

Special Purpose Acquisition Company (SPAC) IPOs Through 2023

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Table 15 (updated December 28, 2023)

How Many IPOs Are There?

The net number of IPOs excludes Special Purpose Acquisition Companies (SPACs), closed-end funds, Real Estate Investment Trusts (REITs), unit offers (typically composed of a share plus a warrant to buy a share), IPOs with an offer price of less than \$5.00, commercial banks and savings and loans S&Ls), companies not promptly listed on the Amex, NYSE, or Nasdaq, master limited partnerships, small best efforts offers (included in the other exclusions column), and foreign companies issuing American Depositary Receipts (6 of which are banks). 11 ADRs are missing a first-day return, and the “including ADRs” averages exclude them. SPACs that are unit offers are classified as SPACs rather than units. No CRSP listing refers to IPOs not listed on CRSP within six months of the IPO. CRSP covers stocks listed on Nasdaq, the NYSE, and the NYSE MKT (the Amex prior to May 10, 2012).

Some IPOs are excluded for multiple reasons. For example, some bank and S&L IPOs are also excluded due to not being listed on CRSP. The bank and S&L count includes all of them (other than ADRs).

Table 15

Year	Number of IPOs		CEFs, SPACs, and REITs	Units and penny stocks	LPs	Banks and S&Ls	No CRSP listing or others	ADRs	Including ADRs	
	Gross	Net							No.	Mean return
1980	234	71	1	56	0	0	106	0	71	14.3%
1981	439	192	0	103	0	0	144	0	192	5.9%
1982	198	77	1	14	0	3	102	1	78	10.9%
1983	850	451	1	168	0	75	152	3	453	9.9%
1984	518	171	4	139	1	47	150	6	177	3.8%
1985	326	186	16	102	6	43	0	0	186	6.4%
1986	710	393	28	183	20	100	0	1	394	6.1%
1987	531	285	36	131	15	57	7	0	285	5.6%
1988	293	105	74	88	3	30	0	5	109	5.4%
1989	254	116	46	83	2	11	0	3	119	8.0%
1990	213	110	43	55	1	7	0	1	111	10.7%
1991	408	286	45	65	2	7	2	2	288	11.9%
1992	602	412	105	80	1	4	0	5	416	10.2%
1993	772	510	175	93	3	17	0	17	525	12.5%
1994	594	402	85	106	3	10	0	19	418	9.5%
1995	574	462	11	77	2	3	4	16	478	20.9%
1996	845	677	15	104	5	15	0	34	710	16.9%
1997	601	474	30	63	1	15	0	34	508	13.7%
1998	379	283	39	20	2	33	0	13	296	21.7%
1999	565	476	37	18	3	12	0	26	501	69.7%
2000	431	380	2	8	0	4	0	40	418	55.4%
2001	130	80	38	5	4	0	0	4	84	13.8%
2002	157	66	81	2	6	4	0	2	68	9.0%
2003	131	63	57	5	0	5	0	3	66	13.0%
2004	304	173	95	5	5	8	2	16	188	11.9%
2005	283	159	88	4	9	8	2	13	172	11.7%
2006	261	157	62	5	18	5	0	15	172	12.5%
2007	326	159	116	4	14	1	1	31	190	14.4%
2008	53	21	22	3	4	0	0	3	24	4.3%
2009	80	41	22	3	0	2	2	10	49	8.8%
2010	198	91	37	9	7	11	7	36	125	12.2%
2011	178	81	50	5	18	12	0	12	93	13.3%
2012	175	93	46	4	16	11	0	5	97	17.2%
2013	255	158	58	3	19	5	2	10	168	22.3%
2014	305	206	30	10	20	19	1	19	225	14.8%
2015	183	118	35	4	9	7	2	8	126	18.7%
2016	113	75	18	4	1	4	2	9	83	14.1%
2017	202	106	52	3	5	11	5	20	125	13.6%
2018	243	134	52	9	1	9	6	32	166	17.1%
2019	228	112	67	6	1	7	8	27	139	19.8%
2020	465	165	257	7	0	0	4	32	197	38.3%
2021	1,026	311	628	34	0	11	8	36	347	31.0%
2022	175	38	91	39	0	3	2	5	43	54.5%
2023	152	53	31	47	1	3	2	13	66	10.1%
Total	15,960	9,180	2,827	1,976	228	639	723	587	9,742	18.8%

