Introduction

Thank you. This is Patricia Murphy, and I'd like to welcome you to IBM's fourth quarter 2020 earnings presentation. I'm here with Arvind Krishna, IBM's Chairman and Chief Executive Officer, and Jim Kavanaugh, IBM's Senior Vice President and Chief Financial Officer.

We'll post today's prepared remarks on the IBM investor website within a couple of hours, and a replay will be available by this time tomorrow. Some comments made in this presentation may be considered forward looking under the Private Securities Litigation Reform Act of 1995. These statements involve factors that could cause our actual results to differ materially. Additional information about these factors is included in the company's SEC filings.

Our presentation also includes non-GAAP measures, to provide additional information to investors. For example, we present revenue and signings growth at constant currency throughout the presentation. In addition, to provide a view consistent with our go-forward business, we'll focus on constant currency growth adjusting for the divested businesses for the impacted lines of total revenue, cloud and our geographic performance. We have provided reconciliation charts for these and other non-GAAP measures at the end of the presentation, and in the 8-K submitted to the SEC.

So, with that, I'll turn the call over to Arvind.

CEO Perspective

Hello everyone. Thank you for joining today, and I'm pleased to be speaking with the investment community again. Over the next 15 minutes I'll talk about where we stand in the execution of our strategy as we begin 2021, and how we are running the company to align with the strategy. I'll provide a perspective on the current environment and our results. Then, in the spirit of being as transparent with you as possible, I will speak to our expectations for the next two years. Jim Kavanaugh will then cover the quarter and give more detail on the separation process for our Managed Infrastructure Services business. I've also asked Martin Schroeter to join us to make a few comments as the recently named CEO of this business. Jim will conclude with additional color on our 2021 expectations, and then Jim and I will take your questions. I'd ask you to please bear with us if we go slightly longer than usual on this call.

When I was appointed CEO in April, I laid out my approach to growing the value of the company, which is straightforward: we will significantly increase our focus on our hybrid cloud and AI capabilities, the two most important transformational journeys for our clients. In the nine months since then, we have taken a series of important actions to redefine our future as a hybrid cloud platform and AI company. This is where we are focusing the bulk of our efforts, time and investments.

In spite of the many challenges in 2020, we have made good progress. In 2021 we believe you will see that progress showing up in our results. With that said, we know it's not necessarily going to be a straight line. The operating environment remains difficult because of what clients are experiencing at the moment. We can see that in the quarter just passed. Our revenue was slightly behind typical seasonality, but we finished strong in free cash flow, which is important, as it's the fuel for investments. Our

performance reflects the fact that our clients continue to deal with the effects of the pandemic and broader uncertainty of the macro environment. This put additional pressure on larger software transactions this quarter, and project delays in some services engagements. Our revenue growth was also impacted by IBM-specific headwinds of our product cycle and compare challenges. Notwithstanding these short-term market dynamics, we believe we have the plans in place and the focus inside the business to be able to grow in 2021.

IBM's Hybrid Cloud & AI Strategy

That said, in the midst of all of this, I'm seeing an ever-greater need from clients to accelerate their digital transformations, and this bodes very well for us now and over the long term. As I've told you before, the opportunity in hybrid cloud and AI is enormous – in fact we see the hybrid cloud opportunity at a trillion dollars, with less than 25 percent of workloads having moved to the cloud so far.

Our approach is platform centric. Linux, along with Containers and Kubernetes, provides the foundation of our hybrid cloud platform, and Red Hat OpenShift is the core product that captures all of this and more. Our hybrid cloud approach is also differentiated by a vast software portfolio modernized to run cloud-native and our GBS expertise, which plays a key role in driving consumption and is currently helping hundreds of major clients on their on their own hybrid cloud journeys.

With this foundation in place, we are successfully leveraging Red Hat as a unique platform to address what our global, complex and highly regulated clients need: a hybrid cloud platform that is open, flexible, and secure. Our hybrid cloud approach allows clients to connect their back office to their front office; to modernize mission-critical workloads, to build cloudnative apps, and to securely deploy and manage data and applications across various clouds.

