

The Black Box Institute

M&A Market Overview

Q4 2022

March 15, 2023

- This report marks the first edition of TBBI's Quarterly M&A and Market Overview updates.
- We will be releasing quarterly reports approximately one month after the the end of each fiscal quarter.
- The aim of these reports is to provide an overview of broad market trends in the Global, North American, and Canadian economies.
- All figures are in Canadian dollars unless otherwise indicated.
- This analysis is based on figures from Q4 2022, from the dates of Oct 1, 2022 to December 31, 2022.
- All figures are sourced from S&P Capital IQ.
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Q4 Summary

- Overall deal volumes in 2022 were below record-breaking numbers of 2021 with high-interest rates and a negative outlook for the macroeconomic environment leading to reduced equity valuations
- However the number of M&A transactions remained 9% above pre-pandemic levels
- Equity prices also rebounded slightly in the fourth quarter, with S&P 500 producing a 7.6% return during Q4

Outlook

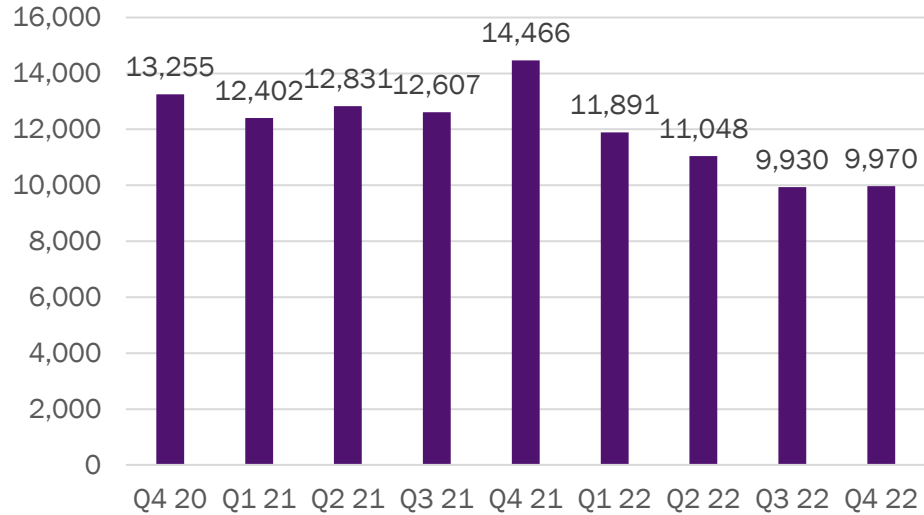
- 2023 is clouded in uncertainty with global recession fears, rising interest rates and geopolitical tensions
- The U.S Federal Reserve remains a big factor going forward, depending how they adhere to their monetary policy and federal fund rates can push valuations up or down in 2023
- Investors are expected to remain risk-averse in Q1 of 2023
- Lower valuations may lead to private equity firms to hold on to portfolio companies longer while waiting for prices to recover

