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Nasdaq's Acquisition of Thoma Bravo's Adenza for $10.5bn

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Deal Introduction

DETAILS ABOUT THE DEAL

Nasdaq announced on the 1st of November 2023 that it has completed the acquisition of Adenza, a provider of risk management and regulatory services company, from the software investment firm Thoma Bravo. The deal was priced at $10.5 billion, with $5.75 billion in cash and the rest being made of 85.6 million shares of Nasdaq common stock, worth the volume-weighted average price per share as of the last 15 consecutive trading days before signing the deal.

During negotiations, Nasdaq was financially advised by Goldman Sachs & Co. LLC and J. P. Morgan Securities LLC and legally by Wachtell, Lipton, Rosen & Katz. Adenza employed Qatalyst Partners LP (lead), along with Barclays, Citi, Evercore, HSBC Securities (USA) Inc., Jefferies LLC, Piper Sandler to be their financial advisors and Kirkland & Ellis to be their legal advisors.

REASONS FOR M&A

Among the rationale behind this deal, Adenza's financial profile, product alignment and significant value creation potential are the most noteworthy reasons for Nasdaq to pursue this acquisition. First of all, Adenza shows a strong financial profile with 2023 coming so far with $590 million revenue with organic growth from last year of 15%, ARR growth of 18% and a high adjusted EBITDA margin of 58%.

Nasdaq foresees that the acquired company will be able to enhance their own financial performance by growing revenue from the Solution Businesses side by 6% and increasing their adjusted EBITDA margin up to 57%. Second, Nasdaq will be able to serve a larger client base with Adenza's cloud-enabled risk and regulatory management solutions having a strong presence in the European banking system. The acquisition also brings additional capabilities in asset classes to better address clients' needs. Thirdly, value creation is expected under the form of $80 million in run-rate net expense synergies through functional alignment, product rationalisation, optimisation of location and consolidation of the real estate services, and an additional $50-$100 million in run-rate revenue synergies through cross-selling in the long-term.

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Acquirer Overview

NASDAQ - National Association of Securities Dealers Automated Quotations Stock Market is a financial services corporation that owns and operates three stock exchanges in the US: NASDAQ, Philadelphia, and Boston. 7 in the EU (Copenhagen, Helsinki, Iceland, Riga, Stockholm, Tallinn and Vilnius).

Headquartered in New York City, founded in 8 February 1971, 6,377 employees globally, CEO is Adena Friedman since 2017.

Key bond issuances
22/06/2023= Nasdaq issues $4.25 billion in BBB unsecured senior notes to fund the purchase of Adenza

KEY FINANCIALS

Market cap: $31.81 billion	ROE: 17.89%
Revenue: 6.23 billion	Price/Book: $4.37
EBIT: 1.76 billion	Debt/Equity: 87.77
EBITDA: 1.95 billion	Profit Margin: 18.37
Net Income: 1.125 billion	Return on assets: 4.66
PE Ratio: 25.6	Current ratio: 1.75
Dividend yield: 1.54%	Earnings Per Share: 0.6

Business Model

Nasdaq, as a stock exchange operator considers all revenue generated either as a result of these business operations or other related activities as its primary segments. These are broken up into:

Market Platforms (subdivided into):

·Trading services
·Marketplace technology

Capital Access Platforms (subdivided into):

