

Annual Review 2022

Leonberg, January 2023



2022: A year in crisis mode

2022 HIGHLIGHTS

Rising interest and soaring inflation

- Russia-Ukraine war increased volatility on the stock markets at the beginning of the year
- Significant rise in interest rates within a few months and accelerating inflation to a historic high (> 10%)
- German and US leading stock indices with **negative annual performance**: DAX (12.3)%, TecDAX (25.5)%; DJ (8.8)%, NASDAQ 100 (33.0)%

Porsche IPO as a beacon

- **Number** of IPOs down -77% from 13 (2021) to **3** (2022); however, **IPO volume** up +21% from €7.4bn (2021) to **€9.0bn** (2022)
- **Porsche AG's** €9.0 billion IPO comprises almost 100% of the total German IPO market in 2022 and is the **second largest issue worldwide** this year
- Another **5 listings** in 2022, including two SPACs

Performance of IPOs is mixed

- Half of the 10 new listings (3 IPOs and 5 listings on German stock exchanges as well as 2 initial listings on foreign stock exchanges) show a **negative performance** at year-end

Global IPO market down by 70%

- **IPO volume down** by 71% from USD 604bn (2021) to **USD 177bn** (2022)
- US stock exchanges (NASDAQ, NYSE) lost over 90% of their previous year's volume as **SPAC IPOs dropped** in 2022, mainly due to the rise in interest rates

Only two foreign listings of German issuers

- **Two initial listings** in 2022: Rebelle AB on Nasdaq First North / Stockholm and Cabka NV on EuroNext in a "deSPACing" with a total placement volume of **€130 million**
- Previous year 2021: 8 initial listings with a total placement volume of €2.2 billion

"Follow-on" activities shrink by around 80%

- **Decrease** in follow-up issues after an IPO ("follow-on") by 78% year-on-year from €25.8 billion (2021) to **€6.0 billion** (2022)
- Immatix and Affimed were each able to raise over €100 million on NASDAQ



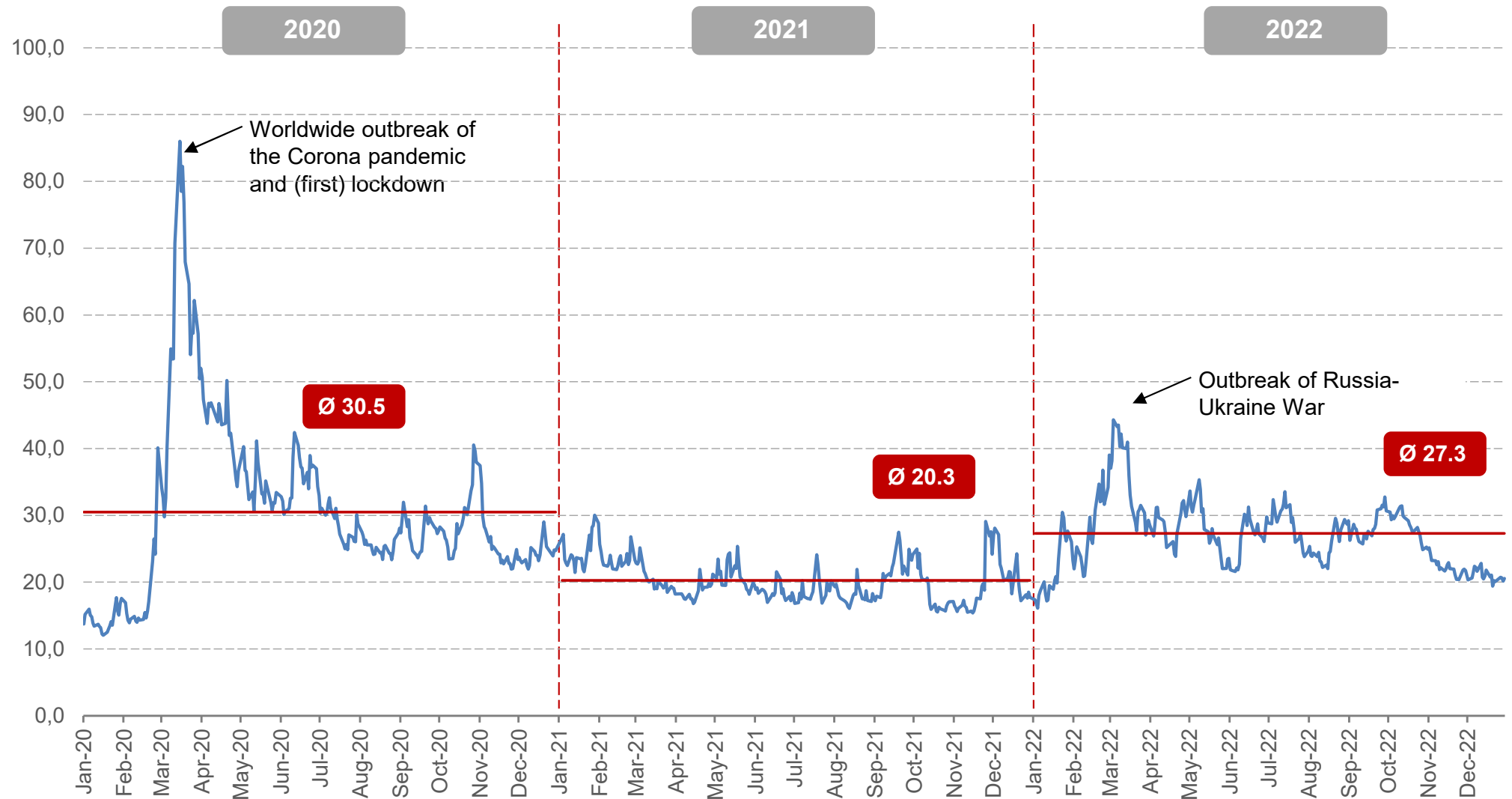
Capital Market Environment in 2022



The Russia-Ukraine-Conflict has caused volatility to rise significantly over the past year