We are confident that we have the right strategy for our clients and for IBM. Let me comment on some of the proof points we have seen over the last few months as we execute on our hybrid cloud platform and AI strategy.

First, to drive leadership and focus as a hybrid cloud platform company: a key element of this strategy is to win the architectural battle in cloud. And with our cloud foundation in place, client consumption continues to grow. We now have 2,800 clients using our platform, a number which has grown 40 percent over the last year. In the fourth quarter, clients such as Barclays, Walmart, GEICO, Airbus, Ford, ABB are all leveraging our hybrid cloud platform to accelerate their own digital transformation journeys.

We're also making good headway in our focus on industry clouds, which are designed to tackle the specific needs of mission-critical and highly regulated industries. Following the successful launch of our Cloud for Financial Services last year with more than 75 ISVs and SaaS partners including Adobe, Infosys Finacle, Persistent Systems and many others, we launched our Cloud for Telecommunications in November. So far, more than 35 partners have joined our Cloud for Telecommunications. For example, Samsung is working with IBM and Red Hat to develop new user experiences for business. We are also helping major companies like Verizon, Vodafone Idea, Bharti Airtel and AT&T to transform their IT and telecom network operations.

Second, to be the trusted partner of clients for data and AI: the opportunity in AI is massive while the current enterprise deployment rate is in the single digits. Clients are now at the point where they are moving from experimenting with AI to deploying it at scale. To seize this opportunity, our AI platform is focused on data, automation and security and now includes more than 30,000 clients who have turned to IBM to unlock value from their data. We're helping clients across industries build 'intelligent workflows' by infusing AI into their core business processes such as hiring, supply chains and customer service. When it comes to data and AI, trust is paramount. IBM is unique in that we make a hard commitment not to monetize or use our clients' data. We also offer the

industry's strongest commercially available cryptographic technology. And we give clients the ability to retain control of their own encryption keys. In the fourth quarter, clients such as Air Canada, Sprint / T-Mobile, State Street and Humana used our rich data and AI capabilities to drive business outcomes.

As we look forward, we are also investing to develop and address future market opportunities, such as quantum computing. Quantum has the potential to unlock hundreds of billions of dollars of value for our clients by the end of the decade. To seize this opportunity, we have a roadmap to build a 1000-plus qubits quantum computer by 2023 and we've expanded our fleet of quantum computers on which our clients are working today.

Actions to Accelerate Change

I want to now spend a couple of minutes on a series of significant changes we are making to the company – most since just the beginning of October. We know that a platform-centric strategy requires a fundamentally different way of doing business. This is why our operating model is being quietly but substantially reshaped. These decisive moves are all aimed at creating value through greater focus on our portfolio, our operating model and the needs of our clients. And, as they take hold, they will help us to deliver sustainable mid-single digit revenue growth, post separation.

To drive greater focus on our portfolio, we announced the separation of our Managed Infrastructure Services business in October. As I just mentioned, this month we appointed Martin Schroeter as this new company's CEO. Martin has a unique understanding of the business, its global talent base and 4,600 clients. You'll hear from him shortly. Though much remains to be done, we are on track to complete the spin by the end of the year. We are working closely with clients to ensure a smooth transition while we are also renewing business and signing new deals. We have a comprehensive project management office to establish the new entity and to optimize the business. I can tell you that there's a great deal of excitement among our employees about the opportunities ahead for this new company.

To strengthen our hybrid cloud and AI portfolio, we have announced ten acquisitions since I became CEO and seven acquisitions just since October. This includes five in Global Business Services which add skills to help our clients with their journeys to cloud; Red Hat's first acquisition as part of IBM that adds cloud-native security capabilities for OpenShift. Our investments in organic and inorganic growth, and in our people, will continue to be sharply focused on both hybrid cloud and AI.

To accelerate consumption of our hybrid cloud platform, we are also rapidly expanding our ecosystem by adding hundreds of new partnerships with Global System Integrators, Independent Software Vendors and major third-party software partners and also elevating the role of partners. We're investing \$1 billion in our ecosystem so that our partners can play a much bigger role in fulfilling the many needs of our clients. As an example, we recently teamed up with Salesforce to deliver a new strategic contact tracing platform for the UK National Health Service to help them in their fight against COVID-19. Salesforce and IBM have also joined forces to address key challenges such as vaccine management using IBM's Sterling supply chain solution and our blockchain based digital health pass together with Salesforce Vaccine Management and CRM capabilities.

