

PERFORMANCE OF BRAZILIAN PRIVATE EQUITY AND VENTURE CAPITAL DEALS FROM 1984 to 2022

October 2022



HIGHLIGHTS

- This paper investigates the performance of private equity (PE) and venture capital (VC) investments in Brazil. We analyzed performance data only of deals that were divested.
- The Brazilian PE and VC industry performed well. The average gross MOIC in BRL was 5.8.
- Although the currency risk offset part of the return achieved by Brazilian fund managers, the industry also performed well in USD. The estimated average gross MOIC in USD for Brazilian PE and VC was 2.8
- The performance pattern of the tech deals was in line with what is expected for VC deals: high percentage of losses, and a few outliers, some of them with skyrocket returns, pushing the average performance up. Most of the tech exits resulted in either total (43%) or some loss (17%), and a few have extraordinary return: 8% with a gross MOIC in USD above 10, with a maximum of 455. The average gross MOIC in USD for tech exits was 5.1, and in BRL was 7.9

HIGHLIGHTS

- Accordingly, the performance pattern of non-tech deals was in line with the expectation for PE: more modest percentage of losses (13% total and 18% some losses), and a small percentage of high returns, but less scalable than in the tech segment: 4% of the exits resulted in a gross MOIC in USD above 10, with a maximum of 57. Despite showing lower return than tech deals, what is in accordance with lower risk, non-tech deals' gross average MOIC was high for global standards: 2.8x in USD and 5.8x in BRL.
- The channel that represents the largest percentage of exits was sale to strategics (50% of total exits), and this was the case for tech and non-tech deals.
- Write-offs corresponds to 32% of total exits, and when we break the sample in tech and non-tech, we observe that the tech deals had 51% of the write-offs, compared to 16% of non-tech.
- IPO was the most successful exit route for non-tech companies (an average gross IRR of 41%, and an average gross MOIC of 4.5). Brazilian Tech companies had their first wave of IPOs with an IRR of 55% and MOIC of 5.2.

DATA

- The performance data includes only deals that were invested and divested between 1984 and May 2022. The data comes from Private Placement Memorandums (PPMs) reported by General Partners. The information is sanitized by Spectra Investments to protect identities.
- Our analysis investigates the performance of 1334 deals, being 586 in the tech segment and 748 in the non-tech segment.
- We estimated statistics for performance denominated in USD, as well as in BRL.
- We split the analysis for deals in the tech sector and non-tech sectors. The non-tech segment is composed almost entirely by PE investments. The vast majority of the VC deals (pre-seed, seed, series A and B) are in the tech segment. However, series B and later stage rounds also include investments by PE funds. The tech segment includes the gray area (series B and C) of investments that could be classified either as growth capital or VC. Recently, traditional PE funds also started investing in earlier stages.

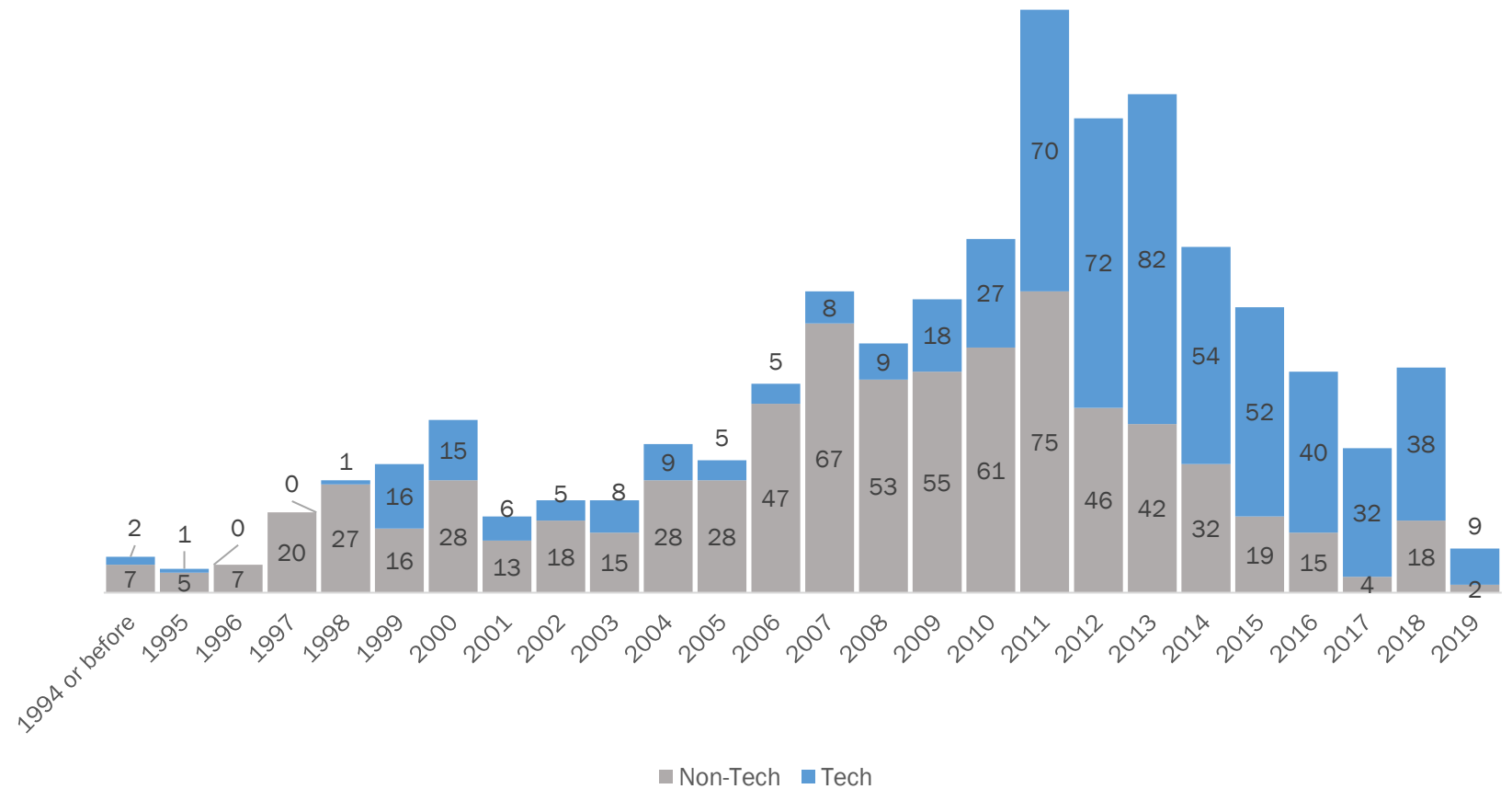
PERFORMANCE METRICS

- We estimated the following metrics for **gross returns**: **Multiple of Invested Cash (MOIC)** ¹ and **Internal Rate of Return (IRR)**.
- We converted the gross returns from BRL to USD using the transaction day bid exchange rate quoted by the Brazilian Central Bank for the performance metrics in USD.²

¹ MOIC – multiple of invested capital, also known as cash on cash or multiple of money. Represents the amount of money generated by USD 1.00 of investment. For example, a MOIC of 2.00 means that US\$1.00 was transformed in US\$2.00, considering all cash flows received

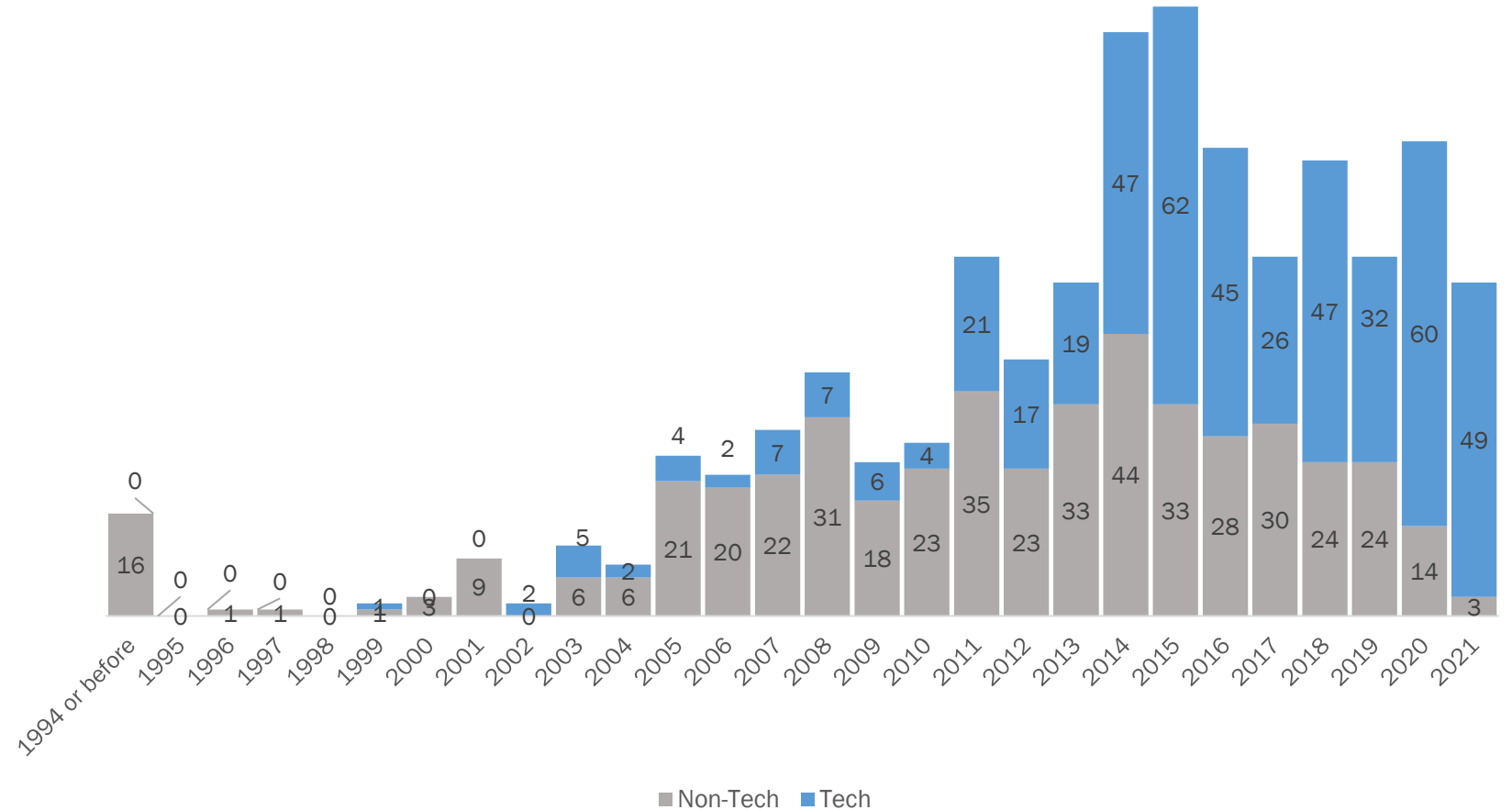
² $MOIC_{USD} = MOIC_{BRL} * (P_{tax\ investment\ day} / P_{tax\ divestment\ date})$ and $IRR_{USD} = MOIC_{BRL}^{(365/holding\ period\ days)} - 1$, where P_{tax} is the Central Bank official exchange rate for BRL to USD.

