Hedge Funds - comprehensive Market analysis

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PART 1 – OPENNING	3
Research Purpose	3
Intrinsic Value	3
PART 2 – PERFORMANCE ANALYSIS	5
The data	5
Sample bias	5
Performance analysis	6
2019	6
2020	8
2021	10
2022	12
2023	15
Conclusion	17
PART 3 – HEDGE FUNDS RETURNS	19
Strategy 1 - The absolute noob strategy	19
Strategy 2 – after the crowd	20
Strategy 3 – the most obvious	21
PART 4 – HEDGE FUNDS & DOWNSIDE RISK PROTECTION	22
Strategy 1 – bonds	22
Strategy 2 – the most obvious one	23
Final conclusions	24

dictionary

Return – the percent return from investment

alpha – the excess return a fund (in this case hedge funds) create against some sort of investment, most times against the s&p500

median – is the exact middle number of a data set, for example: for a data set as 1,2,3,4,5 the median would be 3, because it is the number that has the same number of numbers that are bigger them him as the numbers that are smaller than him.

Hedge fund – קרן <mark>גידור</mark>

Bonds – אגרות חוב

Short – an investment where if the stock goes down, the investor gains money.

PART 1 – OPENNING

Research Purpose

The purpose and goal of this research is to lay down and present my findings about the question; Does there is a possible and relatively easy market entry and consumable market share among the hedge funds market?

Intrinsic Value

hat are hedge funds? One my ask, well, the definition of a hedge fund by Wikipedia is:

"pooled investment fund that holds liquid assets and that makes use of complex trading and risk management techniques to improve investment performance and insulate returns from market risk."

In English, hedge fund is a fund that invests the money of customers, while trying to achieve 2 goals, the first and the less important one is to create an excess return against the market, the second and the important one is to protect the customer's money from downside risks while investing.

Let's say there is a guy named Jimmy, jimmy is very rich, he has 100 million dollars sitting at the bank, jimmy is smart and he knows that his money is losing its value because of inflation, so he turns into investing solutions. Jimmy might know a thing or two about the stock market, but he **won't dare** to invest on his own, because if the market has a bad year, and the stock market fell 10%, jimmy would lose 10 million dollars, just liked that, in a blink of an eye.

This just might be the reason why hedge funds as an idea is so successful, people are more afraid of the scenario of losing money, than excited of the opportunity to make money.

Crazy right? Not really, although investors are by nature scared of losing more than excited from gaining, when we are discussing about a large amount of money, the stress and pressure are much stronger, the fear is real. If jimmy invested all his money in the s&p500 in 2022, he would have lost 18.5 million dollars in a single year.

Just imagine the next scenario: you have 100 million dollars, you achieved them by hard labor or with your insane luck you won them, doesn't matter. You decide to do the smart thing and invest them, you spread the money on a few ETF's that track the s&p500, the Dow jones and the Nasdaq, the classic strategy.

You go to sleep one day in 2020, thinking everything is fine, you wake up and then...BOOM! **you just lost 10 million dollars!** Think its unrealistic? It happened twice in 2020!, the s&p500 fell 10% In one single day.

With that being said, on average, an investment in the s&p500 had never lost its value after 13 years, which means that if you invest in the s&p500 for the far future, say 20 years, you statistically has more chance to die within this time than to lose money, but guess what, jimmy would still rather hedge funds than to invest on his own.

The bottom line here is that it is understandable why people, especially with big amounts of cash in the bank, tend to always prefer hedge funds, which literally by their name, hedge the investment fund. The important thing to catch here is that the **Intrinsic Value** of the hedge fund is to offer psychological safety for the investor, and the freedom from the headache of managing his/her own portfolio.

PART 2 – PERFORMANCE ANALYSIS

The data

The data used in this part for the statistical analysis is provided by barclayhedge.

barclayhedge is a leading provider of alternative investment data, offering a range of indices, research reports, and analytics tools. Their indices are widely used as performance benchmarks for the alternative investment industry, furthermore, it has operated for more than 30 years.

On the other hand, she offers the data for free, which should raise a few red flags, although I do find the company and the data reliable.

Site: https://www.barclayhedge.com

LinkedIn: https://www.linkedin.com/company/barclayhedge

Sample bias

in every sample there is a bias, and it's an important thing to know what bias it is, so you would know to see the results in the right context.

In our case, the sample is built from about 6,000 hedge funds, which makes up roughly 35% of all hedge funds worldwide, quite a big sample. The hedge funds in the sample are almost entirely from the us, which raises the first bias, US is the go-to for hedge funds, so I think it is fair to assume that on average American hedge funds preform better than the average worldwide hedge funds.

Unfortunately (and probably why the data is free), the data only goes far as to 2019, a 5 year long data, which is not a lot but an average cycle of the s&p500 is 4 years long, so we are probably in the clear.