VDAX NEW INDEX¹⁾ 2020 - 2022

AS OF 31st DECEMBER 2022



1) VDAX-NEW Volatility Index DE000A0DMX99
Source: Refinitiv

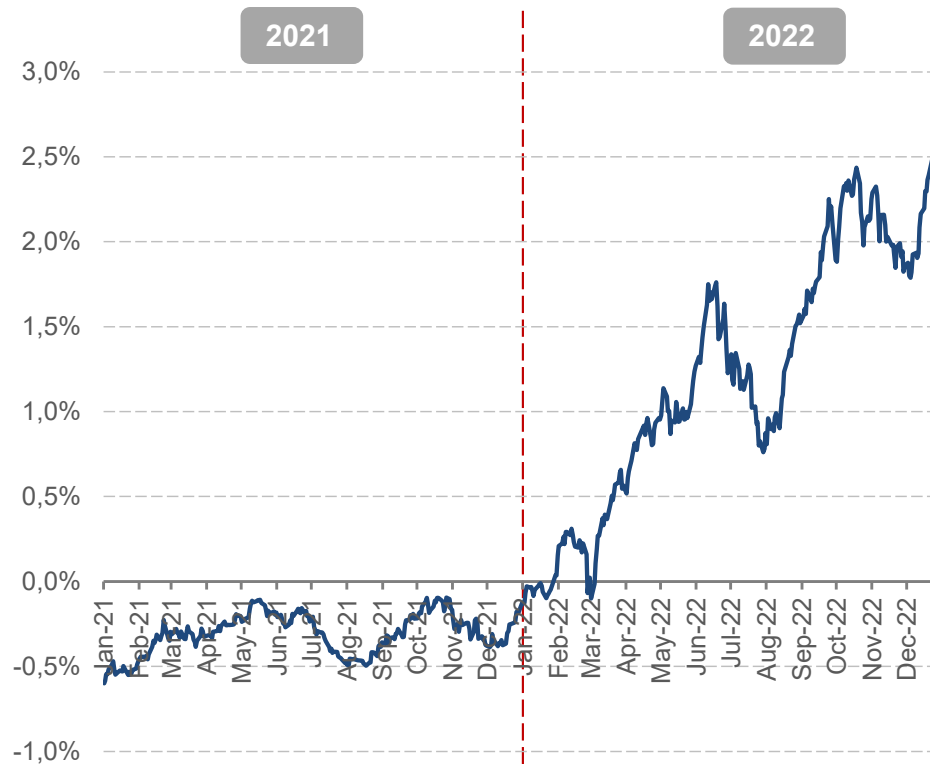


The very rapid rise in interest rates as well as rampant inflation to a historic high shaped the year 2022

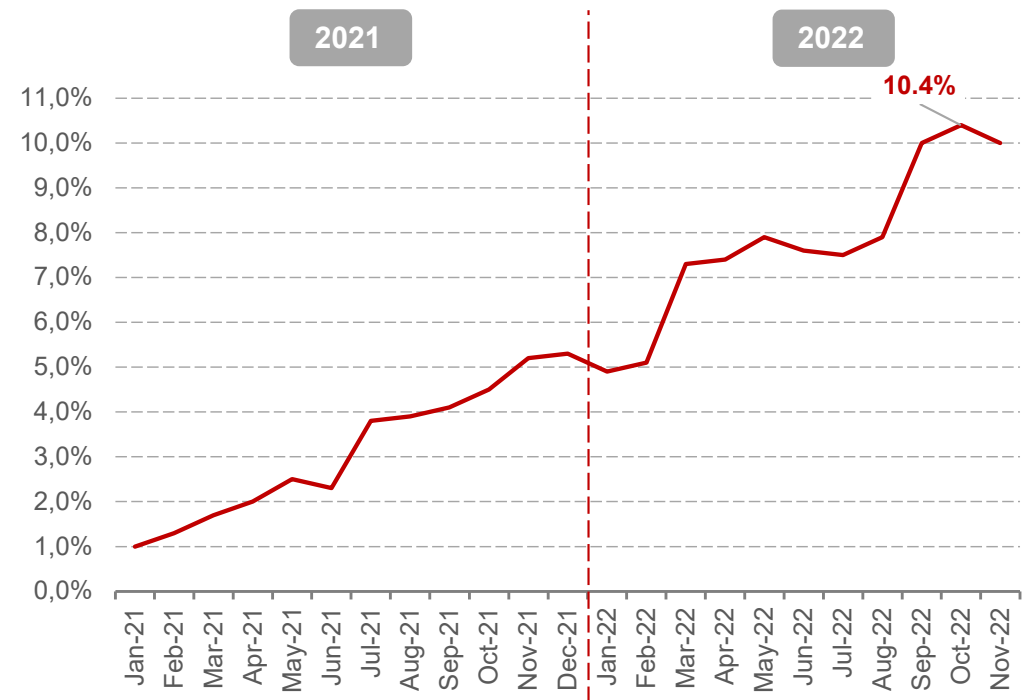
INTEREST- AND PRICESHOCK

AS OF 31st DECEMBER 2022

Current yield 10-year Bund



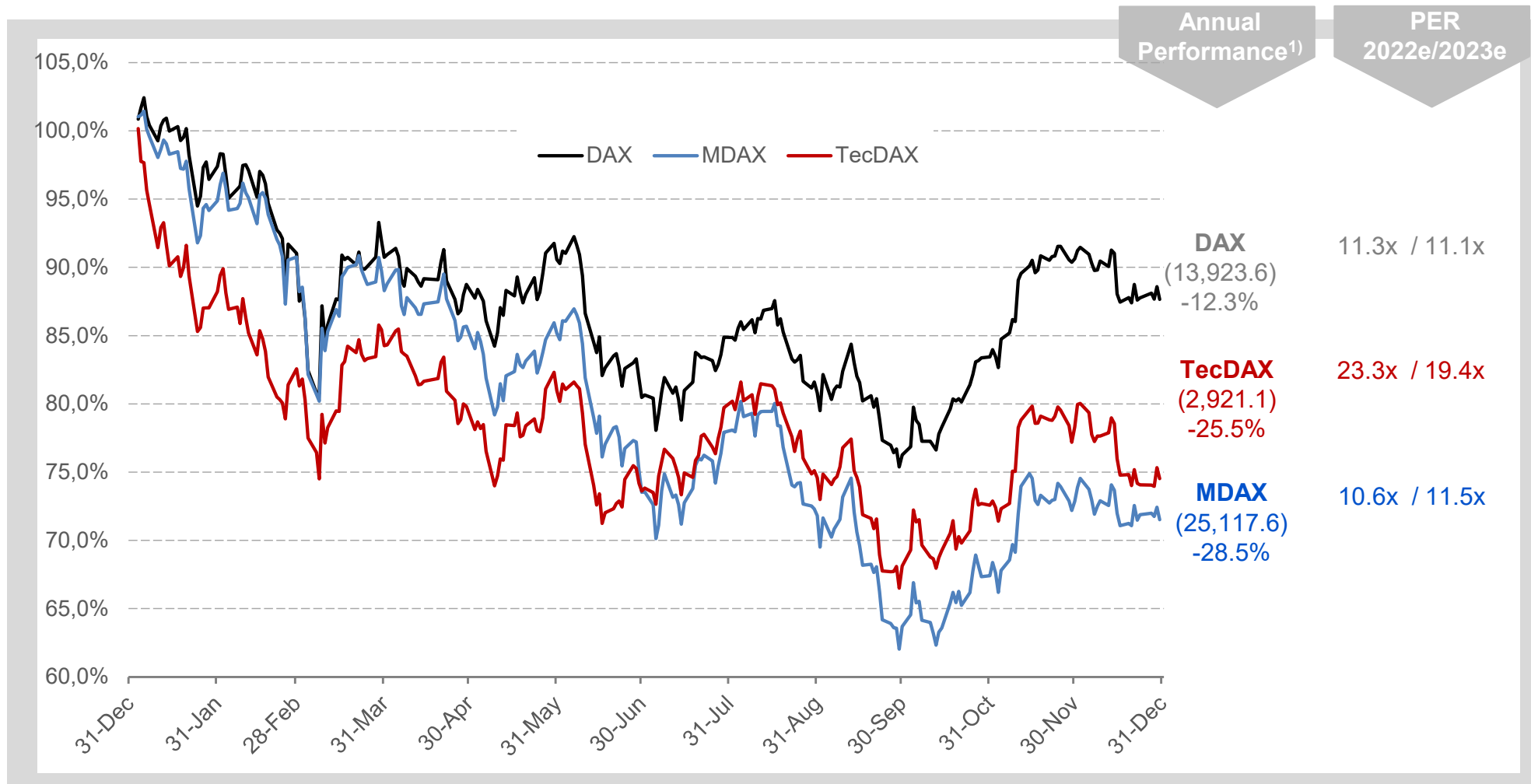
Consumer Price Index (Germany)