To simplify and transform the way we engage clients, earlier this month we announced a new go-to-market model. The first aspect is that we've simplified our sales model by adopting a single consistent segmentation, which will make it easier for clients to work with us and unlock a great deal of productivity. In addition, we are providing clients with a more technical and experiential approach, with investment in pre-sale garages that allow us to co-create with our clients earlier in the sales process. And we're ensuring our sales organization is fully incentivized toward our strategic growth areas. Finally, we're investing in and elevating the role of our ecosystem partners to deliver more value to clients.

Let me say a few words about the changes we're bringing to our culture. Since I became CEO I've talked at great length about the importance of culture and the need to instill a growth and entrepreneurial mindset. As part of that, we're encouraging more business risk taking and ensuring a higher tolerance for failure across the business. This should allow us to

more quickly respond to clients, seize more opportunities and drive better business outcomes.

I'm only scratching the surface of all the actions we've taken to sharpen our focus. As a result, we are running the company differently as we begin 2021. I'm convinced that all these changes will allow us to deepen our client footprint and open up new avenues for growth.

Accelerating IBM's Performance

Now, let me speak to our expectations for the next two years. All of the actions I've taken are designed to drive growth, and we expect to deliver sustainable mid-single digit revenue growth post separation, with strong free cash flow performance.

How do we achieve this? First, through the continued strong growth of Red Hat, which has grown 18 percent on a normalized basis in 2020 and will be an even larger contributor to revenue growth post-separation. Second, with improvement in the Global Business Services trajectory, we expect GBS to return to its pre-pandemic growth rate by the middle of the year. Third, by leveraging our expanded ecosystem to further contribute to both GBS and software. And you'll finally start to see the benefit from the investments we're making – both organic and inorganic. These will all contribute to an improving software trajectory as well.

In the first half of the year, we expect our results to continue to reflect some of our current challenges as well as our product cycle dynamics. And of course, all year we'll be working on the separation of Managed Infrastructure Services. But these are not long-term trends in the business, and these headwinds will dissipate.

In 2021, the significant changes we have made to focus on hybrid cloud and AI will also begin to take hold. The company will look different at the end of the year, particularly with the execution of the spin-off, but also with the operational changes to sharpen our focus. At a high level, in 2021, we expect to grow revenues at current spot rates, with better performance in the second half than the first half. This is the first step toward achieving mid-single digit revenue growth, post separation. And

we expect to generate between \$11 to 12 billion of adjusted free cash flow. These are the measures we are focused on.

This is where we stand today and how we will operate to achieve our growth goal. Jim will cover all of this in more detail. Over to you Jim.

4Q20 Highlights

Thanks Arvind. I'll go through our performance and then wrap up with a perspective of how the actions we've taken in 2020 position us to deliver on these financial objectives.

In the fourth quarter, we delivered \$20.4 billion of revenue. We expanded our gross profit margin. With a significant charge for structural actions that improve our go-forward position, we reported operating earnings per share of \$2.07. We generated free cash flow of \$10.8 billion for the year. And we have strong liquidity with a cash position of over \$14 billion.

The fourth quarter is our seasonally largest transactional quarter, and I'll remind you that a year ago we had a very strong software performance and our first full quarter of z15 availability. We knew that given our product cycle dynamics – and the pressure from the current environment – that the fourth quarter of 2020 would be our most challenging, in terms of year-to-year revenue performance. Ninety days ago, we expected revenue and operating earnings per share to be in line with historical third to fourth quarter seasonality. In 2020, our fourth quarter revenue came in slightly below our typical seasonality, while EPS was at the higher end of the historical range, before the charge for structural actions. And we had a good finish to the year in free cash flow.