Performance analysis

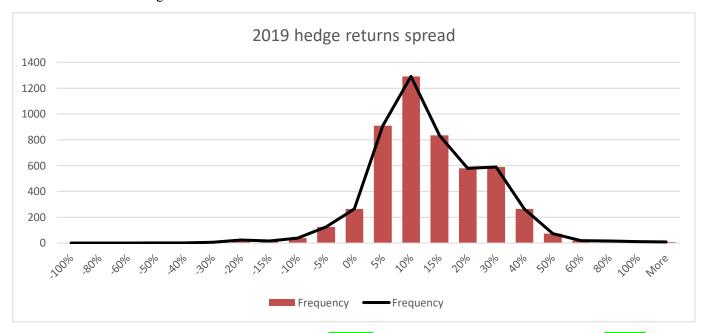
2019

The 2019 hedge funds performance was as follows:

preformence	totillence											
average	median	highest	lowest	range	std deviation	skewness	kurtosis	total amount lost money	total amount gained money			
11.97%	9.32%	320.1%	-51.43%	371.5%	14.30%	4.555	65.629	9.4%	90.6%			

An average return of 11.97%, a median return of 9.32%, the median is a much more reliable metric to assess what is truly the mid performance. The highest return is 320.1%, while the lowest is -51.43%, a range of 371.5%.

The histogram of the returns is as follows:



The median return for the top 50% is 15.57%, the median return for the top 25%, is 24.7%.

90.6% of the hedge funds managed to gain money, while 9.4% lost money. I think that 9.4% losers is pretty alarming, considering the fact that 2019 was an outstanding year for the stock market.

So, if a toddler would have opened a hedge fund in 2019, and would not do anything with his client's money, because he is a toddler, he would have performed better than 10% of all hedge funds.

The 2019 hedge funds relative performance was as follows:

relative preformence

used data	s&p500 return	dow jones return	nasdaq return	average market	s&p500 alpha	dow jones alpha	nasdaq alpha	market alpha
11.97%	31.49%	22.34%	35.23%	29.69%	-19.52%	-10.37%	-23.26%	-17.71%
used data	s&p500 return	dow jones return	nasdaq return	average market	s&p500 alpha	dow jones alpha	nasdaq alpha	market alpha
9.32%	31.49%	22.34%	35.23%	29.69%	-22.18%	-13.03%	-25.92%	-20.37%

-20.37%	
tno losers s&p500	tno winners s&p500
93.61%	6.4%
median return top 25%	median return top 50%
24.7%	15.57%
alpha	alpha
-6.75%	-15.92%

The s&p500 return was 31.49%, the dow jones return was 22.34% and the Nasdaq return was 35.23%, an average market return of 29.69%.

Relative to the average, the excess return against the s&p500 is -19.52%, against the dow jones its -10.37%, against the Nasdaq its -23.26%, against the average market its -17.71%. Relative to the median, which is a better metric, it's even worse, the median excess return of hedge funds against the average market is -20.37%.

It doesn't end there, the excess return of the median return of the top 50% against the s&p500 is -15.92%, against the median return of the top 25% its -6.75%.

The total number of losers against the s&p500 is 93.61%, 93.61% has not managed to beat the s&p500.

Ouch, what a year, it seems like Jimmy would have gained an extra 20 million dollars if he would have gone against his guts, and this is without even considering the fees!

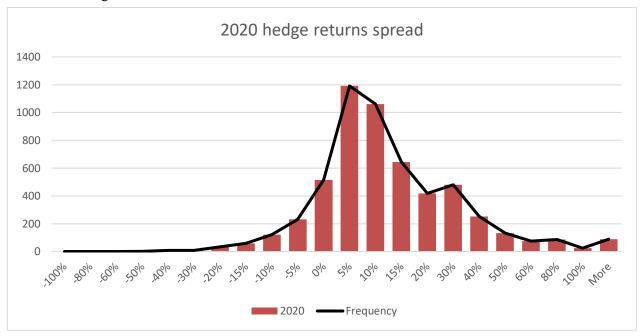
2020
The 2020 hedge funds performance was as follows:

	preformence											
	average	median	highest	lowest	range	std deviation	skewness	kurtosis	total amount lost money	total amount gained money		
1	14.13%	7.14%	795.1%	-55.41%	850.6%	34.36%	8.909	128.529	18.0%	82.0%		

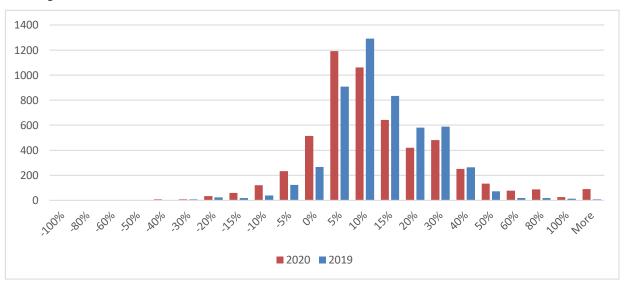
The average return for hedge funds in 2020 was 14.13%, the median was 7.14%, almost half the average. The highest return was 795.1%, which just proves that the average is not reliable at all.

