticking their head in the sand and we're trying to get out and share our thoughts like we are today with our investors and they are as well. I think that again reflects the quality approach that both we and our investments take to conduct their business.

Q: Are you seeing similar responses from governments around the world, or are there material differences from the perspective of an equity investor? And to what degree are the global equity markets connected or disconnected during this crisis?

A: It's a really good question. They are highly connected, but it is idiosyncratic. Australia just went through probably the most volatile period I've ever seen for a stock market day last week, they were up or down 5%+, which is remarkable for a relatively stable economy, and there's lots of good reasons for that, but fractionally there are. If you look at the performance week to week, there's a very high correlation. I think there was some things I touched upon in my opening remarks, real nervousness two or three weeks ago, that the global central banks couldn't get their act together. The European Central Bank swung and missed their first chance at the plate to really come up with something dramatic. Bank of England came out. They were going quite strong. It took about 10 days for the global central banks to come together. When they came together with a drop in interest rates, huge programs to keep their markets freeing smoothly, that was a huge turning point that was really led by the Federal Reserve only two weeks ago did the Fed really come out. They adopted pretty much a whatever it takes approach as we saw with the US stimulus program. I would say most countries are swinging in the right direction from both fiscal in terms of government spending and by cutting interest rates and supporting the markets.

There are, I must admit though unfortunately a couple outliers out there they haven't quite gotten the memo, and that's disappointing and frustrating. Brazil will probably frankly be the one. Their President is viewing the COVID crisis as a bit of a disturbance, he's not taking it seriously. I think there was a little bit over here in the United States four weeks ago. I think President Trump in his press conference last night, admitted that he

was not taking it as seriously as he probably should have. I think it was the strong new data from his healthcare experts led by Dr. Faucci that he is now taking it more seriously. Unfortunately, the President of Brazil still is dismissing it and he's even been publicly campaigning, shaking hands, and that's particularly tricky because while things are getting warmer for us in the northern hemisphere, it's starting to get colder down in the southern hemisphere. If we're right, and if the COVID is seasonal like the flu and all these other strains, we think Brazil is in for a very difficult backdrop. But overall, I would say nine out of ten countries are rolling in the right direction. Intraday volatility is remarkable and is tied to stimulus programs in each country. As we talked about, they come, they process, but directionally everyone is pretty much moving in the same direction for understandable reasons.

Q: The market is down because of the economic impact of the virus. But why do you think it's so volatile?

A: It is reacting to news suggesting that over the last five weeks the degree of the viruses spread, and the related economic disruption continues to increase, and they've exceeded the markets expectations in the United States and Europe. That's why the markets have been so down. We think at some point once the COVID virus peaks in Europe, which we think is about right now, and once it peaks in North America, which we think is in about two to three weeks, that volatility will dampen. But we expect market volatility to continue at a high pace until those two events occur.

Q: Which sectors or regions offer the greatest opportunities and present the largest risks?

A: In terms of fishing ponds, we're taking a hard look at technology as we touched on, and healthcare are both very attractive. Healthcare very defensive, very high quality, tech because these are

enabling businesses. Many cases I touched on before. Changing the way we work as a work environment and personal food delivery and all the rest. These are all based in technology. Where you remain the most cautious towards consumer discretionary, as I mentioned with Rita and financials, we've cut the number of financials back by half in the last three years. We are down 11 names, but as you might imagine, we were absolutely giving those names a very, very hard to go through.

In terms of regions we think China is actually very interesting because they're the first one in, the first one out. They have a commanding control of their economy and we think they're going to perform quite well. That'll lift countries in the region. We think Scandinavia will remain a very attractive market. They've been relatively insulated from the virus. We've had exceptional success with great companies there. We don't see any reason to change that. On the cautious side, Brazil is the top of list for the reasons I touched on. Unfortunately, Japan was already in a tough spot because of their consumption tax increase that they put forward in the fourth quarter, which is very poorly

timed. They were already in recession before this hit. We've been actively processing this, and we began in February to call the names in Japan portfolio so that process wrapped up before the signal took off.

