David and Goliath in the Financial Market

August, 2022

Dear investors,

Today, the way the financial market works in Brazil is still unclear to most individual investors. For example, have you ever wondered how the large brokerage firms make money, even while offering free services to individuals, and what the implications of this business model are for investors?

One of the main sources of revenue for brokerage firms is charging commercial commissions on the investment funds available on their platforms, which commonly reach 50% of all the fees paid by investors to fund managers, throughout the entire investment period.

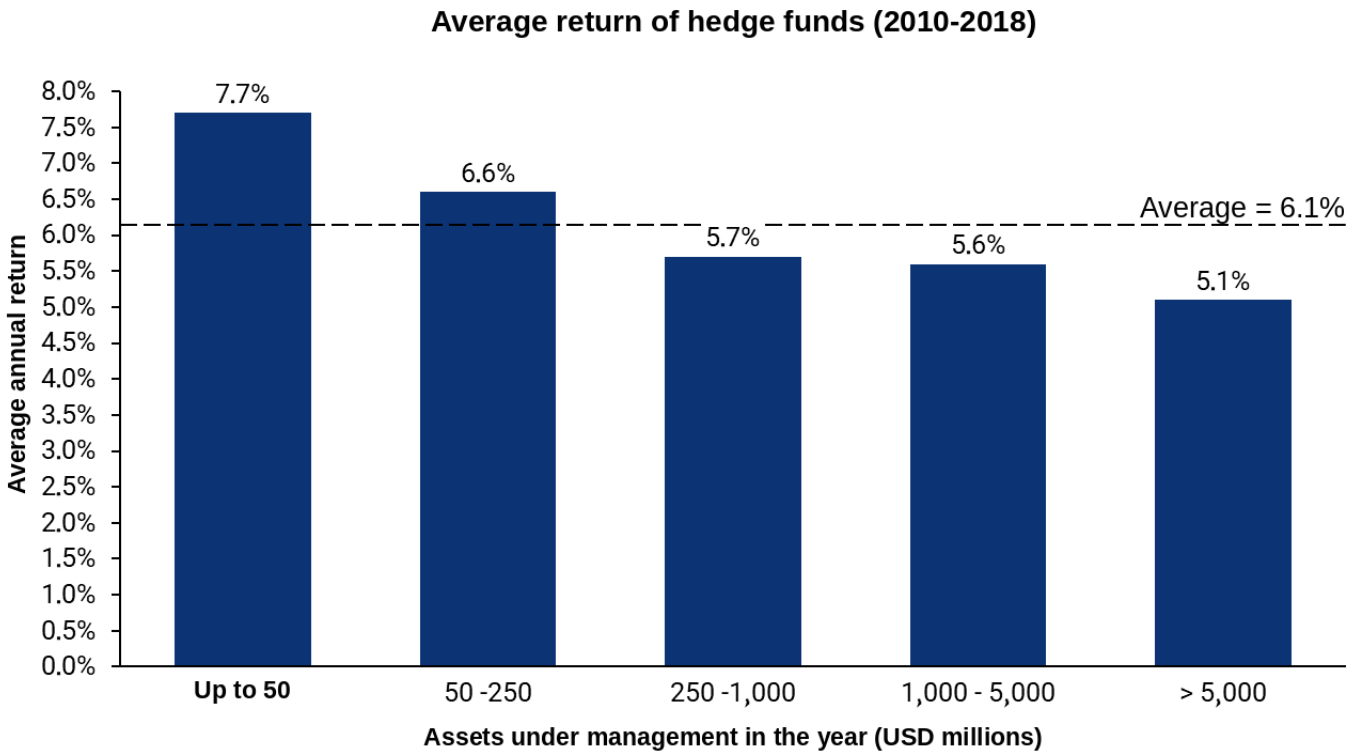
This business model has two relevant implications. The first is that the brokerage firms' advisors, who serve clients free of charge, have an incentive to recommend the products that pay the highest commissions, and not necessarily those that are best for each client. The second implication is that the compensation of the managers, who actually work to improve investment returns, is cut in half. The rest goes to the brokerage firms, which provide the convenience of a good app and the ability to centralize investments in a single account, but contribute nothing to improving the return on the capital invested. It is as if the packaging cost the same as the product inside.