Global Transaction Analysis

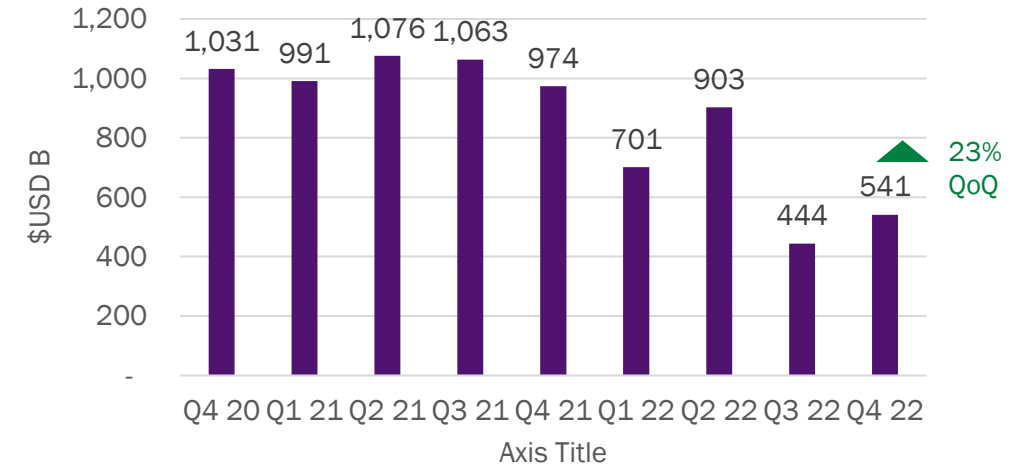


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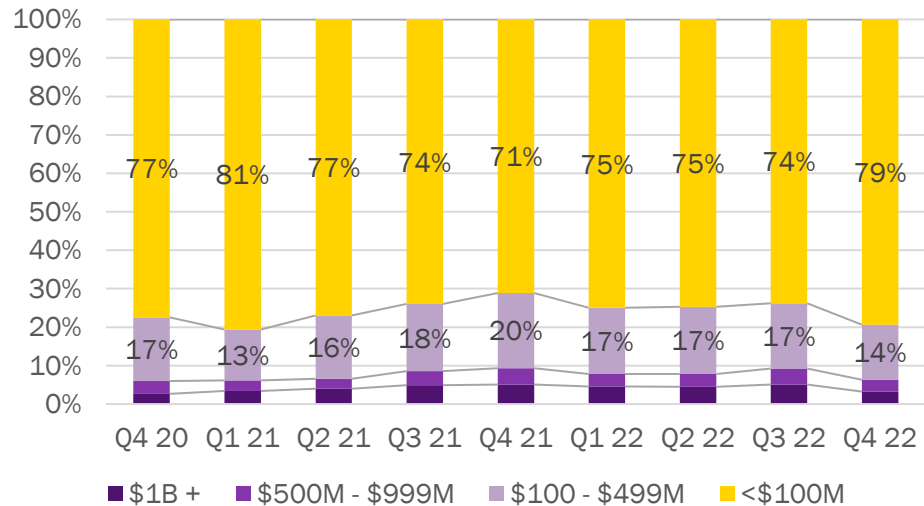
Total Number of Transactions (Global)



Total Transaction Value



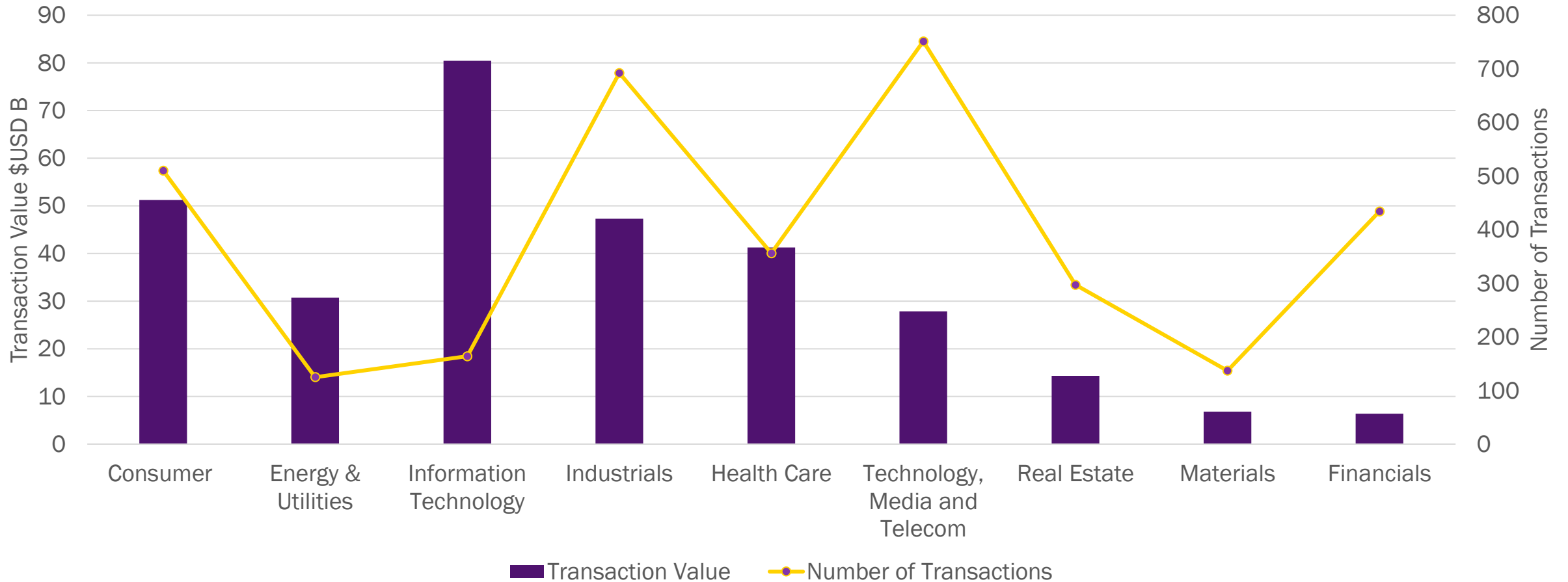
Distribution of Transactions by Transaction Value