The challenging environment we've seen since March continued – with a shift in clients' buying behaviors and priorities. Given the level of macroeconomic uncertainty, more clients tended to move toward shorter duration engagements, impacting our software revenue. But we did have a good IBM Z performance relative to where we are at in the product cycle. We also continue to see good demand in offerings that support our clients' digital transformations, and we're driving strong adoption of our hybrid

cloud platform. Arvind mentioned we now have 2,800 clients using our hybrid cloud platform. For perspective, that's more than a thousand new enterprise clients since we acquired Red Hat.

Red Hat continued its strong performance with normalized revenue growth of 17 percent. That's slightly higher than the third quarter rate, driven by subscription growth. Strong subscription bookings contributed to over 20 percent backlog growth, and the Red Hat backlog is over \$5 billion for the first time. Global Business Services continues to drive adoption of OpenShift and IBM Cloud Paks, and over the course of 2020 we accelerated the number of GBS engagements using Red Hat technology, with 260 engagements for the year.

We've discussed the economics of a platform model, with the software and services revenue multiple anywhere from 3x to 8x the platform revenue. Our full stack cloud capabilities, from infrastructure up through our cloud services, generated over \$25 billion of cloud revenue in 2020, which is up 20 percent over the prior year.

IBM is a high value business – generating ample profit and free cash flow to invest for future growth and support our dividend policy. We again expanded our operating gross profit margin – up 70 basis points in the fourth quarter and 130 basis points for the year – with expansion across software, services and systems. This operating leverage at the gross margin level enables higher investment – in innovation, in skills and in ecosystem.

Our fourth quarter pre-tax profit also reflects a charge of over \$2 billion for structural actions to simplify and optimize our operating model – and reinvest the savings to accelerate growth. This charge is \$260 million – or about 25 cents of EPS less than what we discussed back in October,

driven by a few countries, primarily in Europe, with government restrictions on certain employment actions in the current environment.

This charge did not have much impact on our fourth quarter cash flow, and we generated over \$6 billion of free cash flow in the quarter, and \$10.8 billion for the year. Our free cash flow performance in 2020 was driven by working capital improvements and contribution from Red Hat, net of related interest. This was offset by increases in net capital expenditures to scale our cloud infrastructure, and workforce rebalancing payments from previous actions. We continued to have high free cash flow realization, which was well above 100 percent as expected. We ended the year with a cash balance of \$14.3 billion, which is up over \$5 billion while our debt was down \$1.4 billion, with \$4.5 billion of debt maturities in the fourth quarter.

Cloud & Cognitive Software Segment

Now, let me turn to the segments, starting with Cloud and Cognitive Software. Revenue was down seven percent in the quarter, and gross margin was up 20 basis points.

This year has proven to be a challenging transactional environment, especially in the fourth quarter, which is our largest transactional base. As I said, we had particularly strong software performance a year ago, when revenue was up 10 percent. The fourth quarter of 2019 was the peak of our enterprise license agreement or ELA cycle, which renew about every three years, on average. With the uncertainty our clients are facing in the current environment, we're seeing many of them opt for shorter duration ELAs. This dynamic, in combination with the large seasonal volume of ELAs in the fourth quarter, pressured the fourth quarter's software revenue performance. At the same time, our renewal rates for subscription and support improved this quarter – in fact it was the strongest year-to-year increase in some time. This is evidence of our clients extending their commitment to our software solutions. In this environment, our hybrid cloud and AI solutions like Red Hat and Cloud Paks are resonating with clients.

In Cloud and Data Platforms, revenue was up six percent. Red Hat delivered double-digit growth in both Infrastructure and App Development and emerging technologies. We continue to gain share in both product areas, instantiating the importance of our hybrid cloud platform and the Linux foundation to our clients. Earlier this month, Red Hat announced plans to acquire StackRox, a leader and innovator in container and Kubernetes-native security. This further enhances Red Hat OpenShift, the industry's leading enterprise hybrid cloud platform. Within Cloud and Data Platforms, we're also building out our integration offerings, bringing AI-

powered automation across the portfolio through key partnerships and new innovation. During the quarter, we acquired Instana, an application performance monitoring and observability company. We also expanded our partnership with ServiceNow to develop a joint solution around Watson AIOps, an IBM solution which helps enterprises to self-detect, diagnose and respond to IT anomalies in real time. And we continue to enhance the Cloud Pak for Automation, which grew at a strong double-digit rate this quarter.