- Data and listing services
- Workflow and insights
- Index

Anti-Financial Crime

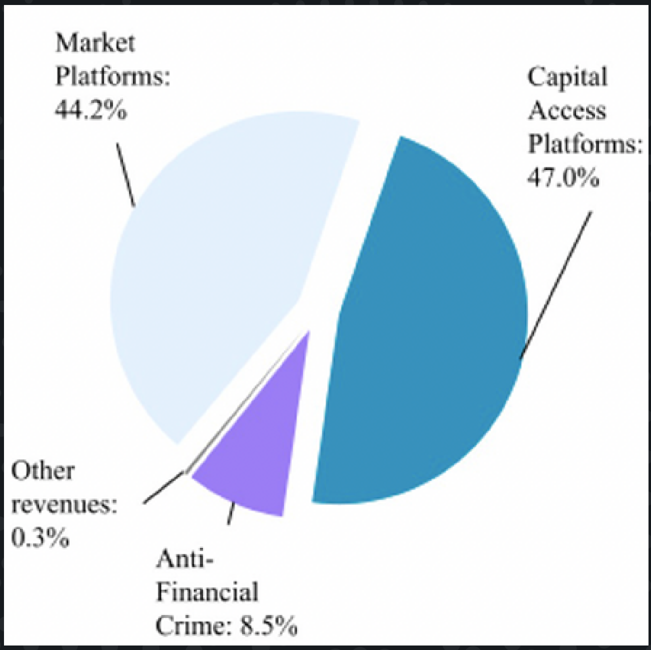
Market Platforms reported $4.22 billion in revenue: Trading services ($3.66 Billion), Marketplace Technology ($562 million)

Capital Access Platforms reported $1.68 billion in revenue: Data and Listing Services ($729 million) , Workflow and Insights($469 million, Index($486 million)

Anti-Financial Crime reported $306 million in revenue

Total revenue for 2022 was $6.22 Billion.

Revenue Breakdown



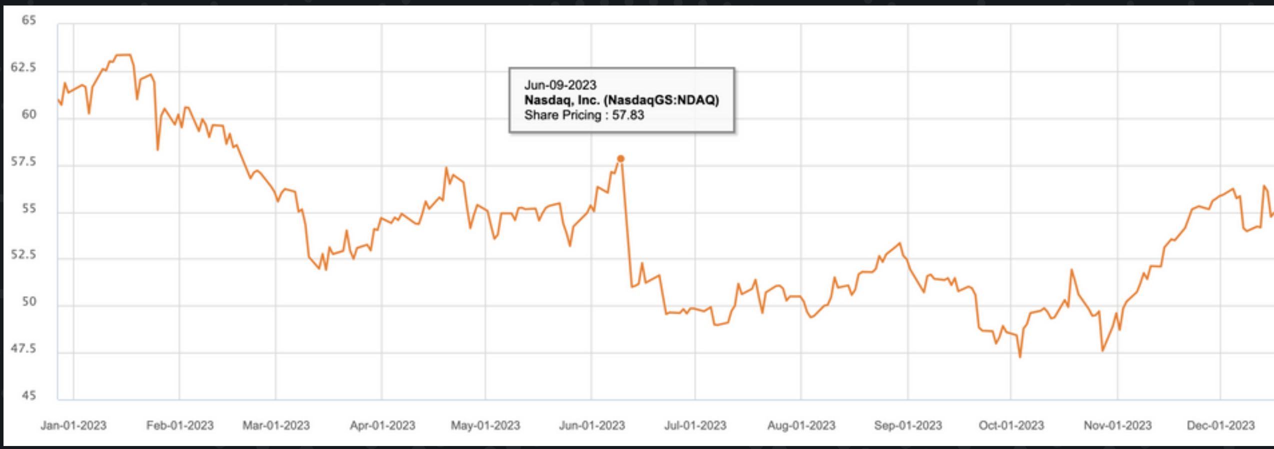
ESG Practices

The company has made significant improvement in ESG rankings across a range of ESG rating agencies since 2022.

Most of their ESG initiatives are focused around reducing environmental footprint, particularly through decarbonising their supply chain and maintaining the goal to achieve net zero emissions by 2050.

Otherwise, social initiatives include an annual company-wide survey for employees to identify areas of improvement and investing in various foundations and organisations, such as the Nasdaq Foundation, aiming to give back to the community. However, their governance initiatives are quite narrow and are limited to sets of ethics and compliance rules

MARKETS DATA



The point highlighted above (9/6/2023) marks the beginning of the 10% drop after the announcement of the Adenza deal.

Nasdaq, being a firm with a performance highly dependent on the remainder of the market, key drops mark general drops in the economy e.g., 5-year low of 26.83 on 20 March 2020 (a time In which the coronavirus pandemic was taking effect on financial markets).

Nasdaq has beaten expectations on 3/4 most recent earnings calls.

Nasdaq’s revenue is down on last year by 6.81% however all other key financials are up with the largest increase being the 8.47% rise of EBITDA.