DIVESTED DEALS ACCORDING TO YEAR OF INVESTMENT



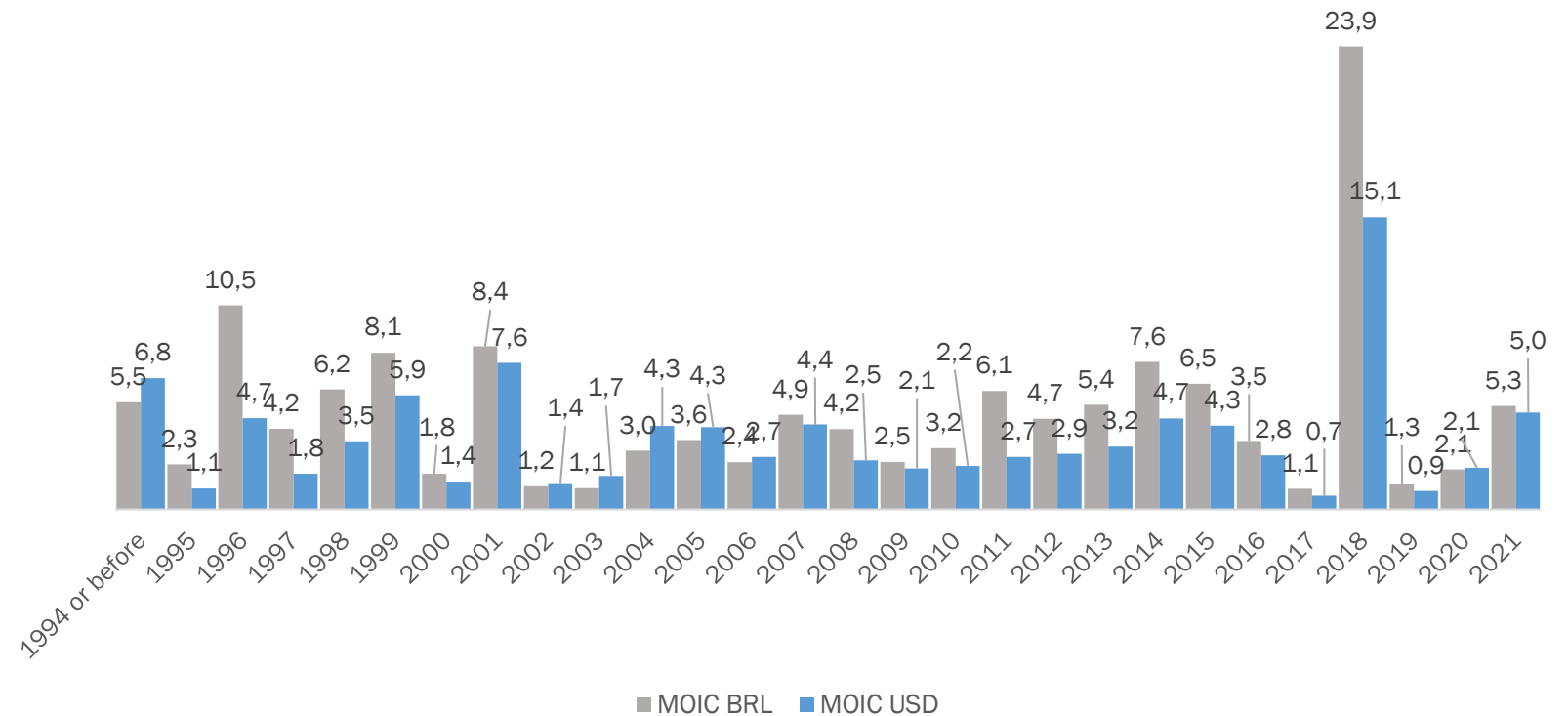
The number of tech investments has increased since 2007, and after 2011 it surpassed the number of non-tech deals.

DIVESTED DEALS ACCORDING TO YEAR OF EXIT



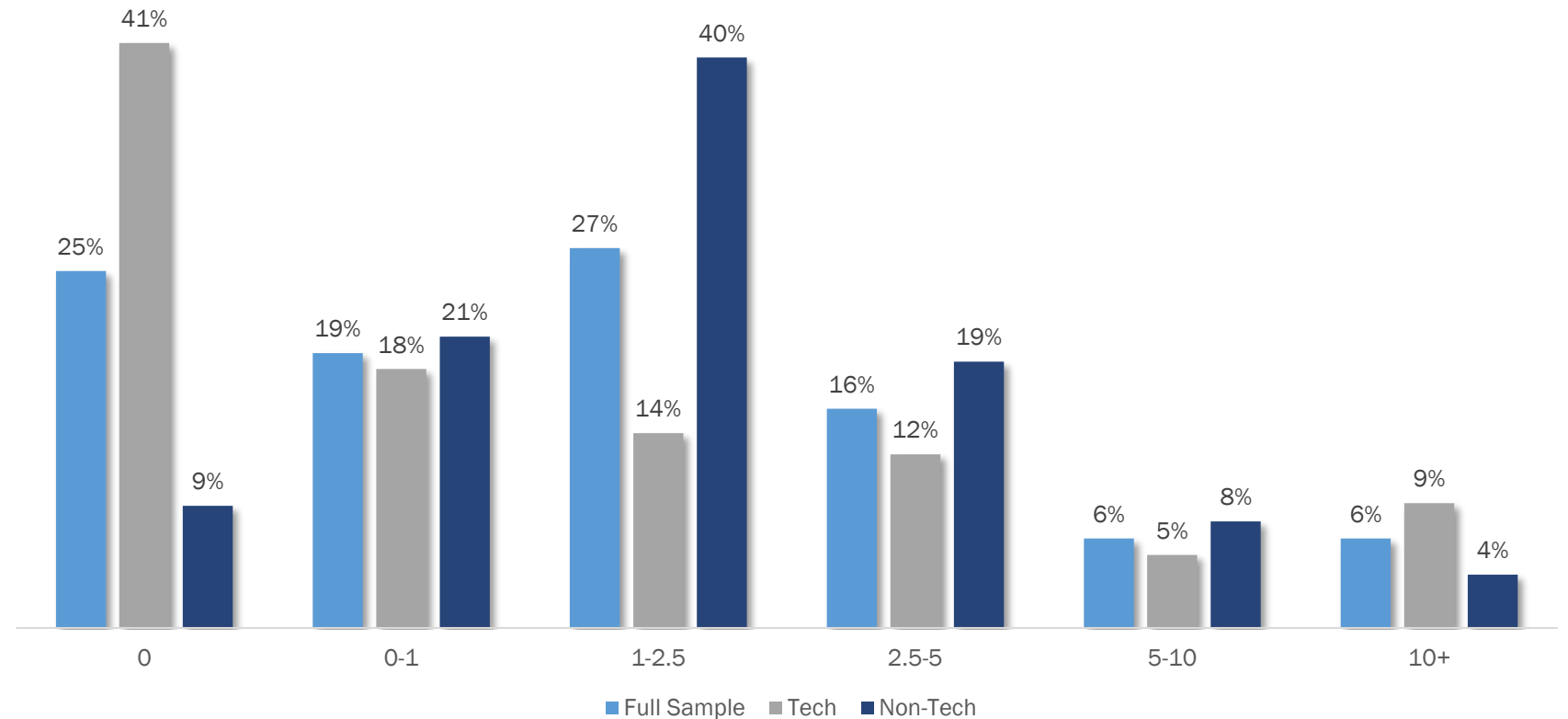
After 2011 we have observed an increasing number of tech exits. Since 2014, they have surpassed non tech deals' exits.

MEAN MOIC ACCORDING TO YEAR OF INVESTMENT



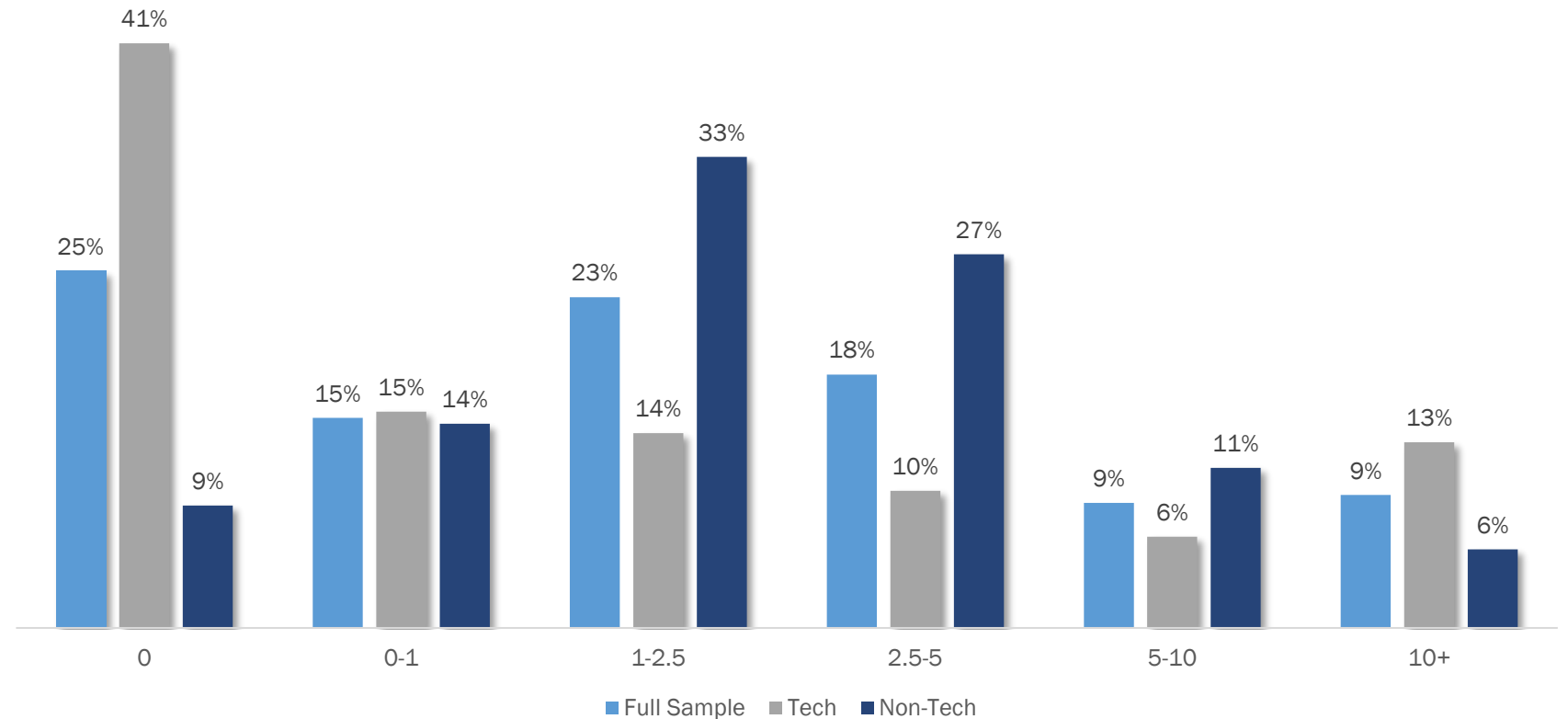
Despite the currency devaluation cycle, the Brazilian PE and VC deals performed well in USD. Except for 2017 and 2019, the mean MOIC in USD has always been above 1.0, and very often above 3.0. When we eliminate the top performer of the sample, with was invested in 2018, the average MOIC in the vintage 2018 drops to 3.2 in BRL and 2.3 in USD.