Our Cognitive Applications revenue was down less than two percent. We had growth in Security, fueled by our modernized Cloud Pak for Security and services. This was offset by weaker performance in solutions concentrated in industries more impacted by the current environment – like Tririga, which is focused on commercial real estate.

As expected, our software performance was most impacted by Transaction Processing Platforms. Clients' prioritization of opex over capex was amplified this quarter with our strong seasonal mix toward transactional revenue and the ELA dynamics I just described.

In Cloud and Cognitive Software, we remain focused on our hybrid cloud and AI strategy and will continue to invest in our portfolio as we head into 2021.

Global Business Services Segment

In Global Business Services, revenue declined five percent, which was about a point sequential improvement from the third quarter – and we had gross margin expansion of 260 basis points.

Our book-to-bill in the quarter was strong, contributing to backlog growth for GBS. While there remains some market uncertainty, clients are looking to accelerate their digital reinventions by leveraging business transformation services built on hybrid cloud. Our offerings are aligned to this high-value opportunity with a clear focus on reimagining workflows using AI – and modernizing the underlying application infrastructures through hybrid cloud.

We see this in our GBS results. First, our GBS cloud revenue grew at a double-digit rate for the quarter and the year and is now almost \$6 billion annually. Second, our Global Process Services' revenue returned to growth, as we deliver efficiency and flexibility to our clients' processes by infusing innovative technology and redesigning workflows. And third, our consulting signings grew eight percent, driven by advisory work for application modernization, and enabled by our unique and experiential Garage methodology.

In Application Management, our performance reflects a continued shift from traditional On-Prem services to building and managing cloud applications. Our incumbency in Application Management creates the opportunity and trust to be the partner of choice for their digital journey. This GBS incumbency plays an important role in driving adoption of Red Hat's hybrid cloud platform.

As I mentioned earlier, our GBS Red Hat engagements accelerated through the year. We had 75 engagements in the fourth quarter, with clients including BMW, Humana, Samsung Electronics, Ikea and Costco. And, similar to last quarter, approximately one-third of our quarterly Cloud Pak revenue resulted from GBS engagements.

To continue this momentum, we are investing in ecosystems, resources, offerings and skills. Arvind mentioned we have announced five GBS acquisitions in the last few months. Nordcloud and Taos provide cloud native development, multi-cloud migration, and platform engineering solutions that advance our clients' cloud journeys. And, 7Summits, a leading Salesforce partner, Truqua, a leading SAP partner, and Expertus, a leading digital payments solutions provider, are collectively at the center of our clients' digital transformations. Finally, the investments we have made in our delivery capabilities, such as our innovative Dynamic Delivery model, have resulted in improved delivery quality, which are reflected in our net promoter scores and our gross margin expansion.

Systems Segment

Turning to Systems, revenue was down 19 percent, driven by product cycle dynamics, while our gross margin expanded 380 basis points.

We saw the product cycle dynamics play out in IBM Z, Power and Storage. Power revenue was down at a level consistent with last quarter, and Storage revenue was also down, driven by high-end storage tied to the IBM Z cycle.

IBM Z revenue was down 24 percent as we've wrapped on the strong growth in the fourth quarter last year, when we were up 63 percent. Ninety days ago, I mentioned that clients in sectors like banking and financial markets made purchases early in the cycle to manage through robust market volatility – while those in select other industries focused on cash preservation, elongating z15 adoption. We've made up ground in the quarter, and improved adoption in some of the lagging industries. IBM Z delivered growth for the year despite a second half wrap on the product cycle and within a challenging environment. This reflects the importance of this high-value, secure and scalable platform with cloud native development capabilities. Based on this performance, we expect z15 to be fairly consistent with prior cycles. And, looking back over a longer period of time, our installed base of MIPS is over 3.5x the level of a decade ago, with 60 percent of our install base now in new workload areas like Linux.

The Systems portfolio continues to deliver critical and lasting value to our enterprise client base, in support of our hybrid cloud strategy.

Global Technology Services Segment

Turning to GTS, while revenue was down eight percent, we expanded gross margin by 70 basis points. We had strong contract renewals and added a number of new clients.

