



Year End 2022 Report

Citi Depository Receipt Services

May 2023



2022 Global DR Highlights

1,455
Total Number of
Unsponsored ADR
Programs

\$8.3 Billion
DR Capital Raising

\$736 Billion
Value Held by
Institutional
Investors

\$5.5tn
DR Trading Value
276.7bn
DR Trading
Volume

Sources: Bloomberg, Depository Data Interchange; Data as of 12/31/2022

2022 Global DR Highlights (cont.)

2022 DR Highlights

Global DR Trading & Liquidity

- In 2022, DR trading volume was **down 8% to 276.7bn** versus 299.2bn in 2021
- Similarly, DR trading value was **down 32% to \$5.5tn** versus \$8tn in 2021

Global DR Equity Offerings

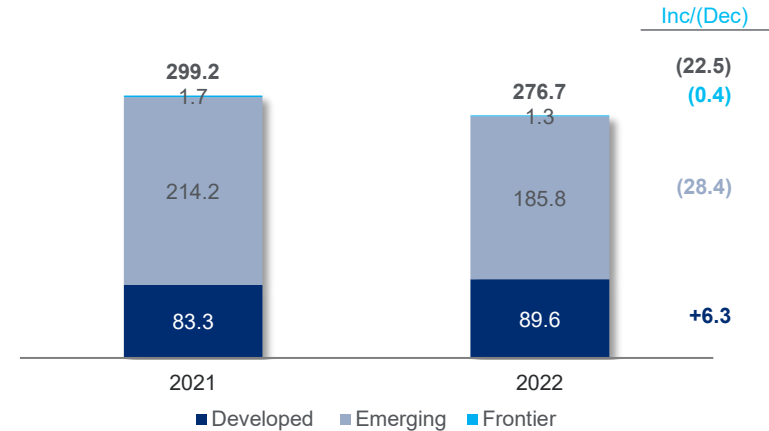
- Total capital raised in DR form in 2022 was **\$8.3bn** globally **down \$27.1bn (76%)** from 2021
 - Citi acted as depository bank for nearly **\$6bn (72%)** of the total DR capital raised in 2022

Global DR Institutional Investor Trends

- Value of DRs held by institutional investors **grew from US\$478bn in 2009 to US\$1.18tn in 2021**. The value **declined in 2022 to \$736bn** as a result of falling stock prices, dollar strength and a flight to safety in US stocks
 - Mutual funds account for **75%** of the total DR value held
 - In terms of investment style, growth, value and GARP funds account for **75%** of the total DR value held

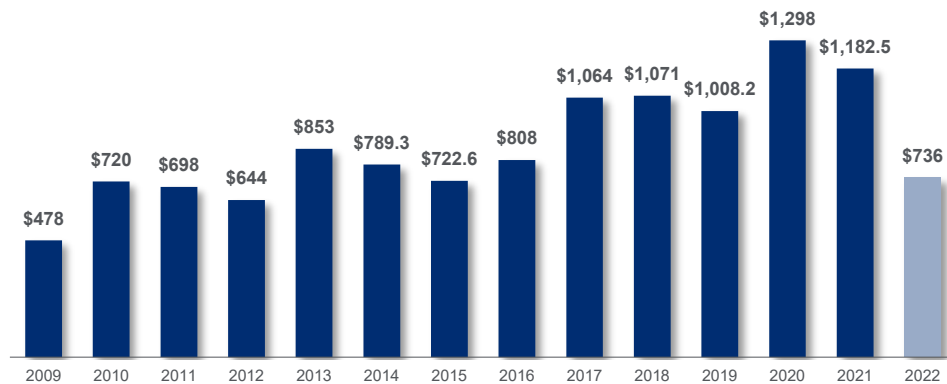
Global DR Trading & Liquidity⁽¹⁾ (bn)

Although DR trading volume fell by 7.5% globally, mainly in emerging markets, developed markets was up 7.5% to 89.6 billion from 2021