18% of the hedge funds had lost money, 18%! Almost a fifth of all hedge funds. That toddler's business must be bombing! Imagine what would have happened if he took 3 minutes of his leisure time to invest in the safest bond in the world and gained a return that is not 0%!

The histogram of the returns is as follows:



Against 2019 its as follows:



The median return of the top 50% was 17.10%, the median return of the top 25% was 29.4%.

The hedge funds relative performance was as follows:

relative preformence

- 1	14.13%	18.40%	9.70%	43.64%	23.91%	-4.27%	4.43%	-29.51%	-9.78%	4
	14.13%	18.40%	9.70%	43.04%	23.91%	-4.27%	4.43%	-29.51%	-9./8%	4
1	used data	s&p500 return	dow jones return	nasdaq return	average market	s&p500 alpha	dow jones alpha	nasdaq alpha	market alpha	
1	7.14%	18.40%	9.70%	43.64%	23.91%	-11.26%	-2.56%	-36.50%	-16.77%	1
									tno losers s&p500	I
									76.88%	
									median return top 25%	ı
									20.40/	

s&p500 return dow jones return nasdaq return average market s&p500 alpha dow jones alpha nasdaq alpha market alpha

The s&p500 return was 18.40%, the dow jones return was 9.70% and the Nasdaq return was 43.64%, an average market return of 23.91%.

Relative to the average, the excess return against the s&p500 is 4.27%, against the dow jones its 4.43%, against the Nasdaq its 29.51%, against the average market its 9.78%. Relative to the median, the excess return of hedge funds against s&p500 is -11.26%, against the dow jones its -2.56%, against the Nasdaq its -36.50% and against the average markets its -16.77%.

the excess return of the median return of the top 50% against the s&p500 is -1.31%, against the median return of the top 25% its 11.02%.

The total number of losers against the s&p500 is 76.88%.

A better year for hedge funds against the market, the top 25% actually managed to create an excess return, but the bottom line still stands, almost all the hedge funds did not manage to create an excess return against the market. If someone theoretically would have opened a hedge fund and would have just invest all his client's money in the s&p500, he would have been in the top 12.5%!

2021
The 2021 hedge funds performance was as follows:

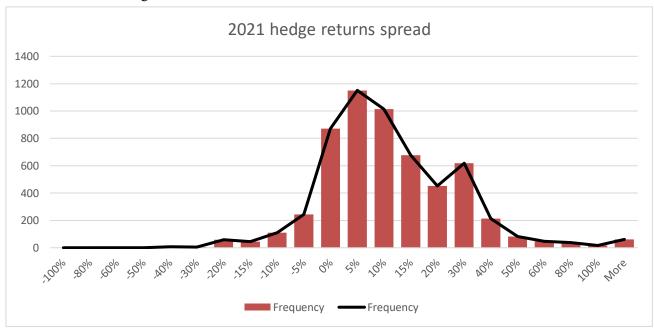
	<u>preformence</u>									
	average	median	highest	lowest	range	std deviation	skewness	kurtosis	total amount lost money	total amount gained money
I	11.58%	6.52%	1122.5%	-64.41%	1186.9%	32.07%	13.841	337.874	23.4%	76.6%

The average return of hedge funds In 2021 was 11.58%, the median was 6.52%, highest return of 1122.5%, lowest of -64.41%, a range of 1186.9%!

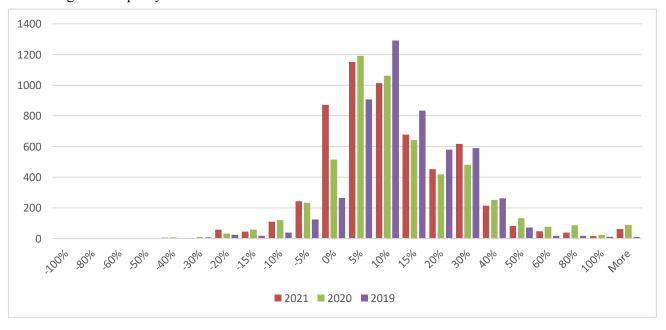
23.4% of hedge funds lost money, while 76.6% of hedge funds gained money, again, pretty surprising since 2021 was a strong year for the stock market.

The median return for the top 50% was 15.85%, the median return for the top 25% was 24.8%.