PERFORMANCE DISTRIBUTION ACCORDING TO MOIC USD



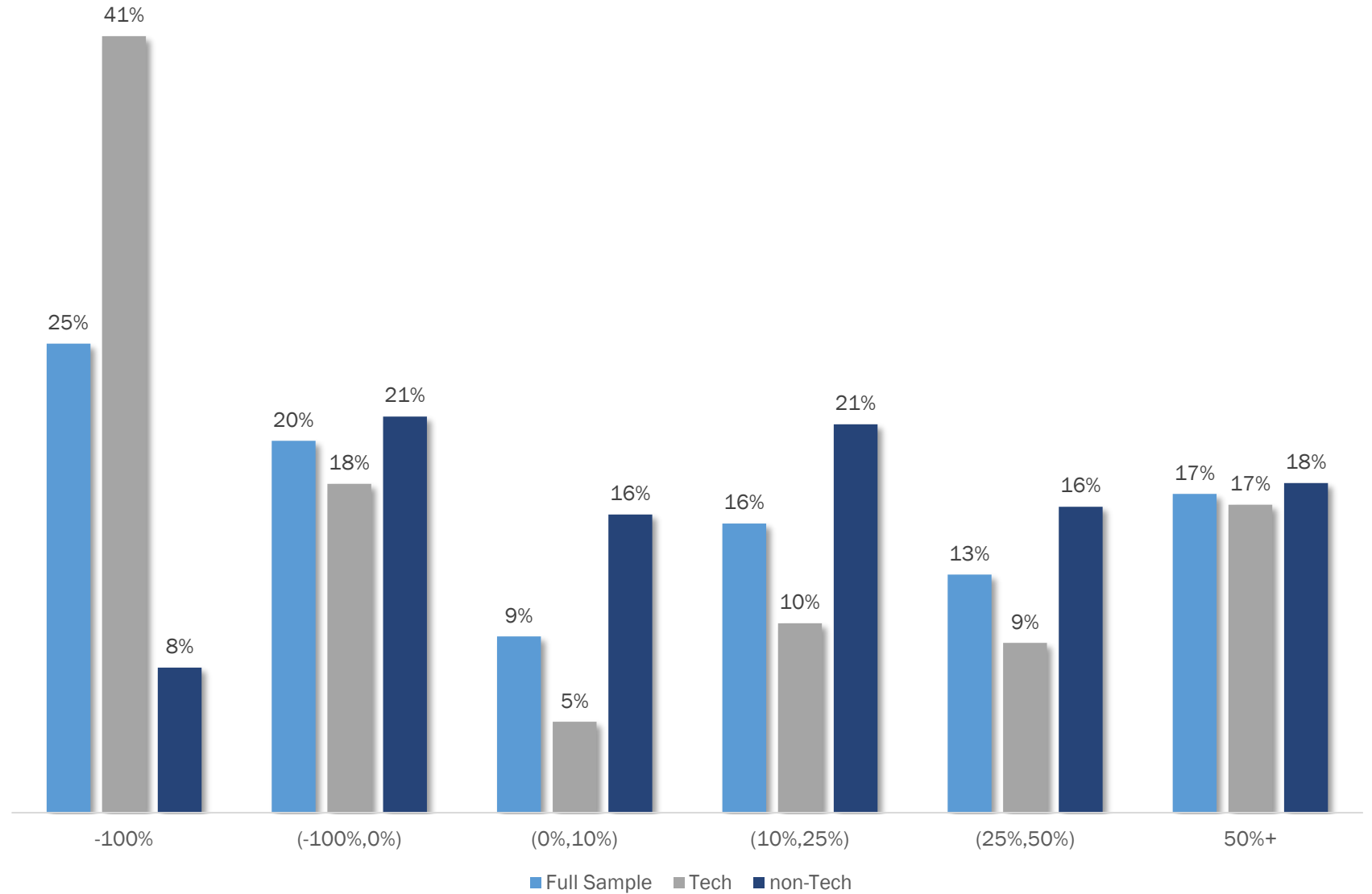
The performance pattern of the tech deals was in line with what is expected for VC deals: high percentage of losses, and a few outliers with skyrocket returns. Non-tech deals performance was in line with the expectation for PE: more modest percentage of losses, and a small percentage of high returns, but less scalable than in the tech segment.

PERFORMANCE DISTRIBUTION ACCORDING TO MOIC BRL

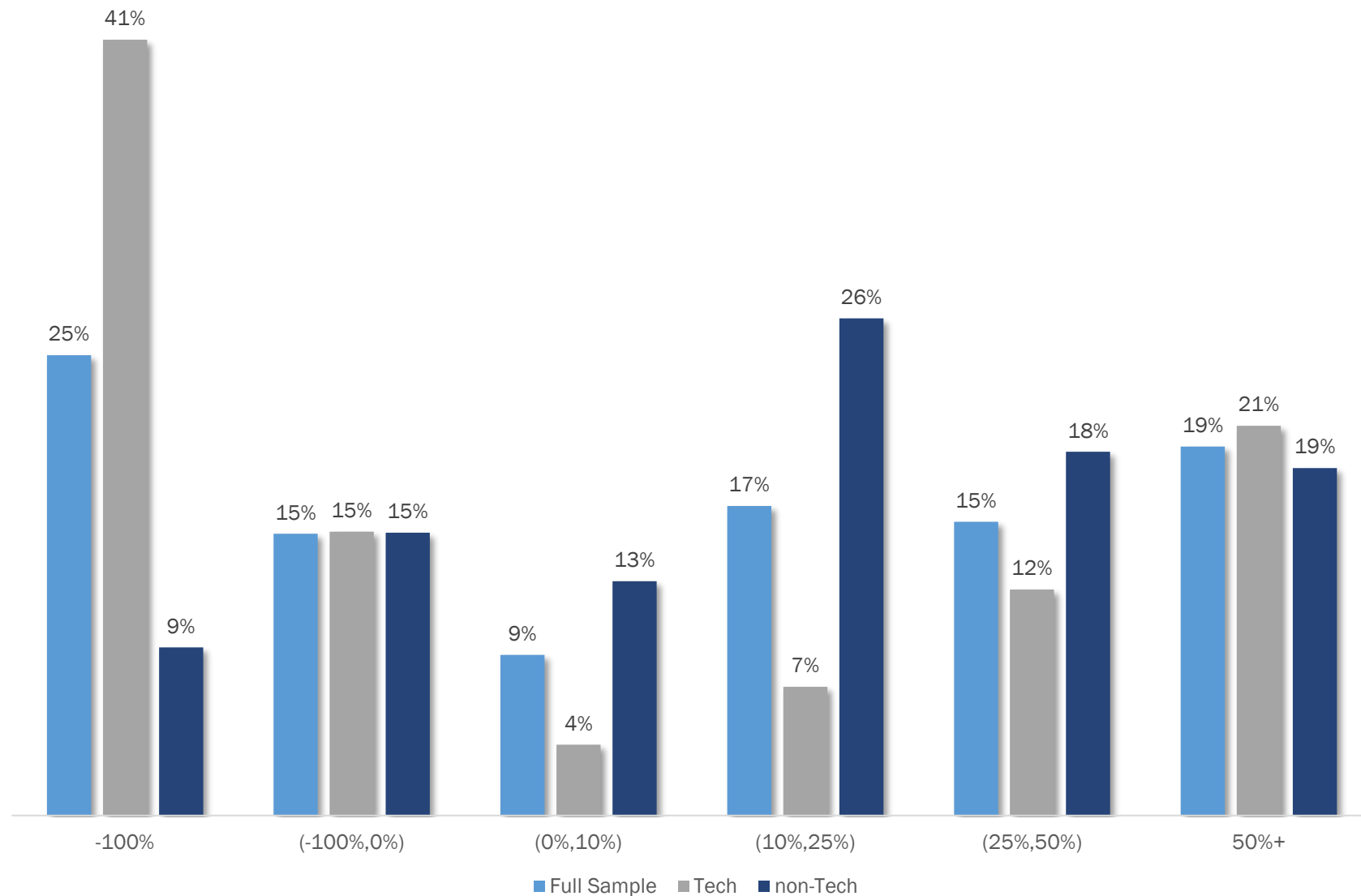


The MOIC distribution in BRL shows a slightly lower percentage of losses and a slightly higher percentage of outliers than the distribution in USD. This holds for tech and non tech deals.

