

# 20-YEAR STUDY OF IBM

January 22, 2021

Equity Risk Sciences produces risk & price change probability ratings for all publicly-traded US and Canadian companies.

Each company has 3 ratings:

1. **Financial Risk Indicator** – A measure that rates the strength and durability of a company's financial condition
2. **Price Risk Indicator** – A statistical measure that rates the probability that a company's stock price will decline
3. **Equity Risk Indicator** – An overall statistical rating considering its price and financial condition

These indicators are indexed from 0 (good) to 100 (bad) and then transformed into an effective scaled rating from A (great) to E (poor).

# IBM – 20 YEAR HISTORY

On 12/31/1999, IBM had revenues of \$87.6 billion and liabilities of \$67 billion.

Wall Street's analysts wrote bullish reports about the company over the following 20 years. During that period, however, long-term investors in IBM have seen the market value of their company decline by \$85 billion, a loss of -44%. The financial risks of IBM have grown exponentially: its revenues have fallen to \$75 billion, and their total liabilities are up to a whopping \$133 billion! And yet, retail and institutional investors still own and continue to buy IBM and its "turnaround" story.

ERS's data analytics could have guided analysts to buy it at the best times and protect their capital when it became overvalued by selling it.

	December 31, 1999	January 22, 2021	
Earnings per Share	\$4.12	\$8.83	+\$4.71 (+114%) Increase in EPS
Revenues <i>(trailing 12 months)</i>	\$87.6	\$75.0	-\$12.6 (-14.4%) Decline in Revenues
Liabilities	\$67.0	\$132.8	+\$65.8 (+98%) Increase in Liabilities
Net Tangible Equity	\$20.3	-\$51.1	-\$71.4 Loss in Tangible Equity
Market Cap	\$193	\$108	-\$85 (-44%) Loss In Company's Value
Stock Price	\$108.00	\$121.25	+12.3% Price Change

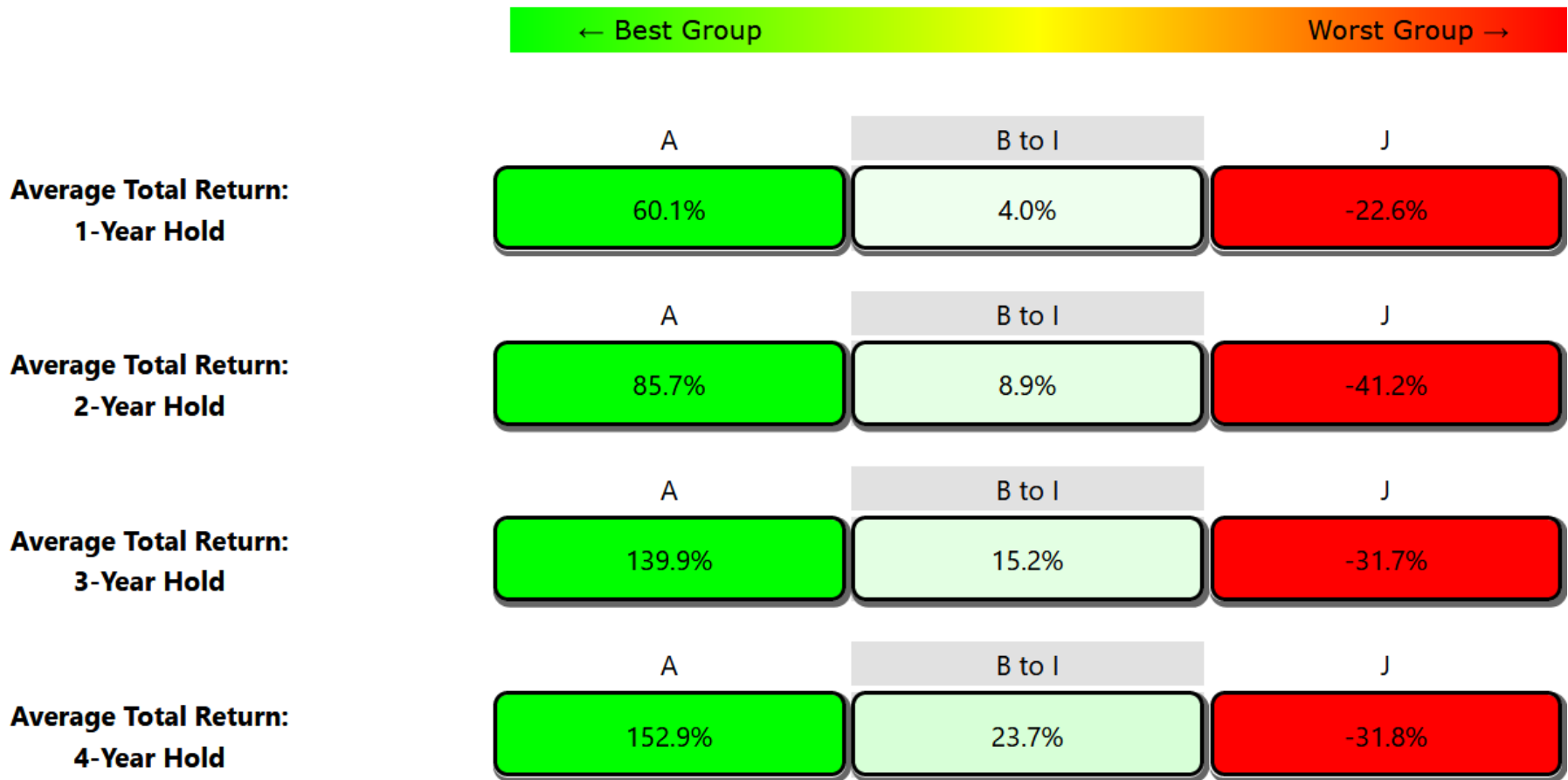
*\*All numbers in billions except share prices.*