Q: On the company level, how are you evaluating the risks that each company faces?

A: I stole my thunder a little bit talking about that triage effort, but a we had an hour discussion with the industrial team last week and they went through every single 20-page deck. Every single company that we own as a team. Liquidity, short launch on liquidity, how are positions and markets, real deep diving kind of stuff. They came back with some concrete recommendations. They actually recommended the sale of three companies that we own from our large cap portfolio. It's been a moving target, we're making some assumptions based on all those basic economic assumption, but it's an aggressive triage opportunity. Triage comes first. Make sure what you have is going to make it through the valley, then shift opportunities. What new ideas, and we've actually seen a lot of great companies been marked down, valuation is now attractive, so that we have been able to get invested in because of the market strength of the last five years, so we're actually getting what we think is once in a very long term opportunity to find compelling companies priced very attractively.

Q: How much activity has there been in the strategy in the last month as a result of the outbreak of the pandemic? And can you provide examples of stocks you bought or sold recently?

A: I would say we've gone through most of the triage. There's a handful of companies we stepped away from, either because we've reduced our exposure to Brazil as I touched on because we think the macro backdrop might be a bit tougher than expected. We've had the total of six new purchases in the month of March. We just had one really interesting idea presented today. I'll talk to Simon later today and that might be another goal, but we have six so far this year so just a couple examples. Rita recommended a company called HelloFresh. It's the it's leader in meal kit delivery services. It's based in Germany, but they have a huge market in the United States almost 2,000,000 people here. This is already an attractive area for aging demographics. For folks that don't go out as much to eat food. They're really good at what they do. They have some spectacular market share. They compete against Blue Apron, here in the United States who are continuing to shed share. This is a 20% top line grower. We think this is a compelling story. Best in class customer satisfaction. This is one that's a recent IPO. Actually, we think their competitive advantage is strengthened because the impact of COVID.

Another good one would be a company called A-Living. This is a mainland Chinese based company. They provide property management services to both commercial and residential buildings, and they've also been heroes amid a downturn in China. They provide everything they can from getting residents meals that are physically locked

inside, that can't leave their complexes, to helping businesses get through a very tough time. This is a long growing, attractive market, lots of structural drivers, and you're not making a bet on property development, so A-Living is the company there. We've recently entered that company. They've been at it for 25 years in China.

The most recent addition which was last week, is a Swedish company called Argo, and they make products to help folks struggle with reduced mobility and have age related health challenges. We don't see much of a COVID lift for these guys, but we do think there's a demographic benefit over a very long period of time. They are the global leader in what's called patient handling. They halved their shares twice, number two player. Good little grinder like a lot of health care companies. Sound returns are actually getting better. Good cash flow generation. We think this is actually a mid 20s percent earnings grower over a compounded basis in part because their margin profile is improving. They are very good at what they do. Close, deep relationships with hospitals. Long term care providers that are talented. That's three good examples of companies that are/have been our buys so far.

Q. You mentioned during your opening remarks that you've been in touch with many of the companies in the portfolios. I'm wondering how communicative are they in general about the likely impact of COVID-19 and what are the sorts of questions that you ask them to get beneath their initial response to really understand what's likely to happen with them?

A: The richest discussions have been with our financials companies and D.J. Neiman, who's our director of research and our global large cap financial analyst, and I have sat through several of these names and they are in the absolute teeth of the storm. Lots of questions we ask as investors. Are they taking the call? Yes. Are they being very open and candid about what they know and what they don't know and we're trying to do the same thing on our side with discussions like this, so they are doing that; they are being very open and very direct. The questions that D.J. would take would go right to liquidity. Very directly, what's your line of credit? How are you funding your businesses? Is it internally generated? Does it rely on other folks? Is it a wholesale generated? What's your balance sheet structure? What is your interest expense coverage?

