Recommendation: Long Interactive Brokers (NASDAQ:IBKR)

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Summarized Investment Thesis

Interactive Brokers ("IB" or "IBKR") is an electronic broker serving retail and institutional investors globally. IB is experiencing rapid new account growth due to its dominance in niche international markets and its strong value prop as the lowest cost provider. The company has increased its account base by nearly 10x over the past 10 years and is poised to increase its account base by an additional 5x to 10x over the next 10 years.

Interactive Brokers benefits from higher interest rates and is on track to grow EPS as much as 70% next year if rates stay elevated. The company is more levered to rising rates than peers because the company's liquidity is held entirely in short-term Treasury bills. IB will immediately benefit from an improved net interest margin and simultaneously offer the most attractive account interest rates in the industry.

Currently trading for 14.7x forward EPS (consensus estimates), IB's stock is trading at the low end of its historical valuation multiple range. Furthermore, we believe that consensus estimates need to be revised much higher as analysts fully appreciate the flow-through from higher rates and new account growth exceeds expectations.

Our base case assumption is that IBKR stock will double over the next 2 years. Our bear case assumption has IBKR stock flat over the next 2 years. Therefore, we believe an investment in IBKR is asymmetric to the upside. Furthermore, there are several reasons to own the stock over the long term as the company has a significant runway for growth, increasing returns on invested capital, and an owner-operator management team with a superb track record that is firmly aligned with minority shareholders.

Interactive Brokers Overview

InteractiveBrokers

Interactive Brokers is an electronic brokerage serving the full spectrum of retail and institutional investors. IB has 1.9 million accounts globally giving it substantial scale and considerable room to continue growing its account base.

The company offers two flagship products to retail investors: IBKR Pro and IBKR Lite.



	IBKR Pro	IBKR Lite
US-Listed Stocks	Fixed low-price commissions	Zero trading commissions
Other stocks	Fixed low-price commissions	Fixed low-price commissions
Options, Futures, Bonds, Currencies	Fixed low-price commissions	Fixed low-price commissions
Interest Paid on Cash	Benchmark less 0.5%	Benchmark less 1.5%
Interest Charged on Margin Loans	Benchmark plus 1.5%	Benchmark less plus 2.5%
Trading Tools Available	Full suite of tools & execution algorithms	Basic trading tools
Order flow sold to market makers	No	Yes

Source: https://www.interactivebrokers.com/en/index.php?f=45500.

The IBKR Pro product is the traditional discount brokerage model of charging commissions for trades and collecting net interest against cash held and margin loans. The IBKR Lite product is the new model of zero commission trading and monetizing through payment for order flow (PFOF) and higher net interest rates.

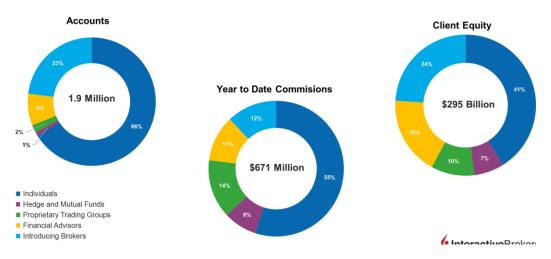
IBKR Lite was rolled out in 2019 in response to the popularity of commission-free trading at other brokers such as Robinhood. The vast majority (over 90%) of IB's customers are on the IBKR Pro plan, but interestingly, most customers have evaluated or tried the IBKR Lite product and chose to stick with Pro. The two plans are priced in such a way that the company is indifferent on which plan the customer chooses.

In addition to serving retail investors, Interactive Brokers enables financial advisers and hedge funds to use their platform. This is an extremely sticky b2b solution for financial professionals. Advisers and fund managers are monetized the same way as retail accounts – commissions and net interest – there are no platform fees billed to third-party businesses.