In terms of cash flow, all the key metrics are down on the year apart from cash flow from operations which is up by 29.31%.

Target Overview

Adenza

Adenza - Software application provider specializing in capital markets, investment management, central banking, risk management, clearing etc. Their integrated suite of trading and risk applications is used by banks and other financial companies.

Headquartered in San Francisco, founded in 1997, 1,001-5,000 employees, Didier Bouillard is the CEO

KEY FINANCIALS

EBITDA: £13.1 million

Revenue: £29.7 million

Operating profit= £13.1 million

Post tax profit= £49.3 million

EBITDA margin = 58%

Operating margin = 52%

Net profit margin = 44.2%

ROE= 67%

Return on assets= 212.59%

Business Model

Adenza's integrated suite of trading and risk applications is used by banks and other financial companies, as such, their revenue is generated exclusively through the licencing and maintenance of this software, Adenza recognises revenue after 5 criteria are fulfilled:

1. Identify the contract with a customer.
2. Identify the performance obligations in the contract.
3. Determine the transaction price.
4. Allocate the transaction price to performance obligations in the contract.
5. Recognize revenue as the performance obligation is satisfied.

Adenza was hit significantly by the conflict between Ukraine and Russia, estimating over $6.4 million lost

In total Adenza reported revenue of $37.7 million in 2022 and is expected to hit $590 million by 2023 year-end.

ESG Practices

Adenza does not have information published on its ESG initiatives, yet from its previous owner Thoma Bravo's 2022 ESG report we can identify a few areas of interest: the main focus for 2022 wer governance issues, particularly around investing in cybersecurity and data privacy services, learning to address AI risks and improving their ESG risk management. Similarly to Nasdaq, the company seeks to reduce their carbon footprint and encourages fellow portfolio companies in the same direction, yet their social initiatives are limited only to diversifying the workforce.
(Thoma Bravo)

Valuation Analysis

COMPARABLE COMPANY ANALYSIS

	EV/Revenues	EV/EBIT	EV/EBITDA
High	7.80	251.59	30.40
Low	1.30	15.70	11.20
Median	2.50	22.10	16.80
Average	3.38	77.87	18.80

	EBITDA ($millions)	EV/EBITDA	Expected EV
Adenza Group Inc	**247.93**	**18.80**	**4661.17**

Please click on the table to access the full model

The Adenza Company Comparables Analysis (CCA) Model provides a financial comparison of Adenza Group Inc against several firms within the same sector, presented in millions except per share data. The model includes Unlevered Beta and Levered Beta values, which measure the volatility of these companies against the market risk, both without and with the impact of their respective debt structures. The Levered Beta average across the companies is 1.33, indicating a higher volatility compared to the market when considering debt.

The model also notes the percentage of debt and equity financing for each company, with percentages ranging from as low as 0.5% to as high as 64% for debt, and from 36% to 99.5% for equity. Tax rates across the companies average at 30.1%, with the lowest at 21.3%.

Adenza Group Inc's own valuation is characterized by an EBITDA of $247.93 million, an EV/EBITDA multiple of 18.80, leading to an expected Enterprise Value (EV) of $4,661.17 million. The analysis thus provides a comprehensive view of Adenza's market position in relation to its peers, with valuation parameters that reflect its financial stability and market perception.

NASDAQ DISCOUNTED CASH FLOW MODEL

Growth Rate	**3.00%**
WACC	**8.88%**
Mid-Year Convention	**Yes**
Discount Year	
Terminal Value	
Present Value Unlevered Free Cash Flow	
Present Value Terminal Value	
Enterprise Value	**$26,968.14**
Net Debt	5,814.00
Equity Value	**$21,154.14**
Diluted Shares Outstanding	494.10
Implied Share Price	**$42.81**

Please click on the table to access the full model

Our Discounted Cash Flow (DCF) model for NASDAQ, incorporates financial data up to 2022 and extending forecasts to 2028, reveals increasing revenues across Market Platforms (from $4,179 million to $5,461.90 million), Capital Access Platforms (from $1,287 million to $2,584.15 million), Anti-Financial Crime initiatives (from $116 million to $1,653.40 million), and other sources remaining constant.

