EVENT DATE/TIME: JANUARY 31, 2017 / 1:00PM GMT

OVERVIEW:

Co. reported 2016 net revenues of nearly $2.3b and non-GAAP EPS of $3.68. 4Q16 reported revenue was $599m and non-GAAP net income attributable to Co. was $161m or $0.95 per diluted share.
Good day, ladies and gentlemen. Welcome to the Nasdaq fourth-quarter 2016 results conference call.

(Operator Instructions)

As a reminder, today's call is being recorded. I would now like to turn the conference over to Ed Ditmire, Vice President of Investor Relations. Sir, you may begin.

Ed Ditmire - Nasdaq, Inc. - VP of IR

Good morning everyone. Thank you for joining us today to discuss Nasdaq's fourth-quarter 2016 and full-year financial results. On the line are Adena Friedman, our CEO; Michael Ptasznick, our CFO; Ed Knight, our General Counsel; and other members of the management team. After prepared remarks we'll open up to Q&A.

The press release and presentation are on our website. We intend to use the website as a means of disclosing material, non-public information, and complying with disclosure obligations under SEC Regulation FD.

I'd like to remind you that certain statements in the presentation and during Q&A may relate to future events and expectations, and as such, constitute forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Actual results may differ materially
from those projections. Information concerning factors that could cause actual results to differ from forward-looking statements is contained in our press release and periodic reports filed with the SEC.

I now will turn the call over to Adena.

Adena Friedman - Nasdaq, Inc. - CEO

Thank you, Ed, and good morning, everyone. Let me start by saying that 2016 was truly a significant year for Nasdaq, our businesses, our leadership team, and the geopolitical landscape. I’m very excited to have been named CEO, and to have the opportunity to lead this tremendous organization forward, during its next phase of growth and expansion.

I would like to start by thanking Bob Greifeld, for his incredible dedication and leadership over the past 14 years. Bob led a transformation that strengthened the Company’s foundation, and expanded it in a logical, disciplined, and progressive manner. It is because of his vision that Nasdaq is as well-positioned as it is today, as a leading global technology solutions company, serving the global capital markets.

Bob’s focus on shareholders was incredibly important to him, and one that he engrained in the entire organization. This manifested itself in the Company's tremendous efficiency, as well as the outstanding shareholder returns the Company has delivered over his tenure.

I know that Bob appreciated the insight and support he received from you throughout the years. I fully intend to continue Nasdaq’s focus on our shareholders, as well as our clients. Most importantly, our emphasis on delivering strong, consistent shareholder returns, while providing our clients with world-class exchange and capital markets solutions across the globe.

Having been in this role for a month now, and having spent time with key personnel in many of our businesses at their annual sales and strategy kickoff sessions, we are very excited about our prospects in 2017, and my confidence in this organization’s ability to continue to execute has only increased. Today, I want to organize my remarks around a few of the areas where Nasdaq is evolving our business, as well as cover some performance highlights from 2016, and then end with our execution priorities for 2017.

As I noted, 2016 was indeed a significant year of progress for Nasdaq. We welcomed several additions to the business and executive leadership team, all of whom share strong expertise in their respective areas. I have the utmost confidence in the leadership team we have assembled today, and their ability to move Nasdaq forward.

Moving ahead for us means that we are constantly evaluating our businesses and our client engagement, and finding the best path to success, and serving our clients in a unified and strategic way. With this goal in mind, we’ve decided to group listing services and our corporate solutions business under one segment, called corporate services in our reporting. Bringing these two businesses under one reporting segment will allow the investment community to gain a better understanding of the full range of services we offer our corporate clients, as well as highlight the unique value we deliver to them.

We strive to be a strategic partner to our 18,000 corporate clients throughout their life cycle, both as private and public companies. We intend to build further on the momentum in this area through increased collaboration and innovation across the teams at Nasdaq.

We are also now reporting market technology as an independent segment. This change will provide investors with a clearer view of what we consider the most differentiated and compelling aspects of Nasdaq’s business model. We are very excited about the growth and expansion opportunities in market technology, as we become an increasingly important partner to other markets, broker-dealers, and institutional investors.

We are also making significant changes in our fixed income businesses. Under new leadership, we are bringing our fixed income offerings together under one common brand, Nasdaq fixed income, as we begin to evolve the strategy to better support both our clients and our growth objectives.
While it resulted in a non-cash accounting impact in the fourth quarter, which Michael will detail, we’re confident the business will be better-positioned moving forward. Lastly, in terms of our business alignment actions, we have decided to end the NLX European rate futures initiative, and will be working with our clients and partners to facilitate an orderly wind down of open positions.

Now moving into the broader results for 2016, we are proud of the accomplishments that we achieved for our clients throughout the year, and the resulting financial performance for our shareholders. Specifically, in 2016, we delivered record overall net revenues of nearly $2.3 billion, record non-trading segment revenues of nearly $1.5 billion, and record non-GAAP EPS of $3.68, an increase of 9% year over year.

Building on this with our dividend payments and valuation improvement, Nasdaq achieved double-digit total shareholder return of 17.5% in 2016. This performance is a testament to the strength of our model, our teams, and our ability to execute against a mixed volume backdrop.

Recognizing that 75% of our revenues comes from subscription and recurring revenue businesses, I’ll speak to the non-trading segments first. We continued to see steady organic growth across each of our non-trading segments, which together delivered 4% organic growth in 2016, a figure that is consistent with both our track record over the last several years, as well as our forward-looking medium-term outlook.

This was driven in special part by accelerated growth in our market technology segment, which delivered a very strong 11% organic growth for the year, along with strong momentum exiting 2016 in terms of the fourth quarter’s robust new order intake of $136 million, one of our highest quarters ever, capping a very solid $276 million total for the year. Breaking down 2016 order intake into how we delivered for our clients included deepening our relationships with existing clients, such as contract extensions and in some cases contract expansions with the Hong Kong exchanges; Australian stock exchange; NEX, formerly known as ICAP; SIX Group; Borse Dubai; and Borse Kuwait. And significant new customer sales from clients such as NYIAX and the Affinity Capital Exchange, among others.

In conjunction with our trading business, we are particularly excited to announce in the fourth quarter, our agreement to support and host a leading bank’s dark pool, as part of our Ocean initiative, a new way of leveraging our expertise in trading and compliance support solutions to solve customer challenges, and we look forward to building on this success in coming periods. Along with market technology’s new order intake success in 2016, we were also excited to announce the Nasdaq Financial Framework, or what we call NFF, which is our new modular architecture, that will provide next-generation capital markets capabilities, including the integration of blockchain technology across the issuance and settlement of securities, as well as cloud-enabled trading and clearing capabilities. We expect this next generation platform to contribute meaningfully to our order intake in 2017 and beyond.

In our corporate services segment, we are very pleased to see solid progress in terms of improving our competitive position as a result of our continued client focus. In particular, issuers continued to see Nasdaq and our listing value proposition as the preferred venue for their public offering. This is evidenced in our 73% win rate among US IPOs in 2016, including an 87% win rate in US tech IPOs, as well as our success in large tech deals.