All these different factors that allow us to gain confidence that they'll not only get down, they'll survive the trough and come out the other side. So very open direction. Very open discussions. In many cases these companies have typically survived another storm, have communicated to the market, we have one company we own, A Small Bank Finance, which is a compelling lending company within India. D.J. and Dan Hill and I along with three other colleagues were in India in November and we met with these guys. Small ticket items. These are secured loans and very talented entrepreneurs throughout India. Often in rural markets, very low default rate. They put out a wonderful four-page release and it talked about all the things that've happened to their loan book, their losses and their growth rate during all the recent crises in India, which there have been many. Punchline was they're strong throughout and actually take share from weaker

competitors that drop out and they expand their competitive advantage, expand their market share. Really good and we just really went through their press release point by point.

What makes you think you can get through it? Well the answer is not only can we get through it, we've gotten through every one of these other ones, and here's how we're going to do it. That's a very very important development, so we're reaching out to every company as soon as we can to get all information to allow us to get the confidence to stick with these companies or in a handful of cases if we don't have confidence with their ability to get through it, we're going to step away.

Q: Combination of two questions: How do you expect global trade to be impacted near term and will this pandemic result in deglobalization longer term?

A. It's going to clearly cramp global activity. It's really seized up in many parts of the world. We still think there's a strong resolve of globalization, but the trend towards more local production manufacturing that seems to want to be accelerated. It's still too early to reach any overall conclusions. We asked Olga today about that during the team meeting, what's your takeaway? Where do you see the world evolve in the next 10 years? Her answer in fairness was it's too early to tell how corporate and household behavior will change. Let's think about our own lives. The stay home that we're all going through. Does this mean we'll go out to eat less often when we come out the other side of this thing? Will we purchase more differently? Amazon has been overwhelmed for obvious reasons. Are we going to get more used to that? Is bricks and mortar in a decade-long deterioration for on-premise retail environment? Is that going to be accelerated? So lots more questions that we will continue to work through very carefully. The key focus now is identifying how steep this trough is going to be and how successfully we can come out of it. That's a very good question. That will be the key to the next decade in the markets.

Q: Somewhat related to that question. As we think about how Europe and North America will recover from the pandemic, what are you seeing in terms of the recovery in China? Are you seeing a U-shaped recovery, a V-shaped recovery or an L-shaped recovery? Maybe as you answer that you can explain what those types of recoveries, what those letters mean.

A: Market assumption was that China's recovery would be V-shaped. A sharp collapse and a sharp rebound at the same pace at which it declined. I think that was the world's expectation frankly for growth up until about four weeks ago that we'd see China would have a sharp collapse and sharp recovery. They are remarkably successful combatting these different situations.

I think that U-shape recovery is what we're seeing in the rest of the world led by United States in North America. That is a kind of a modified V. Clearly everything has collapsed at the greatest pace since the history of World War II as I touched on. I think the recovery will not be as steep, but we know that V-shaped recoveries anywhere, including China,

their recovery is going to take longer. We track things like fuel consumption, train tickets, train travel, lots of easy economic numbers to track, pollution levels. They are about 70% back to where they were. They got hit in January, they came back in February so now it's the end of March, beginning April so they're not all the way back.

Europe is going to take a lot longer I think, and the United States remains to be seen. That depends on how bad the COVID outbreaks will be. How many hot spots will we see in the United States, a U-shaped recovery would be best. My honest view is that an L-shaped recovery of course would be things collapsing and never coming back. I don't think that's a reasonable base case scenario for really any market, so I think we can dismiss that. I think we can also dismiss the V-shaped as too optimistic. The

breath and depth of this disruption, the COVID virus levels, the humanitarian levels are too dramatic so I think it would be more of a modified kind of extended out U-shaped recovery, a sharp collapse and then kind of a gradual 45%-degree angle as things get back into business.

Q: Ian- OK, so an extended modified U-shaped recovery?

A: Think about actually a cliff. So, it's like straight down and I think you're going to see one of these kinds of deals where it gradually gets back up again. If I had a bigger TV screen, I could talk about the recovery over three years to get all way back to where we were, we think it will take two to three years.

Q: Can you discuss the economic impact of postponing the Tokyo Summer Olympics and how the pandemic is affecting the outlook for Japanese equities?