Table 15a (updated December 28, 2023)

IPO Volume and Average First-day Returns with Banks, LPs, and ADRs Included

In the last two columns of the table, the net number of IPOs is expanded to include LPs, banks and S&Ls, and ADRs. Only CRSP-listed IPOs that have first-day return information are included, and therefore the number of IPOs added is slightly less for many years than if the “net” IPO count is added to the LP count, the bank and S&L count, and the ADR count. CRSP covers IPOs that are listed on Nasdaq, NYSE, and NYSE Market (formerly Amex). If a stock takes more than six months before CRSP-listing, it is not included in the count. The sample size of 15,959 IPOs from 1980-2023 includes the 9,180 IPOs from 1980-2023 used in most tables, plus 566 ADRs with a first-day return, 228 natural resource industry limited partnerships, and 577 bank and S&L IPOs (6 of which are ADRs). There are also 14 ADRs with a missing first-day close (1 in 1986, 2 in 1988, 2 in 1989, 2 in 1992, 2 in 1993, 3 in 1994, 1 in 1995, 1 in 1997).

As with Table 15, the net number of IPOs in the first column excludes Special Purpose Acquisition Companies (SPACs), closed-end funds (not including interval funds), Real Estate Investment Trusts (REITs), unit offers (typically composed of a share plus a warrant to buy a share), IPOs with an offer price of less than \$5.00, commercial banks and savings and loans, companies not promptly listed on the Amex, NYSE, or Nasdaq, natural resource master limited partnerships, small best efforts offers (included in the other exclusions column), and foreign companies issuing American Depositary Receipts (6 of which are banks). SPACs that are unit offers are classified as SPACs rather than units.

Table 15a also differs from Table 15 in that the category of SPACs, closed-end funds, and REITs in Table 15 is decomposed into the three component parts. Blind pool offerings from the pre-2004 era were previously not included as SPACs, but I have recently added those from 1988-1997. These blind-pool offers are almost always screened out of the net number of offerings because they are either unit offers, penny stocks (offer price below \$5 per share), small best efforts deals, or were not CRSP-listed. The remaining blind pool offers are excluded in the “other reasons” category. A typical blind pool offering raised a few million dollars and investors never received anything in return.

The average first-day return on 580 bank and S&L IPOs is 6.1%, with a range of -20% to +57.5%. In most of my tables, I exclude Bank and S&L IPOs because, among other reasons, it is not always clear how many shares are sold to the general public versus sold to depositors and employees, since most of these offerings are demutualizations. **Many bank demutualizations use best efforts offerings, and in most years I exclude these 200+ IPOs.** The same can be said of some insurance IPOs, which I include.

The average first-day return on 566 ADR IPOs with a closing market price, including banks, is 16.5%, with a range of -37.2% to 414.3%, with the 2000 internet company Crayfish Co. Ltd IPO having the highest return, at 414.3%. In most of my tables, I exclude ADRs because, among other reasons, the accounting data is not always reliable (SDC sometimes makes translation mistakes) and the U.S. tranche may be a small part of a larger offering, especially in the home country of the company.

The average first-day return on 228 limited partnerships is 3.7%, with a range of -6.8% to +33.3%. In most of my tables, I exclude natural resource company limited partnerships because it is frequently difficult to discern the founding date of the underlying business, since most of these IPOs are spinoffs partly motivated by tax minimization strategies. Also, most of these LPs are created at the time of the IPO, and identifying whether the LP is profitable, what its trailing sales are, and what its assets are, is sometimes problematic. The same can be said of rollups, which I include. I also include newly created reinsurance companies.