In fact, seven of the top 10 technology IPOs selected Nasdaq in 2016, including amazing companies such as Trivago, Nutanix and Coupa Software. We also attracted the largest energy IPO of the year with Extraction Oil and Gas, and the largest bank IPO with First Hawaiian Bank. We believe the investments and enhancements we have made to the IPO open experience, coupled with our corporate solutions and our long-term orientation to our listing relationships, are truly differentiating our offering.

In the Nordics, DONG Energy and Nets were two of the largest Nordic IPOs ever, and two of the top three IPOs globally last year. With 62 IPOs in 2016, and over EUR8.5 billion raised, we are very proud that our Nordic markets topped all other European regions. Lastly, Nasdaq became the fastest-growing venue for ETF listings, delivering 50% year-over-year growth in our total number of listings, with an increase of 110 Nasdaq ETF listings.

In corporate solutions, we made significant progress to enhance the client experience through the introduction and rollout of the next-generation IR platform, IR Insight platform. In doing so, we created an architectural foundation for all of our next-generation corporate solutions products going forward. The IR Insight launch and roll out, and other product enhancements, combined with the continued improvements in our service
and support, all contributed to the ability to improve our organic revenue trends. Our revenue performance in corporate solutions stabilized, as we progressed through 2016, culminating in modest but encouraging organic growth in the fourth quarter.

Turning to our information services segment, it continued to provide solid gains in 2016. The data products business specifically delivered a 7% revenue increase for the year, most of which was organic. Our index licensing and services business, on the other hand, experienced a challenging start to the year, due to beta headwinds in fund flows and market performance, but we progressively improved as the year went on, with assets under management ending the year higher versus 2015.

As we look to the future in information services, we are encouraged by the progress in leveraging emerging technologies, most notably machine intelligence, to expand the ways we serve our clients, such as including the launch of the trading and analytics product suite, which is just beginning to leverage the machine intelligence and its logic. The new family of solutions includes offerings that our clients use to refine their trading strategies, or identify potentially alpha-generating investing areas.

We continue to launch new analytics and insights products throughout 2017 and into the future, as a way to generate new growth opportunities for us moving forward. We also continue to make strides in expanding our index franchise, in particular with our Smart Beta products, which make up 44% of our growing $124 billion in AUM total. An example of this was launching the first fixed income product leveraging the DWA relative strength methodology, in partnership with State Street.

Now turning from our non-trading segments to the market services segment, it was a mixed year. In terms of beta drivers, the first three quarters of the year were characterized by low volatility and volumes, an obvious challenge, although volumes picked up post US election. In terms of our alpha drivers, we experienced a continued fierce competitive environment for market share in US equities and fixed income, while we made some late-year gains in market share at Nordic equities and US options.

Specifically in our US options business, we believe the IC acquisition provides us with significant upside in how we serve our options trading clients, in particular, in the complex order business and in our front end. We began to see the benefits of the combined options business as we went through the year, and we have worked closely with our clients to begin to see new order flow, achieving market share north of 40%, entering 2017.

Additionally, Nasdaq CXC, our recently acquired Canadian market, provides new ways to leverage our core trading expertise in North America. NFX, our energy futures market, continues to demonstrate a positive trajectory in the year and a half since its launch. Open interest reached a peak of 1.6 million contracts in January of 2017, a new high.

Volumes averaged 170,000 contracts per day in the fourth quarter, and we are averaging above 200,000 per day so far in January 2017. We enter 2017 with a clear opportunity to add to the 140 clients who have already traded, and we continue to identify additional products to bring to market. Overall, we are proud of our progress and accomplishments for 2016 across the businesses, and how we are positioned to continue the momentum as we enter the new year.

Shifting to the execution priorities in 2017, there are three in particular that I’ve communicated internally, and will share today. First is to remain intently focused on completing the integrations of the 2016 acquisitions, so that we can provide the full benefits of these investments to our clients and shareholders. As of the end of the fourth quarter in 2016, we’ve achieved $38 million in realized run rate cost synergies, and we continue to have high confidence we can deliver the full $60 million total by the end of 2017.

Second is to commercialize emerging technologies in meaningful ways, for our clients and shareholders. Most notably in the areas of machine intelligence, blockchain and the cloud. Leveraging our investments in the Nasdaq Financial Framework and the new trading and analytics platform, we will progress our commercial offerings in areas where we have the most compelling client opportunities.

Third is to improve our competitive positioning across all of our core businesses through continuous innovation and best-in-class client service. In my view, client-centric innovation and service, coupled with a return orientation to our investments, are the best means to secure our future growth. Of course, we’re going to have to navigate the macroeconomic and geopolitical backdrop in 2017. Looking very specifically at the most critical
areas and matters that will impact us, our industry, and our broader clients, our initial areas of focus will be financial regulation, tax reform, and broader trade and immigration issues, given that we are a global business.

In closing, at Nasdaq, we are always focused on our future, and the new ways in which we can serve our clients better. While we support our clients in a variety of different ways, technology has always been and will continue to be at the forefront of what we do. As a global capital markets infrastructure and technology solutions provider, Nasdaq has one of the most unique sets of capabilities in the industry.

We use these capabilities to enable entrepreneurs and innovators with new ideas to find the capital they need to grow and expand. We use the capabilities to enable investors and intermediaries to buy and sell financial assets with ease and efficiency. And we use the capabilities to help the entire industry mitigate risk.

All of these result in more constructive interactions with the capital markets, which as we've seen over the decades, creates jobs and drives economic growth. The management team and I are very focused on the importance of our role in the global economy, and how we can best continue to leverage our unique strength to advance our clients' ambitions.

I want to re-emphasize my excitement about leading this tremendous organization. I fully intend to bring the progress and success that Nasdaq has achieved, and I look forward to taking our Company, our business, and our brand into the future to reach new levels. I look forward to working with and collaborating with all of you, as well as our clients and key stakeholders, as we embark on this exciting journey together. Now I'll turn it over to Michael to review the financial details.

Michael Ptasznik - Nasdaq, Inc. - CFO

Thank you, Adena and good morning, everyone. My commentary will primarily focus on our non-GAAP results. Later in my prepared remarks, I'll discuss this quarter's differences between US GAAP and non-GAAP results. Reconciliations of GAAP to non-GAAP results can be found in the attachments to our press release and in the presentation that's available on our website at IR.Nasdaq.com.

I will start by reviewing fourth-quarter revenue performance relative to the prior-year quarter, as shown on page 6 of the presentation, and organic growth on pages 8 and 19. The 12% or $63 million increase in reported net revenue of $599 million consisted of $54 million in net revenues from our 2016 acquisitions of ISE, Marketwired, Boardvantage and Nasdaq CXC, and organic growth in the non-trading segments of $16 million or 5%. This was partially offset by an organic decrease in market services net revenues of $3 million, and a $4 million negative impact from changes in foreign exchange rates.