A: It's sad I know, I go to Japan, a wonderful culture, just genuinely a great place to go, both personally and professionally. This is a real tragedy for Japan. If it's postponed, that's one thing. If it's cancelled, it's much more dramatic. Simon and I have been nervous about recession in Japan because of how, as I touched on before, how tough things were in the fourth quarter, they put through this badly timed increase in their taxes to support their budget, which just put them into a deep recession, which they haven't recovered from. We were already pretty nervous about Japan. As the COVID outbreak really advanced dramatically in Europe, Simon and I both reached the conclusion that the Olympics is likely going to be postponed or cancelled.

It's a real tough thing for an interesting country. They were hoping to use this Olympics like the 1964 Olympics to show, like they had in 1964, the world 20 years after World War II here, after their terrible battle, that they had come back. They were really hoping to use this to show the world that they were emerging from two or three, as we heard discussed, lost decades of economic growth, that they were finally becoming competitive on a global scale. It's a huge psyche. Just some of the numbers. They spent 25 billion dollars since they won the Olympics in 2013. Their expectation would be that this would generate revenue of 32 trillion dollars, or three hundred million dollars of

revenue in Japan. Japan was already in a recession, then they got hit by COVID now they've got a third one. We've been reducing our exposure in Japan. We scrubbed everything in January and February. We've cut back our exposure in Japan. Unfortunately, they are in for a tough sledding.

Q: Here's a recent supply chain question that just came in from a client. A not well publicized fact about our pharmaceutical industry is that some products they market draw critically on raw materials obtained from China and India. This concerns us as users of prescription drugs as well as investors. Could you comment on this?

A: That's a very good question. I unfortunately do not have a good answer for you. We can have Camilla and Tommy Steinberg our large cap analysts, have a better, more thoughtful answer than I have to that question. That unfortunately is not a question I have a real thoughtful answer to. I've not seen or heard anything to suggest that any of the companies that we invest in have faced any product shortages. I've not heard that, so it's difficult for me to comment on.

Q: What indicators are you looking for that would tell you that the stock market has bottomed?

A: It's a good fair question and there's two answers depending on how hopeful you are. Since the 1950s, recessions in the United States have always bottomed at the same time economic growth has bottomed. If we're right, if all goes right, in terms of economic growth outlook, that means that the global economies will bottom when world economic growths bottom, which should likely be in May. It's still March almost May. The million-dollar question, the trillion-dollar question then is, the degree of a huge government spending and stimulus by world central banks will have pulled for the recovery of the market bottom. This is probably the most difficult to predict, but the answer is historically recessions end as economic growth bottoms and most projections, as Olga shared, is economic growth bottoms in the second quarter, not the first quarter, bottoms in the second quarter, and then there's a period where it rebounds significantly. I personally think when we get an all clear when the number of new cases in North America, the rate of new cases while they're still rising but rising at a smaller amount, that's when the market begins to look through the worst of it. That will be the first thing that will happen.

The second thing that will happen is weeks later, economic activity will begin to slowly recover in North America and finally see economic activity recovering on a global scale. That third leg will be lifted by this dramatic stimulus that we've never seen in the history of the world, so it'll be a sharp recovery, but that's the big parlor game. We're not playing that game. We're investing in great companies. Calling the bottom is a tricky business, we are identifying great companies that have been put for sale for no apparent, for no lasting reason. We're spending all our efforts identifying companies like that, getting great new names in the strategy that we think have been unfairly sold off in any kind of reasonable two to three-year timeframe. Calling the bottom is a tricky business. I've been

at this for 35 years and it's not easy to do. I'm going to focus on great companies who I know strength is still there, that I can get behind. I can confirm that we're going to move in aggressively, and that's what we've been doing.

Q: To what degree are you still focused on the impact of Brexit or the trade tensions between China and the US? Or has the pandemic really taken front and center here?