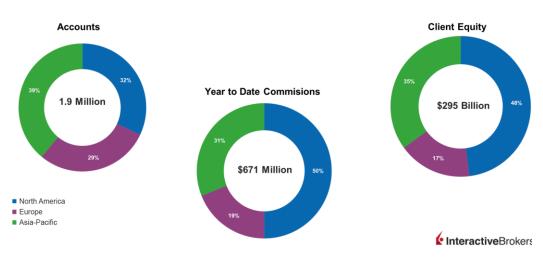
Lastly, the company has white-labeled its platform for other brokerage companies to use as a backend. Third-party brokers are referred to as 'introducing brokers' and handle all aspects of their own marketing and customer service. They use IB's backend to support trading and clearing. Introducing brokers are monetized the same way as all other IB account types. Introducing brokers pay the standard commission rates and interest rates on cash and margin loans before marking up the commissions and interest rates to their end customers. Examples of introducing broker customers include Tiger Brokers and Futu Holdings, two leading brokers based in Asia.

The charts below show the client mix by account type and geography. Interactive Brokers is extremely diversified by account type and geography. No single customer represents more than 1.5% of commission revenue.

Interactive Brokers Account Mix by Account Type



Source: Interactive Brokers September 2022 Investor Presentation.



Interactive Brokers Account Mix by Geography

Source: Interactive Brokers September 2022 Investor Presentation.

Low-Cost Advantage

Founded in the 1970s, the company's roots are in electronic market making where it focused on leveraging technology to drive automation and lower costs. Over the past 30 years, Interactive has built upon its market making infrastructure to provide low-cost brokerage solutions. The company continues to heavily invest to retain its low-cost advantage and passes along most of the savings to its customers in the form of lower account fees, better interest rates paid on cash, lower interest rates charged on margin loans, sharing of the economics from stock lending, and better trade execution.



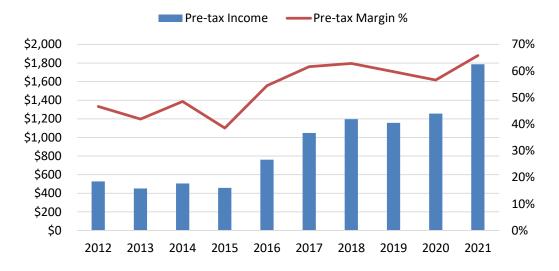
For years Interactive Brokers has been the low-cost leader with \$1.00 commission trades, effectively giving wholesale rates to anyone with an account. Today, most retail brokers offer zero commission trading and monetize with payment for order flow (PFOF) and margin rates. IB's margin rate isn't just a little cheaper relative to competitors, *it is less than half the rate!*

JS Margin Loan Rates Comparison ²				
	\$ 25K	\$ 300K	\$ 1.5M	\$ 3.5M
Interactive Brokers	3.83%	3.49%	3.28%	3.16%
E-Trade	11.20%	9.70%	N/A	N/A
Fidelity	10.07%	8.82%	6.25%	6.25%
Schwab	10.07%	8.82%	N/A	N/A
TD Ameritrade	11.25%	9.75%	N/A	N/A

Source: <u>https://www.interactivebrokers.com/en/trading/margin.php</u> as of 9/17/2022.

Therefore, Interactive Brokers embodies the concept of "scale economies shared" in its growth flywheel. The company uses its scale and years of technology investments to drive lower prices and better trade execution for customers. The superior value prop fuels customer growth which helps drive additional scale and platform investment.

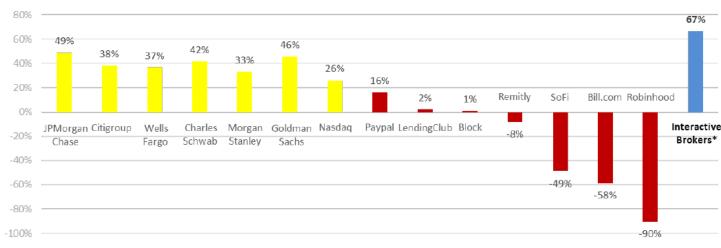
This is a durable competitive advantage because Interactive Brokers is driving increasing returns over time as it drives the cost of using its product lower. Over the past 10 years, the company has seen pre-tax earnings more than triple to \$1.7 billion and pre-tax margins expand from 47% to 66%.



Source: Interactive Brokers Financial Statements.



And despite its low-cost selling model, Interactive Brokers has the best margins among its peers.



Pre-Tax Margin (FY 2021)

* Represents adjusted pre-tax margin. See the reconciliation of non-GAAP measures at the end of this presentation.