Table 15a

Year	Number of IPOs		CEFs, SPACs, and REITs	Closed -end funds	REITs	SPACs		LPs	Banks and S&Ls	Including LPs, Banks, & ADRs	
	Gross	Net				Non- unit	Unit			No.	Mean IR
1980	234	71	1	0	1	0	0	0	0	71	14.3%
1981	439	192	0	0	0	0	0	0	0	192	5.9%
1982	198	77	1	0	1	0	0	0	3	80	10.5%
1983	850	451	1	0	1	0	0	0	75	523	8.9%
1984	518	171	4	0	4	0	0	1	47	220	3.1%
1985	326	186	16	1	15	0	0	6	43	223	6.4%
1986	710	393	28	25	3	0	0	20	100	497	5.9%
1987	531	285	36	32	4	0	0	15	57	349	5.5%
1988	293	105	74	65	8	0	1	3	30	136	5.3%
1989	254	116	46	46	0	0	0	2	11	128	7.7%
1990	213	110	43	42	0	0	1	1	7	118	10.3%
1991	408	286	45	42	2	0	1	2	7	295	11.8%
1992	602	412	105	98	5	0	2	1	4	420	10.1%
1993	772	510	175	121	46	0	8	3	17	546	12.4%
1994	594	402	84	37	41	0	7	3	10	432	9.4%
1995	574	462	11	2	7	0	2	2	3	483	20.8%
1996	845	677	15	5	6	0	4	5	15	727	16.7%
1997	601	474	30	7	22	0	1	1	15	517	13.6%
1998	379	283	39	24	15	0	0	2	33	323	20.6%
1999	565	476	37	35	2	0	0	3	12	512	68.3%
2000	431	380	2	2	0	0	0	0	4	420	55.1%
2001	130	80	38	38	0	0	0	4	0	86	13.6%
2002	157	66	81	77	4	0	0	6	4	77	7.8%
2003	131	63	57	49	7	0	1	0	5	71	13.1%
2004	304	173	95	55	28	0	12	5	8	201	11.9%
2005	283	159	88	50	11	4	24	9	8	189	11.5%
2006	261	157	62	22	5	0	35	18	5	195	11.4%
2007	326	159	116	47	4	0	65	14	1	205	14.0%
2008	53	21	22	3	2	0	17	4	0	28	4.1%
2009	80	41	22	13	9	0	0	0	2	50	9.6%
2010	198	91	37	22	8	0	7	7	11	139	11.5%
2011	178	81	50	25	9	0	16	18	12	112	11.6%
2012	175	93	46	28	9	1	8	16	11	122	15.8%
2013	255	158	58	28	20	3	7	19	5	192	20.1%
2014	305	206	30	13	6	0	11	20	19	261	14.2%
2015	183	118	35	8	7	1	19	9	7	142	17.4%
2016	113	75	18	2	3	0	13	1	4	89	13.6%
2017	202	106	52	9	9	0	34	5	11	141	12.7%
2018	243	134	52	1	5	0	46	1	9	176	16.4%
2019	228	113	67	6	2	0	59	1	7	146	19.0%
2020	465	165	257	5	4	11	237	0	0	197	38.3%
2021	1,026	311	628	10	5	33	580	0	11	349	30.7%
2022	175	38	91	4	1	0	86	0	3	46	50.1%
2023	152	53	31	0	0	0	31	1	3	70	9.4%
Total	15,960	9,180	2,796	1,099	341	53	1,334	227	639	10,496	17.9%

Table 15b (updated March 8, 2024)**Special Purpose Acquisition Company (SPAC) IPOs, 1990-2023**

IR is the initial return, measured from the offer price to the first close. Proceeds are in millions and do not include overallotment shares. For 1990-1997 and 2004-2007, 50 of the initial returns are missing for SPAC OTC issues. For SPACs from before 2010, data has been provided by Tim Jenkinson, Andrew Karolyi, and Milos Vulanovic. SPAC Research, Gritstone Asset Management, and Dealogic have been used as data sources for SPACs in 2015-2023. For 1990-2022, Refinitive (SDC) misclassifies over 140 SPAC IPOs, usually as closed-end funds (SIC 6726).