As Arvind mentioned, at the beginning of October we announced the spin-off of our Managed Infrastructure Services business into a separate public company – which we're referring to as NewCo for now. We are making good progress on that work and remain on track to complete by the end of the year. As we discussed in October, this process is complex and includes working with clients to ensure a smooth transition to NewCo as the world's leading infrastructure services provider, optimizing the business model to improve its financial profile and executing upon the necessary financial, legal and regulatory milestones to enable the transaction. I'll give you some additional color on each of these three areas.

First, from a client perspective, we are deeply engaged with our clients that make up the \$62 billion of backlog, and they are strongly supportive. We are seeing client confidence in NewCo's long-term value proposition to manage and modernize mission-critical infrastructures. This quarter we had wins at clients such as the Dutch Ministry of Defense, Fung Group, and Bankinter. In the fourth quarter, we signed 11 new logo deals, which is more than double the prior year, and one of the highest in the last couple of years. Our renewal rates of existing contracts this quarter were also at the higher end of our historical performance. However, while we had a strong pipeline as we entered the quarter, with the announcement, as expected some negotiations were extended, resulting in some deals moving out of the quarter.

Secondly, we are optimizing the NewCo business to have a leaner and more efficient operating model. We continue to take a disciplined approach to improving our margins and overall financial profile. As part of this, a considerable portion of the \$2 billion charge for structural actions was for GTS. We also have taken steps to restructure existing contracts and further reduce activity in lower value offerings. These actions impacted our revenue performance this quarter, but contributed to the gross margin expansion of 70 basis points. All of this positions NewCo for an improved margin, profit, and cash generation profile.

Lastly, NewCo has an unparalleled operational footprint—it has approximately 90,000 employees and operates in roughly 115 countries. And, as you know, Managed Infrastructure Services is an integrated business, not only within IBM but within GTS. We are executing on our detailed plan to achieve the milestones to create a standalone company. Today, we are working with Works Councils on employment terms, establishing NewCo's legal entities across the world, drafting the agreements which outline the on-going relationship between IBM and NewCo, and developing audited financials. We expect the Form 10 to be available in the fall, at which time we will conduct investor outreach. We'll continue to update our progress as we move through the year.

This is a good place to pause, and turn it over to Martin Schroeter, NewCo's new CEO.

NewCo: The #1 Managed Infrastructure Services Company

Thank you, Jim. I am delighted and honored to be briefly speaking with you today on IBM's earnings call as the CEO of "NewCo", and yes, we are working on a name. When Arvind and I began talking about this role, he let me speak with all the teams who are working on it, and as I did my due diligence, it became very clear to me that I absolutely wanted to be a part of this. With the outstanding talent in NewCo, the nature of NewCo's work for the leading companies in every industry, and the freedom of action or the mandate that NewCo will have I could not be more excited about the future of this business. Of course, as Jim noted, we have a lot of work to do prior to NewCo being a separate, publicly traded company, and as we put all of that together I will tell you more of the story about what NewCo will look like. In the meantime, we do know what we have to get right in order to realize the tremendous potential we see.

First, we know that we must continue to serve our clients. These industry leaders – NewCo's clients – trust us to deliver some of their most important workloads in challenging environments and NewCo will continue to do that. It's what our clients expect and deserve. It's always been NewCo's "True North" and will continue to be. And over time, our clients will see our strong investments bring new capabilities into their environments to help their ongoing journey into a more digitized world.

Second, we must continue to invest in and develop our teams, the teams our clients see and need every day. To our clients, our people are the face of NewCo and they are the people who know how to make these complex systems work. So, we'll build the right inclusive culture around client service, innovation and talent so our clients continue to see how our teams shine brighter than any other.

Third, and in support of the other elements of our business, we must establish the financial model for NewCo that ensures our long-term success. IBM has already provided, at a high-level, some of the characteristics of NewCo's financial profile when it becomes independent. And we're working on the specifics now in order to give you a complete and clear view of NewCo's profile but we know that NewCo's long-term success requires the right "starting point" and we will make sure NewCo is launched the right way.