Global M&A Activity grew slightly in Q4 2022. The aggregate transaction value was \$541B USD, a 23% increase QoQ. However, aggregate transaction value still decreased 54% YoY

Q4 2022 saw an increase in smaller transactions (<\$100M) relative to the previous quarter. Overall, deal sizes have decreased since Q4 of 2021

Q4 2022 Transactions by Industry



While Information Technology represented only 5% of the number of transactions in Q4 2022, the industry represented the largest share of the transaction value. Technology, Media and Telecom represented the largest share of the number of transactions in Q4.

Sector	Trans. Values (\$USD M)	EV/Revenue	EV/EBITDA	EV/EBIT	P/E	P/BV
Industrials	90,690	1.8x	9.2x	10.3x	10.0x	1.8x
Health Care	65,667	2.6x	1.3x	NM	NM	3.2x
Financials	54,269	NA	NA	NA	9.7x	1.3x
Materials	41,859	1.4x	8.1x	6.5x	6.9x	1.5x
Real Estate	35,515	8.9x	12.2x	3.4x	4.5x	1.0x
Information Technology	35,015	2.1x	13.7x	9.2x	10.7x	2.1x
Communication Services	34,783	2.1x	7.8x	9.1x	1.8x	1.8x
Consumer Discretionary	30,290	2.5x	6.9x	NM	NM	1.X
Utilities	19,390	2.4x			10.2x	1.6x
Energy	16,628	4.4x	3.0x	NM	NM	2.0x

EV/Revenue – Measure of value that compares a company's enterprise value to its revenue

P/E – A ratio calculated by dividing the current market price of common shares by earnings per common share

P/BV – A ratio calculated by the share price divided by the book value per share

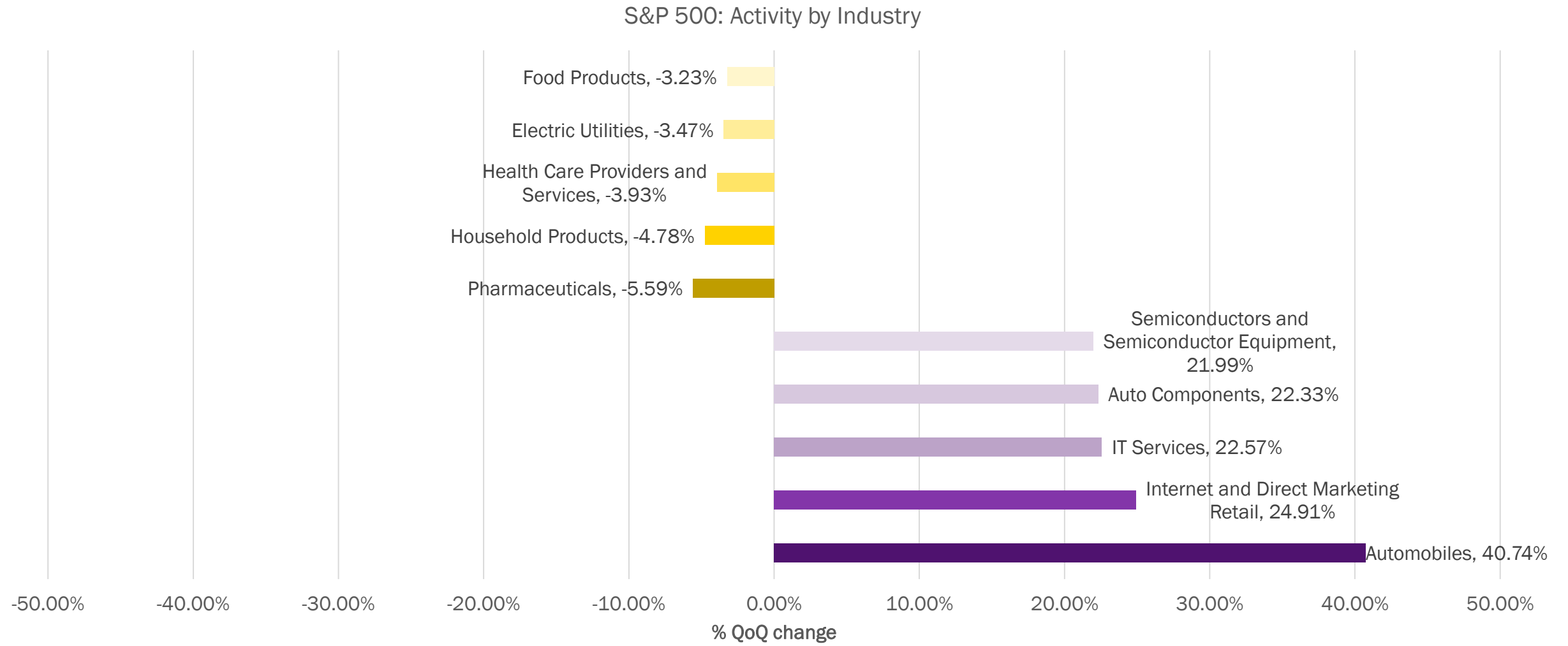
Largest US & Canada deals announced in 2022