Year	Operating Company IPOs		SPAC IPOs			SPAC IPOs	
	Number	Mean IR	Non-unit	Unit	Total	Proceeds, \$b	Mean IR
1990	110	10.8%	0	1	1	\$0.003	
1991	286	11.9%	0	1	1	\$0.015	
1992	412	10.3%	0	2	2	\$0.030	
1993	510	12.7%	0	8	8	\$0.086	
1994	402	9.6%	0	7	7	\$0.086	
1995	462	21.4%	0	2	2	\$0.018	
1996	677	17.2%	0	4	4	\$0.032	
1997	474	14.0%	0	1	1	\$0.018	
1998	283	21.9%	0	0	0		
1999	476	71.2%	0	0	0		
2000	380	56.3%	0	0	0		
2001	80	14.0%	0	0	0		
2002	66	9.1%	0	0	0		
2003	63	11.7%	0	1	1	\$0.024	0.9%
2004	173	12.3%	0	12	12	\$0.425	0.8%
2005	159	10.3%	4	24	28	\$1.846	1.9%
2006	157	12.1%	0	35	35	\$3.013	3.2%
2007	159	14.0%	0	65	65	\$10.985	0.7%
2008	21	5.7%	0	17	17	\$3.627	0.2%
2009	41	9.8%	0	0	0	0	
2010	91	9.4%	0	7	7	\$0.513	-1.5%
2011	81	13.9%	0	16	16	\$1.049	0.4%
2012	93	17.7%	1	8	9	\$0.475	0.0%
2013	158	20.9%	3	7	10	\$1.33	0.2%
2014	206	15.5%	0	11	11	\$1.56	-0.1%
2015	118	19.2%	1	19	20	\$3.62	0.4%
2016	75	14.5%	0	13	13	\$3.22	0.3%
2017	106	12.9%	0	34	34	\$9.00	0.7%
2018	134	18.6%	0	46	46	\$9.94	0.4%
2019	113	23.5%	0	59	59	\$12.12	0.6%
2020	165	41.6%	11	237	248	\$75.34	1.6%
2021	311	32.0%	33	580	613	\$144.53	1.9%
2022	38	48.9%	0	86	86	\$12.08	0.1%
2023	53	12.2%	0	31	31	\$3.19	1.2%
Total	7,133	22.3%	53	1,333	1,386	\$298.2	1.4%

SPAC IPOs by Quarter

	Number	Mean IR		Number	Mean IR
1Q 21	298	3.7%	1Q22	54	0.0%
2Q 21	60	0.3%	2Q22	16	0.2%
3Q 21	89	-0.2%	3Q22	8	0.0%
4Q 21	166	0.5%	4Q22	8	0.5%
1Q 23	11	1.6%			
2Q 23	6	1.1%			
3Q 23	5	1.2%			
4Q 23	9	0.9%			

Table 15c (March 25, 2024)
Post-merger Returns on deSPACs, 2012-2022

This table is an updated version of Table 4 in “SPACs” by Minmo Gahng, Jay R. Ritter, and Donghang Zhang, published in the Sept. 2023 *Review of Financial Studies*. The table reports average equally weighted deSPAC period common share percentage returns based on a buy-and-hold strategy (Equation (3)) in which an investor purchases common shares of a merged company at the close of the first day of trading as a new entity (the deSPAC) and holds them for 1 or 3 years. The year column represents the year of the merger. The sample consists of 447 business combinations consummated between January 2010 and December 2022, after excluding a few deSPACs that were listed OTC rather than on Nasdaq or the NYSE. Returns include dividend yields and capital gains. When the full 1- or 3-year data are not available, we calculate the returns based on available data. For example, if a merged company started to trade in March 2020 and delisted in August 2020, we report the buy-and-hold returns from March 2020 to August 2020 for both one-year and three-year returns (not annualized). Returns end on December 29, 2023, a Friday. The CRSP return is the total return on the CRSP value-weighted market index, matched to each investment period.

For 2021 and 2022, the 3-year returns are for less than 3 years. In 2021, GNRS is not included because this deSPAC was traded OTC. For 2022, MLEC is not included because the deSPAC occurred on the last trading day of the year. Guilherme Junqueira assisted in the update of this table. It should be noted that if there is a high redemption rate, the public float after the deSPAC can be quite low until shares that were locked up become available for trading. For 2023, returns are measured from an assumed \$10 price to the Dec. 29, 2023 split-adjusted close. For two deSPACs in 2023, the market price is multiplied by 1.4 due to bonus shares given to non-redeeming shareholders. The return for a deSPAC on Dec. 29, 2023 is not included.