I will now review highlights within each of our reported segments, and all comparisons will be to the prior year period unless otherwise noted. I'll start with information services, which as reflected on pages 9 and 19, saw $8 million or 6% in increased revenue, consisting of $5 million or 4% organic growth, as well as $3 million increase related to the ISE and Nasdaq CXC acquisitions. The operating income margin was 69% in the fourth quarter, down a point from the prior-year quarter, due primarily to the impact of acquisitions, though the full-year 2016 figure of 71% was unchanged from 2015.

Market technology revenue, as shown on pages 10 and 19, increased $6 million or 8%, with organic growth of $7 million or 10%, partially offset by the impact of FX of $1 million. The growth was driven by increased revenues from software licensing and support contracts, as well as from surveillance products. Notably, new order intake was $136 million in the fourth quarter, which is among the highest quarters ever, and the period-end backlog finished at $777 million, just 1% under the record high for the fourth quarter of 2015. The operating income margin was 30%, down from 32% in the prior-year period, which had an unusually strong seasonal revenue spike.

Turning to corporate services on pages 11 and 19, revenues increased $24 million or 17%, primarily due to the Marketwired and Boardvantage acquisitions totaling $21 million, but also $4 million of organic growth, $2 million of which came from corporate solutions. The corporate services operating margin was 25%, unchanged versus the prior-year period.
While our new segment alignment reflects how we’re managing our businesses today and going forward, to be sensitive to the fact that we communicated a 20% margin initiative for the former technology solutions segment, which included corporate solutions and market technology, we will continue to provide periodic updates on our annual progress towards that margin goal. Looking at full year numbers, the Company has improved operating income margins from single-digit percentage levels in 2012 to 17% in the full year of 2016. We will continue to work to improve that margin by obtaining efficiencies that come from combining and streamlining our corporate solutions platforms, offering best-in-class service to retain and attract clients, and innovating our offerings to expand usage across our suite of products.

Market services net revenues on pages 12 and 19 saw a $25 million increase, reflecting inclusion of $30 million of revenue from the acquisitions of ISE and Nasdaq CXC, partially offset by a $3 million organic decline primarily in cash equities, and $2 million in negative impact from changes in FX. Market services operating income increased slightly to 54% versus 53% in the prior-year period.

Turning to pages 13 and 19 to review expenses, non-GAAP operating expenses increased $39 million. This increase included $29 million in expenses from our acquisitions, net of $8 million, of realized expense reduction from synergies. A $14 million organic increase, which was partially offset by favorable $4 million impact from FX. The 2016 full year saw a 3% organic increase in expenses, excluding the expense impact of acquisitions and related synergies, in line with the prior year.

Now turning to slide 14, our 2017 non-GAAP operating expense guidance is a range of $1.26 billion to $1.31 billion, which reflects core organic expense growth, excluding synergies of around 3%, the full-year impact of the acquisitions that closed at various points during the first half of 2016, anticipated progress against our synergy opportunities, and the impact of changes in FX rates. Included in this expense guidance is $40 million to $50 million of R&D spend.

Now, as many of you are you aware, the costs associated with operating NLX were included in our previous year’s R&D spend. With the closure of NLX, we expect to save approximately $6 million in 2017 versus 2016, including the impact of both expenses and contra revenues, with almost all the savings occurring in the second half of the year.

The $40 million to $50 million R&D range reflects in part the fact that we may choose to reinvest those savings into new R&D initiatives, as we continue to pursue compelling opportunities to invest in our future. We will keep our investors informed as we progress throughout the year.

Non-GAAP operating income increased 10% in the fourth quarter of 2016, and the non-GAAP operating margin totaled 46%, down approximately 100 basis points from the prior-year period, as organic revenue growth from our non-trading segments was mostly offset by higher organic operating expense growth. Net interest expense was $36 million in the fourth quarter of 2016, an increase of $9 million versus the prior-year period, reflecting the additional interest expense from our 2016 acquisition financing.

The non-GAAP effective tax rate for the fourth quarter of 2016 was 33.5%, and for the full year 2016 was 33.7%, in line with our 33% to 35% full-year guidance. We expect the 2017 non-GAAP effective tax rate to be in the range of 30% to 32%. The decline from 2016 is a result of the adoption of a new accounting standard, ASU 2016-09, which requires companies to include incremental tax benefits or charges related to the vesting of equity grants through the tax provision. Without this accounting change and the expected incremental benefit in 2017, our annual effective tax rate would still be in the range of 33% to 35%.

During 2017, each quarter’s tax rate will differ, as the tax provision will be influenced by the number of awards that vest and the difference in the stock price from the grant price. For the first quarter of 2017, we expect the effective rate to be between 24% and 26%. The adoption of this accounting standard will also result in an increase to our average diluted share count of approximately 700,000 shares. Non-GAAP net income attributable to Nasdaq for the fourth quarter of 2016 was $161 million, or $0.95 per diluted share, compared to $150 million or $0.89 per diluted share in the prior-year period.

There were several non-GAAP items in this quarter’s results, and given the number and size, I’d like to spend a moment to provide some detail around these. First, we had a $584 million in non-cash write downs, which included a $578 million asset impairment for the carrying value of the eSpeed trade name, relating to our rebranding of the US electronic fixed income business, and $7 million of other write-downs.
Second, we had $23 million in amortization expense for acquired intangible assets. Third, we had $20 million in merger and strategic initiatives expense, related primarily to the acquisition integrations.

Fourth, we had $12 million in expenses due to an accelerated recognition of certain share-based compensation expense, in connection with Bob’s retirement as CEO. This does not affect the vesting timing of his previously granted equity. And fifth, we were issued a $6 million regulatory fine from the Swedish Financial Supervisory Authority, an amount of which we are appealing.

Turning to capital, during the fourth quarter, our outstanding debt and our debt to EBITDA ratio were both reduced in the period due to fluctuations in FX rates and debt pay down. Our debt to EBITDA ratio ended the period at 3 times, and we continue to expect to deleverage to the mid-2 level by mid-2018. While we did not repurchase shares this quarter, through dividends and repurchases, Nasdaq returned nearly $300 million in capital to shareholders in 2016, constituting 48% of our non-GAAP income, even while executing on several attractive acquisition opportunities. As of December 31, 2016, there is $429 million remaining on the Board repurchase authorization.

In 2017, we will continue to look for opportunities to deploy our capital through organic and inorganic investments, share repurchases, dividends and debt repayment, as we work to maximize returns on capital to shareholders. Thank you for your time. With that, I’ll turn it back to Adena.

Adena Friedman - Nasdaq, Inc. - CEO

Thank you, Michael. We are ready for questions.

Q U E S T I O N S  A N D  A N S W E R S

Operator

(Operator Instructions)

Our first question comes from Rich Repetto with Sandler O’Neill. You may begin.