Target Primary industry	Target Location	Buyer	Target	Date	Transaction Value (\$B USD)
Home Entertainment Software	California, U.S	Microsoft Corp.	Activision Blizzard Inc.	January 18, 2022	\$69.0
Systems Software	California, U.S	Broadcom Inc.	Vmware Inc.	May 26, 2022	\$68.0
Internet Software and Services	California, U.S	Elon Musk	Twitter Inc.	April 14, 2022	\$41.8
Food Retail	Idaho, U.S	Kroger Co.	Albertsons Cos. Inc.	October 14, 2022	\$30.6
Industrial REIT	Indiana, U.S	Prologis Inc.	Duke Realty Corp.	May 10, 2022	\$25.4
Internet Software and Services	California, U.S	Adobe Inc.	Figma Inc.	August 15, 2022	\$19.4
Healthcare Equipment	Massachusetts, U.S	Johnson & Johnson	Abiomed Inc.	November 1, 2022	\$18.0
Internet Software and Services	Texas, U.S	TIBCO Software Inc.	Citrix Systems Inc.	January 31, 2022	\$16.7
Banking Technology	Florida, U.S	Intercontinental Exchange Inc.	Black Knight Inc.	May 4, 2022	\$16.3
Research and Consulting Services	New York, U.S	Evergreen Coast Capital Corp. and Brookfield Business Partners LP	Nielsen Holdings PLC	March 29, 2022	\$15.8