The model demonstrates solid growth with Gross Profit estimated to rise from $2,903 million to $5,586.71 million, EBIT from $1,234 million to $2,438.46 million, EBITDA from $1,436 million to $2,841.70 million, and Net Income from $933 million to $1,878.87 million. It features the Income Tax Provision, maintaining a consistent Tax Rate of 24% to derive the Net Income attributable to NASDAQ.

NASDAQ DISCOUNTED CASH FLOW MODEL

Capital Expenditure scrutiny reveals a trajectory of investment in the Purchase of PP&E (projecting an increase from $188 million to $431.64 million) and business acquisitions, alongside a nuanced look at Working Capital adjustments, where Operating Current Assets and Liabilities are meticulously tracked. The model employs a mid-year convention to enhance the precision of cash flow timing and valuation accuracy.

Valuation is meticulously calculated using a Weighted Average Cost of Capital (WACC) of 8.88%, reflecting a high-interest-rate environment's impact on discount rates due to increased equity and debt costs. This informs the Enterprise Value of $26,968.14 million, Net Debt of $5,814 million, Equity Value of $21,154.14 million, and an Implied Share Price of $42.81.

The Sensitivity Analysis within the model gauges the potential impact of fluctuating WACC and Growth Rates on Enterprise Value and Share Price, ensuring the model remains adjusted to economic shifts and assumption changes. The projections encompass Total Capital Expenditure, Depreciation & Amortization, alongside the Present Value calculations for Terminal Value and Unlevered Free Cash Flow, providing a transparent and forward-looking financial narrative for NASDAQ's trajectory.

ADENZA DISCOUNTED CASH FLOW MODEL

Exit EV/EBITDA Multiple	**18.80x**
WACC	**10.17%**
Mid-Year Convention	**Yes**
Discount Year	
Terminal Value	
Present Value Unlevered Free Cash Flow	
Present Value Terminal Value	
Enterprise Value	**£5,714.17**
Net Debt	1,999.97
Equity Value	**£3,714.20**
Diluted Shares Outstanding	1.00
Implied Share Price	**£3,714.20**
Exchange Rate (£/$)	1.22
Enterprise Value	**$6,943.17**

Please click on the table to access the full model

The Adenza DCF model, denominated in millions of British Pounds except for per share data, presents actuals for 2021 and 2022, with forecasts from 2023 to 2028. Revenue grows from £293.61 million in 2021 to an estimated £1,119.72 million in 2028, while the Cost of Goods Sold and other operating expenses like SG&A, R&D, and Depreciation & Amortization are also projected to increase. Gross Profit shows a positive trend, expected to rise from £196.14 million to £775.83 million over the period. A tax loss carry forward is also taken into account within the early years.

ADENZA DISCOUNTED CASH FLOW MODEL

The model calculates EBIT and EBITDA, with EBITDA expected to reach £436.72 million by 2028. Capital expenditures on PP&E are projected to grow, and changes in net working capital are accounted for. The Unlevered Free Cash Flow is estimated to increase from £142.67 million to £279.24 million.

For valuation, the model uses an Exit EV/EBITDA Multiple of 18.80x and a WACC of 10.17%, with the mid-year convention applied for discounting cash flows. The model arrives at an Enterprise Value of £5,714.17 million and an Equity Value of £3,714.20 million.

When translated to USD at an exchange rate of 1.22, the Enterprise Value is $6,943.17 million, and the Equity Value is $4,513.05 million, maintaining the implied share price at $4,513.05 per share.

The sensitivity analysis explores how changes in WACC and the Exit EV/EBITDA Multiple impact the valuation. The lower estimation of the Enterprise Value in this model could be attributed to the relatively high WACC, which, in a high-interest-rate environment, discounts future cash flows more heavily, thus lowering their present value and, by extension, the company's valuation.