Source: Interactive Brokers September 2022 Investor Presentation.

More Products to Trade and Better Trading Tools

Interactive Brokers isn't just the lowest-cost provider, it's also the leader when it comes to accessing more financial securities to trade and ways to trade them.

The company has an important niche in providing access to global markets. Interactive Brokers provides access to trade over 90 trading markets and 27 local currencies. This is far more than any other brokerage company and makes Interactive Brokers the default choice for investors that do extensive global trading.

By comparison, Schwab only enables access to 30 foreign markets and 7 local currencies (<u>source</u>). Robinhood only allows customers to trade US-listed stocks (<u>source</u>). Based on our conversations with hedge funds, Interactive Brokers enables access to some foreign exchanges that even large prime brokers like Goldman Sachs do not support.

Beyond stocks, Interactive Brokers supports trading across all asset classes including bonds, futures, foreign exchange, and derivatives. While the company still has progress to make on improving electronic fixed income trading, the platform has everything sophisticated FX and futures traders need.

Furthermore, Interactive Brokers offers sophisticated trading tools beyond what is available at other retail brokers. This includes advanced order types, trading outside of regular exchange hours, trade execution algorithms, and an institutional-grade trading API that is used by quants and program traders.

Finally, IB claims to offer the best trade execution due to its unique dual-auction mechanic for routing orders. The conventional execution path is for a broker to route an order to either an exchange or a market maker and hold a single-price auction. Interactive has programmed its orders to first run an auction with 16 market makers and then a public auction with all of the exchanges, ensuring the best execution (source: June 2022 investor conference). Financial market structure is complex but IB is one of the most sophisticated participants due to its decades spent as a leading global market maker.

Connecting to exchanges around the world and managing a sophisticated trading environment is primarily a technological feat resulting from decades of investment. Today, Interactive Brokers owns several trading niches that are unchallenged by current competitors in breadth or in pricing.

Earnings Catalyst #1: Continued Rapid Account Growth

Over the past 10 years, Interactive Brokers has increased its total number of accounts by nearly 10x from 200 thousand in 2012 to 1.9 million today. New account additions accelerated during the pandemic but are still robust today. So far 2022 has seen an addition of over 300k net new accounts representing over 30% y/y growth.

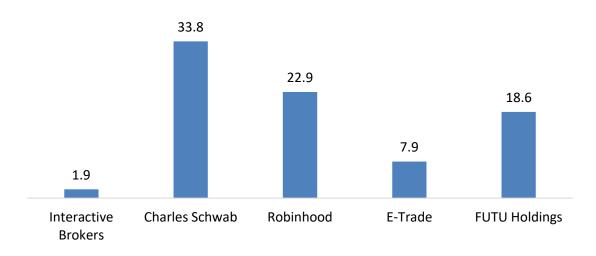


Source: Interactive Brokers financial reports.

At 1.9 million accounts, Interactive Brokers is at a sweet spot where it is large enough to benefit from scale advantages but small enough to still have a large untapped growth opportunity. Given the size of the market, there is a path for Interactive Brokers to exceed 10 million accounts over the next 10 years.



Total Accounts By Broker (in millions)



Source: Financial Reports as of Q2 2022, E-Trade as of Q2 2020.

Where will the account growth come from?

1) Continued industry growth & market share gains

The brokerage industry continues to exhibit global growth. Every major brokerage company has reported positive organic account growth with international markets growing faster than developed ones. During its July 2022 investor call, Charles Schwab noted that it expects 5% organic growth in 2022 despite a decline in client equity.

Investing in the stock market caught mass-market attention during the pandemic as financial markets soared and zero-commission brokers such as Robinhood (in the US), E-Toro (in international markets), and Futu (in Asia) saw millions of new customers open accounts. These lightweight zero-commission brokers have seen account growth stall in 2022 as legacy players such as Schwab and Interactive continue to see rapid account growth.

One theory is that the pandemic introduced many people to the world of investing via lightweight brokers such as Robinhood. Many of these 'pandemic traders' are now upgrading to more sophisticated platforms such as Interactive Brokers which better serve their needs. We believe the pandemic has permanently expanded the addressable market for the investment platforms and that Interactive Brokers is well-positioned to take market share over time due to its superior customer value proposition.