PERFORMANCE DISTRIBUTION ACCORDING TO IRR USD



PERFORMANCE DISTRIBUTION ACCORDING TO IRR BRL



PERFORMANCE BY QUARTILE USD

	Full sample			Tech			Non-Tech		
	IRR	MOIC	Holding Period	IRR	MOIC	Holding Period	IRR	MOIC	Holding Period
Maximum	3202	455	20	3202	455	19.9	1140	57.0	15.7
Top Quartile	33	2.9	6.1	26	2.7	5.0	39	2.9	6.8
Median	5.0	1.2	4.0	-23	0.2	3.0	14	1.6	4.9
Bottom Quartile	-99	0.0	2.3	-100	0.0	2.0	0	0.8	2.8
Minimum	-100	0.0	0.1	-100	0.0	0.2	-100	0.0	0.1
Average	16	2.8	5.4	4	5.1	3.9	28	2.7	6.1

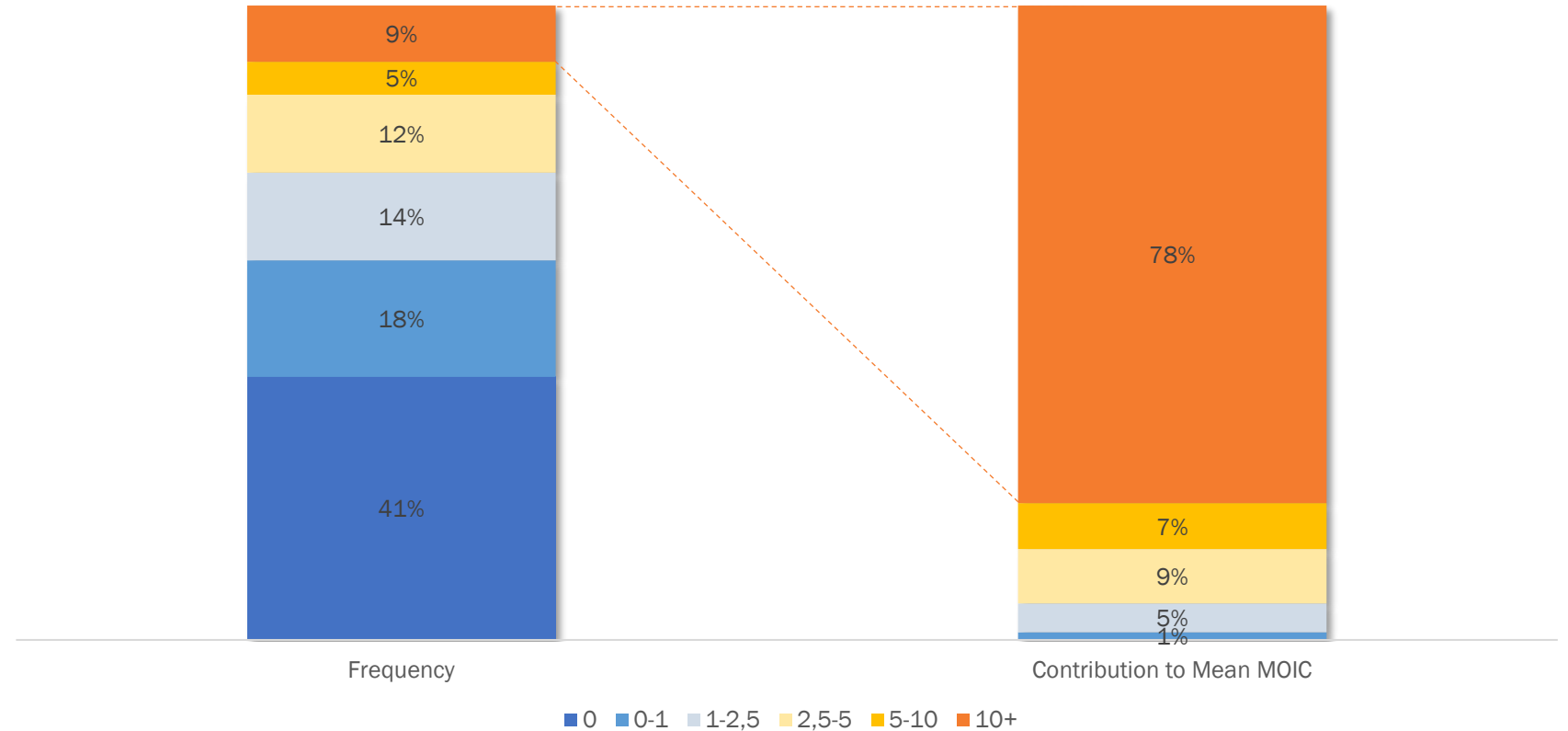
In comparison to the performance reported in our last paper, we found a slightly lower MOIC in USD for both tech and non tech deals (MOIC in USD in 2021 was 6.2x and 2.9x respectively). One of the reasons, is the impact of currency devaluation in Brazil. The adjusted mean MOIC in USD (excluding the highest performer) is 4.2for Tech and 2.6 for non-Tech

PERFORMANCE BY QUARTILE BRL

	Full sample			Tech			Non-Tech		
	IRR	MOIC	Holding Period	IRR	MOIC	Holding Period	IRR	MOIC	Holding Period
Maximum	3375	734.7	19.9	3375	734.7	19.9	1238	87.7	19.9
Top Quartile	40	3.7	6.1	41	3.5	5.0	39	3.7	5.0
Median	12	1.6	4.0	-22	0.2	3.0	19	2.1	3.3
Bottom Quartile	-100	0.0	2.3	-100	0.0	2.0	3	1.1	2.0
Minimum	-100	0.0	0.1	-100	0.0	0.2	-100	0.0	0.2
Average	19	5.8	5.4	14	7.9	4.7	26	3.6	4.7

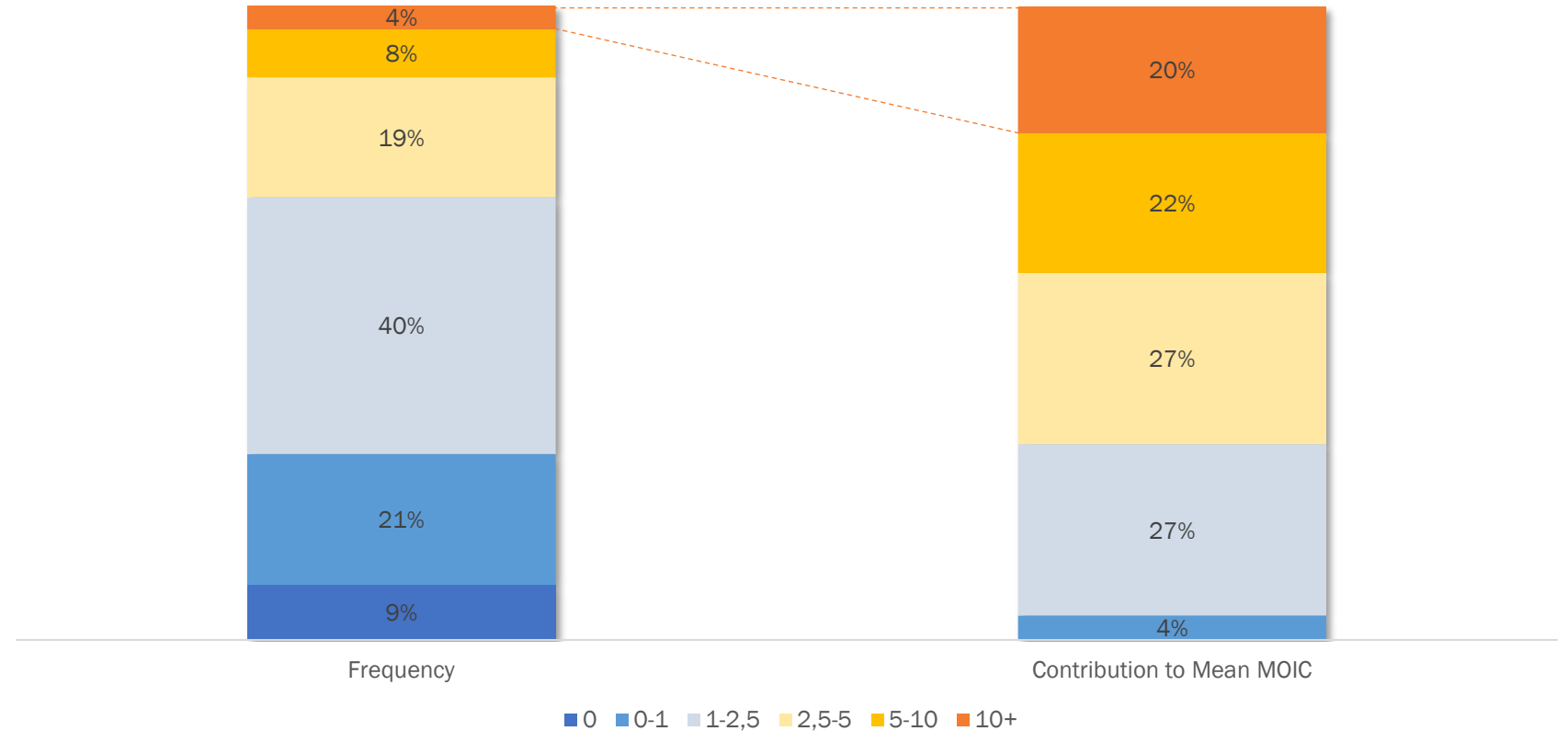
The average MOIC in BRL for tech deals was 7.9x, lower than the 8.3x found in our last whitepaper. Non-tech deals, were slightly higher in this analysis (3,6x versus 3,5x in the last year). The adjusted mean MOIC in BRL (excluding the highest performer) is 6.3 for Tech and 3.4 for non-Tech.