As a consequence of this structure, managers seek to offset the lower fee by increasing the fund's assets under management. However, this places a burden on their investors because the larger the fund, the harder it is to achieve excellent returns. This will be the subject of today's letter.

Smaller funds, higher returns

The fact that small funds have higher average returns than large funds is well known in the financial market. Although the subject is rarely discussed, there are several studies and articles that prove the point[1].

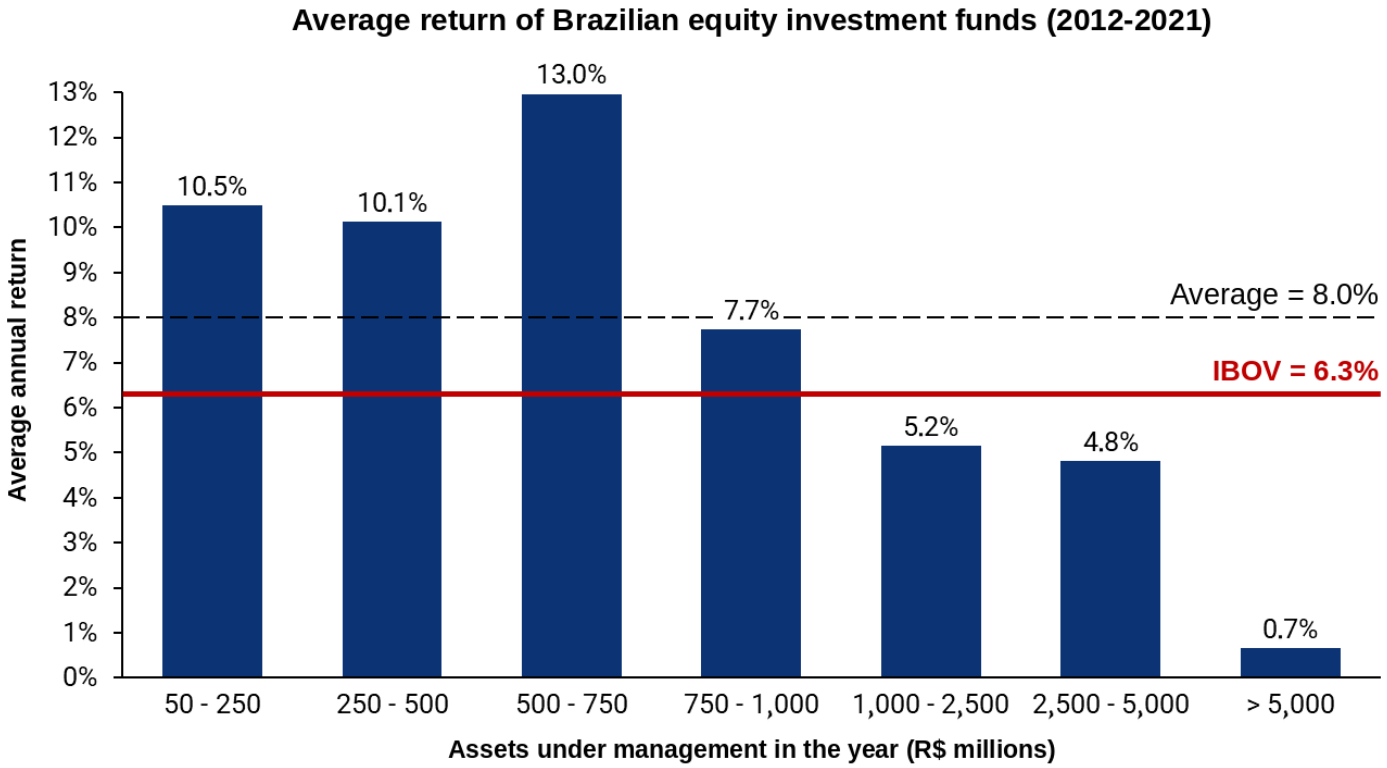
Aurum, a fund of funds manager (funds specialized in selecting and investing in units of other funds), analyzed the returns of hedge funds between 2010 and 2018. At the beginning of the period, there were around 1,700 funds with a combined USD 1.7 trillion under management, and at the end of the period there were 3,800 funds with USD 3.2 trillion under management. It found a clear correlation between fund size and returns: while "micro" funds (less than USD 50 million under management) had an average return of 7.7% per year, "mega" funds (more than USD 5 billion under management) had an average return of 5.1% per year. The difference is larger than it seems: USD 100 thousand invested in the "mega" funds would have become USD 156 thousand at the end of the nine years, while the same investment in the "micro" funds would have reached USD 195 thousand, a final value 25% higher.