The equally weighted average deSPAC return would be similar if a purchase price of \$10 was used, since the average first closing deSPAC price is close to \$10. The average deSPAC return would be higher, however, if a public cash-weighted return was reported, because it tends to be the case that deSPACs with high redemption rates (low public cash) have worse subsequent returns. Also, some deSPACs involve side payments to non-redeeming shareholders, for instance giving 0.5 sponsor shares to each non-redeeming shareholder. For these shareholders, the effective purchase price is thus approximately \$6.67 rather than \$10.00, so their returns would be higher if the deSPAC return accounted for the side payment. If these shares were sold on the first day of deSPAC trading, however, the computations would not be affected.

Year	Number	Average 1-year Return			Average 3-year Buy-and-hold Return		
		deSPACs	Market	Mkt-adjusted	deSPACs	Market	Mkt-adjusted
2012	1	-53.2%	20.4%	-73.6%	-98.1%	37.2%	-135.3%
2013	5	-30.1%	17.9%	-48.0%	-41.1%	28.0%	-69.1%
2014	4	-51.6%	5.7%	-57.3%	-89.6%	26.7%	-116.2%
2015	9	-19.5%	0.7%	-20.2%	87.7%	33.1%	54.6%
2016	9	-5.2%	19.0%	-24.2%	-35.1%	40.3%	-75.3%
2017	13	-11.0%	11.7%	-22.6%	-44.5%	30.3%	-74.7%
2018	23	-35.0%	8.8%	-43.8%	-8.1%	51.7%	-59.8%
2019	25	2.0%	8.8%	-6.8%	-25.0%	10.1%	-35.1%
2020	63	-3.0%	32.6%	-35.6%	-56.0%	28.6%	-84.6%
2021	198	-64.2%	-10.3%	-53.9%	-73.0%	7.0%	-80.0%
2022	101	-63.8%	5.0%	-53.0%	-63.8%	16.9%	-80.7%
2023	98	-59.1%					
2012-2022	451	-46.3%	3.1%	-49.4%	-57.7%	17.0%	-74.7%

Table 11 (updated April 12, 2024)
Redemption rates on deSPACs, by quarter, 2017-2023

This table appears as Table 11 in “Going Public with IPOs and SPAC Mergers” by Rongbing Huang, Jay R. Ritter, and Donghang Zhang in for *Research Handbook on the Structure of Private Equity and Venture Capital* co-edited by Brian Broughman and Elisabeth de Fontenay. The redemption rates are equally weighted averages at the time of the merger between a SPAC and an operating company. Source: SPAC Research.

Quarter	All deSPACs		VC-backed		Non-VC-backed	
	Number of deSPACs	Average redemption rate	Number of deSPACs	Average redemption rate	Number of deSPACs	Average redemption rate
2017, first	3	38.4%	1	8.7%	2	53.3%
2017, second	2	36.2%	0	0.0%	2	36.2%
2017, third	4	60.2%	1	78.2%	3	54.2%
2017, fourth	4	57.8%	1	91.8%	3	46.5%
2018, first	6	64.9%	0	0.0%	6	64.9%
2018, second	1	8.4%	0	0.0%	1	8.4%
2018, third	5	41.8%	2	14.1%	3	60.3%
2018, fourth	11	72.1%	3	86.4%	8	66.8%
2019, first	6	73.0%	1	99.3%	5	67.8%
2019, second	6	72.5%	2	88.6%	4	62.2%
2019, third	5	74.2%	1	96.7%	4	68.6%
2019, fourth	11	53.1%	2	7.1%	9	63.3%
2020, first	10	52.2%	3	64.9%	7	46.7%
2020, second	8	54.1%	4	32.7%	4	75.6%
2020, third	8	56.3%	3	37.5%	5	67.5%
2020, fourth	38	27.4%	24	27.7%	14	26.7%
2021, first	24	11.3%	16	7.0%	8	19.8%
2021, second	40	24.2%	30	25.1%	10	21.6%
2021, third	82	54.5%	62	52.2%	20	61.3%
2021, fourth	53	62.0%	34	61.5%	19	63.0%
2022, first	29	85.6%	23	85.5%	6	86.1%
2022, second	20	81.4%	9	84.0%	11	79.2%
2022, third	26	82.2%	9	80.6%	17	83.0%
2022, fourth	27	88.1%	14	90.9%	13	85.0%
2023, first	28	94.3%				
2023, second	10	85.8%				
2023, third	29	93.8%				
2023, fourth	28	96.7%				
Total	524	62.7%	245	58.1%	184	57.0%