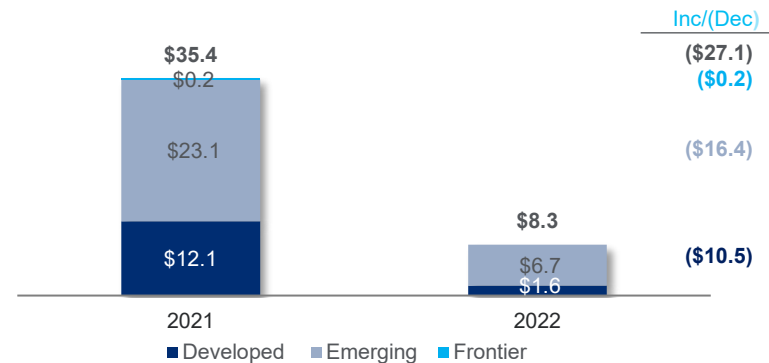
Global DR Institutional Investor Trends (\$bn)

DRs have consistently grown in recent years as an equity instrument of choice for institutional investors. However, in 2022 disclosed DR institutional holdings declined, reflecting unfavorable market and FX headwinds



Global DR Equity Offerings (\$bn)

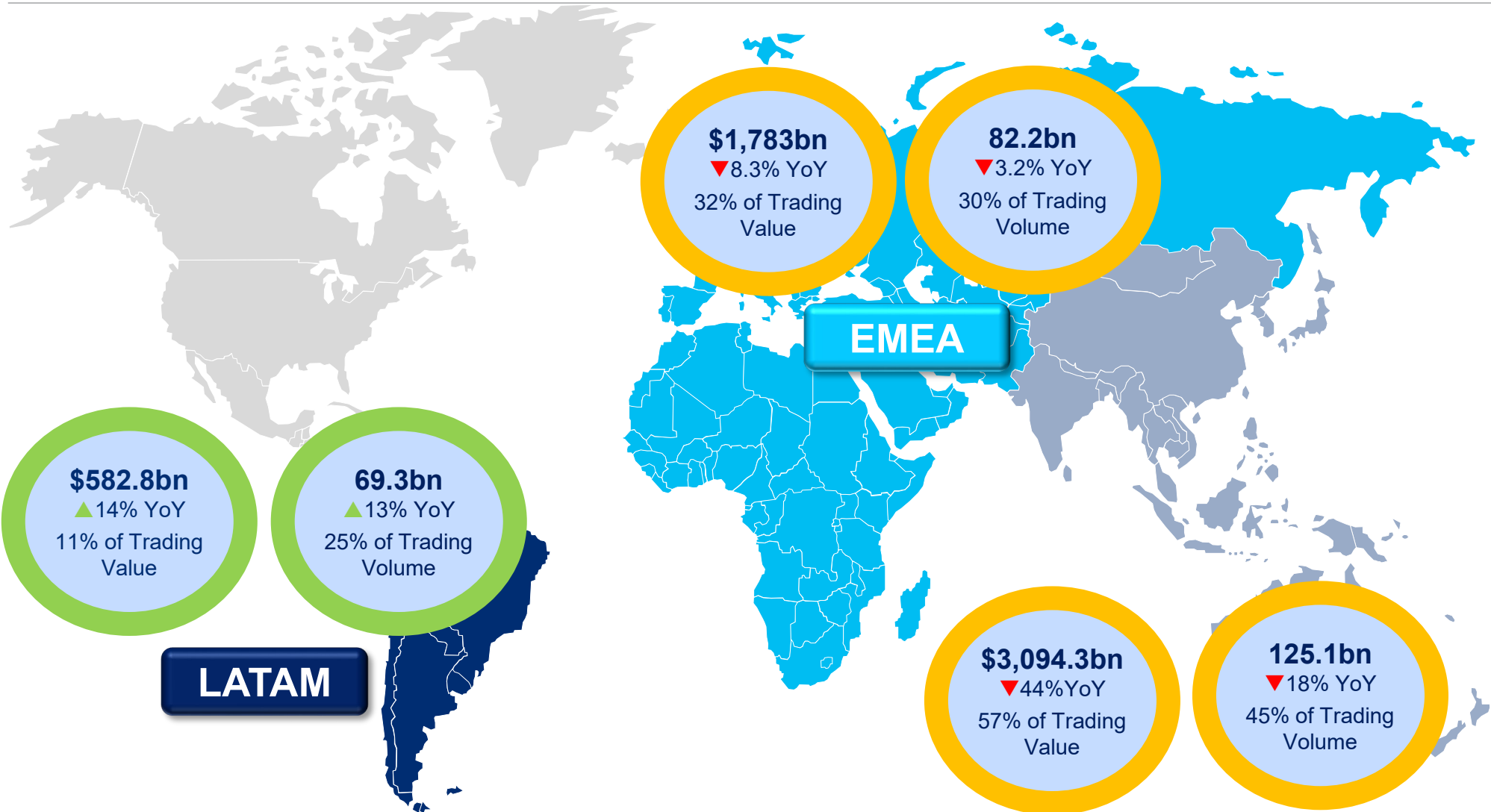
The aggregate sum of capital raised in DR form amounted **\$8.3bn** in 2022 globally