The return histogram is as follows:



Against the past years:



The hedge funds relative performance was as follows:

relative preformence

used data	s&p500 return	dow jones return	nasdaq return	average market	s&p500 alpha	dow jones alpha	nasdaq alpha	market alpha
11.58%	28.70%	18.73%	27.50%	24.98%	-17.12%	-7.15%	-15.92%	-13.40%
used data	s&p500 return	dow jones return	nasdaq return	average market	s&p500 alpha	dow jones alpha	nasdaq alpha	market alpha
6.52%	28.70%	18.73%	27.50%	24.98%	-22.18%	-12.21%	-20.98%	-18.46%
	•	•						

-18.46%
tno losers s&p500 tno winners s&p500
90.98% 9.02%
median return top 25% median return top 50%
24.8% 15.85%
alpha alpha
-3.92% -12.85%

With the median hedge funds return, the excess return against the s&p500 is -22.18%, against the dow jones its -12.21%, against the Nasdaq its -20.98% and against the average market return its -18.46%.

The excess return of the median return of the top 50% against the s&p500 was -12.85%, the excess return of the median return of the top 25% against the s&p500 was -3.92%.

90.98% of all the hedge funds lost against the s&p500 that year.

2022

2022 was a bad year for the stock market. In the period of the corona, cash was barely flowing from one to another and the "economy machine" seemed to barely work. Since inflation was at the floor, the fed decided to make interest rates fall to the floor to almost 0% to restore the buying power in the market. On top of all that the US synthetically injected money into the economy to raise inflation and restore buying power.

Well, it worked, perhaps too well, after a while inflation surged to the roof, the fed was quick to draw their guns and made interest rates surge as well, and made them stay at high values, on top of all that, Russia invaded Ukraine, which seemed to cause panic among investors.

With that being said, it is super important that we have in our data a year of a falling market, because we can finally see the hedge fund's performance while doing the one thing, they are basing the hedge fund on, **Hedging**. We already discussed how the whole point of hedge funds is to hedge the investments, well, let's see how it went.

The hedge funds performance for 2022 was as follows:

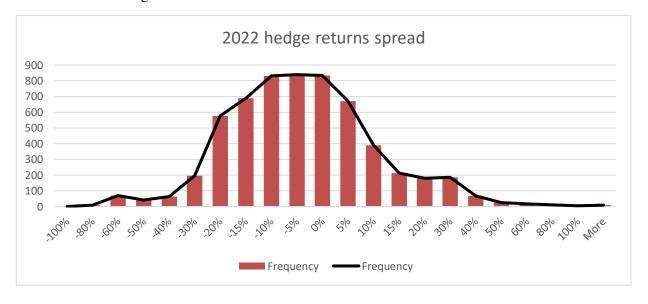
1	<u>reformence</u>									
	average	median	highest	lowest	range	std deviation	skewness	kurtosis	total amount lost money	total amount gained money
	-6.85%	-7.21%	205.6%	-93.52%	299.2%	18.79%	1.233	16.296	70.1%	29.9%

The average return for hedge funds was -6.85%, the median return was -7.21%, highest return was 205.6%, lowest was -93.52%, a range of 299.2%.

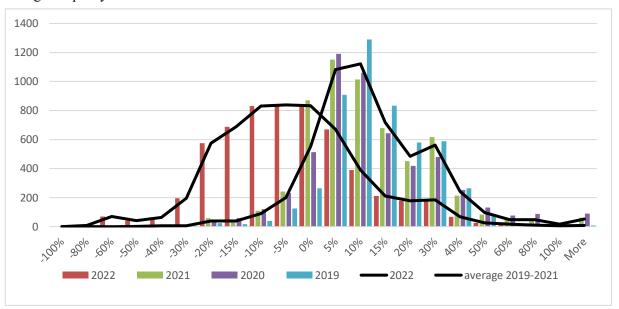
The median return of the top 50% was 1.95%, the median return of the top 25% was 9.43%.

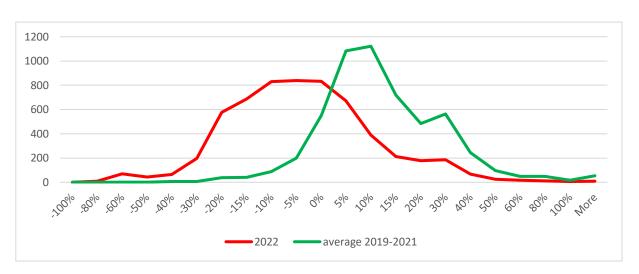
70.1% of all hedge funds lost money, well, here is your "hedging"!

The return histogram was as follows:



Against past years:





The hedge funds relative performance was as follows:

relative preformence

used data	s&p500 return	dow jones return	nasdaq return	average market	s&p500 alpha	dow jones alpha	nasdaq alpha	market alpha
-6.85%	-18.11%	-8.78%	-32.97%	-19.95%	11.26%	1.93%	26.12%	13.10%
used data	s&p500 return	dow jones return	nasdaq return	average market	s&p500 alpha	dow jones alpha	nasdaq alpha	market alpha
-7.21%	-18.11%	-8.78%	-32.97%	-19.95%	10.91%	1.58%	25.77%	12.75%

12.75%	
tno losers s&p500	tno winners s&p500
20.00%	80.00%
median return top 25%	median return top 50%
9.43%	1.95%
alpha	alpha
27.54%	20.06%

The relative performance of the hedge fund spills some different light on their performance.