# INSPECTING IBM WITH ERS'S IMPROBABILITY BAR TOOL

## International Business Machines Corp (IBM): Dec 31, 1999 to Jan 15, 2020

Grouped by Metric into 2 Deciles and the Middle 80% Based on F1

Current F1: "J"

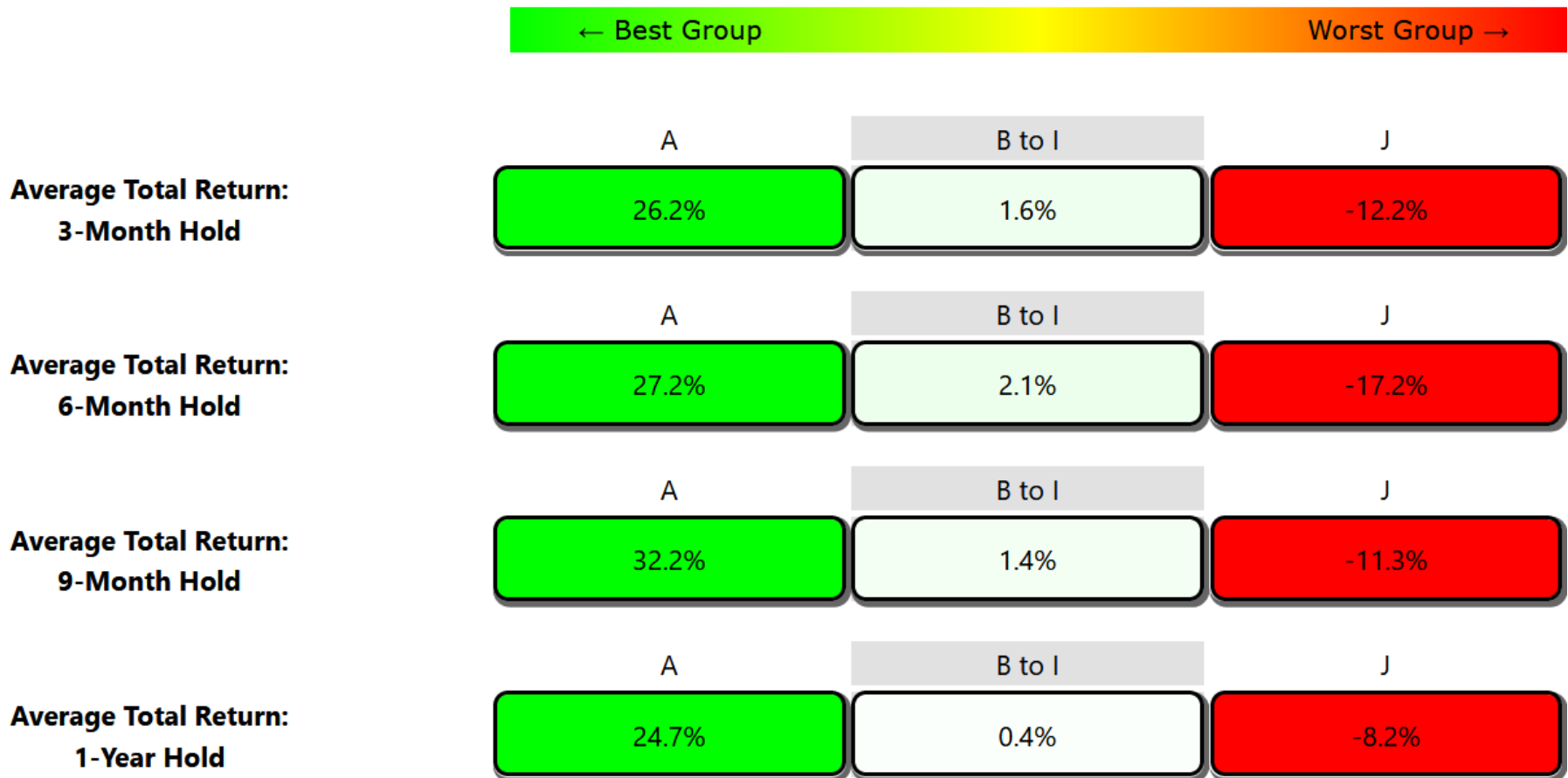


# INSPECTING IBM WITH ERS'S IMPROBABILITY BAR TOOL

## International Business Machines Corp (IBM): Dec 31, 2015 to Oct 15, 2020

Grouped by Metric into 2 Deciles and the Middle 80% Based on F1

Current F1: "J"



# INSPECTING IBM WITH ERS'S IMPROBABILITY BAR TOOL

## International Business Machines Corp (IBM): Dec 31, 1999 to Jan 15, 2019

Grouped by Metric into 2 Deciles and the Middle 80% Based on F1

Current F1: "J"

		Average	A	B to I	J
2-Year Hold		53.7%	100.0%	53.4%	0.0%
	% Probability of Gains				
		9.5%	85.7%	8.9%	-41.2%
	Average Total Return				
		100%	1.0%	98.6%	0.4%
	% of Total Days:				
	6956	Number of Days	72	6856	28
	3736	Number of Gains	72	3664	0
	Average Gain	28.5%	85.7%	27.3%	
	Average Loss	-12.4%		-12.2%	-41.2%

# INSPECTING IBM WITH ERS'S IMPROBABILITY BAR TOOL

## International Business Machines Corp (IBM): Dec 31, 1999 to Jan 15, 2018

Grouped by Metric into 2 Deciles and the Middle 80% Based on F1

Current F1: "J"

		Average	A	B to I	J
3-Year Hold		59.6%	100.0%	59.4%	0.0%
	% Probability of Gains				
		16.4%	139.9%	15.2%	-31.7%