North American Stock Market Analysis



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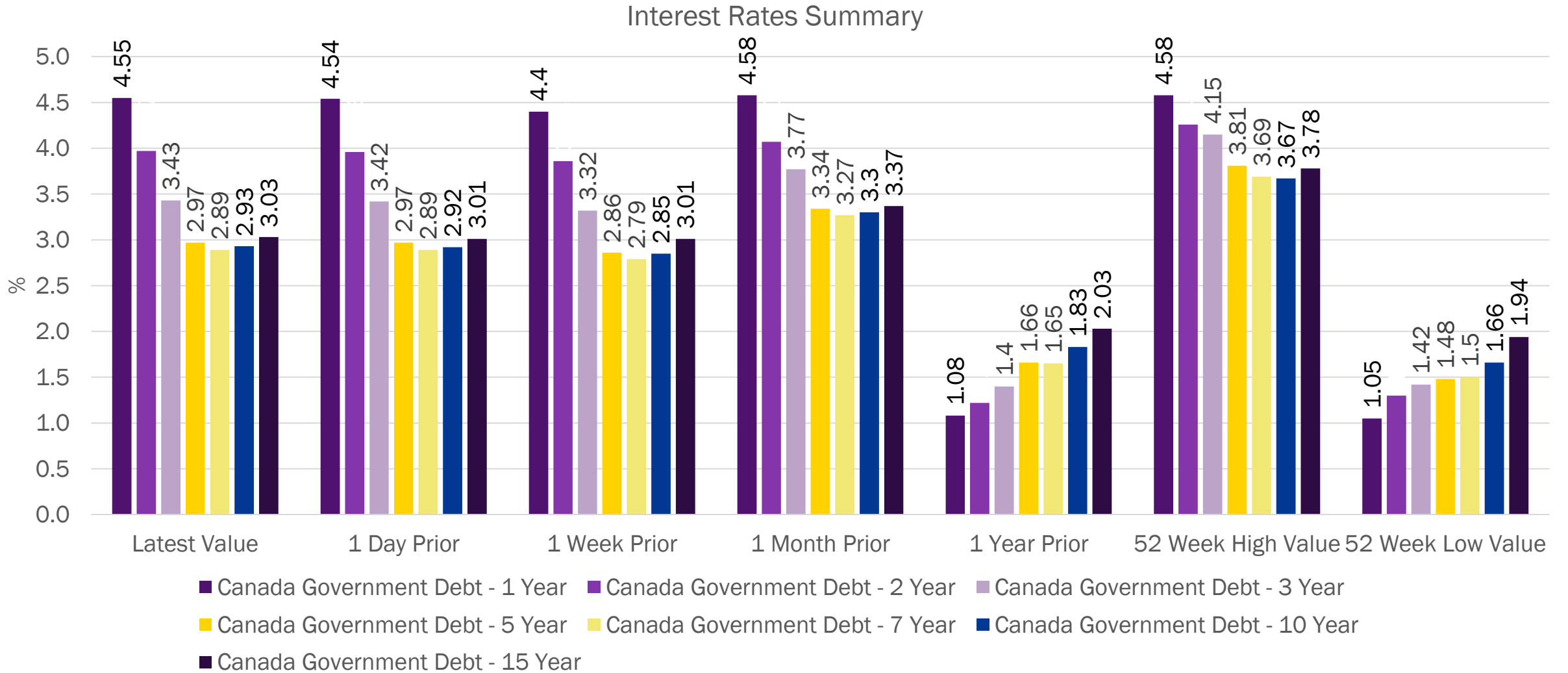
Industry	Market Cap (\$USD B)	TEV (\$USD B)	LTM Total Rev (\$USD B)	LTM EBITDA (\$USD B)	TEV/LTM Total Rev	TEV/LTM EBITDA	P/BV	Transactions
Energy	7,584	9,300	8,577	2,065	1.1x	4.6x	1.8x	445
Real Estate	3,475	6,974	1,951	405	3.8x	15.6x	1.0x	940
Materials	6,320	365,773	6,685	179	1.2x	6.1x	0.0x	1,695
Industrials	12,022	16,069	12,201	1,703	1.4x	9.4x	2.1x	3,749
Consumer Discretionary	10,645	13,277	9,707	1,197	1.4x	10.3x	2.3x	2,318
Consumer Staples	7,346	8,953	6,690	785	1.4x	11.8x	3.2x	1,133
Health Care	10,464	11,407	4,998	770	2.3x	12.6x	3.6x	2,921
Financials	22,683		-16,699	492	NA	12.2x	1.0x	1,774
Information Technology	16,567	16,918	6,051	1,152	2.8x	13.5x	4.4x	4,385
Communication Services	6,305	8,453	3,542	1,026	2.5x	8.1x	2.1x	1,490
Utilities	3,426	6,466	3,805	554	2.0x	11.0x	1.6x	347