Using the median, the excess return against the s&p500 was 10.91%, against the dow jones it was 1.58%, against the Nasdaq it was 25.77% and against the average market it was 12.75%.

The excess return of the median return of the top 50% against the s&p500 was 20.06%, The excess return of the median return of the top 25% against the s&p500 was 27.54%.

80% of the hedge funds managed to win the s&p500.

The average hedge fund won the s&p500 by 11.26%.

This might sound impressive, but it really isn't, because if you use **any** some sort of downside risk protection, you have 100% chance at winning the market.

2023
The performance of hedge funds in 2023 was as follows:

preformen	preformence											
averag	ge	median	highest	1owest	range	std deviation	skewness	kurtosis	total amount lost money	total amount gained money		
9.789	%	6.73%	369.8%	-68.54%	438.3%	21.46%	6.092	64.909	17.9%	82.07%		

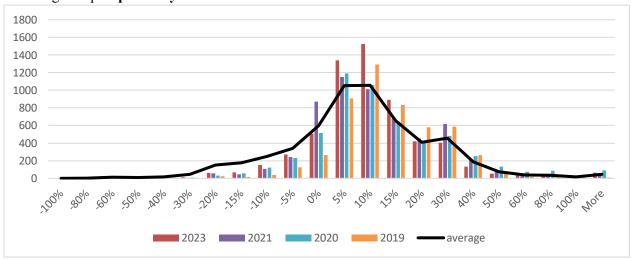
An average return of 9.78%, a median return of 6.73%, a range of 369.8%. The median return of the top 50% was 12.79%, the median return of the top 25% was 20.13%.

17.9% of the hedge funds lost money, I can say again that it is surprising since 2023 was a strong year for stocks, but at this point it's just a recurring motive.

The return histogram is as follows:



Against past positive years it's as follows:



The relative performance was as follows:

relative preformence

used data	s&p500 return	dow jones return	nasdaq return	average market	s&p500 alpha	dow jones alpha	nasdaq alpha	market alpha
9.78%	26.29%	13.70%	53.81%	31.27%	-16.51%	-3.92%	-44.03%	-21.48%
used data	s&p500 return	dow jones return	nasdaq return	average market	s&p500 alpha	dow jones alpha	nasdaq alpha	market alpha
6.73%	26.29%	13.70%	53.81%	31.27%	-19.57%	-6.98%	-47.09%	-24.54%

-24.54%	
tno losers s&p500	tno winners s&p500
92.55%	7.45%
median return top 25%	median return top 50%
20.13%	12.79%
alpha	alpha
-6.16%	-13.50%

Using the median, the excess return against the s&p500 is 19.57%, against the average market its 24.54%. The excess return of the median return of the top 50%, against the s&p500 was 13.50%, the excess return of the median return of the top 25%, against the s&p500 was -6.16%.

92.55% of the hedge funds had lost against the s&p500.

Conclusion

So, what can we learn from this analysis? First, lets create some end statistics to have a broader vision:

Average return

The average percent of hedge funds that won the s&p500 including 2022 was 25.19%.

The average percent of hedge funds that won the s&p500 excluding 2022 was 11.49%.

The average median return of hedge funds excluding 2022 was 7.43%.

The average median return of hedge funds **including** 2022 was 4.50%.

Total return

The total median return of hedge funds between 2019-2023 was 22.50%.

The total s&p500 return between 2019-2023 was 86.77%, a difference of 64.28%.

The average of average of hedge funds returns between 2019-2023 was 8.12%.

The average of average of warren's buffet's hedge funds between 1956-1969 was 31%, a "warren buffet premium" of 22.9%.

Excess return

The average excess return against the s&p500, of the median return hedge funds, **including** 2022 was -12.86.

The average excess return against the s&p500, of the median return hedge funds **excluding** 2022 was -18.80%.

Warren buffet's average excess return against the s&p500 was 16.86%.

The average excess return against the s&p500, of the median return of the top 50%, **including** 2022 was -4.70%.

The average excess return against the s&p500, of the median return of the top 50%, **excluding** 2022 was **-10.89%.**

The average excess return against the s&p500, of the median return of the top 25%, **including** 2022 was 4.35%.

The average excess return against the s&p500, of the median return of the top 25%, excluding 2022 was -1.45%.

So, what do we learn from that?

First thing off the table, almost all hedge funds do not manage to beat the market, in years that the market go up, on average only as small as 12% manage to win the market.

Even the top 25% does not manage to beat the market consistently when it goes up.

Second, the hedging service on average is just **not worth it**, in a year where the market fell, most hedge funds lost money. Although they did manage to lose less than the market.

When looking at the big picture, between 2019-2023 the s&p500 made <u>64.28%</u> higher return than the average hedge fund return. So, for every investor that plans to invest long term, the hedge fund service is just statistically not worth it on average terms.

