

## WE SAT DOWN WITH GEORGE ZINN, CORPORATE VICE PRESIDENT AND TREASURER AT MICROSOFT, TO DISCUSS LIQUIDITY MANAGEMENT, THE INVESTING CLIMATE AND HOW CLOUD COMPUTING IS TRANSFORMING HIS TEAM'S WORKFLOWS.

KB: How do you manage the complexities of investing more than \$100 billion in cash globally, while balancing dividends, buybacks and M&A?

**GZ**: We've got a dual mandate: we want to protect and preserve capital, but we also want to invest in a prudent fashion. Before the Tax Cuts and Jobs Act of 2017, it was really a tale of two balance sheets. After the Jobs Act, the two balance sheets were combined and as a result, we moved to a much more asset/liability matching posture with our debt as it rolls off. It's fair to say we still have a lot of treasuries and agencies. If you look at the duration of our investing portfolio, we're far more risk averse than some of our peers with similar balance sheets.

KB: Earlier this year, cash was back and we finally had some yield, although yields have fallen again. What's it like to be a corporate treasurer in these times?

**GZ:** We just don't spend a lot of time on the day-to-day movements. It's far more of a macro top-down implementation of our investing framework with very minor course corrections. Where we really spend a lot of time is liquidity management for strategic investments and M&A.

KB: You've done some larger deals recently. Can you tell us about your liquidity management strategy for managing that M&A to completion? **GZ:** Our largest acquisition was LinkedIn in 2016 for \$26.2 billion. The market expected us to come with a bond issue given the size of the deal and we came in for about half of that. It really tightened up our offering pricing. We used commercial paper to raise the other half.

Then for GitHub last year, which was our largest stock acquisition, we moved to repurchase shares to address the dilution resulting from that stock issuance. We wouldn't have been able to do those repurchases and raise that capital without our banking partners, including BNY Mellon.

KB: Can you tell us anything unique about how you monitor such large cash balances, payments and intercompany loans?

**GZ**: I think our ability to add up our money daily is pretty unique for a non-financial company. We do business in 191 countries. Most companies don't have a very high percentage of bank statements reporting through the overall ledger. We have multiple banks feeding us statements and, through various assumptions we make, we can produce both our cash balances as well as our custodial positions every morning, all added up.

KB: We hear a lot about Microsoft's "digital transformation," which speaks to combining people, data and services to enhance productivity. Can you tell us your vision for that?

**GZ:** We're using our software, cloud platforms and tools to make our jobs easier. We moved all our first-party apps to Azure, Microsoft's cloud computing service, and reduced our infrastructure costs by 20% and related physical footprint by 60%.

I'm really happy with those results, but that's not the reason I would do it again. The biggest benefit is that all of our data is now in one place. Everybody is able to do things that we always talked about, like embracing our Power BI service, which is a visualization/analytics software tool, to query gigabytes of data to get insights on our business. It opened up our ability to analyze and visualize information, saving us a lot of time that we used to spend trying to rationalize spreadsheets, figure out where all the information was and then reconcile it.

Looking ahead, the next step in our digital transformation is to see if there is a third-party solution that will help further streamline our bank account management, intercompany loan management and cash flow forecasting systems.

KB: What are some of the things you can now do with those workflows in your Treasury function?

**GZ:** We're using some very new Microsoft tools. We integrated Microsoft

Flow with Azure Active Directory, which allows us to automatically determine whether a signer on a bank account needs to be turned on or off.

So we now have very interactive discussions around the data and in meetings can click through the data to discover new information and insights in real-time.

Additionally, we've been experimenting with Azure Machine Learning, which provides data that allows us to do our cash forecasting more efficiently and create a global customer master database for Accounts Receivable. We're also able to increase our straight-through-processing rates for our trading activity like triparty repo after moving our custody business to BNY Mellon.

For that switch, we used Microsoft Teams. It's a unified communications platform, with group chat and collaboration tools. It helped the implementation go more smoothly because we had an open line of communication for meetings and chats, and we could work more collaboratively by keeping the latest versions of our work plans and schedules in one central place.

I think our new tools are making people feel more empowered, and in turn they're more productive and engaged.

KB: Some of what you're developing sounds pretty transformative internally. Have you discussed any attempts to commercialize it?

**GZ**: We've discussed with our product groups whether they're interested in our applications, and we've talked about whether we should give one of those groups a license.

Some of the applications we've developed are being made available to a couple of customers in private review mode. Those customers are realizing that once they move their systems to the cloud, they get not only a cost saving, but also the agility and velocity to move much faster and create more with the bandwidth they currently have. But as the Treasury department of a corporate group, we're not the

right team to support customers outside the company, so we still have to figure out the product development and support model.

KB: On the subject of trading, there are some new dynamics I'm curious about given you're a direct participant in US Treasury auctions. Can you talk about some of those enhancements?

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\$100 million government treasury agency trades in bits, and it would take hours. Now we're able to process it all as a single trade because of the systems and partnership we started with BNY Mellon in November. BNY Mellon takes the trade and reconciles it automatically on the back end as a Fed clearing bank. We don't even see that - it's straight-through processing. That was a terrific win and a major enhancement in the Treasury auction process for us.

KB: Even though you've determined that you're out of scope for the

non-cleared margin rules that are starting to capture a much wider swath of the buyside in 2019 and 2020, you've chosen to get some assistance in your daily variation margin processes. Can you walk us through your thought process and the benefits that you're seeing?

**GZ:** We know our collateral program is unique. The opportunity to outsource that to BNY Mellon was attractive because it's a complex job when you're talking about so many types of interest rate, credit and FX derivatives.

KB: There has been some chatter about whether politicians should look at buybacks to make sure there's enough coming down to the employee level. If that ultimately become something more substantial in the form of a rule, how do you think that would affect your ability to meet shareholder return targets?

**GZ:** Our employees are compensated in part with stock in order to help align their incentives with the company's performance. Those stock issuances create dilution. So, if you prohibit the repurchasing of shares, you end up in a more diluted position as a shareholder. I don't know how you regulate that, but there are politicians thinking about it.

KB: How do you retain sophisticated people who want to be at the cutting edge of a treasury function when you make these seriously nuanced and gradual changes to your investing approach?

GZ: We have a really strong team that I am very proud of. These are exciting times at Microsoft. We have a very charismatic and smart CEO [Satya Nadella], who alongside the digital transformation, has orchestrated a cultural transformation that is very inspiring. It's not just limited to the technology, but also moving from a "fixed mindset" to a "growth mindset."

Questions or comments on the story? Contact the writer, Katy Burne, at Katy. Burne@bnymellon.com

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