And, of course, we must build a strong relationship with our owners and the broader stakeholder community. To that point, I look forward to discussing the opportunities we see and how we intend to capture them in due course.

As I said, I was not going to miss the opportunity to be a part of this. With a sharper focus and broad freedom of action, we have a tremendous opportunity to drive client value and translate that into a compelling investment thesis.

Now I'll turn it back to Jim.

Summary

Thanks Martin. Now, before the Q&A, I want to bring it back up to the IBM level with a summary of the actions we are taking, and the resulting expectations for 2021. These actions span our portfolio, our operating model and our capital structure.

After building a foundation in hybrid cloud, and accelerating Red Hat platform adoption, we are now separating Managed Infrastructure Services to better align to our platform strategy and improve the financial profile of both businesses. At the same time, we are increasing investments – organic and inorganic – in innovation, expertise and ecosystems. We're investing in platform capabilities, including security and industry-specific clouds. We're investing in data and AI, and in technologies like quantum to create future market opportunities. As we bring these innovations to market, we're adding GBS skills and expertise. We're making changes to our go-to-market to engage our clients in a more technical and experiential way. And we're expanding our ecosystem to drive platform adoption and broaden our reach.

And in the fourth quarter we executed structural actions to simplify and streamline our business. These actions will improve the EBITDA profile of NewCo, address stranded costs from the separation and generate savings that will be reinvested to extend our position in hybrid cloud and AI, and accelerate our growth.

We have also taken actions to enhance our balance sheet and liquidity, resulting in a stronger financial position. We have focused our captive financing business on IBM's hybrid cloud and AI offerings. We've exited OEM Commercial Financing and have entered into an agreement to sell our IBM Commercial Financing receivables. As a result, our financing

receivables have declined from \$32 billion to \$18 billion over the last 2 years, reducing our external debt needs. Looking at our retirement-related plans, as you know we have shifted our asset base to a lower-risk, lower-return profile. At the end of the year, our plans remain well funded. Our overall returns in 2020 were well ahead of expected returns and the funded status of our worldwide qualified plans was consistent with last year.

Bringing it all together, we feel good about the path we're on moving into 2021, and as Arvind said, we expect an improving financial profile throughout the year. For the full year, we expect to grow revenue at current spot rates. In the first half, we expect our results to continue to be impacted by the shift to shorter duration software transactions as clients deal with uncertainty, and by our IBM Z product cycle dynamics. At the same time, we expect GBS to return to pre-pandemic revenue growth rates by mid-year. As I mentioned, we weren't able to execute the structural actions in all countries in the fourth quarter. We anticipate the restrictions will be lifted over the next several months and are planning to execute the remaining structural actions in the first half of 2021, which will result in \$260 million of pre-tax charges.

Looking at our cash flows, we expect \$11 to \$12 billion of adjusted free cash flow in 2021. This reflects a year-to-year cash tax headwind of about a billion dollars. But to be clear, this adjusted free cash flow does not include the cash impact of the structural actions or the transaction costs associated with the spin-off of our Managed Infrastructure Services business. For perspective, at this point we expect to pay about \$4 billion for these items over the next 18 months, with about \$3 billion in 2021. As we look to 2022, we expect to build on this, with adjusted free cash flow in the range of \$12 to \$13 billion.

I also want to comment on our balance sheet as we enter 2021. We're in a strong liquidity position with over \$14 billion of cash on hand. Our plan is to continue to de-leverage and we expect debt reduction throughout the year aligned with our scheduled maturities – so we'll have further progress in reducing debt since our peak debt balance when we financed the Red Hat acquisition in mid 2019. This, together with the actions to focus our financing business, give us confidence in operating at a single A credit rating while we continue to de-lever.

In sum, we expect to continue our progress as a leading hybrid cloud and AI company in 2021, with an improving financial profile.

So, with that, let's go to Q&A. I'll turn it back over to Patricia.

Closing

Thank you. Before we begin the Q&A with Arvind and Jim, I'd like to mention a couple of items. First, we've included supplemental information for the quarter and the year at the end of the presentation. And finally, as always, I'd ask you to refrain from multi-part questions.

So operator, let's please open it up for questions.