Source: Aurum Research Limited

The result is the same in Brazil

To check whether this difference in returns also applied to equity funds operating in the Brazilian market, we collected data on 1,049 investment funds registered with the CVM with net assets of R$50 million or more for the period from 2012 to 2021 and compared the average return across different size ranges. The result was similar. There is no erosion of returns up to the R$750 million range, but the average return begins to decline after that. While funds smaller than R$750 million had an average return of 10.61%, those larger than R$5 billion had a return of 0.66%. In other words, R$100 thousand invested in the large funds would have become R$107 thousand over these ten years, while the same investment in the small funds would have reached R$274 thousand, resulting in a final value 157% higher.



Source: CVM, Ártica analysis

Why does this happen?

Gigantic businesses are quite rare. For example, in Brazil there are 366 companies listed[2] on the stock exchange, of which 253 are worth less than R$5 billion, 95 are worth between R$5 and R$50 billion, and only 18 are worth more than R$50 billion. Similarly, there are fewer investment opportunities in which it is possible to invest billions of reais, owing to the size of the company itself or to the liquidity of its shares in the market, than opportunities to invest tens or a few hundred million.

At the same time, fund managers typically only spend time analyzing opportunities that allow them to invest a minimum amount. The larger the fund, the higher the minimum amount required, and the larger the number of stocks that do not pass this filter and are ignored. A fund that only invested in stocks with a market value above R$5 billion would analyze only 113 stocks on the Brazilian stock exchange, disregarding the other 253, which represent 69% of the possible opportunities.

As a result, large funds compete with one another for the limited number of investment opportunities that can absorb large volumes of capital. This fierce competition among professional investors makes it harder for large asymmetries between the price and the intrinsic value of each asset to arise.

Consequently, the chances of these funds achieving very high returns end up being lower.

In contrast, there is far less competition for small opportunities and, in some cases, the competition comes from non-professional investors, who are more prone to make mistakes and misprice the stock being analyzed. Thus, it is easier to find undervalued small caps (low-liquidity stocks, generally of smaller companies) in the market and, in addition, small caps tend to deliver higher returns than large caps in the long run[3], since they usually have greater growth potential and more agile and efficient management structures. Funds that can invest in companies of this kind have an advantage in the pursuit of higher returns.

Our plans

We are quite realistic about the fact that our investment strategy would not deliver the same level of returns if we had billions under management. The size limit at which we have a good chance of continuing to reach our return target is not precise, but we know it lies somewhere between R$500 million and R$1 billion. In light of this, we have made two decisions.

The first is that, when we begin to have difficulty finding good investments because of the fund's size, we intend to close it to new investors since, besides investing most of our personal wealth in Ártica Long Term FIA, the fund also holds significant capital from several friends and family members. Thus, both out of professional ethics and because of personal relationships, we are deeply committed to generating the best possible return on this capital.