I think the best conclusion that can be drawn from this analysis so far, is that hedge funds as a service are as much as, if not more of a psychological service, than an investment service.

PART 3 – HEDGE FUNDS RETURNS

One may argue that the hedge fund's returns are not that bad at all, and that they work hard with extremely complex risk return models and investment models that the untrained human brain would not be able to comprehend. Well, let's put it to the test, how does hedge funds investment strategies perform against different strategies?

Strategy 1 - The absolute noob strategy

If you have ever had a conversation about the US stock market or have ever spent more than 3 minutes on research about the US stock market, you have probably heard to 3 next indices: **s&p500**, **dow jones**, **Nasdaq**.

They are absolutely everywhere, if you have ever asked for some advice on investing, you have probably got an answer that says to put all your money on the s&p500 or the dow or the Nasdaq.

So, the clueless investor would often just split his investment between the 3, with absolute 0 downside risk protection. Well, lets check how this strategy would perform:

Year	s&p500 Return	dow jones return	nasdaq return
2019	31.49%	22.34%	37.96%
2020	18.40%	7.25%	47.58%
2021	28.71%	18.73%	26.63%
2022	-18.11%	-8.78%	-32.97%
2023	26.29%	13.70%	53.81%



	total return	average HFs return	alpha of HFs	meding HFs return	alpha of HFs	top 50% HFs median return	alpha of HFs	top 25% HFs median returns	alpha of HFs
	30.60%	11.97%	-18.62%	9.32%	-21.28%	15.57%	-15.03%	24.7%	-5.86%
	24.41%	14.13%	-10.28%	7.14%	-17.27%	17.10%	-7.32%	29.4%	5.01%
1	24.69%	11.58%	-13.11%	6.52%	-18.17%	15.85%	-8.84%	24.8%	0.09%
	-19.95%	-6.85%	13.10%	-7.21%	12.75%	1.95%	21.90%	9.43%	29.38%
1	31.27%	9.78%	-21.48%	6.73%	-24.54%	12.79%	-18.48%	20.13%	-11.14%

So, in 2019, this strategy would have beat the median return of the top 25% hedge funds.

in 2020, this strategy would have beat the median return of the top 50%.

in 2021, this strategy would have beat the median return of the top 50%.

in 2022, this strategy would have lost to the average hedge fund.

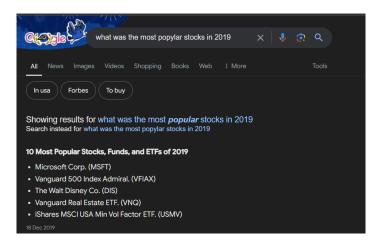
in 2023, this strategy would have beat the median return of the top 25%.

In total, the new investor would have made a return of 91.01%, while the total median return of the top 50% was 63.3%, the single investor won the top 25% hedge funds by 27%.

What can I say, maybe it was luck!

Strategy 2 – after the crowd

Lets say that the new investor in strategy 1 had become a "starter" investor, Although he still does not know what to invest his money in, cluelessly, he searches in google for the "current hottest stocks" and he finds the followed recommendations:



He decides to split all his money between the five and to forget about it for the next 5 years. His strategy would have performed as follows:

Year	crosoft ret	Disney return	/anguard 500 retur	Vanguard	ishares return	total return								
2019	57.03%	33.51%	28.80%	28.87%	27.69%	35.18%								
2020	42.53%	25.27%	16.20%	-4.68%	5.64%	16.99%								
2021	52.48%	-14.51%	26.90%	40.52%	20.84%	25.25%								
2022	-28.02%	-43.91%	-19.50%	-26.24%	-9.42%	-25.42%								
2023	58.19%	3.92%	24.30%	11.79%	10.34%	21.71%								
					Year	total return	average HFs return	alpha of HFs	meding HFs return	alpha of HFs	top 50% HFs median return	alpha of HFs	top 25% HFs median returns	alpha of HFs
					2019	35.18%	11.97%	-23.21%	9.32%	-25.87%	15.57%	-19.61%	24.7%	-10.44%
					2020	16.99%	14.13%	-2.86%	7.14%	-9.85%	17.10%	0.10%	29.4%	12.43%
					2021	25.25%	11.58%	-13.67%	6.52%	-18.73%	15.85%	-9.40%	24.8%	-0.46%
						-25.42%	-6.85%	18.56%	-7.21%	18.21%	1.95%	27.37%	9.43%	34.85%
					2023	21.71%	9.78%	-11.93%	6.73%	-14.98%	12.79%	-8.92%	20.13%	-1.58%

In 2019, he would have beat the median return of the top 25% by 10%.

In 2020 he would have beat the median hedge funds return by almost 10%.

In 2021 he would have beat the median return of the top 25% by 0.46%.