The difficult environment led to significant price decreases on the stock exchanges

PERFORMANCE GERMAN STOCK INDICES IN 2022

AS OF 31st DECEMBER 2022



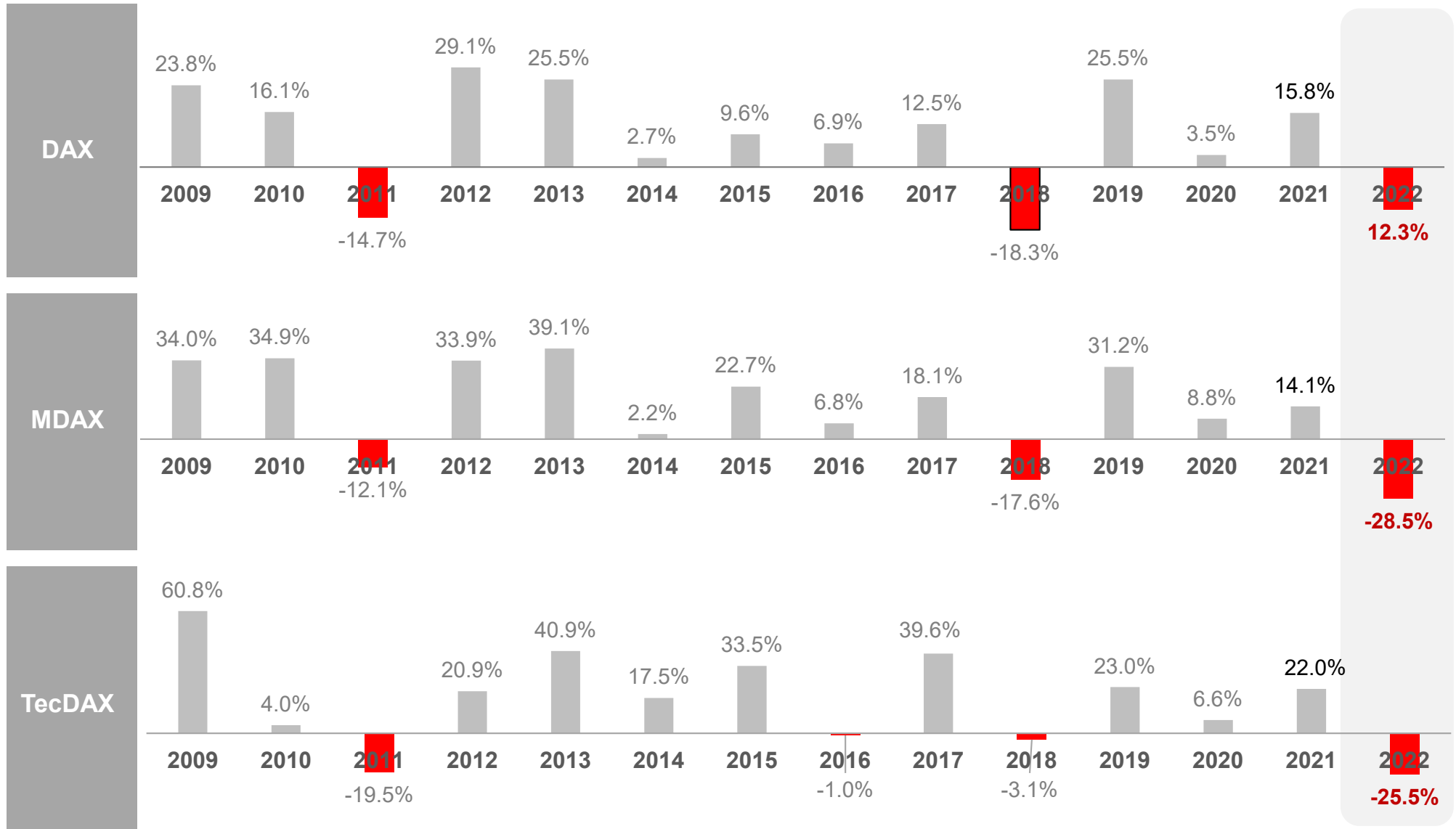
1) In the period between 30-Dec-2021 – 31-Dec-2022
Sources: Refinitiv, Börsenzeitung