2) Limited competition in many international markets

As noted earlier, Interactive Brokers has a niche in enabling trading in global markets. The company not only allows trading in more geographies but also opens local accounts in 217 countries or territories (<u>source</u>), far more markets than any other broker.



Investors from around the world increasingly want to participate in financial markets and want to own shares of high-profile global companies such as Apple, Tesla, Samsung, and Nestle. While the competition for brokerage customers is intense in North America, there is not much competition for globally enabled brokers in places like Indonesia, Hungary, or Morocco.

In most countries, brokerage accounts are primarily handled by slow-moving banks with weak trading tools and high fees. The Interactive Brokers value prop is even stronger in these countries, especially for customers that want to trade in global securities.

Two-thirds of IB's 1.9 million accounts are held by investors outside of North America and the company's international accounts are growing at a faster rate. There is a long runway for continued international account growth.

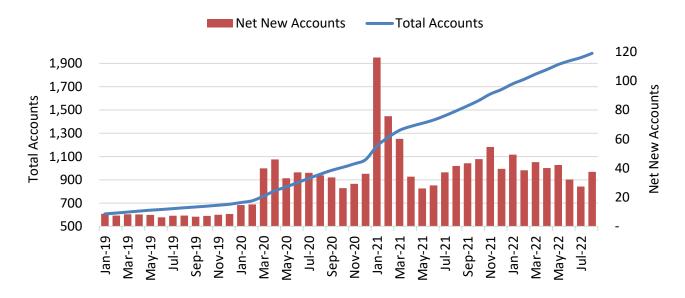
3) Ramp of new introducing brokers customers

Introducing brokers are IB's white label platform customers. These are brokerage companies that use IB's backend systems but handle the marketing and customer service – end customers do not know they are using the IBKR back-end. Interactive Brokers does not discount its services to the introducing brokers; it receives the same commission rates and net interest on balance sheet assets held.

The introducing broker business is clearly a good deal for IB. Partner brokers spend money on advertising and do the hard work of servicing the customers. Interactive Brokers just needs to keep its trading platform up and running. But this is also a great deal for the partner brokerage companies as they do not need to make the investment in building the trading infrastructure. Using IB's backend is cheap enough to the point that introducing brokers can mark up the commission and net interest rates and still be price competitive.

Roughly 23% (437K) of IB's 1.9 million accounts are from introducing brokers today. The mix from introducing brokers has declined over the past 2 years due to the churning of two large partner brokers; however, the total number of accounts from introducing brokers has still increased at a rapid rate. Further, IB is onboarding several new Introducing Brokers in H2 2022.

During an investor conference in September 2022 (<u>source</u>), Chairman Thomas Peterffy noted that 2 large-sized and several mid-sized financial institutions were coming on as introducing brokers over the next 4 quarters. The addition of new introducing brokers could help explain the recent re-acceleration in net new accounts seen in August 2022 as depicted in the chart below.



Source: Interactive Brokers reported monthly metrics.

Earnings Catalyst #2: Higher Interest Rates

Interactive Brokers is a major beneficiary of higher interest rates for three reasons. First, IB keeps a portion of the interest earned on customer cash balances. Second, IB earns higher net interest spreads from margin loans. Third, IB has invested all of its liquidity in 3-month Treasury bills, providing the balance sheet the near-term upside to higher rates.

Regarding customer cash balances, Interactive Brokers keeps all the interest earned on cash balances below \$10,000. IB pays account holders the benchmark rate minus 0.5% for all cash held above \$10k. There are different interest rate calculations for currencies other than USD. For example, IB only pays the benchmark rate minus 1% for South African Rand cash held in excess of 150,000 (IB keeps all interest on cash below this threshold.). IBKR also keeps more of the net interest for IBKR Lite accounts.

The ability to keep all the interest on the first \$10k of cash provides a huge boost for Interactive Brokers when interest rates rise. This incremental interest revenue flows directly to the bottom line.

Margin loans are even more lucrative for IB with the caveat that margin loans must be funded by the company (whereas interest collected on customer accounts is funded by account holders). The table below shows the current USD margin loan rate schedule for IBKR Pro and IBKR Lite accounts.