Source: Bloomberg, S&P Global, Depository Data Interchange; ⁽¹⁾Data includes ADR and GDR programs traded on NASDAQ, New York Stock Exchange (NYSE), London Stock Exchange (LSE), SIX Swiss Exchange, over-the-counter markets (OTC) and other exchanges. Data as of 12/31/2022

1. Global DR Trends

Global DR Liquidity – FY 2022



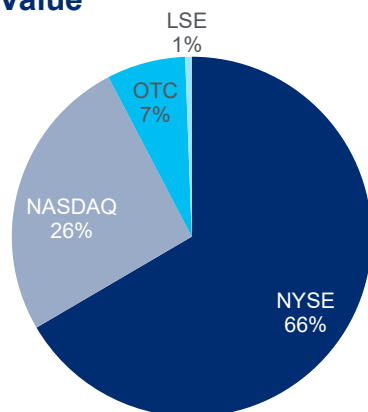
Global DR Trading Value: \$5.5tn
Global DR Trading Volume: 276.7bn

Source: Depository Data Interchange and Bloomberg. Data as of December 31, 2022

Global DR Liquidity – FY 2022 (cont.)

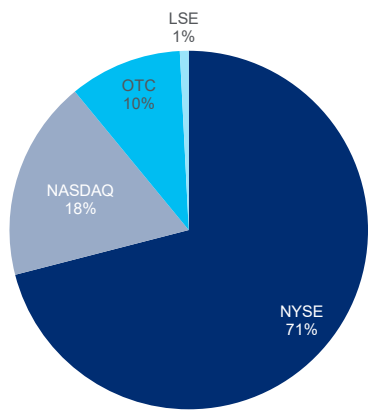
The top five most liquid programs by value were Asian DR programs

DR Trading Value



Total DR Value: \$5.5tn

DR Trading Volume



Total DR Volume: 276.7bn DRs Traded

Top Ten Most Liquid Programs

Issuer	Country	Trading Venue	DR Value (in \$bn)
Alibaba Group Holding	CHINA	NYSE	652.7
Taiwan Semiconductor Manufacturing Co	TAIWAN	NYSE	296.2
NIO	CHINA	NYSE	273.6
Pinduoduo	CHINA	NASDAQ	186.2
Sea	SINGAPORE	NYSE	175.9
ASML Holding	NETHERLANDS	NASDAQ	164.6
JD.com	CHINA	NASDAQ	163.8
Vale	BRAZIL	NYSE	142.3
Petroleo Brasileiro	BRAZIL	NYSE	110.9
Baidu	CHINA	NASDAQ	110.9