Since 2009, 2022 is the third year with a negative performance

ANNUAL PERFORMANCE HISTORY 2009 - 2022

AS OF 31st DECEMBER 2022



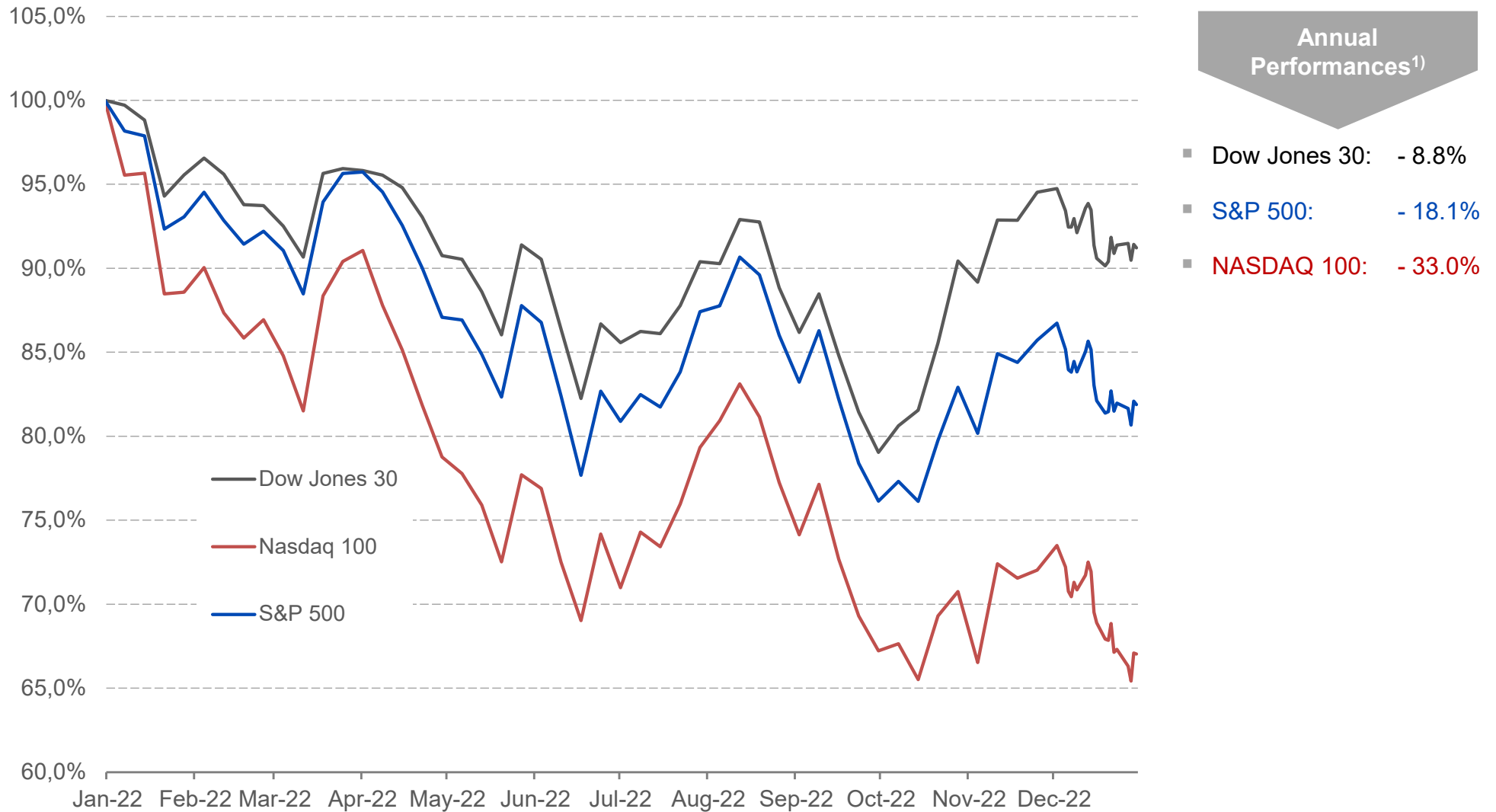
Sources: Refinitiv, own calculations



The most important US stock indices also had to close the year 2022 with losses

PERFORMANCE OF SELECTED US STOCK INDICES IN 2021

AS OF 31st DECEMBER 2022



¹In the period between 30-Dec-2021 – 31-Dec-2022

Source: Refinitiv



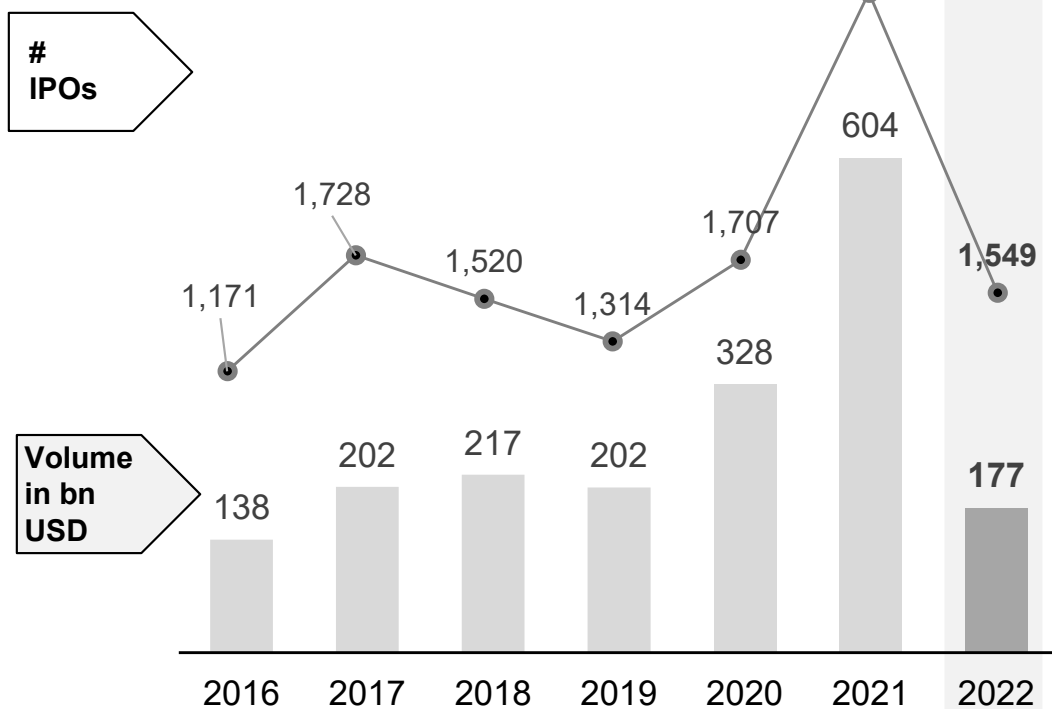
Global primary equity market development

Compared to the record issuance in 2021, the volume in 2022 decreased by 71% to USD 177bn. The Porsche IPO was the second largest issue worldwide in 2022

GLOBAL IPO ACTIVITIES 2016 - 2022

AS OF 31st DECEMBER 2022

IPO Transactions



„TOP 10“ IPOs in 2022

#	Issuer	Date	Exchange	Volume (bn \$)
1	LG Energy Solution Ltd	14-Jan-22	Korea	10.7
2	Porsche AG	28-Sep-22	Frankfurt	8.8
3	Dubai Elect. & Water	6-Apr-22	Dubai Exch	4.7
4	Life Insurance Corp of India	9-May-22	National	2.4
5	Corebridge Financial Inc	14-Sep-22	New York	1.7
6	Borouge PLC	31-May-22	Abu Dhabi	1.6
7	Americana Restaurants Int.	24-Nov-22	Saudi Exch	1.4
8	Nahdi Medical Co	15-Mar-22	Saudi Exch	1.4
9	CICC Anhui	4-Nov-22	Shanghai	1.2
10	SCB X PCL	25-Feb-22	Thailand	1.0

„TOP 10“ IPOs in 2021

#	Issuer	Date	Exchange	Volume (bn \$)
1	Rivian Automotive Inc	9-Nov-21	NASDAQ	13.7
2	Kuaishou Technology	29-Jan-21	HongKong	6.2
3	Coupang Inc	10-Mar-21	NYSE	4.6
4	DiDi Global Inc	29-Jun-21	NYSE	4.4
5	Blackrock Innovation	25-Mar-21	NYSE	4.4
6	Inpost SA	26-Jan-21	Euronext/AM	3.9
7	Krafton Inc	29-Jul-21	Korea	3.7
8	JD Logistics Inc	21-May-21	HongKong	3.6
9	China Three Gorges	6-May-21	Shanghai	3.5
10	Globalfoundries Inc	27-Oct-21	NASDAQ	2.9

Sources: Refinitiv, own calculations



The Asian stock markets were able to take the lead in 2022. The US stock markets lost dramatically. High-tech companies formed the largest group in terms of volume

GLOBAL IPO ACTIVITIES 2020 - 2022

AS OF 31st DECEMBER 2022

IPO activities by regions					
Region	Year	Proceeds (bn\$)	in% in the year	#	in% in the year
Africa, Middle East, Central Asia	2020	2.8	1%	17	1%
	2021	13.7	2%	46	2%
	2022	23.7	13%	60	4%
Americas	2020	166.6	51%	523	31%
	2021	302.0	50%	1,126	38%
	2022	21.2	12%	259	17%
Asia Pacific Excluding Central Asia	2020	130.8	40%	928	54%
	2021	183.5	30%	1,277	43%
	2022	114.6	65%	1,030	66%
Europe	2020	24.1	7%	142	8%
	2021	97.1	16%	416	14%
	2022	15.4	9%	109	7%
Japan	2020	3.5	1%	95	6%
	2021	7.1	1%	123	4%
	2022	2.5	1%	92	6%
Total	2020	327.9	100%	1,705	100%
	2021	603.3	100%	2,988	100%
	2022	177.4	100%	1,550	100%