Rich Repetto - Sandler O’Neill & Partners - Analyst

Congrats, Adena, on your first call here. First, on the corporate solutions and the realignment, and thank you for being pretty straightforward, Michael, when you back into what you moved over, just the pure corporate solutions legacy ex-market technology, looked like 10% margins or so. Is that correct? And then you said that you’re going to update on future margin improvements. If I look at the synergies, all the margin improvements that you get as you were prior going from 18% to 20%, was it going to be in the legacy corporate solutions rather than market technology?

Adena Friedman - Nasdaq, Inc. - CEO

Sure. If first question is what was the margin of corporate solutions for the year, and you’re very close. It was 11% for the year. And in terms of the margin improvement I would say that the majority of margin improvement, we did expect to receive -- or we do expect to receive through the corporate solutions business, as we continue to consolidate our platforms and go down the roadmap that we established at our Investor Day back in April. We fully intend to continue to do that, and we do see some significant efficiency benefits coming from that over the next year.

But I also would say that as we continue to grow our market technology businesses, particularly the surveillance business, there are opportunities to continue to scale in that business. But that’s a -- I would say that we have also -- we’re also making some investments in that business to make sure that we’re positioning it for the next 5 to 10 years of future growth. So there are some investments there, in addition to the opportunity to scale, whereas in corporate solutions, there’s a very clear path we are undertaking to get to a higher margin.
Rich Repetto - Sandler O'Neill & Partners - Analyst

Got it. Thank you. Very helpful. And the one follow-up would be on NFX, the $0.02 drag, is that reported in net revenues, or is it actually -- is it net revenue positive, or is it really a drag on expenses? Is drag on net revenues or drag on expenses?

Adena Friedman - Nasdaq, Inc. - CEO

We do get net positive revenue from the NFX business, but we obviously have higher expenses than we have revenues. So therefore, we would expect that, so the drag is really coming from the expenses, as compared to the revenue intake so far.

Michael Ptasznik - Nasdaq, Inc. - CFO

There is -- we're still negative on the revenue side on NFX total. We are charging now through the rebates, et cetera, we still are a negative standpoint.

Adena Friedman - Nasdaq, Inc. - CEO

Okay. Sorry.

Rich Repetto - Sandler O'Neill & Partners - Analyst

Understood. Okay. Thank you.

Operator

Our next question is from Chris Harris with Wells Fargo. You may begin.

Chris Harris - Wells Fargo Securities, LLC - Analyst

Can you talk to us a little bit about the strategy in fixed income? What is Nasdaq's value proposition? What are the plans to grow that business?

Adena Friedman - Nasdaq, Inc. - CEO

Sure. When we look at it specifically for the US Treasuries business, I think that we see the opportunity for us to, first of all, focus our efforts. We had two initiatives that we had started to launch in 2016, that we've chosen not to continue to pursue, because we really want to focus on the core business and the core value proposition that the Nasdaq fixed income business provides.

And when we look at ways that we can provide our clients with better service or better capabilities, I think there are three things that we're focused on, as we go into 2017. The first are some new critical order types that we expect to introduce in the first half of the year. The second is continued rollout of new assets into the platform, and trying to get more volume into those assets, mainly off the run assets.

And then the third is the potential for us to look at creating more of a direct connect between the dealers and their clients, through some interfaces in networking that we can provide, using our technology as opposed to having to have them have to build that outside in their own infrastructure. So there are ways that we are looking at continuing to build on the business that we have, and we would expect that as we go through the year we'll start to see the benefits of that.
Chris Harris - Wells Fargo Securities, LLC - Analyst

Helpful. Thank you.

Operator

Our next question comes Brian Bedell with Deutsche Bank. You may begin.

Brian Bedell - Deutsche Bank - Analyst

Adena, your target margins for corporate services business in 2017 and 2018?

Adena Friedman - Nasdaq, Inc. - CEO

We have not provided target margins for the corporate services business. What we will continue to provide you though is the technology solutions margin, as it was previously reported, because of the fact that we've given you a target margin for that combined segment. So we want to continue to provide that transparency to you, and therefore, we will continue to provide that, as we march to that 20% goal. We're not providing a separate and distinct corporate services margin goal at this point.

Brian Bedell - Deutsche Bank - Analyst

As you said before, most of the cost saves are focused, or the margin improvement is focused really on the core basis in the legacy corporate solutions product suite; is that correct?

Adena Friedman - Nasdaq, Inc. - CEO

Right. And it's a combination of -- it's margin improvement combined with -- for a combination of both continuing to progress the business, and the value proposition to the clients, in addition to finding new efficiencies, yes.

Brian Bedell - Deutsche Bank - Analyst

On the tax rate guidance, so for 30% to 32%, so we assume that then steps up from that low pace in the first quarter, back almost to a normalized rate in the third through fourth quarters? Or is there opportunity for further tax rate reduction?

Michael Ptasznik - Nasdaq, Inc. - CFO

So it's really tied to the timing of the vesting of the equity awards historically. We provided the guidance for the full year and for the first quarter. The second quarter will go back to more of a normalized run rate.

The third quarter will probably be down again, the tax rate will be down again. We'll provide greater guidance as we get closer to that rate, and we get more surety as to what the percentages might be. You can use the average for the year in that range, and that does take into account that there should be also a drop in the third quarter.
Brian Bedell - Deutsche Bank - Analyst
Great. I'll get back in the queue. Thanks.

Michael Ptasznik - Nasdaq, Inc. - CFO
Just to be clear, won't be as big a drop as it was in the first quarter. It will be much smaller than the first one.

Brian Bedell - Deutsche Bank - Analyst
Great. Thank you.

Operator
Our next question is from Warren Gardiner with Evercore. You may begin.

Warren Gardiner - Evercore ISI - Analyst
I think you proposed some pricing changes to some your market data offerings in the last few months. You increased some, you lowered some others. Just wondering if you had any thoughts on how we should maybe be thinking about the net impact from some of those, all else equal?

Adena Friedman - Nasdaq, Inc. - CEO
Sure. We take a very strategic approach to looking at market data pricing across the suite of products that we have, both in the US and in Europe. And we take a very measured approach to looking at how we can generate value for our clients, and therefore, pursue some pricing changes in our products.

We don't do a standard sweep of pricing increases on an annual basis. That's not our approach at all. But we do anticipate that the pricing changes that we have proposed and implemented in the market data business in particular will generate somewhere in the range of, I think around 2% growth. But it's not particularly significant, but it is something that we continue to pursue, in connection with of course growing the demand for our products, as well as introducing new products in the business.

Warren Gardiner - Evercore ISI - Analyst
Sure. Thanks. And then on NFX, I think you said 200,000 contracts in January. Could you remind us where breakeven there is? I think you had said that level before, but I could be off on that.

Adena Friedman - Nasdaq, Inc. - CEO
I don't think we've ever provided you a breakeven level, specifically on contracts traded. We have a combination of growth in the contracts traded, as well as continued work with our clients to effectuate some pricing increases as we go into 2017, and through the year. And we are working in collaboration with them, to establish what those pricing increases should be, in connection with those products where we've had a critical mass of market share. So that's a dynamic conversation that we have with our clients, but they are very aware of and supportive of us making certain pricing moves, to continue to get to a sustainable level within that business. But it's going to be a combination of those pricing changes and continued growth in the contracts traded, and we have not provided any specific goals for that publicly.
Warren Gardiner - Evercore ISI - Analyst
Thank you.