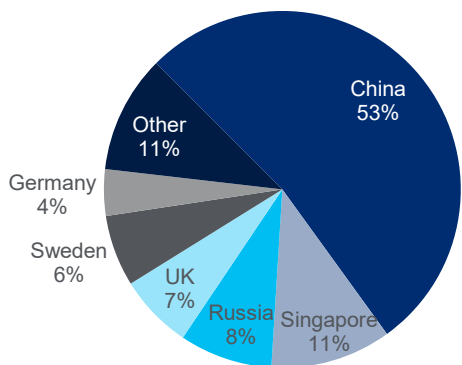
Issuer	Country	Trading Venue	DR Volume (in DR bn)
NIO Inc	CHINA	NYSE	15.2
Itau Unibanco Holding SA	BRAZIL	NYSE	11.5
Banco Bradesco SA	BRAZIL	NYSE	9.5
Vale SA	BRAZIL	NYSE	9.2
Petroleo Brasileiro SA	BRAZIL	NYSE	8.5
Ambev SA	BRAZIL	NYSE	7.2
Nokia Oyj	FINLAND	NYSE	6.9
DIDI GLOBAL INC	CHINA	OTC	6.9
Alibaba Group Holding Ltd	CHINA	NYSE	6.7
XPeng Inc	CHINA	NYSE	4.6

2022 DR Capital Raising Trends

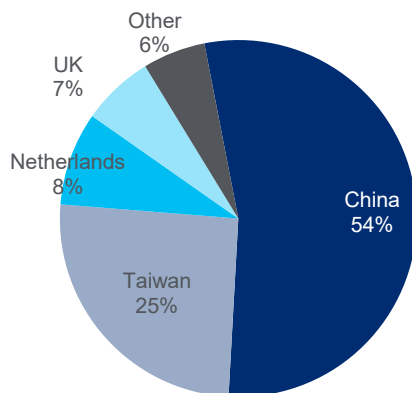
Global DR Equity Offerings by Country

2021

2022



\$35.4bn

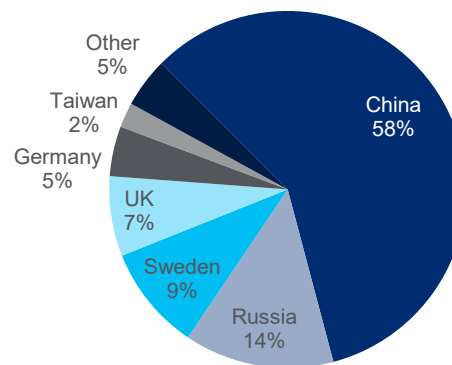


\$8.3bn

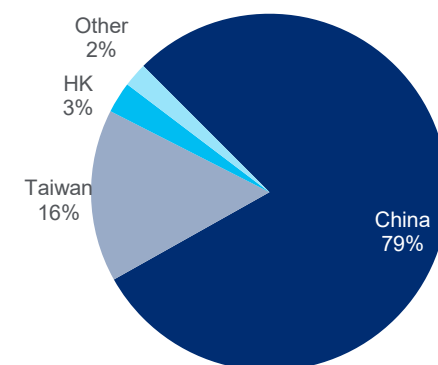
Global DR IPO Capital Raised by Country

2021

2022



\$22.0bn



\$5.1bn

Global DR Equity Offerings

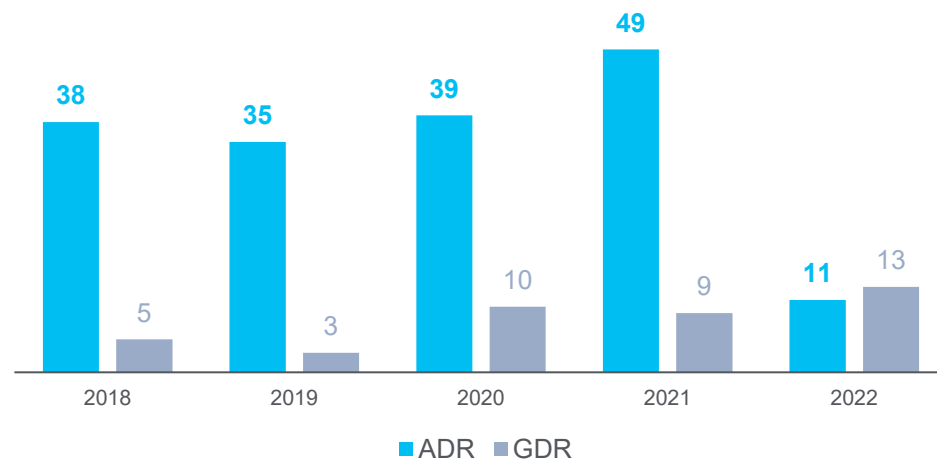
(in US\$bn)