IPO activities by industry					
Macro Industry	Year	Proceeds (bn\$)	in% in the year	#	in% in the year
Consumer/Retail	2020	46.2	14%	238	14%
	2021	74.6	12%	390	13%
	2022	17.7	10%	240	15%
Energy and Power	2020	8.8	3%	50	3%
	2021	23.6	4%	115	4%
	2022	30.0	17%	87	6%
Financials	2020	117.7	36%	410	24%
	2021	221.6	37%	946	32%
	2022	28.0	16%	294	19%
Healthcare	2020	43.2	13%	233	14%
	2021	60.3	10%	342	11%
	2022	15.9	9%	160	10%
High Technology	2020	47.2	14%	270	16%
	2021	118.0	20%	446	15%
	2022	35.7	20%	274	18%
Industrials/Telcom	2020	26.2	8%	231	14%
	2021	60.3	10%	315	11%
	2022	27.4	15%	213	14%
others	2020	37.6	11%	269	16%
	2021	45.0	7%	434	15%
	2022	22.6	13%	282	18%
Total	2020	326.9	100%	1,701	100%
	2021	603.3	100%	2,988	100%
	2022	177.4	100%	1,550	100%

Source: Refinitiv











US stock exchanges lost over 90% of their previous year's volume last year

IPO ACTIVITIES OF SELECTED EXCHANGE VENUES 2018 - 2022

AS OF 31st DECEMBER 2022

in bn USD

												
	NASDAQ	NYSE	LSE	Euronext	OMX	FSE	SWX	China ²⁾	Tokyo	Korea	Arab ³⁾	
2018	29.2	32.3	12.1	3.5	2.6	13.9	3.4	51.8	25.9	2.5	1.2	
2019	35.5	30.9	6.7	3.1	1.8	4.0	3.0	39.4	1.2	3.4	31.0	
2020	85.2	85.7	6.9	4.1	2.1	0.9	0.0	66.0	1.6	4.4	1.4	
2021	192.4	126.9	22.8	20.3	12.0	11.7	2.1	72.5	2.5	17.8	4.4	
2022	15.7	6.6	1.2	0.9	0.3	9.2	0.2	44.9	0.1	13.5	21.5	

1) FSE = Frankfurt, LSE = London, EURONEXT Pan-European Exchange (Amsterdam, Brussels, Lisbon and Paris), SWX = SIX Swiss Exchange (Switzerland)

2) Honkong, Shenzhen, Shanghai 3) Saudi Arabia, Abu Dhabi, Kuwait, Dubai, Qatar

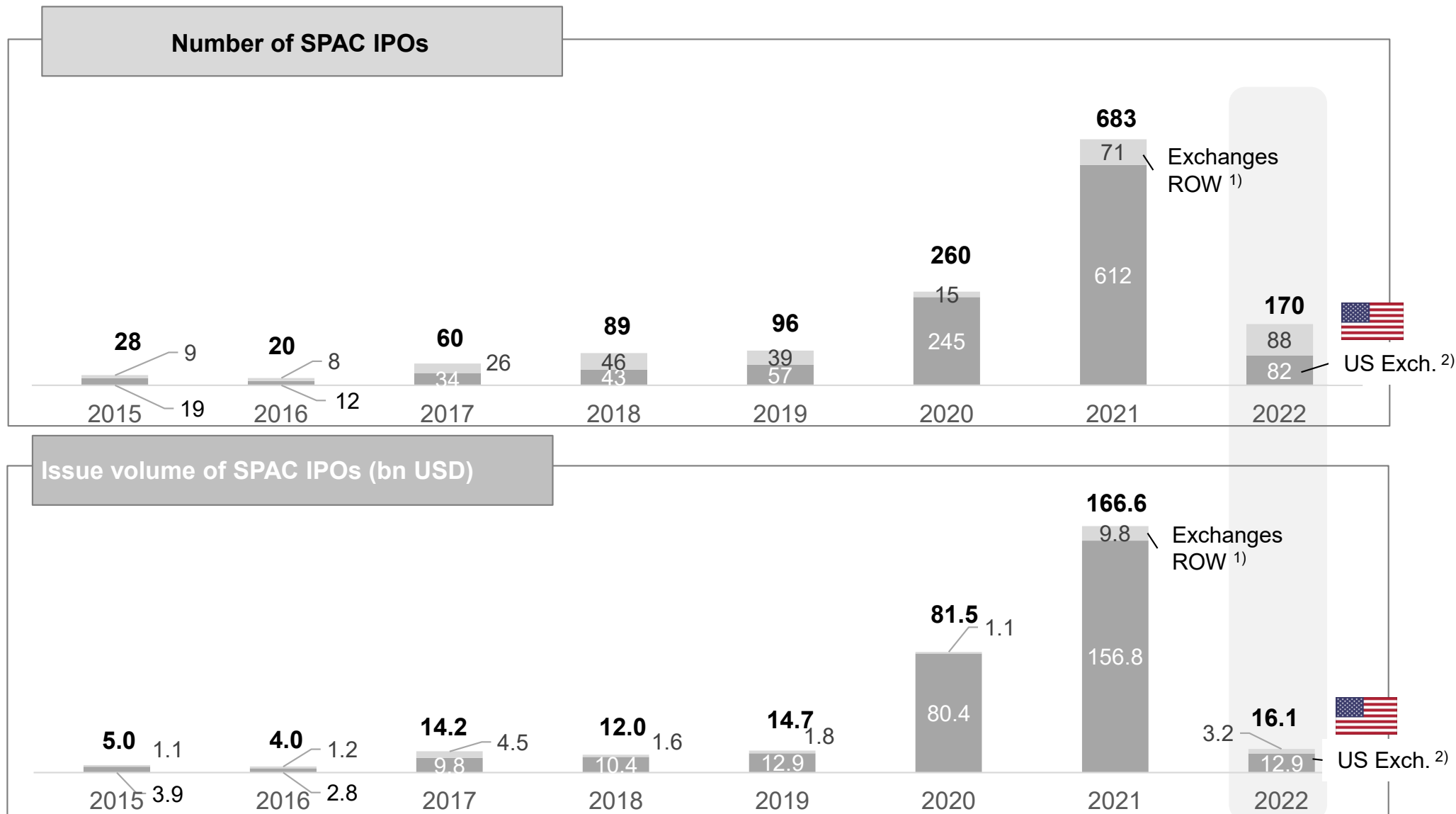
Source: Refinitiv



A major reason for the significant decline in issuance volume on the US stock exchanges is the slump in SPAC activity, which is suffering above all from the rise in interest rates