Operator
Our next question is from Alex Kramm with UBS. You may begin.

Alex Kramm - UBS - Analyst
Maybe just starting on the corporate solutions business, nice to see the 2% organic growth. Can you just give us a little bit more color here what driving that? And as we look into 2017, do you think that organic growth rate can accelerate? And coming back to pricing, can you just remind us in the corporate solutions, are there annual inflators at the beginning of the year? Do they come throughout the year? Or should we actually expect to tick up already in the first quarter as we compare to the fourth-quarter growth rate here?

Adena Friedman - Nasdaq, Inc. - CEO
Thanks, Alex. So the first thing I would say is that we are obviously encouraged by the fact that we have gotten to the point of stabilizing the revenue, and now experiencing some organic growth in the business. We certainly are hopeful that we can continue that momentum into 2017, and we are doing that through a combination of a lot of things.

One is, continuing to improve and increase the value proposition to the clients, to make it so that it's more interesting for the clients to take our products, or maybe expand their usage of our products, as well as making sure that we can retain the clients, because this is a renewal type of business. So it's very important for us to make sure that we can renew our clients every year. On top of that, we are making sure that we invest in certain innovations that make these types of offerings more compelling to them.

In terms of what drove the fourth quarter specifically, we found the highest growth in the advisory business, which is a part of our IR Intelligence Suite, where we provide very detailed information around ownership levels for publicly listed companies, as well as in our Board Portal space. That continues to be a great growth business for us. So those were the two drivers of growth in the quarter.

In terms of pricing changes, we do modest pricing changes, not across the entire suite of solutions. Every year, we make a determination as to where we believe it's appropriate to do pricing changes, but they're very modest within the contracts. We have a cap.

It's somewhere in the range of anywhere from 2% to 3%, and we have done those as we've gone into 2017. And that just flows into the business. We don't make mid-year pricing changes, as a general matter.

Alex Kramm - UBS - Analyst
All right. Great color. Thank you. And then just going to the market services side for a minute, you highlighted the options performance and the market share improvements for this year.

Can you just give us a little bit more color what exactly you're doing? You're obviously six different markets or so now. So what exactly are you doing? And secondly, given the 5 percentage point increase year-to-date, any early color on the pricing trends we should be thinking about, in terms of rate per contract in the first quarter and going forward? Thank you.
Adena Friedman - Nasdaq, Inc. - CEO

Sure. We're very aligned with our clients, and so we spend a lot of time working with them to determine how best to enable them to effectuate their strategies within the options markets that we have. We now of course have six options markets, and a lot of different choices how they can participate in the options business. It does give them more opportunity to work with us to find ways to effectuate their strategies.

We have had some or our larger clients choose to increase their participation in our market. We're very pleased with that, and that of course brings with it follow-on volume from other clients who want to interact with that flow. That's been driving the increase. In the terms of the contracts, the pricing per contract, there are volume tiers and other things in the market, so we would anticipate that, as to the extent that they are bringing in more flow and creating and hitting certain levels, that we might see a slight decline in the contracts, pricing per contract associated with incremental market share, but nothing dramatic.

Alex Kramm - UBS - Analyst

Excellent. Thank you.

Operator

Our next question is from Michael Carrier with Bank of America-Merrill Lynch. You may begin.

Michael Carrier - BofA Merrill Lynch - Analyst

Thanks a lot. Adena, just given the new segmentation, I think it makes a lot of sense, but I think when you look at like the growth outlook by segment, it seems like the segmentation in the corporate services that has that lower growth rate is increasing in size. So just wanted to get a sense on how do you look at the overall growth rate, just given that used do be listings and now it's corporate, it's on the lower end. Does that have much of an impact, or is it just maybe being conservative right now, and we'll see how it plays out over 2017 and 2018, particularly as corporate solutions, you have revamped it, and seeing how that takes hold in the market?

Adena Friedman - Nasdaq, Inc. - CEO

Sure. Well, this is just a of movement of the segments, but overall for the non-trading businesses, we continue to project out that we have outlook of mid single digits growth across all of our non-trading businesses. I think that in terms of looking at how we've broken it out now, you can see that we believe the market technology business has more of a mid to high single digits opportunities, whereas the corporate solutions and combined with listings, continues to have more of a low single digits growth opportunity for now. And I think that's our outlook at the moment, and we will continue to refine that as we continue to progress the businesses.

Michael Carrier - BofA Merrill Lynch - Analyst

Okay. Thanks. And then Michael, just on the leverage and your outlook in terms of hitting the debt to EBITDA ratio, just wanted to get a sense, you list both the net and the gross. Just wanted to get a sense over the next 12 to 18 months, which one are you looking at to get to the mid-2s, just so we understand how much flexibility you have for buybacks or other uses?

Michael Ptasznik - Nasdaq, Inc. - CFO

We look at that on a gross basis, and we're aiming for that for the mid-2018, as that's where we'll be heading, towards that mid-2s.
Adena Friedman - Nasdaq, Inc. - CEO

In terms of buyback activity, as we've said, we've actually been saying this since the middle of last year, we will continue our buyback activity, primarily associated with managing our share count. But we will also take opportunities when they present themselves to do buybacks as well.

Michael Carrier - BofA Merrill Lynch - Analyst

Okay. Thanks a lot.

Operator

Our next question comes from Alex Blostein with Goldman Sachs. You may begin.

Alex Blostein - Goldman Sachs - Analyst

Just a question around the market tech business. So the order intake was very strong in the fourth quarter, but uneven throughout the year. So, was wondering if you can give us an update on the typical conversion timing? And as we think about the revenue trends into the next year, should some of these wins be more back-end loaded, just given the timing of the order intake? Thanks.

Adena Friedman - Nasdaq, Inc. - CEO

Sure. So order intake does tend to progress, as you go through the year, and there will be certain years where we might have some large contracts signed earlier in the year. But for this particular year, we just found that a lot of our clients are making those big decisions towards the end of the year. So we're very pleased with that.

I think also the introduction of the Nasdaq Financial Framework did catalyze more conversations with clients, and that takes time for them to understand what we are presenting to them, in terms of the next generation technology, and getting them to understand the value that it presents to them and their business. That also culminated in some sales later in the year.

In terms of revenue conversion under the current accounting guidelines, or the way that we account for that revenue today, it does, as you know, we don't account for revenue until we've fully deployed the solution into the client. So that's why there was such a lag with Borsa Istanbul in terms of when we signed the contract versus when we started seeing revenue earlier this year.

So for these clients, across all of that order intake, some of it will be recognized frankly within six months, and some other of the revenue might not be recognized for another year, 18 months. None of them are as big, and complex as the Borsa Istanbul deal, in terms of taking years to be able to show up in the revenue.