MERGER MODEL

Accretion / Dilution Analysis

EPS Accounting:	FY 2023 01/11/2023	FY 2024 30/11/2024	FY 2025 30/11/2025
Acquirer			
Net income	1,290.81	1,378.42	1,477.70
EPS	2.6	2.8	3.0
Diluted shares outstanding (weighted avg.)	494.1	494.1	494.1
Target			
Net income	118.22	136.63	157.59
EPS	118.2	136.6	157.6
Diluted shares outstanding (weighted avg.)	1	1	1
Transaction related expenses/income[1]			
Less: Interest expense from new deal debt	(267.5)	(267.5)	(267.5)
Less: Interest income on cash forgone	0	0	0
Plus: Synergies	100	180	180
Less: Incremental D&A expense	(193.0)	(193.0)	(193.0)
Less: Financing fee amortization	(5.8)	(5.8)	(5.8)
Taxes (assumed at acquirer's rate)	85.3	85.3	85.3
Total after tax transaction related income/ (expenses)	(280.9)	(200.9)	(200.9)
Pro Forma	1,128.13	1,314.15	1,434.38
Pro Forma Shares Outstanding	579.70	579.70	579.70
Pro forma	1.95	2.27	2.47
Acquirer standalone EPS	2.61	2.79	2.99
Accretion / Dilution per share	**(0.67)**	**(0.52)**	**(0.52)**
Accretion / Dilution %	**-25.5%**	**-18.7%**	**-17.3%**
Additional pretax synergies required to breakeven	503.65	395.14	390.25

Pro Forma Market Equity	32332.93
Pro Forma Shares Outstanding	579.70
Pro Forma Share Price	55.78

Please click on the table to access the full model

Nasdaq, under the ticker NDAQ, with a share price at the time of acquisition of $48.80, is set to acquire Adenza for a total offer value of $10,500 million, marking a 51.23% premium. The deal structure is split between 45.24% stock and 54.76% cash, financed through $5,750 million of new borrowing and the issuance of $4,750 million in stock.

Post-merger adjustments to the pro forma balance sheet indicate an increase in goodwill by $3,214 million and intangible assets by $1,941 million. These adjustments contribute to a total pro forma asset value of $31,958 million. The combined liabilities and equity also total $31,958 million, ensuring a balanced sheet.

MERGER MODEL

The model also incorporates deal fees of $52.50 million and anticipated pretax cost synergies. It assumes a tax rate of 23.30% for Nasdaq and 25.00% for Adenza, with EBITDA projections for 2023 at $1,941.60 million for Nasdaq and $269.23 million for Adenza.

In terms of financing, the transaction does not involve refinancing existing debt. The total acquisition financing is $5,750 million with an interest rate on new debt at 4.65%. The pro forma credit statistics show total debt of $11,001 million, with a gross debt to EBITDA ratio of 4.98, and an enterprise value to EBITDA ratio of 19.37.

The accretion/dilution analysis includes changes to EPS post-merger. It projects a -25.5% accretion/dilution percentage for FY 2023, improving to -17.3% by FY 2025. The pro forma EPS is estimated at $1.95 in FY 2023, compared to the acquirer's standalone EPS of $2.61, signifying a decrease due to the merger. To reach breakeven on EPS, additional pre-tax synergies of $503.65 million are required.

The pro forma market capitalization is anticipated to be $32,332.93 million, with a pro forma share price of $55.78, reflecting the combined valuation of the companies. The pro forma shares outstanding after the merger will be 579.7 million.

This model provides a complex financial picture, merging assets, liabilities, equity, and anticipated synergies to forecast the financial outlook of Nasdaq post-acquisition.

Deal Analysis

STRENGTHS

- The deal highlights Nasdaq's commitment to modernize markets and enhance the integrity of the world's financial system. With the addition of Adenza, Nasdaq will provide an even more holistic technology suite across market infrastructure, surveillance, compliance, regulatory reporting, and risk management to financial institutions globally.

- Nasdaq can extend its relationships across the bank and broker community. There is also an opportunity to expand Nasdaq's buy-side reach through Adenza's loyal client base, and to deepen Nasdaq's financial market infrastructure client relationships with new capital markets capabilities. Brings a loyal and growing client base with 98% gross and 115% net revenue retention and increases Nasdaq's Solutions Businesses to 77% of total revenue, from 71% today.