GLOBAL SPAC ISSUES 2015 - 2022

AS OF 31st DECEMBER 2022



1) Other stock exchanges excluding NASDAQ and NYSE

2) NASDAQ and NYSE

Sources: Refinitiv, own calculations



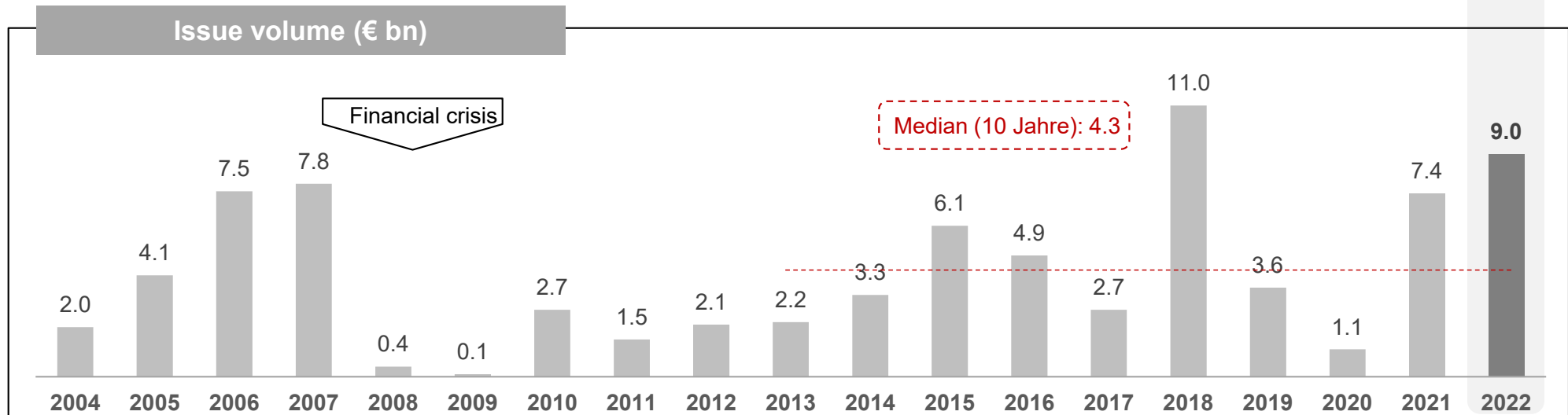
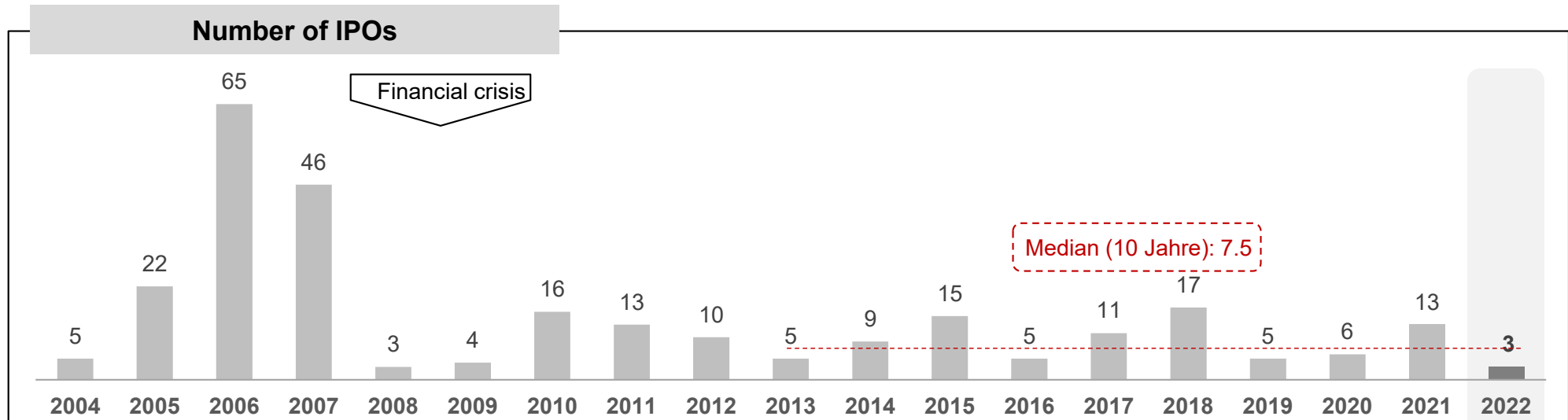
**Initial listings
on German Stock Exchanges
and
of German Companies on Foreign Stock
Exchanges**



IPO activity in 2022 is back at the level of the crisis years 2008/2009. Nevertheless, the Porsche IPO raised a volume of €9 billion

IPO ACTIVITIES ON GERMAN STOCK EXCHANGES ¹⁾

AS OF 31st DECEMBER 2022






¹⁾ Excluding listings, incl. over-allotment option exercised by cut-off date
Source: BFA Database



In 2022, only three IPOs were successfully completed. The Porsche IPO clearly stands out in terms of volume and awareness

IPOS ON GERMAN STOCK EXCHANGES IN 2022

issuer	Industry	Date of IPO	Segment	Sales ¹⁾ (m€)	EBIT ¹⁾ (m€)	Price range	Issue price	Issue vol. ²⁾ (m€)	MC ³⁾ (m€)	MC / Sales ³⁾	Lead bookrunners
BörseGo AG 	Financial market information and analysis	03/25/2022	OTC (München)	10.4	1.2	Fixed Price €240	240.00 €	0.7	27	2.6x	BankM AG
EV Digital Invest AG 	Online real estate investment platform	05/03/2022	Scale	4.4	0.0	€13.50 - €14.50	14.00 €	6.3	62	14.3x	Hauck Aufhäuser Lampe
Dr. Ing. h.c. F. Porsche AG 	Automotive manufacturer	09/29/2022	Prime Standard	33,138.0	5,314.0	€76.50 - €82.50	82.50 €	9,002.5	75,158	2.3x	Bank of America, Citigroup, Goldman Sachs, J.P. Morgan

1) In financial year prior to IPO; 2) Placement volume incl. over-allotment option exercised or planned (greenshoe); 3) Market capitalization at issue price
Sources: Company announcements, prospectus



In addition to the three "classic" IPOs, five issuers went public via "listing", including two SPACs

LISTINGS¹⁾ ON GERMAN STOCK EXCHANGES IN 2022

Issuer	Date of Listing	Segment	Industry	Listing Technique ³⁾	Private Placement Volume ¹⁾ (in m€)	1 st listing price	Market Cap (in m€)	Sales ²⁾ (in Mio €)	Net Income ²⁾ (in Mio €)
468 SPAC II SE	01/20/2022	General Standard (Shares); Open Market (Warrants)	SPAC	Safe IPO	210.0	9.99 €	262.2	-	-
Centurion International AG	02/01/2022	OTC (Düsseldorf)	Legal and Tax consultancy	IPO Light	-	2.00 €	2.0	0.4	0.0
SMG European Recovery SPAC SE	06/01/2022	General Standard (Shares); Open Market (Warrants)	SPAC	Safe IPO	115.0	10.00 €	115.0	-	-
Semodu AG	08/01/2022	OTC (München)	Building Software	IPO light	-	6.50 €	7.0	3.3	0.3
Cantourage Group SE	11/11/2022	Scale	Medical Cannabis	IPO Light	-	6.48 €	80.8	5.2	-1.0

3) Legend:

- Safe IPO: There is a private placement prior to listing
- IPO Light: There is no private placement prior to listing
- Spin-off: Separation from a listed company