Alex Blostein - Goldman Sachs - Analyst

Got it. Thank you.

Operator

Our next question comes from Ken Worthington with JPMorgan. You may begin.
Ken Worthington - JPMorgan - Analyst
I guess first a follow-up on a question two questions ago, did you repurchase any shares in the fourth quarter? It didn't seem like it.

Michael Ptasznik - Nasdaq, Inc. - CFO
No, we didn't repurchase any in the fourth quarter. We continue to analyze it, and we will continue to repurchase shares as Adena mentioned, but we do it on a -- we look at it overall. For the year, we repurchased about $100 million in shares for the year, and we'll continue to repurchase as we go forward.

Ken Worthington - JPMorgan - Analyst
Okay. And just to keep fleshing this out, there were some big dips in the stock during the quarter. I think Adena mentioned that there was -- that you would pursue more of an opportunistic share repurchase. Any additional flavor you can give us as to maybe why those dips didn't represent good opportunities, or did you just hit what you expected to repurchase for the year earlier than expected?

Michael Ptasznik - Nasdaq, Inc. - CFO
I think that's basically it. We had achieved a number that we had wanted to for 2016, and as we continue to evaluate the different opportunities in front of us, we'll look at the timing. So there isn't a commitment to repurchase every single quarter, but we will take a look at that going forward.

Ken Worthington - JPMorgan - Analyst
Okay. That makes sense. Thank you very much. And then just in terms of the options business, can you flesh out the recent market share increases? I think it was Adena again who mentioned the focus on the complex order business.

How are you winning share there? I think when the deal was announced, Nasdaq indicated it would reinvest a portion of the corporate savings into price reductions, to win share. Maybe talk about pricing more broadly in options, as well? Thanks.

Adena Friedman - Nasdaq, Inc. - CEO
Well, I would say that the conversations we've had with clients in terms of having them drive their volume into the platforms has not been specifically to complex order functionality, but rather the overall value proposition we have between the pro rata market, the complex market, and the price time market. So it wasn't specific to any complex order strategies that they were trying to deploy. In terms of the pricing, and we did make some moves earlier last year, leading up to the close. And then right after the close, we did make some pricing moves across some of the price time markets, and those were already -- they've already manifested themselves into the pricing, and as of right now, that's what we're carrying forward with us.

Ken Worthington - JPMorgan - Analyst
Okay. Great. Thank you very much.

Operator
Our next question comes from Chris Allen with Buckingham Research. You may begin.
Chris Allen - Buckingham Research - Analyst

I just want to follow up a little bit on Alex's question on market technology. You gave us some color that a decent amount of the order intake was driven by existing clients. Just wondering when you kind of think about the penetration of existing clients in terms of what's left to go, IE, is this just a chunky quarter, or is there a lot more opportunity with your existing client base to see the upgrades you saw this quarter? And then maybe any thoughts around new clients and the potential for growth there?

Adena Friedman - Nasdaq, Inc. - CEO

Sure. Well, I would say that we continue to have a very healthy pipeline of opportunities, across both our existing clients, and new clients for our core market tech business. And just to remind everyone, the market technology business is really in three components: There's the core market technology business that we offer out to other marketplaces around the world. There's the smart surveillance business, that's offered both to marketplaces and broker dealers, and now also institutional investors around the world. And then there's the GRC platform, that's really primarily offered to corporate clients.

So we do have a lot of different ways for us to penetrate our clients, or grow our client base. And I would say that where we're seeing a lot of opportunity, number one is, we have been working with new markets that want to launch in new asset classes, that are frankly not necessarily financial asset classes.

That's a really fun and exciting area, because we're able to leverage our core technology. And particularly the Nasdaq Financial Framework because it's cloud enabled, does allow us to essentially launch markets in the cloud now, and that is a very compelling offer to some new markets, that are looking at new ways to generate liquidity in other asset classes. That would include the two I mentioned in my script.

I think then on the existing clients, in the core market technology business we have healthy pipeline of clients who are looking to upgrade or really upgrade their existing platforms, as well as broaden out what they do with us. So where you can see with Borsa Istanbul, we had more than 10 components that they implemented with us, where as some of our other clients we're still working on one or two. We do have the opportunity to expand across what we do with our existing clients, and that manifested itself in some of the order intake that came in the end of the year.

And then in the smart surveillance business, that continues to be a very high growth business for us. We continue to penetrate the broker dealer space, with our surveillance offerings. We're now offering e-com compliance, combined with surveillance, total package using very advanced machine intelligence. We also have launched a buy-side platform specifically for them in surveillance, and we already have some early clients working with us to implement that. So we have a lot of growth opportunities across the businesses.

Chris Harris - Wells Fargo Securities, LLC - Analyst

Great. That's it for interest me. Thank you.

Operator

Our next question comes from Kyle Voigt with KBW. You may begin.

Kyle Voigt - Keefe, Bruyette & Woods, Inc. - Analyst

Another follow-up on capital. I know the focus right now is on deleveraging, but I'd still like to hear your thoughts on M&A at current valuations in the market, and how you weigh that versus capital return. A second part to that question is if you could update us on the capital return front, whether we should think about a continued shift towards a dividend away from share repurchases, just given that we usually get an update on dividend next quarter? Thanks.
I share Bob’s general views that we need to take a balanced approach to looking at how we deploy our capital across the franchise. We focus on R&D, and we’ve given you a view looking at essentially somewhere in the range of 2% of our revenue, we’re trying to make sure we’re investing in R&D. I think that we also look at the capital return, in terms of our dividend, and we’re very committed to that. I’ll touch on that a little bit more in a minute. Share buybacks.

But then also making sure that we do take advantage of opportunities that are in the market, to expand our business meaningfully, and provide good returns for you. We are very disciplined in the way that we look at the return profile on deals. I think that the deals that we’ve done over the last 2.5 years since I’ve been here, I think, reflect the fact that we are very, very focused on making sure we generate great returns to you as shareholders, but also really meaningful improvements in what we can offer our clients. And we will continue to do that as part of our strategy.

In terms of dividends versus buybacks, again, I think we do take a balanced approach to that, and we will continue to do that. We will provide any updated guidance on our dividend in the next quarter. That’s all I’ll say about that right now.

Kyle Voigt - Keefe, Bruyette & Woods, Inc. - Analyst
Okay. Then if I could just have one follow-up. On the listings business. I think back in 2015, you introduced that all-inclusive fee structure. And if I remember correctly, your clients had the opportunity to opt into that fee plan in 2015. I’m just curious when all the clients will be migrated to that, or if it already happened? And if there’s another corresponding bump in revenues we should be thinking about in either 2017 or 2018?

Adena Friedman - Nasdaq, Inc. - CEO
Sure. Well, they will all be migrated onto that pricing next year in 2018, so this year continues to be a voluntary program. We have had the majority of clients move into that all-inclusive fee because it is very compelling for them, particularly if they have any sort of share issuances across — in their business. But we will be migrating all of our clients onto that new fee structure next year.