- The deal represents a major milestone in Nasdaq's evolution as a leading technology provider to the world's financial system, enabling Nasdaq to become an even more comprehensive partner, uniquely placed to help clients navigate the rapidly evolving regulatory environment and address their most complex challenges.

- Adenza's business is margin-accretive to Nasdaq and will raise Nasdaq's EBITDA by an estimated 200 bps.

WEAKNESSES

- Nasdaq could potentially have overestimated business synergies with Adenza, with NASDAQ being a considerably older and more resistant to change than the agile and relatively young Adenza.

- The deal is worth $10.5 billion, universally accepted as a vast overpayment by investors (Adenza was valued at almost 18x expected 2023 revenue), Nasdaq's shares fell almost 10% to a 1-year low following the deal announcement.

- Nasdaq will raise new debt worth $5.9 Billion, increasing its debt leverage to 4.7x in an environment of higher for longer interest rates.

OPPORTUNITIES

- **Technology Integration:** The merger of Adenza into Nasdaq's operations is poised to create a broader technological framework, encompassing aspects like market structure, regulatory adherence, risk management, and surveillance for global financial entities. This strategic move situates Nasdaq as a pivotal player in the international financial world, offering wide-ranging solutions to adapt to the dynamic nature of regulatory landscapes. Nasdaq is expected to start challenging fintech competitors.

- **Alignment and Prospective Growth:** The union of Nasdaq and Adenza is seen as a seamless integration, blending the technological strengths and customer bases of both companies. This amalgamation opens doors to significant growth prospects, especially as financial organizations face escalating regulatory demands. The acquisition is projected to increase Nasdaq's earnings before taxes and amplify its recurring income, with expected synergies nearing $80 million within two years following the acquisition.

OPPORTUNITIES (CONTINUED)

- **Expansion of Market and Synergistic Revenue:** Post-acquisition, Nasdaq anticipates an uplift in its medium-term revenue growth projections for its Solutions Businesses, from the current 7-10% to an estimated 8-11%. Adenza's established expertise in regulatory technology and risk management enables Nasdaq to extend its market influence and enhance its sales efficacy. The acquisition is estimated to increase Nasdaq's annualized recurring revenue as a percentage of 2023 pro forma total revenues to 60% from 56% in 2022. It also aims to grow Nasdaq's Solutions Businesses as a percentage of 2023 pro forma total revenues to 77%, enhancing growth, margins, and revenue quality. This acquisition is leaning Nasdaq into a more fintech business.

THREATS

- **Elevated Leverage and Financial Implications:** The acquisition escalates Nasdaq's financial leverage to record levels, potentially impacting its financial stability as per analysts' insights. Nevertheless, Nasdaq has outlined plans to substantially decrease this debt within an 18-month period post-acquisition.

- **Significant Investment Cost:** The financial commitment towards acquiring Adenza is substantial, with Nasdaq expending about 31 times Adenza's EBITDA, with the industry average being 24.6 times. Although this valuation aligns with current market trends for similar acquisitions, it represents a major financial undertaking by Nasdaq.

- **Operational Integration Hurdles:** Merging Adenza into Nasdaq's existing structure may pose operational challenges, considering the scale and intricacy of both organizations. The successful realization of anticipated synergies and growth opportunities hinges on effective management and coordination.

GLOSSARY

ARR Growth: Annual recurring revenue is an essential metric for subscription-based businesses as the metric estimates the expected predictable revenue for the business.

Capital Expenditure: Capital expenditure refers to the spending made to acquire, maintain or upgrade its physical assets, which is key to expand the company‘s productive capacity.

Current Ratio: Liquidity ratio providing insight into firm‘s short-term financial health by comparing its current assets with current liabilities.

Levered Beta: Metric used for assessing the volatility of a stock after taking into account the company‘s debt structure.

PP&E: Property, Plant, and Equipment refers to the long-term tangible assets of a business.

SGA: Selling, General, and Administrative expenses are the indirect costs that are necessary to operate a business.

Synergies: Extra benefit that results from combining the resources and capabilities of two or more firms.

WACC: Cost of capital used to represent a firm's after-tax costs from all resources.

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