Interactive Brokers Margin Loan Rates

BM = Benchmark Rate

CURRENCY	TIER	RATE CHARGED: IBKR PRO	RATE CHARGED: IBKR LITE
USD	0 ≤ 100,000	3.83% (BM + 1.5%)	4.83% (BM + 2.5%)
	100,000 ≤ 1,000,000	3.33% (BM + 1%)	4.83% (BM + 2.5%)
	1,000,000 ≤ 50,000,000	3.08% (BM + 0.75%)	4.83% (BM + 2.5%)
	50,000,000 ≤ 200,000,000	2.83% (BM + 0.5%) ¹	4.83% (BM + 2.5%)
	> 200,000,000	2.83% (BM + 0.5%) ^{1,2}	4.83% (BM + 2.5%)

Source: Interactive Brokers website.

Interactive Brokers does not use debt at the parent company level to finance itself. Therefore, the spread on margin loans is the difference between the interest paid on customer cash balances and the interest charged on margin loans. The spread favors IB and skews even more in the company's favor as rates go higher because IB keeps 100% of the interest on the first \$10k of cash.

The table below shows IB's net interest income and net interest margin quarterly over the past 4 years. Net interest margin peaked in Q3 2019 at 1.8% when the fed funds rate was 2.0%. During Q2 2022, the net interest margin was 1.3% with the fed funds rate at 1.2%. The fed funds rate is currently 2.25% and is expected to hit 4% by the end of 2022.

Interactive Brokers Net Interest Income														
	<u>Q1 '19</u>	<u>Q2 '19</u>	<u>Q3 '19</u>	<u>Q4 '19</u>	<u>Q1 '20</u>	<u>Q2 '20</u>	<u>Q3 '20</u>	<u>Q4 '20</u>	<u>Q1 '21</u>	<u>Q2 '21</u>	<u>Q3 '21</u>	<u>Q4 '21</u>	<u>Q1 '22</u>	<u>Q2 '22</u>
Interest Earning Assets	\$61,948	\$64,605	\$67,126	\$69,080	\$72,976	\$81,272	\$84,613	\$88,429	\$100,031	\$96,898	\$97,575	\$103,001	\$104,325	\$110,705
Net interest income	\$255	\$267	\$299	\$296	\$264	\$201	\$201	\$232	\$312	\$277	\$277	\$297	\$283	\$351
Net Interest Margin	1.65%	1.65%	1.78%	1.71%	1.45%	0.99%	0.95%	1.05%	1.25%	1.14%	1.14%	1.15%	1.09%	1.27%
Fed Funds Rate	2.3%	2.3%	2.0%	1.5%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	1.2%

Source: Interactive Brokers Quarterly Earnings Reports, St. Louis Federal Reserve.

The last time the fed funds rate was 4% was 2007 and IB's net interest margin was 2.5%. Given the current outlook for interest rates, IB should be on track to earn a net interest margin between 2% and 2.5% in 2023.

With IB's current level of interest earnings assets, the difference between a 1.25% net interest margin earned in 2021 and 2.5% expected for 2023 is \$1.38 billion in incremental net interest income. Assuming a 20% tax rate, this translates into \$2.24 of incremental earnings per share. IB earned EPS \$3.24 in 2021 meaning that higher rates alone could grow EPS by as much as 70%.

Management Team & Governance

Thomas Peterffy founded the predecessor company to Interactive Brokers in the 1970s. The company restructured and changed its name to Interactive Brokers in 1993. Peterffy is still the majority owner of the company with a 75% stake and now serves as the Executive Chairman.



The CEO role was transitioned to Milan Galik in 2019. Milan has spent his entire career at the company and rose through the ranks after starting as an entry-level programmer. The vast majority of Milan's personal wealth is also tied up in IBKR stock.

Milan's management style is very similar to Thomas's and all signs point to a continuation of the status quo when Thomas moves on. Both Milan and Thomas are strong believers in heavy technology investment to drive efficiency and are highly engaged in all aspects of the business down to mid-level hiring decisions. Based on our conversations with former employees, it is clear that Thomas and Milan run Interactive Brokers as if they own the entire company and are extremely disciplined when it comes to expense management and making critical decisions.