Kyle Voigt - Keefe, Bruyette & Woods, Inc. - Analyst
Thank you.

Operator
Thank you. Our next question is from Rob Rutschow with CLSA. You may begin.

Rob Rutschow - CLSA - Analyst
I just had a big picture question. As a new management team, I expect you’ve taken a fresh look at all of your businesses. So I’m hoping you can give some perspective on what, if any, revenue synergies you see from having cash equities, options and derivatives trading under the same roof. In other words, the listings trading and market data and corporate solutions all seem to fit together, but the revenue synergies between cash equities trading and options and derivatives aren’t quite as clear. So can you make that case?
Adena Friedman - Nasdaq, Inc. - CEO

I think that while we do have some restrictions in our ability to generate pricing synergies across exchanges in the United States, the SEC, we have proposed the opportunity for us to provide pricing across our exchanges, and try to leverage the fact that we do have great businesses in equities and options in the United States, as well as in Europe. But there are some regulatory restrictions to our ability to do any cross-pricing.

In terms of the way that we work with our clients, in terms of connecting into our data center and leveraging all of the capabilities we have, I think we do find that we have much deeper relationships with our customers, because we can offer them the opportunity to trade across asset classes. The complex order functionality in ISE or in our options business now, does allow them to create strategies across equities and options, and we actually are continuing to look at, particularly in the data products area, ways that we can look at the options data and make -- and using machine intelligence, find opportunities potentially in equities. There are things we can do, but we do have some regulatory restrictions, because each of these exchanges are separate and distinct exchanges.

Rob Rutschow - CLSA - Analyst

Thanks for taking my question.

Operator

(Operator Instructions)

Our next question is a follow-up from Brian Bedell from Deutsche Bank. You may begin.

Brian Bedell - Deutsche Bank - Analyst

Maybe just one more on NFX for, within your expense guidance, and you did give some commentary on the expense versus the net revenue drag. Within your guidance, are you still expecting that to be a $0.02 drag per quarter for the year, or do you expect that to improve to toward breakeven by year end?

Michael Ptasznik - Nasdaq, Inc. - CFO

It does continue to have a $0.02 order in the short term, although depending on the timing, as we see volume increases and the pricing changes start to come in, that will start to, we hope, break even, and then reach profitability. I would say, built into the guidance does assume that we continue to have expenses behind it.

The revenue impact of that is not included, obviously in that expense guidance. That shows up in the revenue line. There continues to be the expense behind it, but the revenue piece of that, we hope to improve as we go throughout the year.

Brian Bedell - Deutsche Bank - Analyst

And then maybe just one last one on, I think Adena, you were talking about some of the longer term, some of your longer term visionary goals. One of the big ones is obviously to commercialize technology. I appreciate that's a very long-term endeavor.

Can you talk about, you mentioned machine learning, blockchain and the cloud. You did touch on your comments in response to some of the questions on a couple of those. Maybe if you could talk about how you see that evolving in the different segments in 2017 and 2018, and to what extent can we see that start to filter into revenue?
Adena Friedman - Nasdaq, Inc. - CEO

Sure. Well, I think that the primary area of initial opportunity, as we continue to deploy the blockchain and certainly the cloud, as well as machine intelligence, I would say, all are primarily focused in the market technology business, because of the fact that the Nasdaq Financial Framework is cloud enabled, and provides full blockchain capabilities from pre-trade risk management all the way to settlement. So we do have some near term opportunities to leverage those technologies with clients who are paying, to deploy those technologies within their markets.

And so we definitely see that as a good area of growth for us. I would say primarily in 2018, but certainly with order intake in 2017. Of course with the SMARTS business, we are fully integrating a natural alignments processing, machine intelligence capabilities from a partner into our solutions, and so that is a near term, immediate term. And we already have two clients signed up to do proofs of concept with us, and we do anticipate to have signed clients this year for that.

And then on the trading and insights business, our platform, which is in our information services business, we are specifically working with several machine intelligence companies to leverage their capabilities to look at our data, and find potential alpha signals within our data, as well as actually bringing in other third-party data into the platform. It's a really fun and exciting area for us. That will take a while for that to manifest itself.

We already have paying clients, using some of those machine intelligence driven products, but that's very early days, and we do anticipate continuing to roll out products over the next several years, to grow that into a critical mass, but that is a long-term opportunity for us, with some near-term revenue. But against these higher revenue stream of GIS business, it will continue to be small in the short run.

And then lastly in the corporate solutions business, we will be starting to work with the machine intelligence in the IR intelligence suite, and that's -- we haven't yet done that, though. So that's right in the beginning of where we're looking at ways to innovate on the IR intelligence side of the business.

Brian Bedell - Deutsche Bank - Analyst

That's really helpful. Is this mostly -- obviously all of those initiatives are organic, but as you see your vision in commercializing technology moving forward, do you view it as much more of an organic strategy, or do you think a number of acquisitions may be required, or be opportunistic to leverage that further?

Adena Friedman - Nasdaq, Inc. - CEO

I would say we are primarily focused on organic opportunities. We have made a couple of strategic small investments into some interesting and growing technology companies, most notably in the blockchain machine intelligence area, and we may continue to do that. But at this point, we are focused on this being organic.

We have been growing our team of data scientists. We've been growing our capabilities, and our expertise in the blockchain. We have, I think, a spectacular technology team that really is working hard to make sure that we can create as many organic opportunities as possible across these technologies. So we're very excited about it.

Brian Bedell - Deutsche Bank - Analyst

That's great color. Thanks very much.

Operator

Our next question comes from Vincent Hung with Autonomous. You may begin.
Vincent Hung - Autonomous Research LLP - Analyst

Just two quick ones. First one, maybe I missed this, what was the reason for the quarter-on-quarter drop in the data products revenues this quarter? And then secondly, if you could just comment on the amended fee proposal for the price changes you are planning to make, for the SIP and connectivity stuff last year? Thanks.

Michael Ptasznik - Nasdaq, Inc. - CFO

The quarter-on-quarter drop in the data revenue was primarily due to two reasons. One, we were slightly lower in our audit revenue in the quarter, we were $3 million this quarter, down from $4 million last quarter. And the second reason, the second reason is due to FX. So there was a slight impact of FX. So that was what caused the difference.

Adena Friedman - Nasdaq, Inc. - CEO

And with regard to the -- we call it trade management solutions now instead of access services, but the connectivity fee filing that you’re mentioning, we have amended that filing, and we do continue to work with the SEC to get it to be approved. I think that it will -- the filing itself in terms of proposal itself, does not have a very significant impact on our revenues. It was a modest filing to begin with, and it will continue to be a modest filing in its refined form.

Vincent Hung - Autonomous Research LLP - Analyst

Thanks.

Operator

Thank you. Our next question is from Alex Kramm with UBS. You may begin.

Alex Kramm - UBS - Analyst

Just couple more, just coming back to NFX, first of all, good to see that you cut the cord on NLX. I would say some investors probably thought you should have done it a long time, and that’s really the question around NFX. How do you think about the timing of that business, in terms of when you need to make a decision, if you want to be in that business or not?