	2021	2022
IPO	\$22.0	\$5.1
Follow-On ¹	\$13.4	\$3.2
Total	\$35.4	\$8.3

	2021	2022
ADR	\$32.2	\$2.3
GDR	\$3.2	\$6
Total	\$35.4	\$8.3

ADR vs GDR IPOs

(Number of completed IPOs)



Sources: Depository Data Interchange; Capital raising data as of 12/31/2022; totals may not sum due to rounding

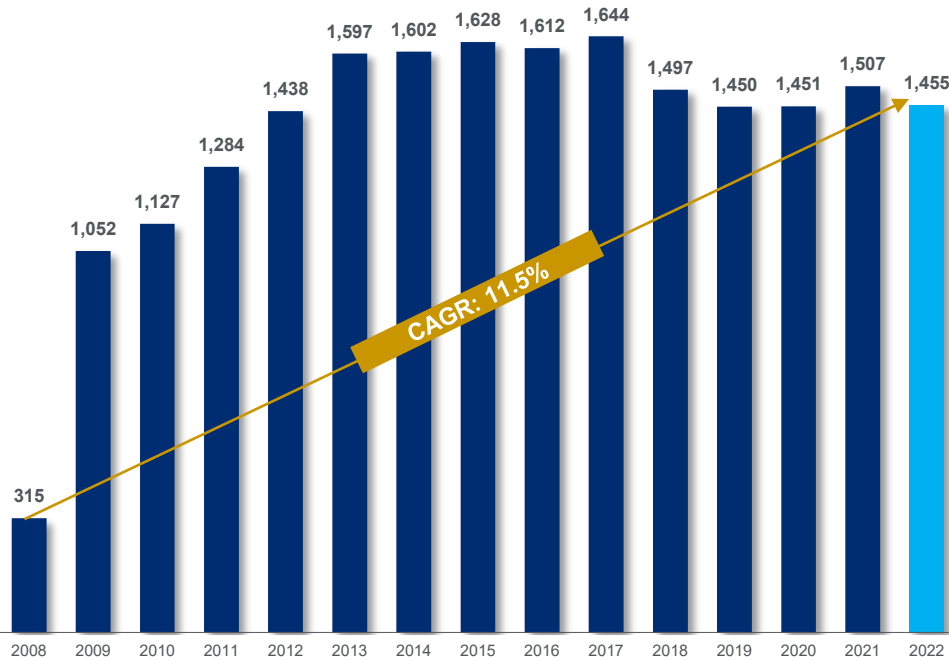
¹Defined as capital raising at the time of listing of additional DR securities including rights offerings, at-the-market offerings, block sales, and private placements.

2. DR Access Products

Global Un-sponsored ADR Market Trends

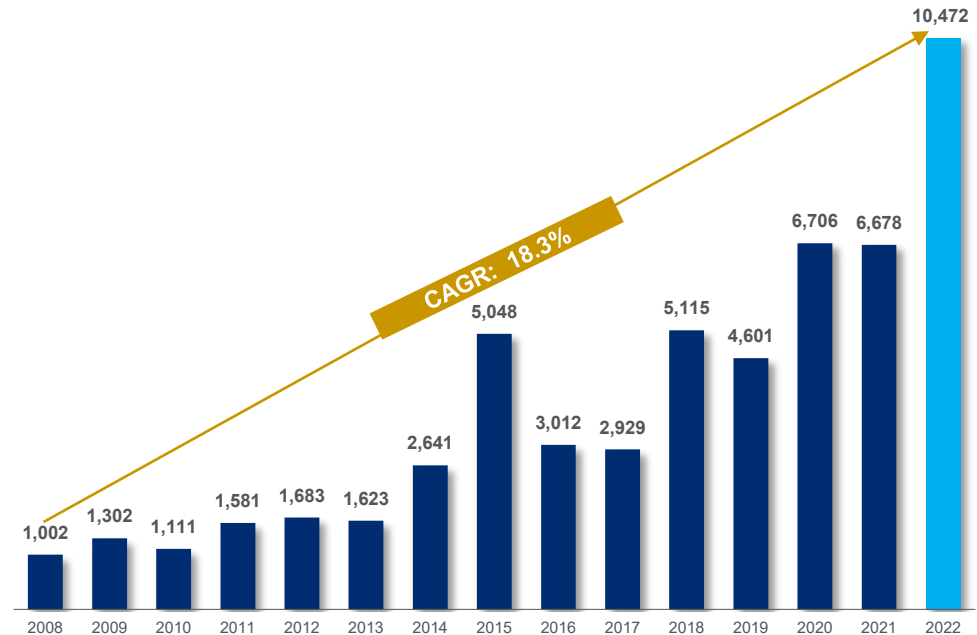
The number of un-sponsored programs available to investors continues to grow YoY globally as demand increases.