Given management's high equity ownership, this is very much a controlled company where minority shareholders have little say or control. This is a double-edged sword but the team's long-term track record speaks for itself. Interactive Brokers and consistently driven innovation, revenue growth, and margin expansion over time. Minority owners should expect more of the same going forward.

Valuation Analysis

Interactive Broker's share price is roughly 20% below its high achieved in 2021. A long-term chart shows that the company's share price has compounded at an attractive rate over the long term although it has traded within a range over the past 5 years.



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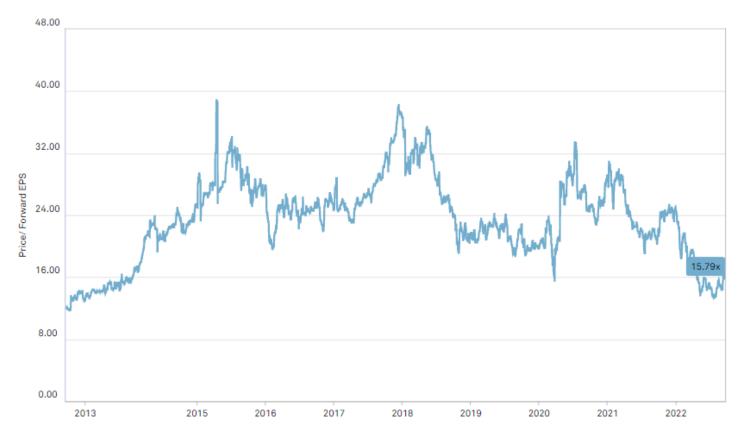
Source: <u>Finviz.com</u>.







The below chart shows that IBKR currently trades for 15.8x next twelve months EPS (Wall St. consensus estimates). Historically, the stock has traded for multiple above 20x. The current multiple is at the low end of the range based on the last 10 years of trading data.



Source: Capital IQ as of 9/19/2022.

The table below shows where IBKR trades relative to its publicly traded peers. Based on analyst consensus estimates, IBKR trades in line with Charles Schwab (SCHW) but at a steep discount to other similar comps. LVS Advisory estimates that IBKR is even cheaper than analysts currently project.



Comps	2023E PE
SCHW	14.8x
NDAQ	21.7x
ICE	17.0x
CBOE	18.1x
CME	22.9x
МТКХ	32.4x
Peer Median	19.9x
Peer Mean	21.2x
IBKR (consensus estimates)	14.7x
IBKR (LVS Advisory estimate)	10.0x

Source: Capital IQ as of 9/19/22, LVS Advisory estimate.

The below table lays out LVS Advisory estimates for IBKR's EPS over the next 2 years. The base case assumes a net interest margin of 2.0% (current interest rate environment), the bull case assumes a NIM of 2.5% (a slightly more aggressive interest rate environment), and the bear case assumes a NIM of 1.25% (zero-interest rate environment).

	2023E EPS	P/E Multiple	Share Price	Gross Return				
Bull Case	\$6.31	25.0	\$157.75	133.0%				
Base Case	\$5.22	20.0	\$104.40	54.2%				
Bear Case	\$3.57	15.0	\$53.55	-20.9%				

IBKR Scenario Analysis (LVS Estimates)

	<u>2024E EPS</u>	P/E Multiple	Share Price	Gross Return
Bull Case	\$7.22	25.0	\$180.50	166.6%
Base Case	\$6.00	20.0	\$120.00	77.3%
Bear Case	\$4.16	15.0	\$62.40	-7.8%

Source: LVS Advisory.

Our base case sees IBKR stock appreciating to \$120 over the next 2 years, 77% above the current share price. What is encouraging is that we see significant upside in our base and bull cases but do not see much downside in our bear case. In other words, an investment in IBKR stock today appears asymmetric to the upside.