The second decision was not to distribute Ártica Long Term FIA through platforms. We prefer to raise capital directly and avoid the "cost of packaging", thereby ensuring that the fees paid by our investors go to the management structure, which is what generates returns. The impact of this is very large: we are able to sustain the same structure with half the assets under management that would be needed if we paid distribution commissions.

Furthermore, we like to get to know our investors and keep in close contact with them. Raising capital directly brings the extra benefit of allowing us to continue this practice. We have sought to be increasingly transparent about our investment philosophy and market view: we have started holding live sessions on the topics of our monthly letters (every first Wednesday of the month at 7:00 p.m.) and also quarterly results presentations, in exclusive online meetings for our investors.

If you have any suggestions on what else we could do to improve our communication with you, please send us an e-mail at investimentos@articainvest.com.br. We will be glad to hear new ideas!

Fund characteristics

ÁRTICA LONG TERM FUNDO DE INVESTIMENTO DE AÇÕES (the "Fund"), managed by Ártica Gestão de Recursos Ltda., is an equity investment fund regulated by CVM Instruction 555/2014. CNPJ: 18.302.338/0001-63

Target audience

The Fund is intended exclusively for qualified investors (under CVM Instruction 555/2014) seeking long-term-focused returns.

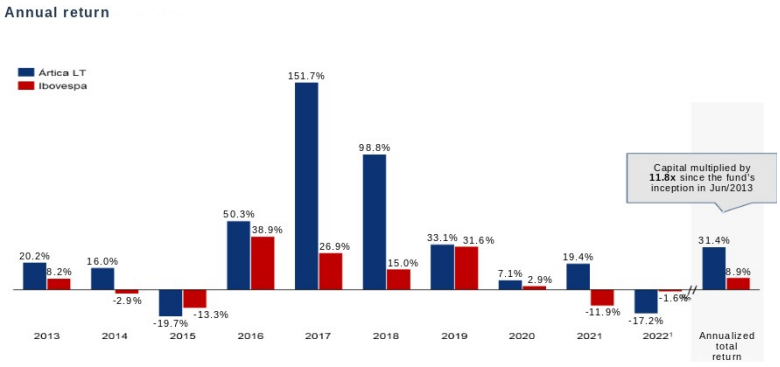
Fund objective

The Fund's objective is to provide its unitholders, over the medium and long term, with capital gains by investing its resources primarily in the stock market, without pursuing a high correlation with any specific equity index available.

Current net assets	R$164.7 million
12-month average net assets	R$157.7 million
Cumulative return	1,087.6%
12-month return	-20.3%
36-month return	41.1%

ANBIMA classification	Equities (Free)
Manager	Ártica Gestão de Recursos Ltda.
Administrator / custodian	BTG Pactual Serviços Financeiros S.A. DTVM
Minimum investment	R$20.0 thousand
Additional investment	R$1.0 thousand
Minimum balance	R$10.0 thousand
Management fee	2% p.a.
Performance fee	20% of excess return over the Ibovespa (high-water mark)
Subscription conversion	D + 1 (business day)
Redemption conversion	D + 89 (calendar days)
Settlement	D + 1 (after conversion)
Taxation (income tax)	15% of gains upon redemption (no come-cotas)