Number of Un-sponsored ADR Programs⁽¹⁾



Total un-sponsored ADR trading volume continues to see robust growth⁽¹⁾

(In mm)



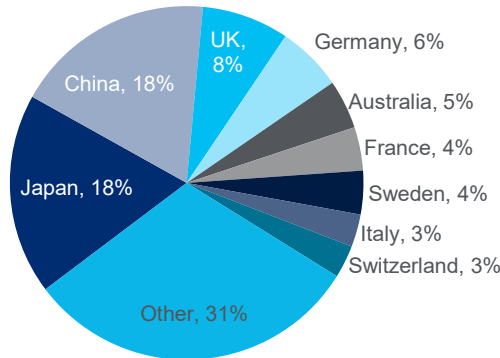
NOTE: Volumes are actuals for each year, do not account for stock splits or ratio changes. In 2015, Greece was an outlier and had a surge of trading volume (~BN ADRs) that was not repeated. In 2018, about 81% of the volume increase was attributed to China, Japan, France, Switzerland, UK and Germany. In 2022 European and Japanese issuers' trading volumes grew by more than 100% in comparison to the 2021 data.

Source: Depository Data Interchange and Bloomberg.
⁽¹⁾ADR trading volume and program count as of December 31, 2022

Un-sponsored ADR Programs – FY 2022

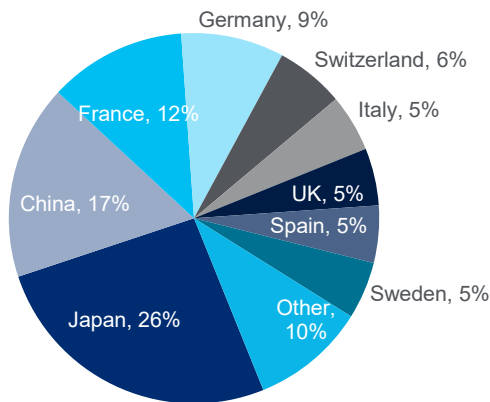
The number of un-sponsored ADR programs has grown from an estimated 300 programs in 2008 to ~1,500 programs in 2022.

Number of Un-sponsored ADR Programs



Un-sponsored Program Count: 1,455

Un-sponsored ADR Trading Volume



Total ADR Volume: 10.5bn ADRs Traded

Top Ten Most Liquid Programs

Issuer	Country	DR Volume (in DR mm)
Tencent Holdings Ltd	CHINA	1,063
Nintendo Co Ltd	JAPAN	379
Enel SpA	ITALY	357
Adyen NV	NETHERLANDS	256
Volkswagen AG	GERMANY	231
Vestas Wind Systems A/S	DENMARK	186
Alstom SA	FRANCE	176
Industria de Diseno Textil SA	SPAIN	160
Recruit Holdings Co Ltd	JAPAN	158
Glencore PLC	SWITZERLAND	149