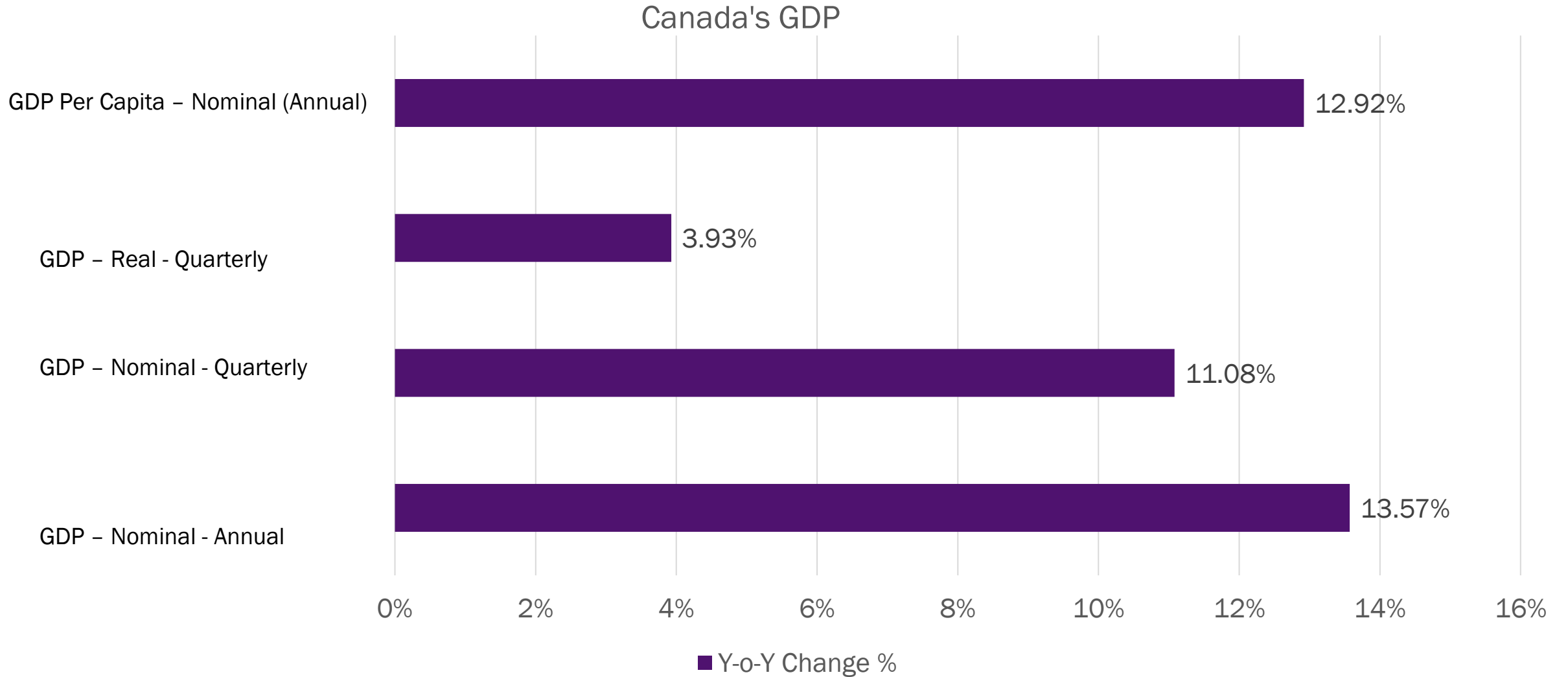
TEV/LTM Rev- Measure of value that compares a company's enterprise value to its last 12 months' revenue

P/BV - A ratio calculated by the share price divided by the book value per share

Canadian Economy Analysis







About TBBI



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FINANCIAL ADVISORY

The Black Box Institute (TBBI) provides financial advisory services, including fair market valuation of businesses, corporate finance and transaction advisory for mergers and acquisitions, business sales and divestitures, buy-side services, recapitalizations and private equity fundraising to a broad range of industries and for businesses of any size.

FRAMEWORK

TRANSACTION ADVISORY

How do strategic, financial and operational considerations inform a successful transaction?