Addressing the Potential "Bear Thesis"

There are two primary points that bears would use to push back against the IB investment thesis and a few minor points:

1. Interactive Brokers was a "covid beneficiary". New account growth will slow and trading activity will not recover.

In 2018 and 2019, IB added approximately 100k new accounts per year compared to 500k new accounts per year in 2020 and 2021. While brokerage companies certainly experienced an unusual amount of growth during the pandemic, strong account growth has persisted for IB in 2022. In August 2022, IB added 40k new accounts for the month and is on pace to deliver nearly 500k new accounts for the year. Taking a step back, IB's competitors are 10x larger and regularly add more than 500k new accounts per year. While new account growth may not accelerate on a percentage basis, it is not unreasonable to expect net new adds to continue at a similar level for years to come.

The other aspect of the pandemic boost is that the trading activity per account was also much higher. LVS Advisory doesn't model trading activity returning to 2021 levels. Increased trading activity would lead to upside to the earnings estimates.

2. Interest rates will quickly return to zero in a recession, turning into a headwind for brokerage companies.

The current level of interest rates is good for IB's bottom line; however, there are benefits to a lower interest rate environment as well. Lower interest rates would likely stimulate trading activity and provide valuation support to IB's stock. Furthermore, IB gets 80% of the benefit of higher rates at the 2% level of the risk free. The sweet spot for IB would be if rates simply are not increased or are slightly cut but not cut back to zero.

Most stocks are negatively correlated with higher rates. Therefore, IB is appealing from a portfolio management standpoint in that it stands to benefit when many other stocks are suffering.

Finally, IB's stock is still an attractive investment over the long run even if rates are stuck at zero. The prospect for continued account growth will be enough to drive long-term earnings growth.

3. Interactive Brokers has terrible governance due to its majority control.

An investment in IBKR stock requires trusting the Peterffy family. Some investors are understandably not comfortable with this governance situation. However, the IBKR's management team and board have delivered compelling results to minority investors over time and have not engaged in egregious self-dealing transactions. Executive compensation is reasonable and the operators are aligned with minority shareholders.

4. Interactive Brokers is vulnerable to a financial crisis.

IB is exposed to the liabilities of its customers if they blow up their accounts in the case of a financial crisis or market event. From time to time IB has been on the hook for customer losses. For example, IB had a system glitch when the price of oil went negative in 2020 which prevented customers from closing out trades; as a result, IB paid \$100m to cover customer losses from this market event.

Some fear that IB could face large losses in the event of another major financial crisis. While a repeat of the oil situation in 2020 could occur at some point, IB's risk management systems and controls are quite proactive and robust. Furthermore, IB is very conservatively capitalized and has nearly \$4 billion in excess capital that could help absorb any customer losses. Finally, it is worth noting that IB has served brokerage clients for 30 years and has

never faced a near-death experience due to a systematic market crisis. IB survived the Asian financial crisis, the dot com bust, the 2008 crisis, the covid pandemic, the meme stock bust, and more.

5. Interactive Brokers is exposed to significant regulatory risk due to its activity in emerging markets.

There are credible reasons to be concerned about IB's regulatory risk. In 2020, IB was hit with a \$38m fine from FINRA due to insufficient anti-money laundering controls. Since that fine, IB has made substantial investments in its compliance program and has not received additional penalties. Since 2019, the company has more than tripled its US-based compliance headcount focused on AML and trading surveillance and more than doubled its Ex-US headcount focused on AML. This is in addition to meaningful investment made in core-compliance headcount (non-AML) and non-headcount-related investments in the compliance function.

This is a sensitive issue given the geographies that IB operates in. After interviewing several compliance professionals and former employees, we are comfortable with how seriously IB approaches the issue and the incremental investments that have been made over the past 3 years.

Heads I Win, Tails I Don't Lose

In conclusion, an investment in IBKR stock represents an attractive risk/reward over the near and long term. From a qualitative perspective, IB has durable competitive advantages as a leading global brokerage franchise. From a quantitative perspective, not only is the stock's valuation attractive but there are multiple earnings catalysts that will result in strong EPS growth.

In a bull case, investors stand to benefit if interest rates stay elevated for the next few years. In a bear case, investors will not lose if rates are cut to zero. There is a natural hedge built into the set-up where higher rates equate to higher earnings through improved net interest margin and lower rates equate to valuation support and an improvement in trading activity. Either way, Interactive Brokers will likely come out ahead.