origination system that will set a new industry standard for closure speed and customer service.

Yes, we are always improving our economies of scale (to the ultimate benefit of our clients). And yes, over time, banks have been enormous innovators.

We commonly hear the comment that a bank of our size cannot generate economies of scale that benefit the client. And we often hear people say that banks don't innovate. Neither of these comments is accurate. Below I give a few examples of the large and small innovations that we are working on:

- **Consumer and small business banking accounts.** Many decades ago, bank accounts meant checks and a monthly statement, with few additional benefits provided to customers (other than maybe a toaster). Today, most checking accounts come with many benefits: debit cards, online bill pay, 24-hour access to online account information, fraud alerts, mobile banking, relevant rewards and ATM access.
- **ATMs.** Today, ATMs are ubiquitous (we have almost 18,000 ATMs, and our customers love them). These ATMs have gone from simple cash dispensers to state-of-the-art service centers, allowing customers to receive different denominations of bills, accept deposited checks, pay certain bills and access all their accounts.
- **The cost and ability to raise capital and buy and sell securities.** Thirty years ago, it cost, on average, 15 cents to trade a share of stock, 100 basis points to buy or sell a corporate single-A bond and $200,000 to do a $100 million interest rate swap. Today, it costs, on average, 1.5 cents to trade a share of stock, 10 basis points to buy a corporate single-A bond and $10,000 to do a $100 million interest rate swap. And much can be done electronically, increasingly on a mobile device and with mostly straight-through processing, which reduces error rates and operational costs – for both us and our clients. These capabilities have dramatically reduced costs to investors and issuers for capital raising and securities transactions.
- **Cash management capabilities for corporations.** It is impossible to describe in a few sentences what companies had to do to move money around the world 40 years ago. Today, people can move money globally on mobile devices and immediately convert it into almost any currency they want. They have instant access to information, and the cost is a fraction of what it used to be.

FinTech and innovation have been going on my entire career – it's just faster today.

If you look at the banking business over decades, it has always been a huge user of new technologies. This has been going on my entire career, though it does appear to be accelerating and coming at us from many different angles. While many FinTech firms are good at utilizing new technologies, we should recognize that they are very good at analyzing and fixing business problems and improving the customer experience (i.e., reducing pain points). Sometimes they find a way to provide these services more efficiently and in a less costly manner; for example, cloud services. And sometimes these services are not less expensive but provide a faster and simplified experience that customers value and are willing to pay for. You see this in some FinTech lending and payment services.

It is unquestionable that FinTech will force financial institutions to move more quickly, and banks, regulators and government policy will need to keep pace. Services will be rolled out faster, and more of them will be executed on a mobile device. FinTech has been great at making it easier and often less expensive for customers and will likely lead to many more people, including more lower-income people, joining the banking system in the United States and abroad.

You can rest assured that we continually and vigorously analyze the marketplace, including FinTech companies. We want to stay up to date and be extremely informed, and we are always looking for ways to improve what we do. We are perfectly willing to compete by building capabilities (we have large capabilities in-house) or to collaborate by partnering.

Whether we compete or collaborate, we try to do what is in the best interest of the customer. We also partner with more than 100 FinTech companies – just as we have partnered over the past decade with hundreds of other technology providers. We need to be very technologically competent because we know that some of our competitors will be very good. All businesses have clear weak spots, and those weaknesses will be – and should be – exploited by competitors. This is how competitive markets work. One of the areas we spend a lot of time thinking and worrying about is payments. Part of the payments system is based on archaic, legacy architecture that is often unfriendly to the customer.

How do you intend to win in payments, particularly with so many strong competitors — many from Silicon Valley?

Right now, we are one of the biggest payments companies in the world (across credit and debit cards, merchant payments, global wire transfers, etc.). But that has not lulled us into a false sense of security – and we know we need to continue to innovate aggressively to grow and win in this area. The trifecta of Chase Paymentech, ChaseNet and Chase Pay, supported by significant investment in innovation, has us very excited and gives us a great opportunity to continue to be one of the leading companies in the payments business. Let me explain why.

Chase Paymentech. We already are one of the largest merchant processors in the United States (merchant processors provide those little machines that you swipe your card through at the point of sale in a store or that process online payments). We are quickly signing up large and medium-sized merchants – this year alone, we signed up some names that you all recognize, including Starbucks, Chevron, Marriott, Rite Aid and Cinemark. And I've already described how the partnership with Business Banking makes it easier for small businesses to connect with Chase Paymentech. In all these instances, we have simplified, and, in some cases, offered better pricing, as well as made signup easier – exactly what the merchants want. And very often it comes with ... ChaseNet.

ChaseNet. ChaseNet, through Visa, allows us to offer a merchant different and cheaper pricing, a streamlined contract and rules, and enhanced data sharing, which can facilitate sales and authorization rates. Again, these are all things merchants want. (You can see that we are trying hard to improve the relationship between banks and merchants.) We expect volume in ChaseNet to reach approximately $50 billion in 2016 (up 100% from 2015), as we have signed up and are starting to onboard clients such as Starbucks, Chevron, Marriott and Rite Aid. In conjunction with Chase Paymentech and ChaseNet, both of which allow us to offer merchants great deals, we also can offer ... Chase Pay.

Chase Pay. Chase Pay, our Chase-branded digital wallet, is the digital equivalent to using your debit or credit card. It will allow you to pay online with a "Chase Pay" button or in-store with your mobile phone. We also hope to get the Chase Pay button inside merchant apps. Chase Pay will offer lower cost of payment, loyalty programs and fraud liability protection to merchants, as well as simple checkout, loyalty rewards and account protection to consumers. As one great example, Chase has signed a payments agreement with Starbucks, which, we hope, will drive Chase Pay adoption. Customers will be able to use the Chase Pay mobile app at more