A: It absolutely has. Brexit is secondary, probably tertiary frankly, to the economic impact in Europe and

obviously globally, that would be the first one within Europe. The UK has the full counter to negotiate the terms of their divorce from EU. So far they've drawn a very strong line in the sand. We will see how that works out, their ability to continue to access the European market to sell their goods and services is critical for their long-term viability. Olga is very cautious about the impact of going it alone and breaking away from the EU, but only time will tell how it happens. That's a two to three-year effort to know how badly they're going to get hit. But that said, we've continued to have several exceptional companies that we invest in in the UK. Some of our best performing stocks over the course of the strategy have been based there. We continue to find a high number of new ideas there. As always, it's very much a company-by-company bottom up approach, but directionally we are less optimistic on the UK than we were before they announced they were going to leave.

Q: Given that the portfolios are managed on a fully invested basis, how does William Blair take advantage of the decline in the markets or said another way, how do you go on the offensive during a time of crisis?

A: You're right, we're fully invested, so we run 2-3% cash levels. That doesn't change.

The question then is to identify companies that we think are an opportunity for us as investors. The companies that are in that third bucket, that might be structurally challenged, or the rate of their recovery, their risk reward profiles are less attractive going forward. Companies in that bucket represents sources of funds, so that's exactly what Sam and I are doing. We've identified a handful of names that we think are very well positioned overall, but we don't think the risk overall will be as strong. A couple of names have been in Brazil. We think Brazil is in for very rough ride, given a very poor level of government leadership, as I've discussed earlier.

The second question is to identify companies that we think can benefit from this environment. At the end of the day, since we already invest in so many great companies, the structure of the portfolio won't look dramatically different than it did months ago from now. That's because we have always been investing in great companies. To be open with you if we had 50% cash and we don't and shouldn't and won't, I would be buying all day long because there's so many compelling opportunities right here. Calling

the bottoms is a tricky game. But what we've been doing, and this is what the market I think was doing last year, we've been upgrading the quality of our portfolio even more. If we can identify a couple companies like a couple of companies in Brazil, they might have a real tough time, this trough may be a lot further down in Brazil than the market thinks, having a tougher time to come back up. If there are great companies that we think are better positioned, we're going to make those trades all day long.

If you count those and the stocks we bought so far this month, six companies, many of those are in that bucket, and if you look at the ones we stepped away from, we stepped away from a parking lot operator in Japan, we stepped away from a commercial building services provider within South Africa, both good businesses, but we think from here the risk low profile is much more favorable towards HelloFresh in Germany, the meal kit delivery business, A-living the Chinese property management services, as well as Argo, which is the Swedish healthcare product. That's the trade we're making. We're not looking at two weeks, two months, two quarters. We're looking at the next three to five years where the great companies out there, that we want to own, so then that makes: "where do you go?". You go to companies that you think will be well positioned in this recovery. That's been the process that we've been doing.

Q: How important is active management at times like these?

A: Well, it's critically important. Our ability to talk to these companies on daily basis, to understand how they're doing, how they're holding up, is critically important. Especially in a small cap environment. We've been doing this for over 20 years. We invest in both in the greatest companies we can find, but in the end, it comes down to your assumptions regarding the economic growth. There will be a number of companies that will not survive this downdraft. Those will be heavier focused and small cap than large cap so there will be companies so that will struggle in this environment. It's like nothing anyone has seen.

We are familiar with restaurants. They've had to close their doors, other than just take out, services that are now considered essential, can operate. There are companies that will be in that bucket. We don't think we have many of those, if any of those in our strategy at William Blair. But as an active manager, we can pick through the ashes. The market behavior has been so dramatically one way. Very volatile with high correlation, everything is down 25-30% or more. Our goal as active investors is to use our experience, our beliefs and our interactions with these companies to identify those that will not only survive but thrive in this backdrop. We think it's critically important now. I would say this even further, I think active management will show in hindsight that they performed well in this downturn because of their ability to really understand what's happening in the world and to make stronger discrimination between those that can succeed and those that can't. It will take a while to see if we're right about that, but that happened after the global financial crisis and I think that will happen again here too.

Q: Do you expect to see widespread bankruptcies as a result of the pandemic? And how does this impact the way that you manage the portfolio?