Annual return



Monthly return

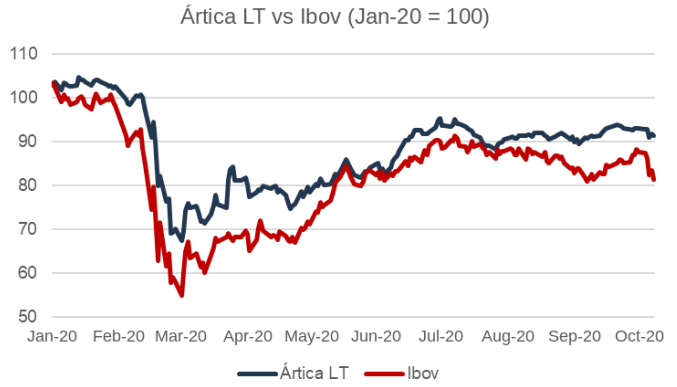
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	Cumulative
2013	Ártica LT	-	-	-	-	-	2.2%	6.7%	(5.2%)	8.8%	8.3%	(1.0%)	(0.3%)	20.2%	20.2%
	Ibovespa	-	-	-	-	-	(11.3%)	1.6%	3.7%	4.7%	3.7%	(3.3%)	(1.9%)	8.2%	8.2%
2014	Ártica LT	(4.5%)	2.9%	2.2%	(0.9%)	4.2%	7.7%	1.2%	0.9%	(1.2%)	(1.2%)	6.2%	(1.7%)	16.0%	39.4%
	Ibovespa	(7.5%)	(1.1%)	7.1%	2.4%	(0.8%)	3.8%	5.0%	9.8%	(11.7%)	1.0%	0.2%	(8.6%)	-2.9%	5.0%
2015	Ártica LT	(4.4%)	(3.6%)	3.4%	5.1%	1.3%	(4.2%)	(10.6%)	(2.9%)	0.2%	(8.7%)	0.5%	3.5%	-19.7%	12.0%
	Ibovespa	(6.2%)	10.0%	(0.8%)	9.9%	(6.2%)	0.6%	(4.2%)	(8.3%)	(3.4%)	1.8%	(1.6%)	(3.9%)	-13.3%	-8.9%
2016	Ártica LT	(9.7%)	2.8%	20.9%	4.7%	1.8%	(0.7%)	16.1%	7.8%	(0.3%)	(1.0%)	1.6%	0.6%	50.3%	68.3%
	Ibovespa	(6.8%)	5.9%	17.0%	7.7%	(10.1%)	6.3%	11.2%	1.0%	0.8%	11.2%	(4.7%)	(2.7%)	38.9%	26.5%
2017	Ártica LT	2.0%	3.7%	1.4%	2.6%	20.4%	1.7%	27.9%	9.4%	8.7%	8.9%	14.1%	(1.2%)	151.7%	323.7%
	Ibovespa	7.4%	3.1%	(2.5%)	0.7%	(4.1%)	0.3%	4.8%	7.5%	4.9%	0.0%	(3.2%)	6.2%	26.9%	60.5%
2018	Ártica LT	22.1%	23.9%	0.8%	2.4%	29.7%	(8.4%)	7.9%	5.1%	(7.8%)	6.5%	(4.7%)	0.9%	98.8%	742.3%
	Ibovespa	11.1%	0.5%	0.0%	0.9%	(10.9%)	(5.2%)	8.9%	(3.2%)	3.5%	10.2%	2.4%	(1.8%)	15.0%	84.6%
2019	Ártica LT	10.7%	(1.7%)	(3.4%)	(1.2%)	(5.7%)	(1.5%)	3.6%	1.0%	(7.8%)	14.0%	0.5%	25.0%	33.1%	1021.5%
	Ibovespa	10.8%	(1.9%)	(0.2%)	1.0%	0.7%	4.1%	0.8%	(0.7%)	3.6%	2.4%	1.0%	6.9%	31.6%	142.9%
2020	Ártica LT	2.7%	(4.2%)	(24.8%)	8.0%	0.2%	6.7%	9.9%	(2.9%)	(0.2%)	0.1%	12.2%	4.6%	7.1%	1,101.6%
	Ibovespa	(1.6%)	(8.4%)	(29.9%)	10.3%	8.6%	8.8%	8.3%	(3.4%)	(4.8%)	(0.7%)	15.9%	9.3%	2.9%	150.0%
2021	Ártica LT	(1.1%)	(1.5%)	8.1%	6.3%	7.8%	4.8%	(2.1%)	(1.3%)	(2.2%)	(1.6%)	(2.7%)	4.1%	19.4%	1,335.2%
	Ibovespa	(3.3%)	(4.4%)	6.0%	1.9%	6.2%	0.5%	(3.9%)	(2.5%)	(6.8%)	(6.7%)	(1.6%)	3.0%	-11.9%	120.2%
2022	Ártica LT	0.5%	(9.2%)	0.4%	(6.1%)	0.3%	(8.7%)	5.0%	-	-	-	-	-	-17.2%	1,087.6%
	Ibovespa	7.0%	0.9%	6.1%	(10.1%)	3.2%	(11.5%)	4.7%	-	-	-	-	-	-1.6%	116.7%