1) Transactions without a public offer of shares

2) In the fiscal year prior to the listing

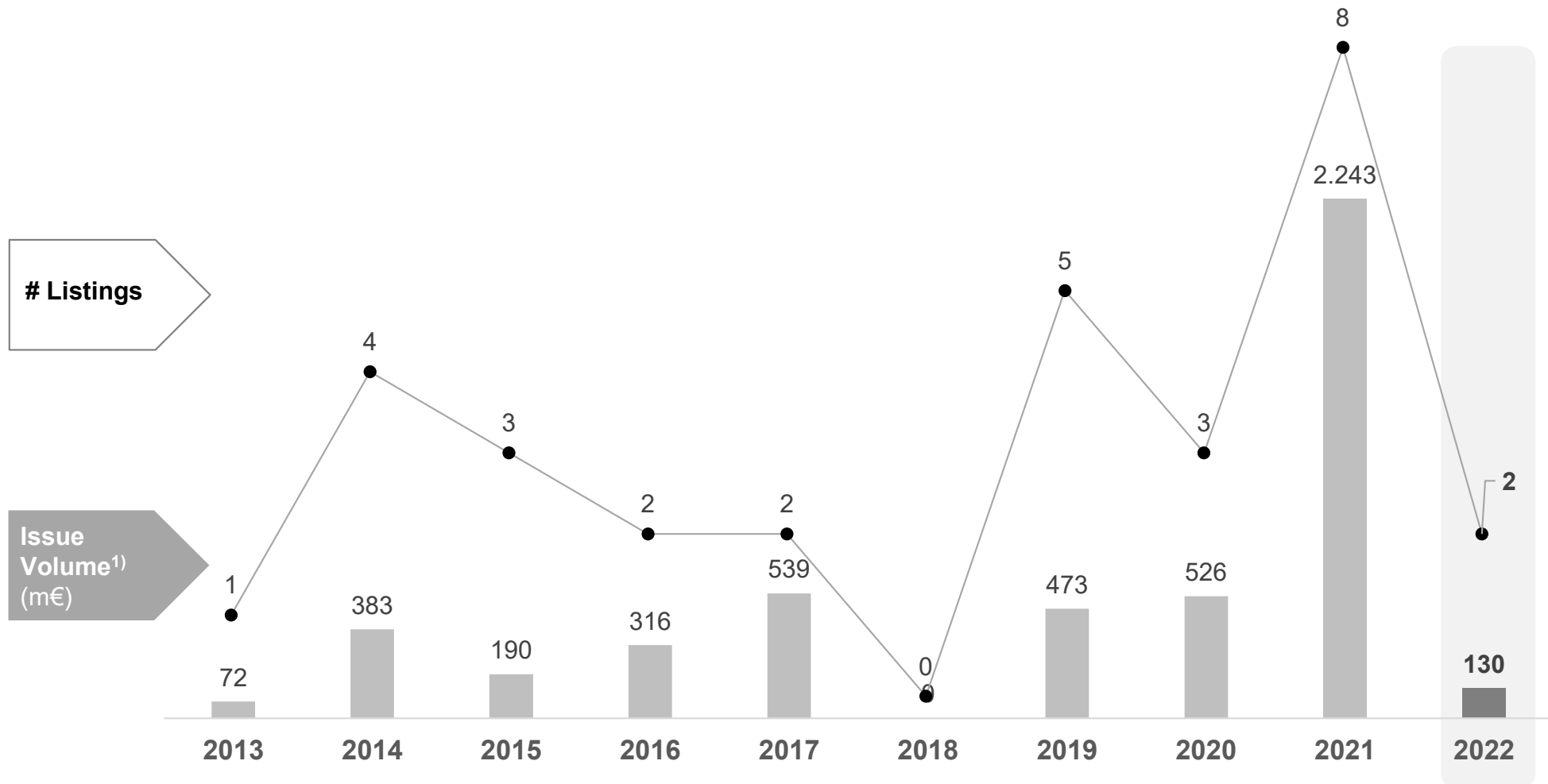
Source: BFA Database, prospectus, companies announcements



Foreign listings of German issuers also decreased significantly after the record year of 2021

LISTING ABROAD OF GERMAN ISSUERS 2013 - 2022¹⁾

AS OF 31st DECEMBER 2022





1) w/o SPAC Listings
Source: BFA Database, Refinitiv



Last year, only two issuers from Germany were able to list on a foreign stock exchange and raise around €130 million

LISTING ABROAD OF GERMAN ISSUERS IN 2022

Issuer	Industry	HQ	Sales (m€)	EBIT (m€)	Date	Transaction	Exchange	Issue Price	Issue Volume ²⁾ (m€)	Market Cap ²⁾ (m€)	Lead Book-runners
Rebelle AB  <small>SELL AND BUY LUXURY BRANDS</small>	Online-Retailer	Hamburg (<i>StyleRe mains GmbH</i>)	7.4	-2.2	02/25/2022	IPO	Nasdaq First North (Stockholm)	28.00 SEK	19.4	60.7	Vator Securities
Cabka N.V. 	plastic pallets made from recycled materials	Berlin	134.6	0.8	03/01/2022	“deSPACing” with Dutch Star Companies TWO B.V.	Euronext	10.00 €	111.0 ¹⁾	232.5	ABN Amro

1) Takes into account SPAC Trust Fund minus reimbursements plus PIPE proceeds

2) Conversion into € was carried out at the exchange rate applicable at the time of listing

Source: BFA Database, Refinitiv



Half of the 10 new entrants show a negative performance at the end of the year

SECONDARY MARKET PERFORMANCE OF GERMAN ISSUERS IN 2022

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	Issuer	Issue Price/ 1st Price	Price 12/31/2022	Performance since IPO ¹⁾	MDAX Performance since IPO	TecDAX Performance since IPO
IPOs	Stock3 AG (BörseGo AG)	26.67 € ²⁾	23.50 €	-11.9%	-19.8%	-11.3%
	EV Digital Invest AG	14.00 €	5.35 €	-61.8%	-15.9%	-5.1%
	Porsche AG	82.50 €	94.75 €	14.8%	14.9%	10.7%
Listings	468 Spac II SE	9.99 €	9.64 €	-3.6%	-27.1%	-18.5%
	Centurion International AG	2.00 €	2.20 €	10.0%	-25.5%	-16.7%
	SMG European Recovery SPAC SE	10.00 €	10.20 €	2.0%	-15.6%	-7.1%
	Semodu AG	6.50 €	10.10 €	55.4%	-8.4%	-7.1%
	Cantourage Group SE	6.48 €	14.14 €	118.2%	-3.3%	-5.4%
Foreign Listings	Rebelle AB	2.71 € ³⁾	1.27 €	-53.2%	-27.1%	-18.5%
	Cabka NV	10.00 €	6.12 €	-38.8%	-25.3%	-15.4%

1) Measured between closing price on 12/31/2022 and issue price or initial listing