OUTLIERS' CONTRIBUTION TO AVERAGE GROSS MOIC - TECH



The high performance of the tech segment is concentrated in a few outliers (MOIC>5), 14% of the deals explain 85% of the MOIC. The concentration in 2022 increased in comparison to the 2021 estimation: 13% of the tech deals explained 67% of the average MOIC

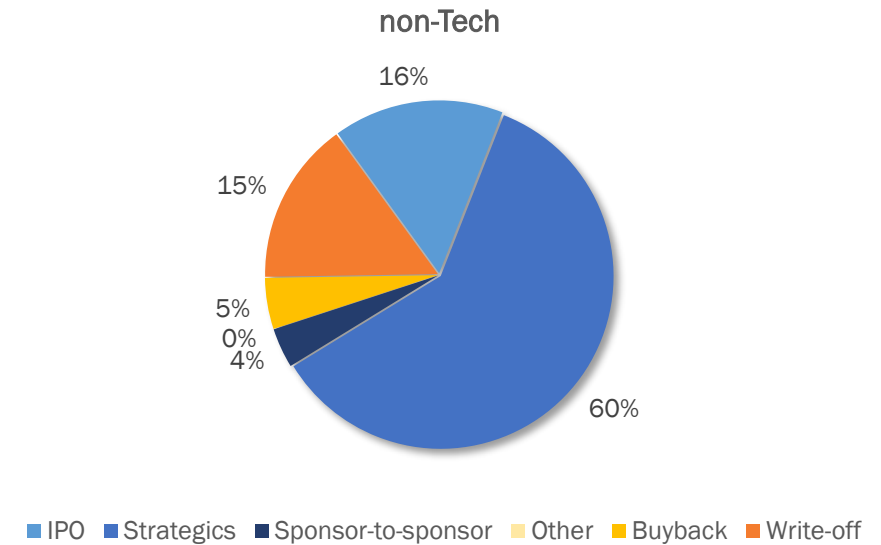
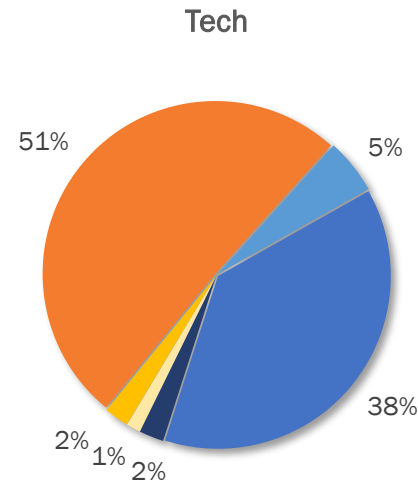
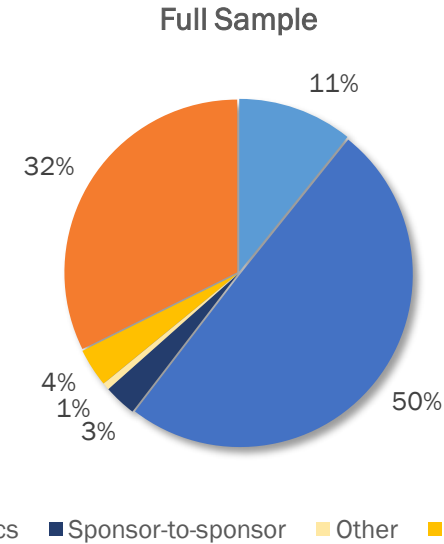
OUTLIERS' CONTRIBUTION TO AVERAGE GROSS MOIC – NON-TECH



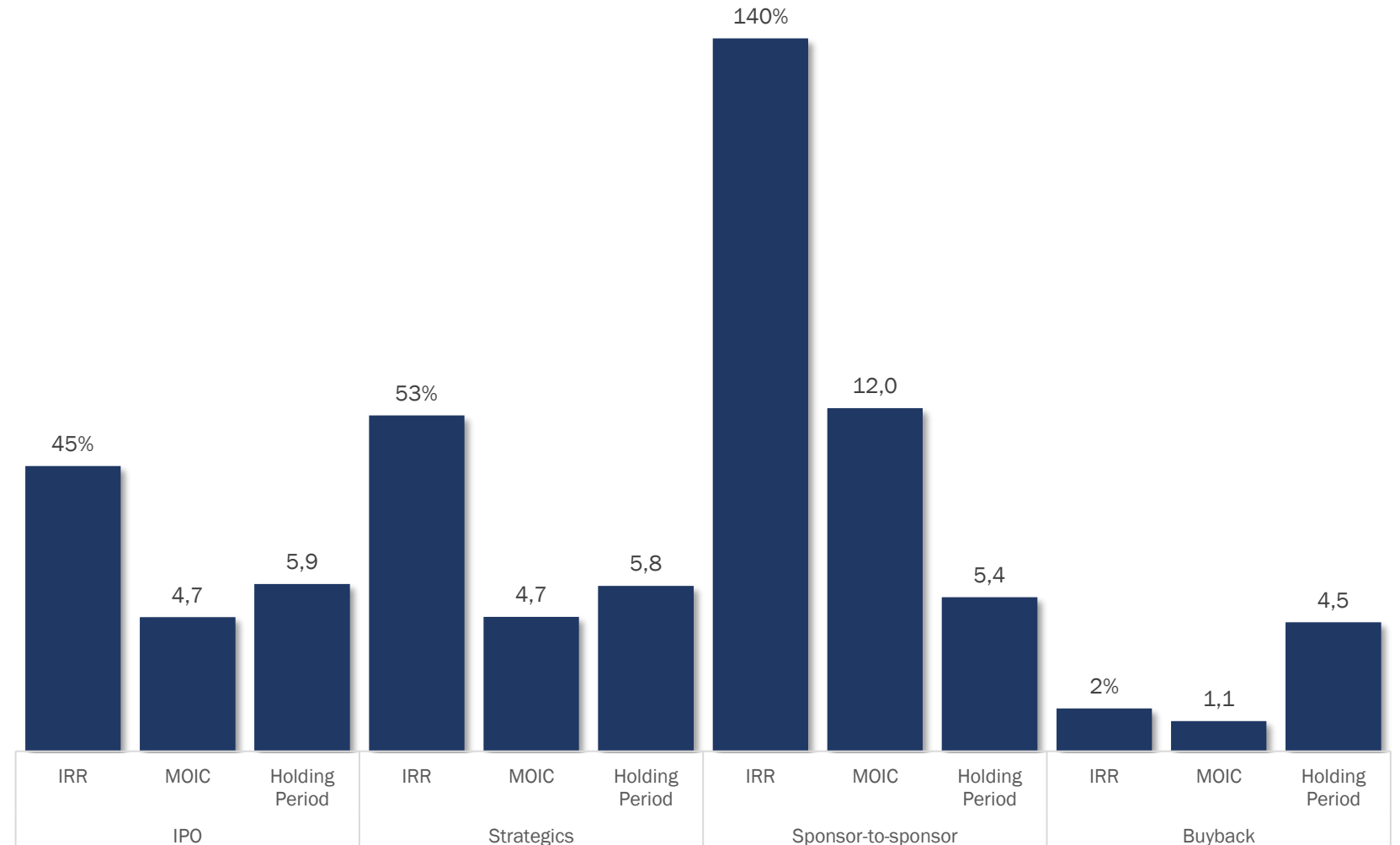
The performance concentration in non-tech deals is much smaller: Outliers (12% of the sample) explain 42% of the average MOIC – similar to our findings in the last whitepaper.

PERCENTAGE OF EXITS ACCORDING TO EACH ROUTE

Sale to strategic was the main route of exit for both: Tech and non-Tech deals

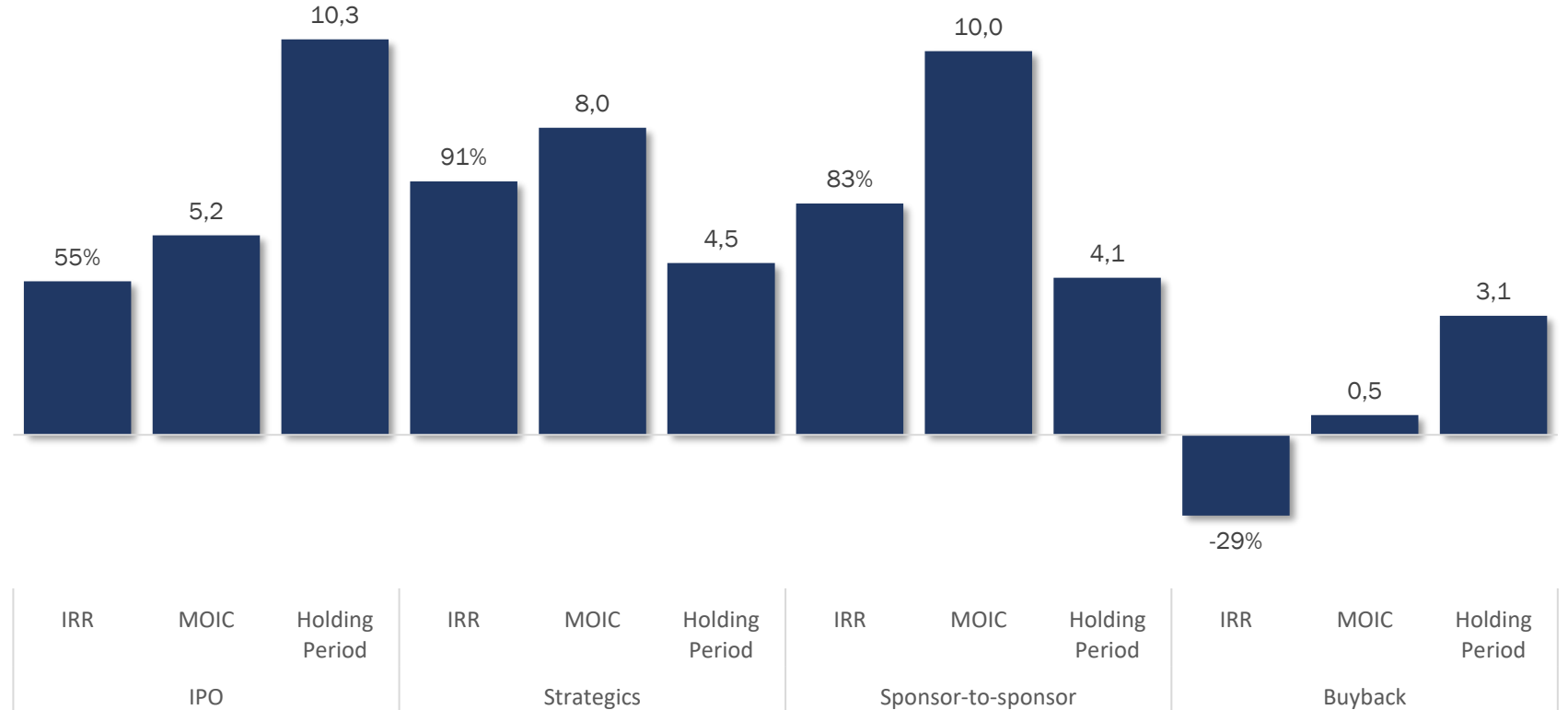


PERCENTAGE AND HOLDING PERIOD BY EXIT TYPE (USD) – FULL SAMPLE



When we aggregate tech and non tech deals, sale's to strategic was the most profitable exit according to MOIC in USD , and sponsor-to-sponsor was the most profitable exit according to IRR in USD