In 2022 he would have lost to the median hedge fund return by 18%.

in 2023 he would have beat the median return of the top 25% by 1.58%.

In total, the starter investor would have made a return of 73.71%, while the total median return of the top 50% was 63.3%, the starter investor won the top 25% hedge funds by 10.45%.

Strategy 3 – the most obvious

Well, the starter investor has evolved to becoming the intermediate investor, from google he turns to the s&p500, he checks what are the 5 biggest companies in the s&p500, because in his mind, big equals good, he finds this:

First we will begin by looking at the components that make up the S&P 500 index and the returns for 2018.

S&P 500 Components

Show 10 v entries		Search:					
S&P	500 Compone	nts Data					
Name	Symbol	Weight \$	Sector	\$			
Microsoft Corporation	MSFT	3.75%	Information Technology				
Apple Inc.	AAPL	3.42%	Information Technology				
Amazon.com Inc.	AMZN	2.92%	Consumer Discretionary				
Berkshire Hathaway Inc. Class B	BRK-B	1.85%	Financials				
Johnson & Johnson	JNJ	1.64%	Health Care				

He decides to split his investments into these 5 companies, equally splatted, his strategy would performed as follows:

Year	MSFT	AAPL	AMZN	BKR	JNJ	total return
2019	57.56%	88.96%	23.03%	10.98%	15.35%	39.18%
2020	42.53%	82.31%	76.26%	2.42%	10.85%	42.87%
2021	52.48%	34.65%	2.38%	29.57%	11.45%	26.11%
2022	-28.02%	-26.40%	-49.62%	4.00%	5.97%	-18.81%
2023	58.19%	49.01%	80.88%	15.77%	-8.60%	39.05%

Year	total return	average HFs return	alpha of HFs	meding HFs return	alpha of HFs	top 50% HFs median return	alpha of HFs	top 25% HFs median returns	alpha of HFs
2019	39.18%	11.97%	-27.20%	9.32%	-29.86%	15.57%	-23.61%	24.7%	-14.44%
2020	42.87%	14.13%	-28.74%	7.14%	-35.73%	17.10%	-25.78%	29.4%	-13.45%
2021	26.11%	11.58%	-14.53%	6.52%	-19.59%	15.85%	-10.26%	24.8%	-1.32%
2022	-18.81%	-6.85%	11.96%	-7.21%	11.61%	1.95%	20.76%	9.43%	28.24%
2023	39.05%	9.78%	-29.27%	6.73%	-32.33%	12.79%	-26.26%	20.13%	-18.92%

In 2019, he would have beat the median return of the top 25% by 14.44%.

In 2020 he would have beat the median return of the top 25% by 13.45%.

In 2021 he would have beat the median return of the top 25% by 1.32%.

In 2022 he would have lost to the median hedge fund return by 11.61%.

in 2023 he would have beat the median return of the top 25% by 18.92%.

In total, the intermediate investor would have made a return of 128.39%, while the total median return of the top 25% was 108.5%, the starter investor won the top 12.5% hedge funds by 19.89%.

If at this point you are not convinced that most hedge funds are almost pointless, then I don't know what would convince you.

PART 4 – HEDGE FUNDS & DOWNSIDE RISK PROTECTION

What is exactly a hedge? Well, by Wikipedia: "A **hedge** is an investment position intended to offset potential losses or gains that may be incurred by a companion investment. A hedge can be constructed from many types of financial instruments, including stocks, exchange-traded funds, insurance, forward contracts, swaps, options, gambles,^[1] many types of over-the-counter and derivative products, and futures contracts."

As we already discussed, the main point of hedge funds is to protect their customer's money from downside risk. Well, one my ask, how good do hedge funds are at achieving that goal?

A good part to start with is in 2022, when the market performed badly, and the market fell. As I already showed that in 2022, 70.1% of the hedge funds lost money, while this can be quite alarming, the average excess return against the s&p500 was actually 11.26%, which proves that hedge funds do their work to some degree, this is also backed up by the fact that as much as 80% of hedge funds managed to win the s&p500.

So, how hard was it to achieve it?

I am not a professional at downside risk protection by no means, but I'm pretty familiar with the basics, so, I went out and checked some down risk protection strategies to see how they would perform:

Strategy 1 – bonds

We have already discussed why exactly the stock market fell in 2022, rising interest rates and Russia invading Ukraine. To be more precise, interest rates started to surge right at **the end of 2021**, and Russia invaded Ukraine in the **second month of 2022**.

Let me propose a theoretical situation; you, the reader, is a hedge fund manager, it is the exact middle time of 2022, it has been 4 months since Russia invaded Ukraine, the fed shows 0 intension of lowering interest rates, you should know at this point, of mid 2022, that 2022 would be a bad year for stocks. You aren't the sharpest hedge fund manager, so it took you half a year to understand that 2022 would be a bad year for stocks.