* Ártica LT began on June 27, 2013 as an "investment club" and, on September 27, 2019, it was converted into an "equity investment fund." Returns shown from inception on June 27, 2013 through July 31, 2022

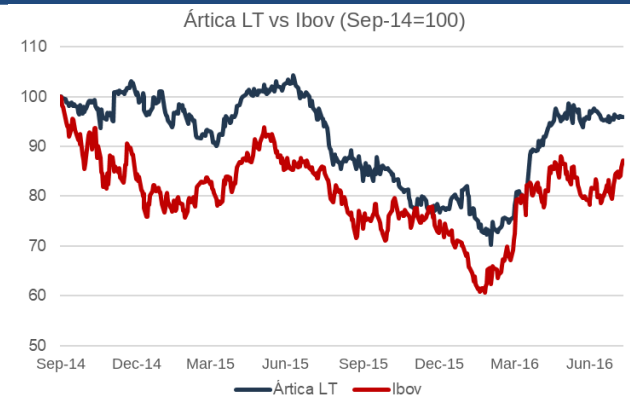
Autorregulação ANBIMA Gestão de Recursos

This material is intended solely to provide information and transparency regarding the management carried out by Ártica Gestão de Recursos, and does not constitute, and should not be construed as, an offer or solicitation to buy or sell any financial instrument or to participate in any specific business strategy. All opinions contained herein were prepared within the context and conditions prevailing at the time the presentation was edited and may change without notice. They also do not take into account the investment objectives, financial situation or specific needs of any particular investor.

Performance in crisis scenarios



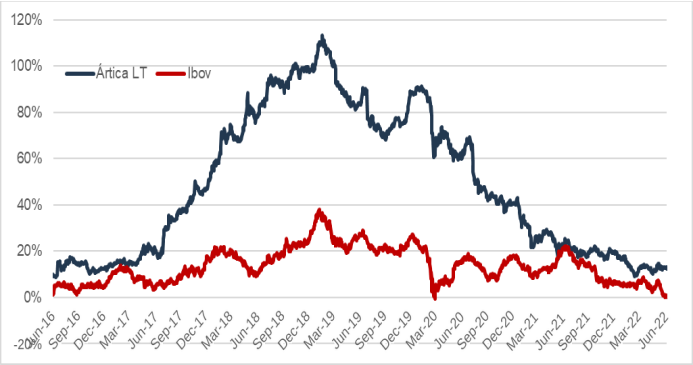
Max drawdown Ártica LT: 34%
Max drawdown Ibovespa: 47%



Max drawdown Ártica LT: 30%
Max drawdown Ibovespa: 39%

	Ártica LT	Ibovespa
Volatility – since inception	23.3%	25.3%
Sharpe – since inception	1.04	0.14
Correlation (Ártica LT vs Ibov) – since inception	0.38	-
Volatility – 12 months	17.7%	20.1%
Sharpe – 12 months	(1.49)	(1.05)
Correlation (Ártica LT vs Ibov) – 12 months	0.70	-

Rolling 3-year returns



Autorregulação ANBIMA
Gestão de Recursos

This material is intended solely to provide information and transparency regarding the management carried out by Ártica Gestão de Recursos, and does not constitute, and should not be construed as, an offer or solicitation to buy or sell any financial instrument or to participate in any specific business strategy. All opinions contained herein were prepared within the context and conditions prevailing at the time the presentation was edited and may change without notice. They also do not take into account the investment objectives, financial situation or specific needs of any particular investor.