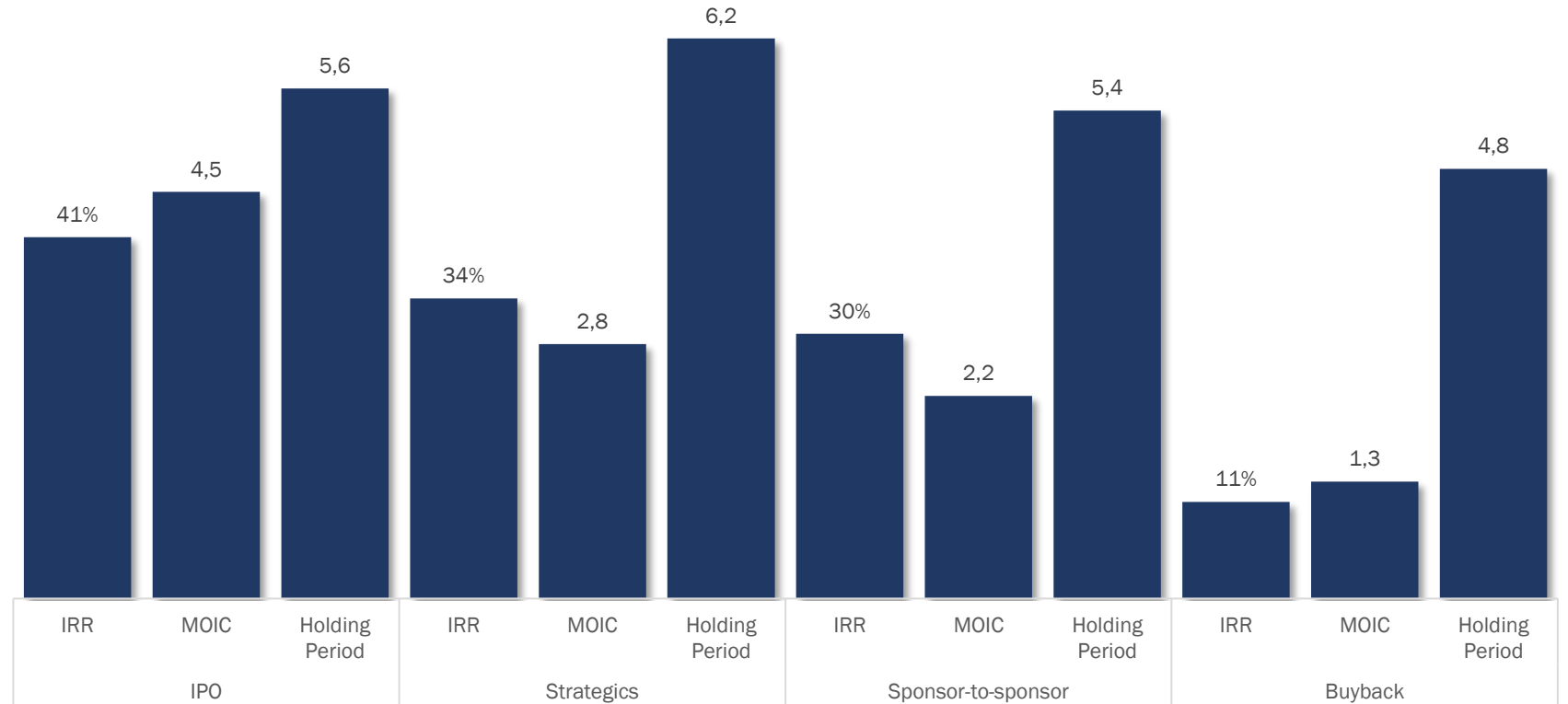
PERCENTAGE AND HOLDING PERIOD BY EXIT TYPE (USD) - TECH



Despite the wave of tech exits in B3 and Nasdaq in the last three years, the IPO route underperformed sales to strategics and sponsor-to-sponsor according to both MOIC and IRR.

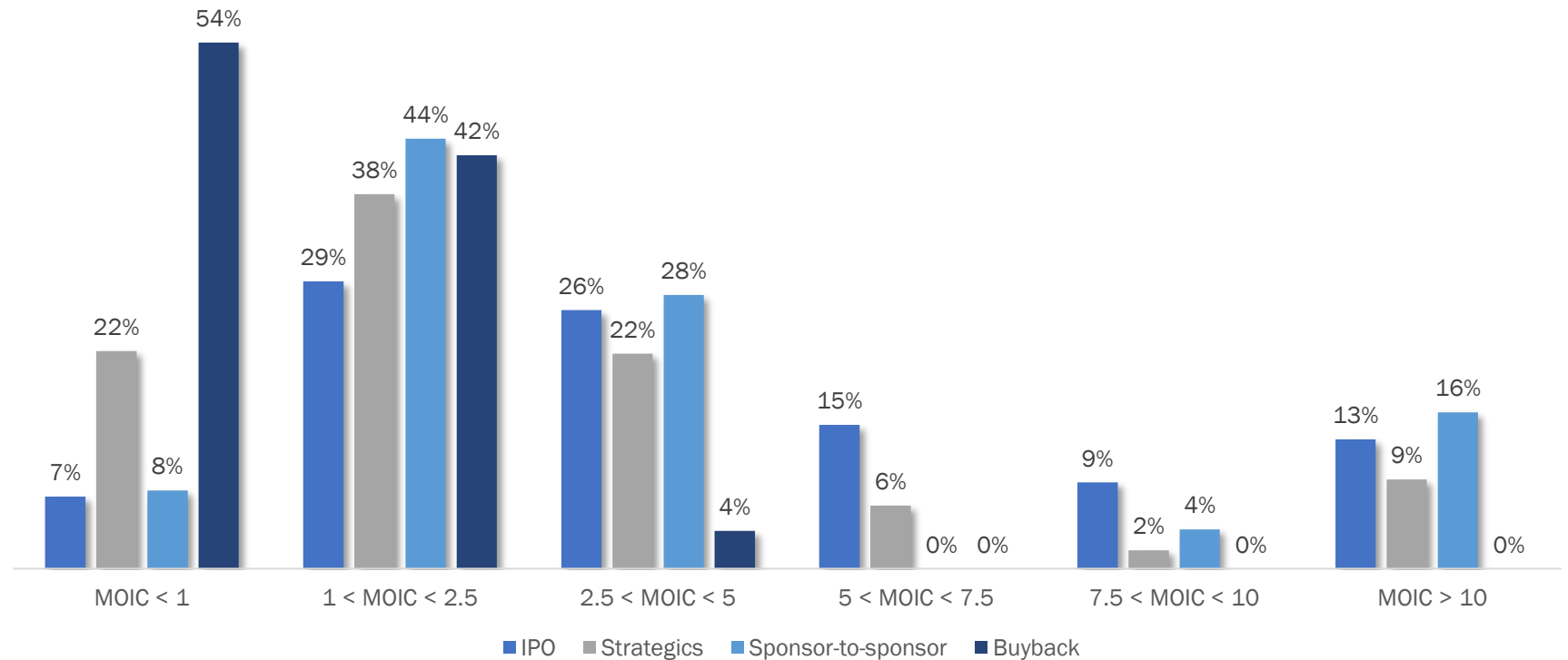
On average, it took more than the double of time to exit through IPO than to sale to strategics or sponsor-to-sponsor (10.3 years versus 4.5 and 4.1 years).

PERCENTAGE AND HOLDING PERIOD BY EXIT TYPE (USD) – NON-TECH



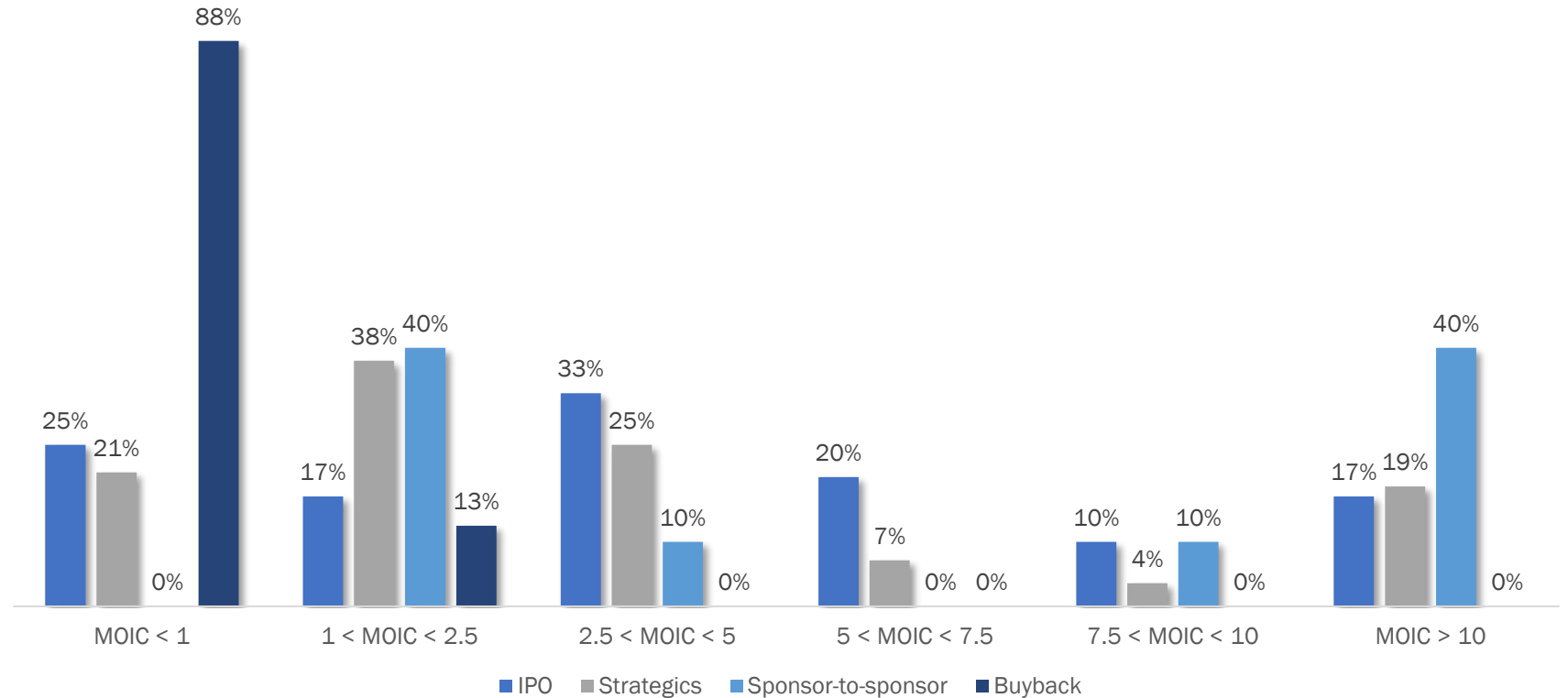
IPOs of non-tech deals outperformed other routes of exits.