I heard you saying about profitability later this year, but clearly it’s taken up a decent amount of resources. So just talk about how you think about the timing of that business, and any decision making? And just maybe lastly related to that, the reason why I’m asking is, some people argue that the reason the multiple is lower than some of the peers is some of that initiative spending and some of the inconsistencies around capital return. So if you want to comment on that as part of the question, that would be great, too.

Adena Friedman - Nasdaq, Inc. - CEO

Okay. Well, I would spend a couple minutes comparing NFX to NLX. NLX, we do want to make sure that when we make investments in these types of things, that we are finding every opportunity to succeed, and we’re working very closely with the clients to understand whether they see a path to success as well.

And with NLX, I think that as we went through last year, and we continued to struggle in terms of building up open interest in the platform, and we continued to have significant delays from LCH in their ability to support cross-margining across the short end, which only came towards the
beginning of last year, and then the long end still hasn't arrived, and now they're delaying it even further, it really essentially created limited momentum in that business, and we started to get the sense that they -- our clients did not see a path to success for the business.

And then I would say that we can compare that to NFX. In NLX, we topped out at maybe 100,000 contracts of open interest in the platform, and that was before last year. Last year, we did not top 50,000 contracts in open interest.

In NFX, we have almost 1.5 million contracts of open interest. We have daily volumes of, as I mentioned, north of 200,000 contracts a day. We continue to on-board new clients.

Our market advisory committee is incredibly engaged, and committed to the platform. They continue to push us to add new products onto the platform. They're continuing to bring other clients into the platform. It's been an amazing experience, in terms of the motivation that our customers have in NFX, to drive to a sustainable competitor in the business. They want to see competition in this business.

They appreciate the fact that OCC has come in as a clearinghouse, to support the business and they are very, very committed to us. So it's just a totally different experience with our customers, as we've looked at the juxtaposition of these two businesses, and it was time, I think with NLX, to say this we don't see a path to long-term success here.

Whereas NFX, we do see a path to long-term success, assuming we can continue the momentum in the business, in that continued commitment from the customers, which is really pretty spectacular right now. I think that in terms of looking at a path to profitability for NFX, just to refine Michael's comments, we do see a path to profitability.

Do we expect that to happen this year? It may not. It all depends on how much growth we can get in contracts traded and how much of the pricing that we can implement as we go through the year. So I just want to say that we continue to see a path. It may not be this year. It may be that we end up hitting that next year, but that's certainly our expectation and our goal.

Alex Kramm - UBS - Analyst

And sorry, just to come back, but in terms of my comment on the multiple, do you agree, or do you think it's the wrong way to look at it, that some of that inconsistency on cap returns, some of that spending is weighing on potentially the stock and valuation, or something you've thought about?

Adena Friedman - Nasdaq, Inc. - CEO

In a business where we generate over $2 billion in revenue, the idea that we would commit $40 million to $50 million in R&D activities to me, seems actually very -- you could argue prudent, or you could say we need to find even more opportunities for us to invest in our future. So I feel very confident and comfortable that we're making the right level of investment in R&D. I think that the key is for us to make sure that we are focusing our R&D efforts on things that we believe can generate the right long-term return on invested capital.

And we look at every R&D initiative going forward, we will look at it on a long-term ROIC. Now, organic activities and organic growth as compared to M&A, M&A you tend to have a shorter time horizon for looking at the return on invested capital, because you're investing more capital upfront, and you're buying an existing business and you're integrating it quicker. Whereas organic growth opportunities, some might manifest themselves with an ROIC over three years, some over five, some over longer. We need to make sure we know that going in, and we look at that and calibrate what's the return we expect versus the investment, and, therefore, how long are we going to give it to have runway to grow?

That's a very, very important focus for me, and it's something that I'm extremely committed to working on with Michael, to make sure that we are balancing that out appropriately as we look at you new opportunities in the business. So I feel that -- then on the capital returns side, we've been extremely committed to returning capital to shareholders through a growing dividend that we've had. I think we've gotten to, I think, a nice return profile for the clients, for our shareholders, sorry, on the dividend.
I also think we’ve been very opportunistic and strong in our share repurchase program. I feel that we are returning a lot of capital to shareholders, while we’re also investing in our growth, and that is the right way for us to run this business. I think that’s what we’ll continue to do going forward.

---

**Alex Kramm - UBS - Analyst**

That’s very helpful. Thank you very much.

---

**Operator**

Thank you. This concludes the Q&A session. I would like to turn the call back over to Adena Friedman for closing remarks.

---

**Adena Friedman - Nasdaq, Inc. - CEO**

Thank you. Well, thanks everyone for your time today. I would like to reiterate that Nasdaq is operating on a very solid foundation across our business, in terms of our team, our technology, and the offerings to our clients. We have opportunities across our businesses to leverage that foundation, to continue to grow, and expand our relationships across our broker dealer, investor, corporate, and exchange clients, and we are excited about our ambitions for 2017. So with that, thank you very much and this concludes the call.

---

**Operator**

Ladies and gentlemen, this concludes today’s conference. Thanks for your participation, and have a wonderful day.

---

**DISCLAIMER**

Thomson Reuters reserves the right to make changes to documents, content, or other information on this web site without obligation to notify any person of such changes.

In the conference calls upon which Event Transcripts are based, companies may make projections or other forward-looking statements regarding a variety of items. Such forward-looking statements are based upon current expectations and involve risks and uncertainties. Actual results may differ materially from those stated in any forward-looking statement based on a number of important factors and risks, which are more specifically identified in the companies’ most recent SEC filings. Although the companies may indicate and believe that the assumptions underlying the forward-looking statements are reasonable, any of the assumptions could prove inaccurate or incorrect and, therefore, there can be no assurance that the results contemplated in the forward-looking statements will be realized.

THE INFORMATION CONTAINED IN EVENT TRANSCRIPTS IS A TEXTUAL REPRESENTATION OF THE APPLICABLE COMPANY’S CONFERENCE CALL AND WHILE EFFORTS ARE MADE TO PROVIDE AN ACCURATE TRANSCRIPTION, THERE MAY BE MATERIAL ERRORS, OMISSIONS, OR INACCURACIES IN THE REPORTING OF THE SUBSTANCE OF THE CONFERENCE CALLS. IN NO WAY DOES THOMSON REUTERS OR THE APPLICABLE COMPANY ASSUME ANY RESPONSIBILITY FOR ANY INVESTMENT OR OTHER DECISIONS MADE BASED UPON THE INFORMATION PROVIDED ON THIS WEB SITE OR IN ANY EVENT TRANSCRIPT. USERS ARE ADVISED TO REVIEW THE APPLICABLE COMPANY’S CONFERENCE CALL ITSELF AND THE APPLICABLE COMPANY’S SEC FILINGS BEFORE MAKING ANY INVESTMENT OR OTHER DECISIONS.

©2017, Thomson Reuters. All Rights Reserved.