A: I think you're right. I think we will. Areas that will be anchored in health, and this consumer discretionary and health care, they will be the ones, they'll be over leveraged firms. You know the old analogy of this word, we just ended up a bull market that was longest in history. The economics sea of strong market support, central bank support as the tide goes out, you're going to see some surprising ships left on the rocks. There are companies that probably aren't as talented as the market thought they were. We believe and know we can identify between those that are true growth champions and those that were just masquerading as world champions. We are not going to be perfect, and they'll always be examples where we may get one or two names wrong, but I think it's going to profoundly change the way we interact as consumers and I think as corporations.

Frankly this first week working from home thing was a bit clunky, trying to get everybody up and going and ready to go but it's been seamless, and I think this will be an adoption. The interaction we all have and feel towards our colleagues is very important, it's a critical part of our success, so we'll get back to the office soon as we can. For the vast majority of industries, I think the technology has improved so much that I think this is the way to go. My son works upstairs and he's a tech consultant. He's been doing his calls at 5:30 every morning. He's not missing a beat. He catches up with India first thing, up early like I am, and I mean nothing gets past us. It's just remarkable what you can accomplish.

Q: You mentioned in your opening remarks already that a recession this year in most countries, is highly likely. How is the current situation different than 1929, in your opinion?

A: Very different. I think in 1929 the central banks were raising interest rates. They were withdrawing support from the financial markets. They really didn't understand the situation as we now know. We have tools and information that provide much more of a clear focus. There was concern three or four weeks ago as the COVID was really ramping up, economic destruction was accelerating, but the central banks did get it, a dramatic change of heart. I think President Trump, as I touched on, was the last one to understand that process. I think the Treasury Secretary really put that forward. So even a week's time from now, I think you would feel that way. There's no real correlation between 1929 and now. Investor laws protections are very different, and we've had dramatic level of improvement as well as disclosure information, so I just don't see any reasonable scenario. I think the best analogy would be really the global financial crisis of 12 years ago. That was a very scary time as we all know, because we didn't really have a sense of which companies were going to survive led by the financials with quickly morphed into a widespread economy.

This is equally disturbing on a personal level because it's an invisible virus that can impact you very personally, but this is a finite event. We think it will slow down during the summer. We're all going to get through it. When I see our way through the other side,

we see the light at the end of tunnel in Asia. I think we're just starting to see it open now in Europe. I think a month's time for now w will see it in the United States. We'll get through this, we'll thrive, and we'll succeed. It's very different than it was now. We've never had a healthcare related pandemic in any of our lives. The last one was 100 years ago, and that's not much of a proxy because most folks died from pneumonia, and we obviously have drugs that can treat that now, which didn't exist 100 years ago. We actually categorically dismissed the analogy the Sun made between COVID-19 and the Spanish flu. We think that's a completely irrational emotional comparison, and Camilla, our healthcare analyst, if she were here, would get quite agitated about that. That's just not a fair analogy at all.

This is a finite, terrible event. We will get through it; we will find our way through it through innovation. Just today we saw the Abbott Labs, over the weekend, announced the FDA approval for a product that in five minutes can test anyone with flu like symptoms. That if you walk into as hospital, in five minutes, they can get a positive or a negative COVID. If it's positive I go in the COVID tunnel, where everyone is in Hazmat suits and get treated, if not I'm over there. Every hospital in every major city, as you folks have all seen, has triage centers, tents in the parking lot. This is huge. Health carers, when they come to work in the morning, they can see if they're infected or not. If they are, they go home if not they can keep going. This will change the way humans interact. These negative views on the COVID outbreak ignore the fact that humans are remarkably innovative and creative, and they'll find ways to find a solution. I'm not saying we're through the worst, because I think we still have outbreaks to get through in North America, but I see, I see a way through this. Market volatility will continue until we see a bottoming. But we're absolutely confident that we will get through this and we will have a much brighter day, once we do.

Q: You touched on some of this already, but it's a It's a good question. What do you think will be different after the pandemics subsides and how have you positioned the portfolios to benefit from that eventual recovery?