DISTRIBUTION OF EACH EXIT TYPE ACCORDING TO MOIC (USD) – FULL SAMPLE



Considering the full sample, buyback was the exit route with the highest loss rate: 54%, and IPO with the highest rate of outliers (MOIC >5): 37%

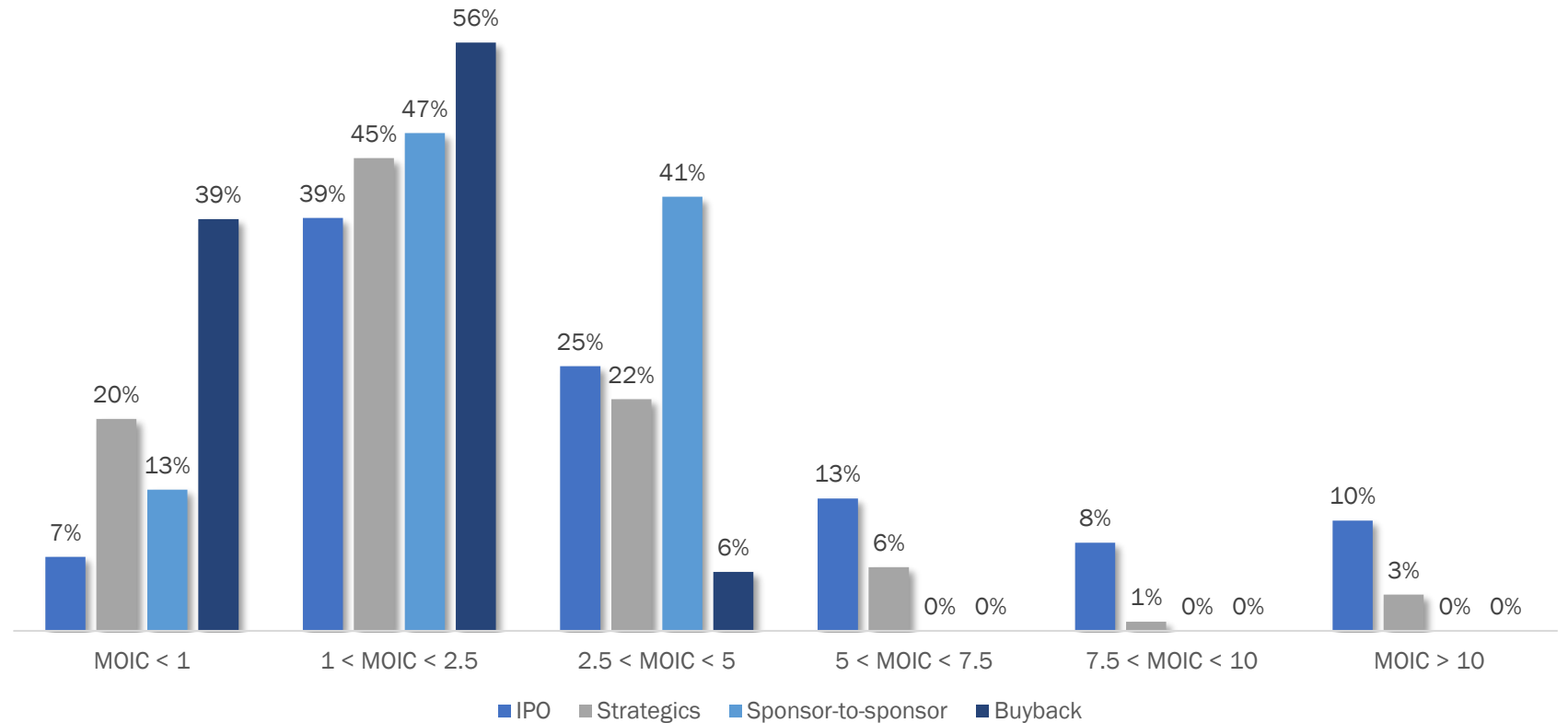
DISTRIBUTION OF EACH EXIT TYPE ACCORDING TO MOIC (USD) – TECH



88% of the tech buybacks resulted in losses.

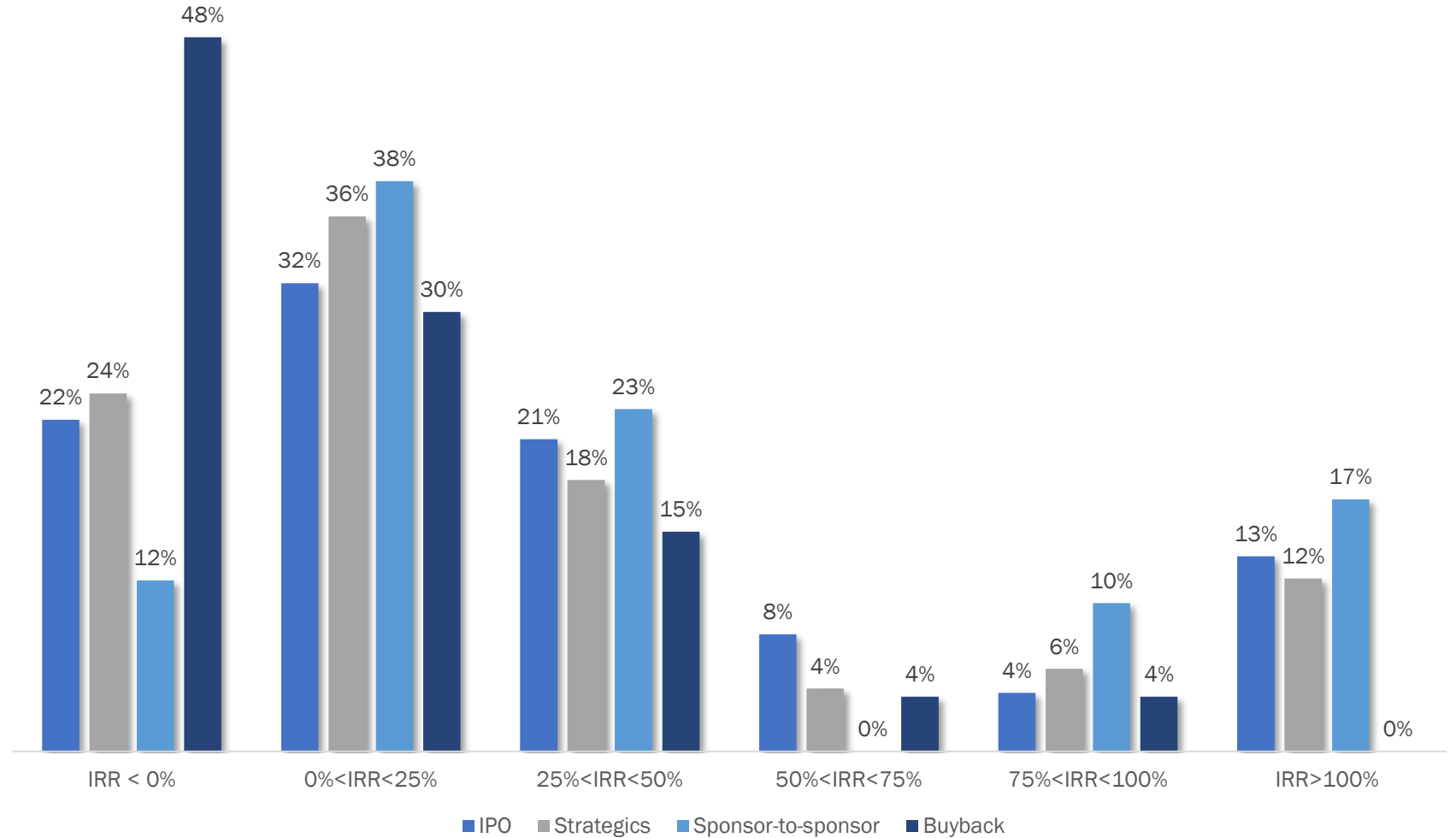
40% of sponsor-to-sponsor tech deals had MOIC greater than 10x.