You have already lost -9.98% of your investment. Since you aren't the sharpest hedge fund manager, it took you 6 months to come to your sense that the situation is not getting any better, and you decide to shift all your investments to **the most obvious form of downside risk protection** – **bonds**.

Although you are a very slow hedge fund manager, lets see how you would have performed for 2022:

strategy	initial investment	lost first half	present value	gain in second half	present value	strategy gain (loss)
Moodys Aaa corporate bond yeild	\$ 100.00	-9.98%	\$ 90.02	4.24%	\$ 93.84	-6.16%
Moodys Baa corporate bond yeild	\$ 100.00	-9.98%	\$ 90.02	5.40%	\$ 94.88	-5.12%

If you had shifted all your investments towards Aaa rated bonds, which are literally the **safest investment form worldwide**. You would have lost -6.16% for 2022. If you had shifted all your investments towards Baa rated bonds, you would have lost -5.12% for 2022.

now let's compare it to the median hedge fund return for the year:

strategy gain (loss)	median HF year return	Strategy Alpha
-6.16%	-7.21%	1.05%
-5.12%	-7.21%	2.09%

this strategy would have come out returning 1% or 2% higher than the median hedge fund's return.

Turned out you are not a bad hedge fund manager at all! you are actually better than 50% of the hedge funds!

Strategy 2 – the most obvious one

What is the most obvious downside risk protecting model out there? Well, it is to invest two thirds of your cash in the stock market, and to short one third on the stock market.

Let's see how this strategy would have performed:

period	total investment	par	rt investment	gain loss %	end posi	tion	total e	nd position	strategy gain (loss)	
2022	\$ 100.00	\$	66.67	-19.95%	\$	53.36	\$	93.35	-6.65%	
		\$	33.33	19.95%	\$	39.98				7
										ſ

median HF year return	Strategy Alpha
-7.21%	0.55%
median return top 50%	Strategy Alpha
1.95%	-8.60%
median return top 25%	Strategy Alpha
9.43%	-16.08%

In 2022 this strategy would have lost -6.65%, **beating the median hedge funds return by 0.55%**. let that sink in, this simple risk return strategy would have beat most hedge funds with their "complex models".

When I first saw this, I thought this might have been a one time luck, so I checked this strategy in the other years:

period	total investment	part investment	gain loss %	end position	total end position	strategy gain (loss)	median HF year return	Strategy Alpha
2019	\$ 100.00	\$ 66.67	29.69%	\$ 86.46	\$ 109.90	9.90%	9.32%	0.58%
		\$ 33.33	-29.69%	\$ 23.44				
period	total investment	part investment	gain loss %	end position	total end position	strategy gain (loss)	median HF year return	Strategy Alpha
2020	\$ 100.00	\$ 66.67	23.91%	\$ 82.61	\$ 107.97	7.97%	7.14%	0.83%
		\$ 33.33	-23.91%	\$ 25.36				
period	total investment	part investment	gain loss %	end position	total end position	strategy gain (loss)	median HF year return	Strategy Alpha
2021	\$ 100.00	\$ 66.67	24.98%	\$ 83.32	\$ 108.33	8.33%	6.52%	1.81%
		\$ 33.33	-24.98%	\$ 25.01				
period	total investment	part investment	gain loss %	end position	total end position	strategy gain (loss)	median HF year return	Strategy Alpha
2023	\$ 100.00	\$ 66.67	31.27%	\$ 87.51	\$ 110.42	10.42%	6.73%	3.70%

That strategy has consistently beat most hedge funds, in 2023 that strategy beat the median hedge fund return by 3.70%.

Final conclusions

After doing this analysis, I have few main conclusions:

- 1. On median terms, almost all hedge funds consistently lose against the market, which makes them unattractive for long-term investors.
- 2. the average hedge fund's downside risk model can be easily beaten by simple models every investor uses. Even as simple as a "third third" model as I have shown, could consistently beat the average hedge fund.
- 3. When looking at the aggregated return of the average hedge fund, it falls short against the market and it's hedging service does not justify the lost potential gain.
- 4. Hedge funds serve more as a psychological solution than an investment solution.

So, is there a relatively easy market entry and consumable market share among the hedge funds market?

From on side, there are a lot of hedge funds worldwide, its not an original idea by any means, and there are some extremely strong hedge funds or equity funds like blackrock o blackstone.

On the other hand, the average hedge fund's relative performance against the market is poor, weak and unattractive.

I think that a hedge fund, with good and strong risk return models and downside risk models that actually work, with strong and talented investors, could relatively easily become a big hedge fund, or an investment house.

Warren buffet averaged 31% annual return and beat the market on average by 18%.

Peter Lynch averaged 29.2% annual return and beat the market on average by 16%.

Benjamin graham beat the market on average by 2.5%.

I think my final conclusion, which is extremely obvious, is that if you will be outstandingly good at it, you will manage to consume a large chunk of the market. And that there is fairly a relative easy entry into the hedge fund's world if you are a good investor.