A: A really good question, that's the big one. I think we're pushing on our tech guys hard. How does this change the way we interact both personally and professionally? Our work-at-home setting, are there ways of technology solutions we can get through? You touched on the global supply chain.

How will companies be positioned? Our companies in the money management business probably won't change much, but for manufacturing, how will that change the global landscape? How will people begin interacting differently in a different environment? If the COVID virus were to come back as other corona viruses have in a smaller wave in the fall, how will people react to that as well? Lots of different questions. Right now, I think all our energy is spent towards identifying how tough this is going to be. Which companies will survive? Which ones will thrive, and how can we take advantage of this dislocation to invest in a number of great companies. Once the dust settles, I think we will have a long time to think about that and how that is moving forward.

Q: One last question for you that came in from a friend of mine that really gets to how you, personally, look at the situation.

Although the markets remain volatile and it is impossible to predict the breath of the economic impact and speed of recovery, if you had money to invest now cash, on the sidelines, what would your strategy be? Would you be putting it to work now? Would you be putting it to work slowly over the next several months? What would your approach be?

A: I'll tell you what Simon and I are doing. We're effectively dollar cost averaging so we don't

think we are really bright enough to call the bottom, and that depends on so many different moving factors. We think within three months the odds are significant that we will be through this. What we're doing is we're identifying companies over a course of let's say, three waves. We've already completed one wave we're putting through the next one, so our belief is there will always be universal companies. As things get tougher over the near term, that creates more opportunities.

We 're going to do it in a course of three different waves to where we think we will roll into the summer where the portfolio allocations had been done or put forward. I think because we're not yet through the woods in North America, the backdrop might remain volatile until we see that. If you go back to what happened a week ago, we were declared in Chicago to be a hotspot over the weekend. Detroit, where I grew up, was declared a hotspot. Until we get past all this, until we get a sense of how many hot spots there are in the United States and North America, the last region of the world, and frankly, how bad it's going to be in India and Brazil, and will know that within a period of weeks, not months or quarters. Once we get our arms around that, like we did in Europe, which seemed terrifying and it's still awful on a human level, we've gotten through the worst in Europe we believe. At some point soon, we will get through the worst in North America, I think that's the point to do it. The approach Simon and I are taking is kind of dollar cost averaging in where we're putting through these series of portfolio enhancements, this upgrade in quality, focusing our greatest conviction names. We are not doing this all at once, we are working feverishly to identify our list, but we're going to do that over the course of the next six weeks.

Andy, that was great. Thank you very much.

We are unfortunately running out of time now, so we're going to have to wrap it up. I would like to thank you very much for sharing your insights and the insights of your colleagues at William Blair with us today. You have a great global reach with your research platform and the companies that you deal with, and we really appreciate you taking time with us today.

It's obviously difficult to know how the pandemic will evolve as none of us have a crystal

ball and the situation is changing so much from day today. Andy's advice about dollar cost averaging and being cautious about timing the bottom or trying to pick the bottom is very good advice.

The way the story plays out could have a significant impact on how we manage the portfolios and on the values of the portfolios going forward. We will have to see how the information changes from day to day.

I hope that all of you have found this call to be helpful. A replay will be available on our website.

This is the third virtual lunch that we've hosted in the past week and replays from all those calls are on our website and we will be organizing more virtual lunches in the near future, assuming that there's strong interest from all of you, which there seems to be.

I would like to thank you all for joining us today and for your continued confidence in Pembroke during these uncertain times.

Stay safe, stay calm and stay in touch.

Thank you very much.

Disclaimer
This report is for the purpose of providing some insight into Pembroke and the Pembroke funds. Past performance is not indicative of future returns. Any securities listed herein, are for informational purposes only and are not intended and should not be construed as investment advice nor is it a recommendation to buy or sell any particular security. Factual information has been taken from sources we believe to be reliable, but its accuracy, completeness or interpretation cannot be guaranteed. Pembroke seeks to ensure that the content of this document is correct and up to date but does not guarantee that the content is accurate and complete and does not assume any responsibility for this. Pembroke is not responsible for decisions or actions taken or made on the basis of information contained in this document.