CORPORATE VALUATION

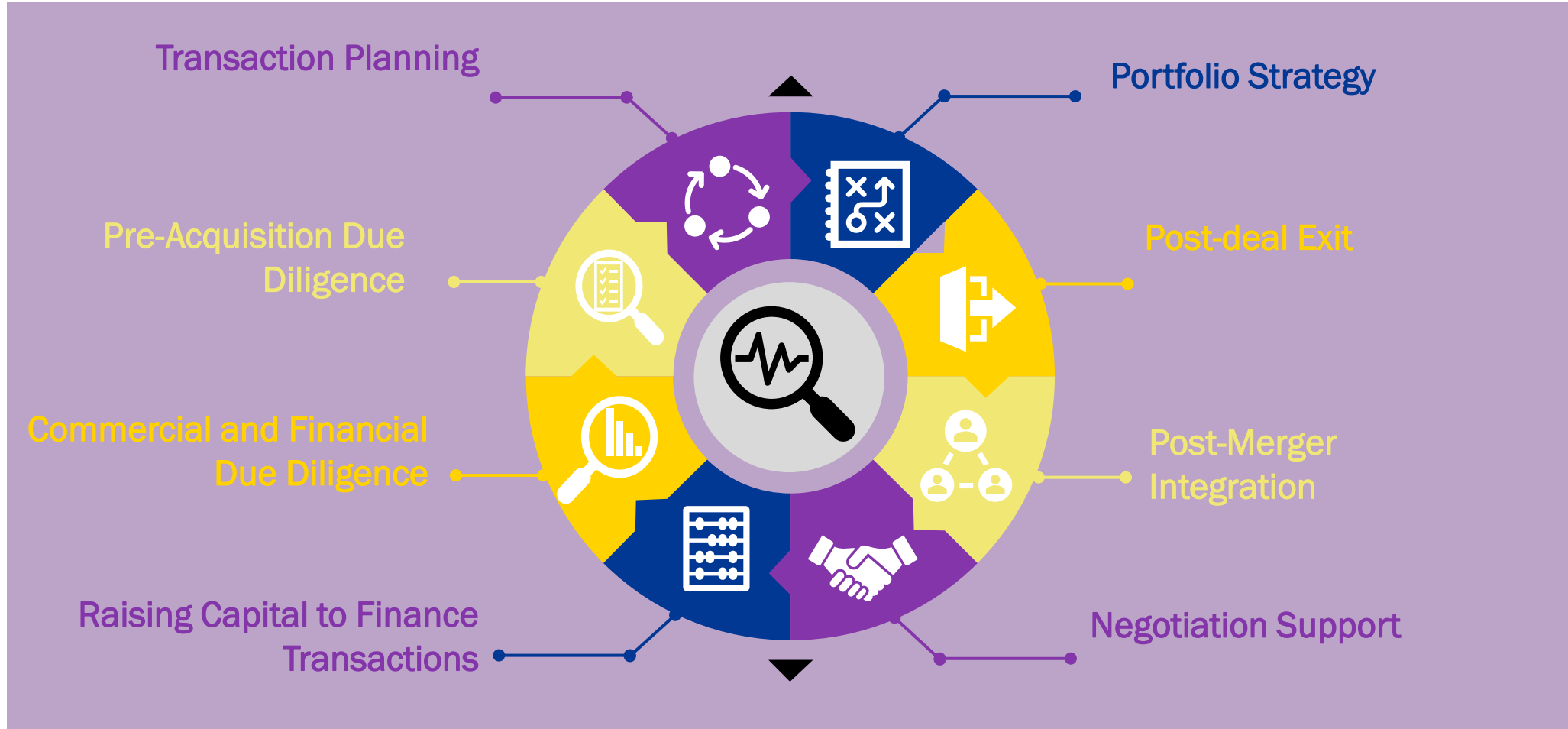
What is a fair valuation?
What are the key value drivers?
What is the market appetite?

CORPORATE DUE DILIGENCE

How can projects be financed?
What is the optimal capital structure?

Transaction Advisory

TBBI works with buy- and sell-side clients to advise them on corporate finance transactions:



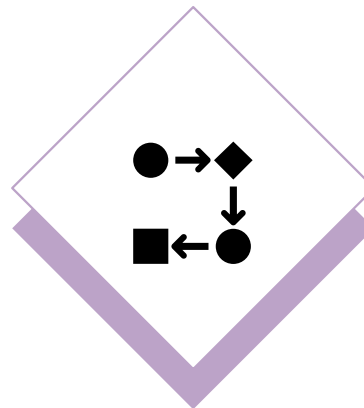
As a part of its financial due diligence services TBBI provides fair market value of businesses, including:



M&A Valuations



Internal Valuations
Related Party Transaction
Fairness Options



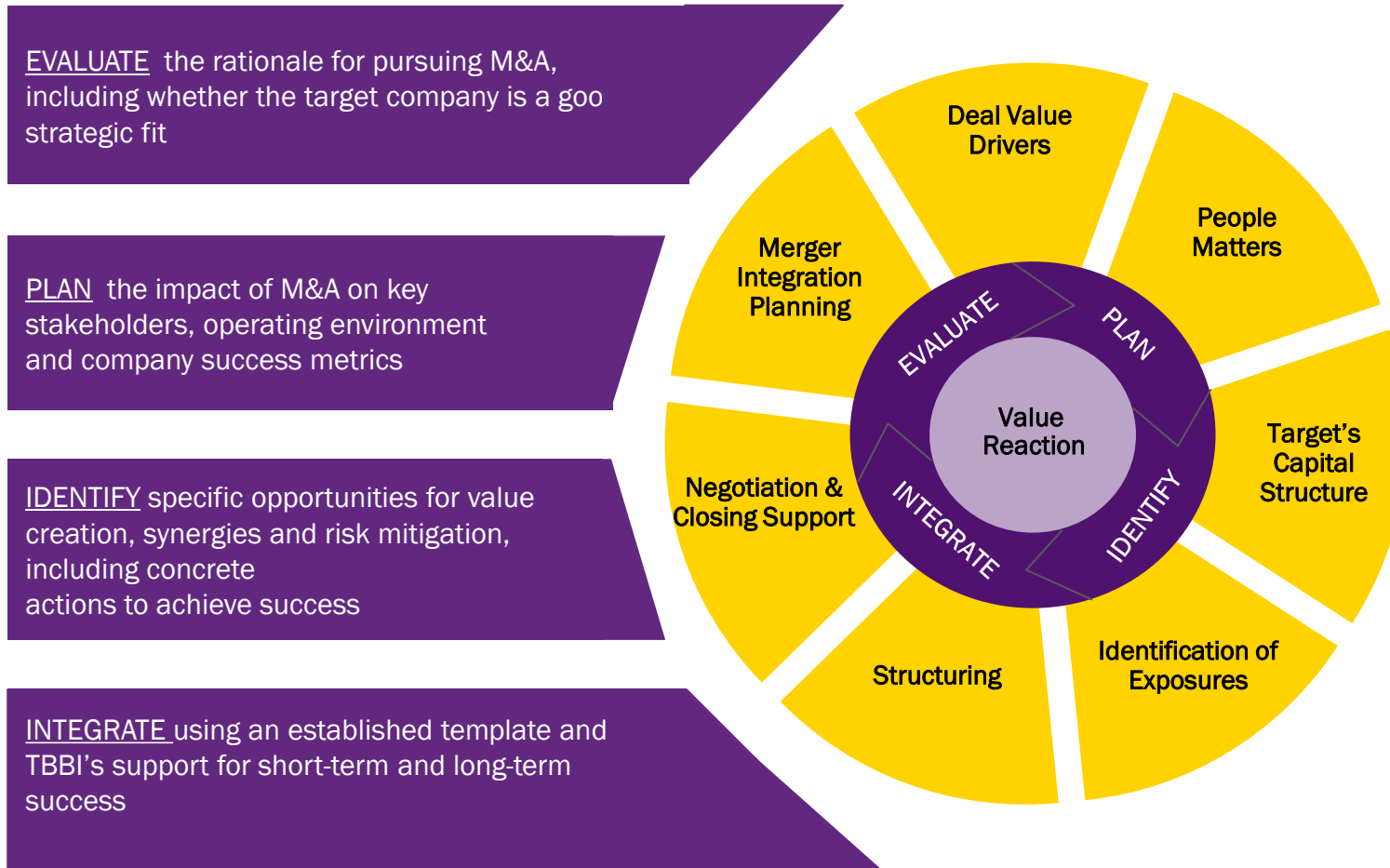
Joint Venture
Valuations



Arm's-length Asset
Valuation for
Restructuring

At The Black Box Institute, we perform holistic commercial due diligence investigations to inform decision-making and identify value maximizing solutions.













A HOLISTIC FRAMEWORK FOR A MORE CONFIDENT TRANSACTION



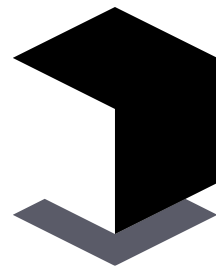
SELECTED CORPORATE FINANCE EXPERIENCE



RECENT TRANSACTIONS

<p>2015</p>  <p>has sold its equipment business to Honeywell for CDN\$472,000,000</p> 	<p>2015</p>  <p>Transaction Advisory</p> 	<p>2015</p>  <p>Transaction Advisory and Partnership Planning</p> 	<p>2015</p>  	<p>2020</p>  <p>acquired by MORNINGSTAR for an initial amount of EUR\$55,000,000</p> 	<p>2022</p>  <p>has acquired SERTI (commercial due-diligence)</p> 
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The Black Box Institute is a unique boutique advisory firm and think tank that brings purposeful and thoughtful advice and guidance to clients. We specialize in complex business, transactional and organizational challenges. Our problem solving techniques are a blend of traditional strategy and financial advisory capabilities, and incorporate creative design thinking.





The Black Box Institute

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