DISTRIBUTION OF EACH EXIT TYPE ACCORDING TO MOIC (USD) – NON-TECH

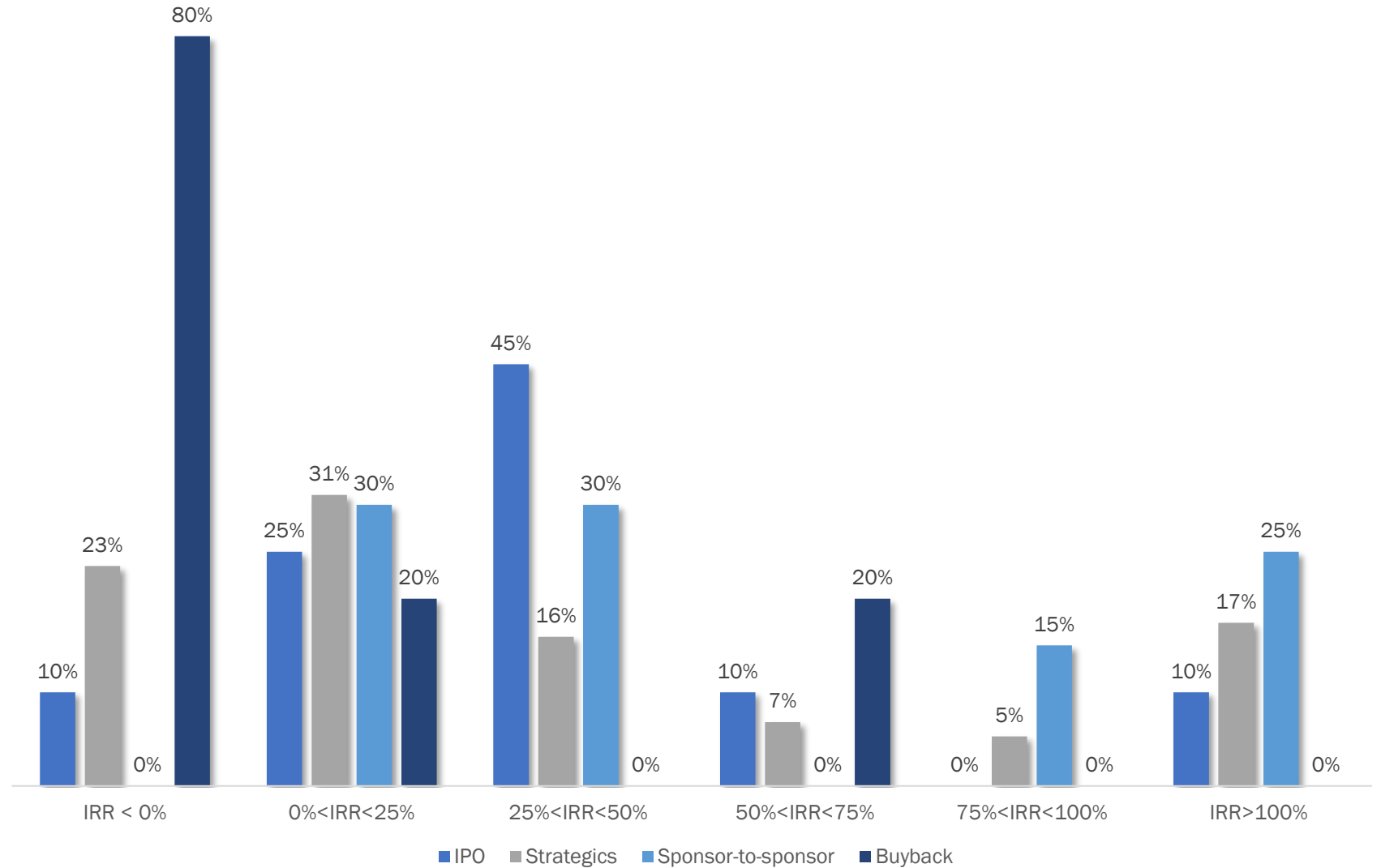


Buybacks of non-tech deals had the highest percentage of losses when compared to other routes, but lower than the percentage of tech deals, and 6% of them performed well: a MOIC between 2,5 and 5.

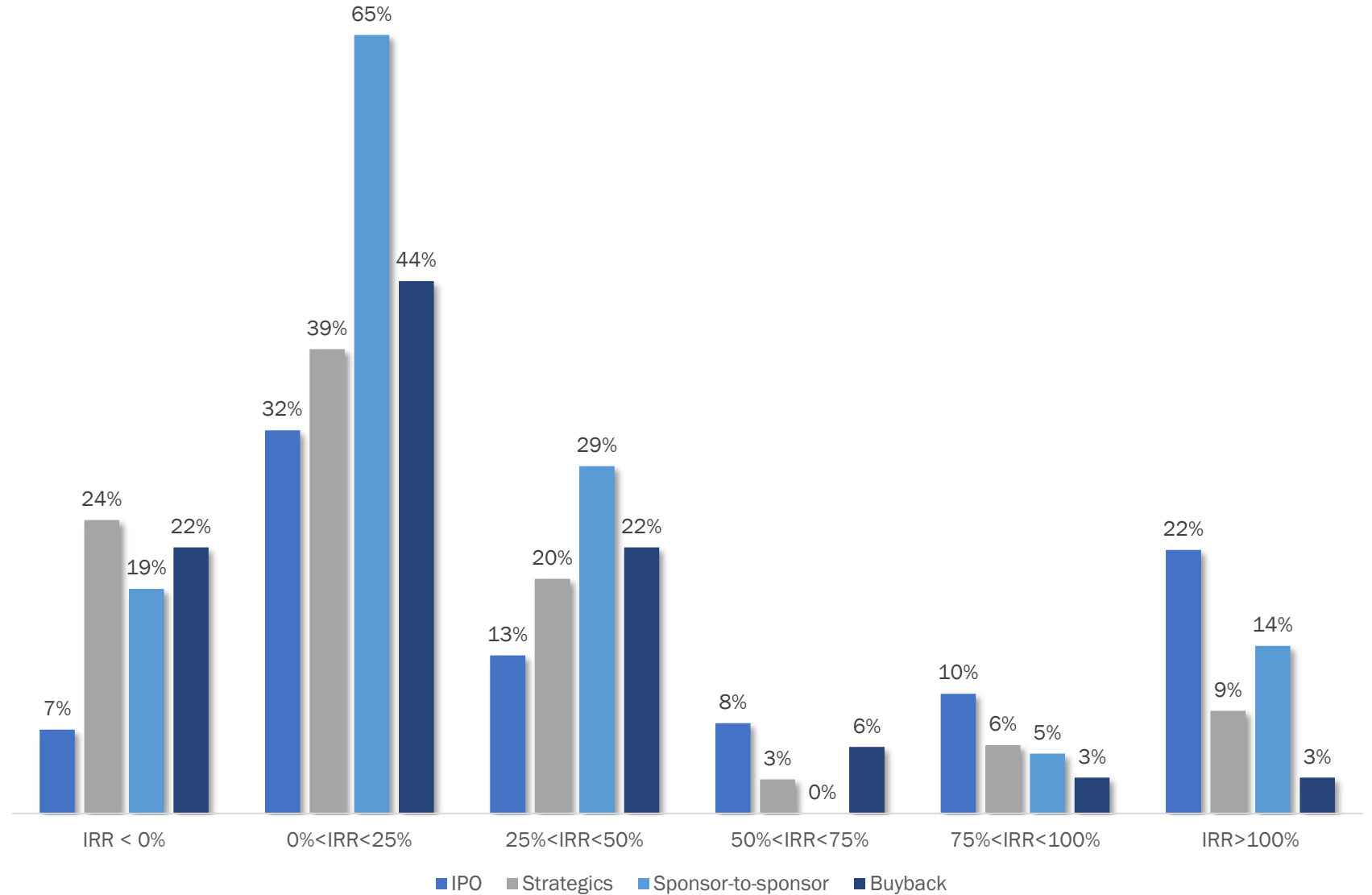
DISTRIBUTION OF EACH EXIT TYPE ACCORDING TO IRR (USD) – FULL SAMPLE



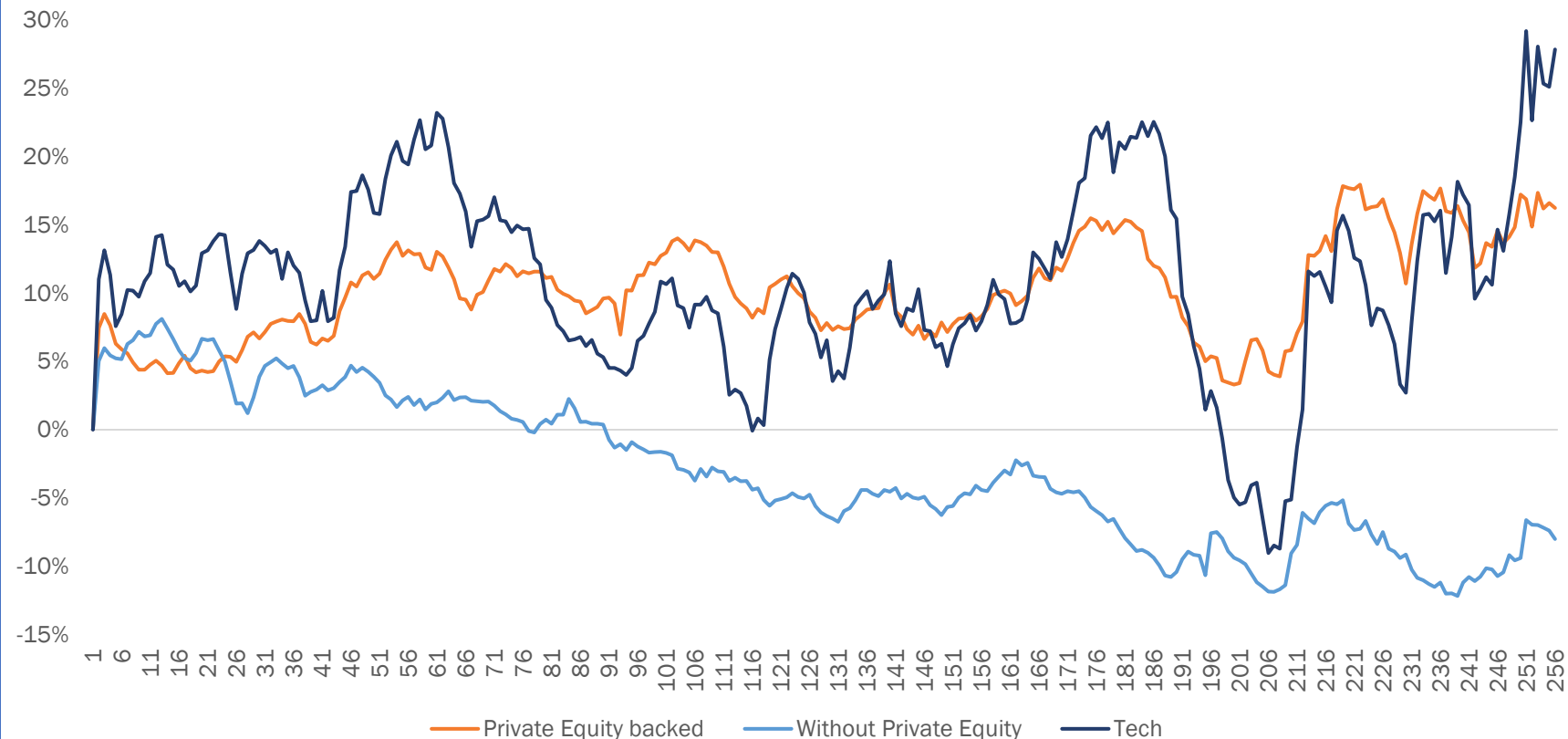
DISTRIBUTION OF EACH EXIT TYPE ACCORDING TO IRR (USD) – TECH



DISTRIBUTION OF EACH EXIT TYPE ACCORDING TO IRR (USD) – NON-TECH



ONE YEAR ADJUSTED RETURN FOR IPOS IN B3 (2019-2021)



PE backed IPOs (42 deals), on average, performed better than the Ibovespa after one-year of issuance. However, this was not the case for non-PE backed IPOs (37 cases). The 15 Tech IPOs were mainly PE backed (11 deals), and they also outperformed the Ibovespa, but with a more erratic path.

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