	<b>Average Total Return</b>				
		100%	1.1%	98.5%	0.4%
	<b>% of Total Days:</b>				
	6591	Number of Days	72	6491	28
	3925	Number of Gains	72	3853	0
	Average Gain	36.1%	139.9%	34.2%	
	Average Loss	-12.7%		-12.5%	-31.7%

# INSPECTING IBM WITH ERS'S IMPROBABILITY BAR TOOL

## International Business Machines Corp (IBM): Dec 31, 1989 to Dec 31, 1999

Grouped by Metric into 2 Deciles and the Middle 80% Based on F1

Current F1: "J"

		Average	A	B to I	J
2-Year Hold		68.7%	100.0%	62.3%	0.0%
	% Probability of Gains				
		55.8%	85.3%	49.8%	-20.6%
	<b>Average Total Return</b>				
		100%	18.8%	80.3%	1.0%
	<b>% of Total Days:</b>				
	3653	Number of Days	685	2933	35
	2511	Number of Gains	685	1826	0
94.3%	Average Gain	85.3%	97.6%		
-28.9%	Average Loss		-29.2%	-20.6%	

# INSPECTING IBM WITH ERS'S IMPROBABILITY BAR TOOL

## International Business Machines Corp (IBM): Dec 31, 1989 to Dec 31, 1999

Grouped by Metric into 2 Deciles and the Middle 80% Based on F1

Current F1: "J"

		Average	A	B to I	J
3-Year Hold		71.1%	100.0%	65.2%	0.0%
	% Probability of Gains				
		97.3%	156.6%	85.2%	-45.6%
	<b>Average Total Return</b>				
		100%	18.8%	80.3%	1.0%
	<b>% of Total Days:</b>				
	3653	Number of Days	685	2933	35
	2597	Number of Gains	685	1912	0
151.5%	Average Gain	156.6%	149.6%		
-35.8%	Average Loss		-35.4%	-45.6%	