2) After stock split 1:9

3) Converted into € from SEK at the time of the IPO

Source: Refinitiv, BFA-Database



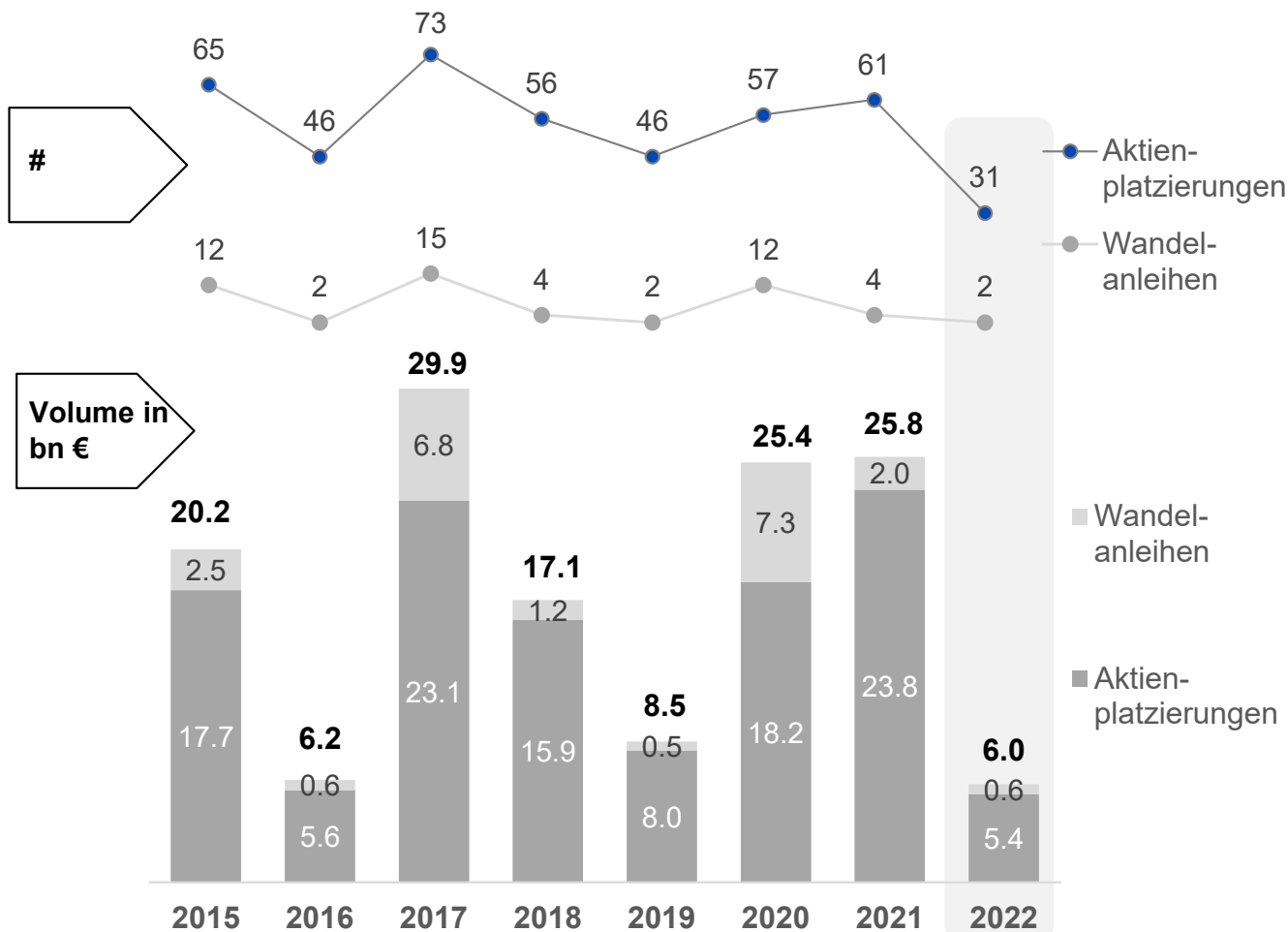
„Follow-on“ Transactions by German Issuers



“Follow-on” activities of German issuers decreased by 77% in 2022 compared to the previous year

FOLLOW-ON PLACEMENTS¹⁾ 2015 - 2022

AS OF 31st DECEMBER 2022



TOP 20 Transactions in 2022

Issuer	Instrument	Volume in m €
Deutsche Bank AG	Shares	1,915
Siemens Energy	CVB ²⁾	951
Commerzbank AG	Shares	732
Rag-Stiftung	CVB ²⁾	518
Hensoldt AG	Shares	469
Deutsche Lufthansa AG	Shares	453
TUI AG	Shares	445
Nordex SE	Shares	361
TAG Immobilien AG	Shares	204
E ON SE	Shares	168
ThyssenKrupp AG	Shares	124
Immatics NV	Shares	110
Affimed NV	Shares	104
SGL Carbon SE	CVB ²⁾	102
Heidelberg Pharma AG	Shares	80
Nexus AG	Shares	73
Sfc Energy AG	Shares	57
EQS Group AG	Shares	49
Evotec SE	Shares	48
MEDIQON Group AG	Shares	45

1) include issues of primary and secondary shares as well as convertible bond issues of German issuers after IPO or 1st listing

2) Convertible Bond

Source: Refinitiv, own calculations



Immatics and Affimed were each able to place over € 100 million as a "follow-on" on NASDAQ

FOLLOW-ONS ON FOREIGN EXCHANGES BY GERMAN ISSUERS IN 2022

Issuer	Issue Date	Issue Volume (in m €) ³⁾	Instrument	Currency	Exchange	Industry
Marley Spoon AG	11/25/2022	11.5	CDI ¹⁾	AUD	Australian Securities Exchange	Food Distribution
Immatics NV	10/10/2022	110.0	Shares	USD	Nasdaq	Biotechnology
voxeljet AG	10/03/2022	4.4	ADS ²⁾	USD	Nasdaq	Industrial Machinery
Vivoryon Therapeutics NV	09/30/2022	14.7	Shares	EURO	Euronext (Amsterdam)	Pharmaceuticals
Sono Group NV	04/28/2022	40.0	Shares	USD	Nasdaq	Car Manufacturers
Affimed NV	04/12/2022	103.5	Shares	USD	Nasdaq	Pharmaceuticals
Vivoryon Therapeutics NV	04/01/2022	23.2	Shares	EURO	Euronext (Amsterdam)	Pharmaceuticals

1) CHES Depository Interests (CDIs)

2) American Depository Shares

3) Converted into € at the time of the IPO

Source: own research, Refinitiv



BLÄTTCHEN FINANCIAL ADVISORY




Also in 2022, we supported some capital market projects in the national and international context

BLAETTCHEN FINANCIAL ADVISORY HIGHLIGHTS IN 2022

Public Projects

Series A



Customcells Holding GmbH

€60m

2022

Share Repurchase Program




BioNTech SE

up to 1.5bn USD (NASDAQ)

2022

ESOP/EEP



BioNTech SE

Execution of Stock Options Program valued at €1.5bn

2022

Other Projects

- Advising on the launch of employee stock ownership plans (ESOP) for pre-IPO candidates
- Advice on the preparation of AGMs
- Capital increase, participation and joint venture projects

We wish the friends of our house a successful capital market year 2023 and look forward to further cooperation!








For many of our clients, access to the capital market is the success factor for extraordinary corporate development

TESTIMONIALS B-FA ADVISORY PRACTICE

AS OF 31st DECEMBER 2022

in m €

Client	Metrics @ IPO			Current Metrics				
	IPO	Sales in FY prior to IPO	Market Cap @ IPO	Sales 2022e	CAGR ¹⁾	Market Cap	CAGR ¹⁾	Index-Membership
 BOSS HUGO BOSS	12/20/1985	121	134	3,547	10%	3,813	9%	MDAX
 bertrandt	10/01/1996	39	60	1,009	13%	405	8%	CDAX
 RIXTRON	11/06/1997	24	128	491	13%	3,057	13%	MDAX/TecDAX
 PNE pure new energy	12/15/1998	5	61	122	14%	1,635	15%	SDAX
 RATIONAL	03/03/2000	131	262	991	9%	6,310	15%	MDAX
 ZEISS CARL ZEISS MEDITEC	07/19/2002 ²⁾	205	284	1,903	12%	10,545	19%	MDAX/TecDAX
 DATAGROUP IT Services + Solutions	09/14/2006	30	18	501	19%	526	23%	Scale All
 MEYER BURGER	11/23/2006	38	73	167	10%	1,947	23%	Swiss All
 HYPOPORT THE FINANCE INTEGRATOR	10/29/2007 ³⁾	26	92	465	21%	632	14%	SDAX
 BIONTECH	10/10/2019	128	3.038	16,507	351%	34,065	111%	NASDAQ Biotechnology 100

1) CAGR: Compound Annual Growth Rate

2) Cold IPO

3) Safe IPO

Source: Database B-FA, Refinitiv



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