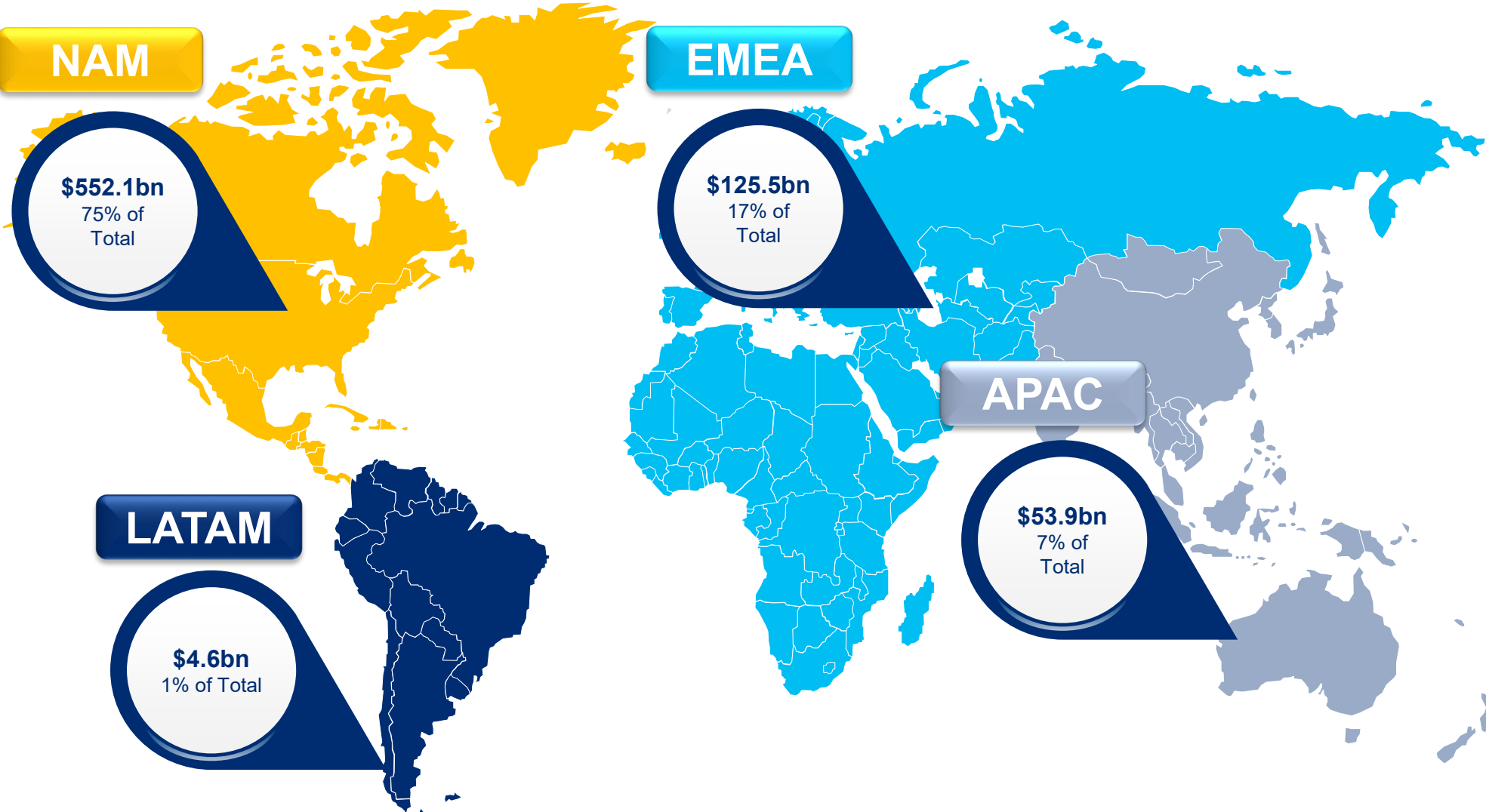
Top Ten Volume Movers

Issuer	Country	DR Volume (in DR mm)		
		2021	2022	Increase/(Decrease)
Nintendo Co Ltd	JAPAN	119	379	261
Enel SpA	ITALY	165	357	192
Adyen NV	NETHERLANDS	122	256	134
Tencent Holdings Ltd	CHINA	1,154	1,063	(91)
Dufry AG	SWITZERLAND	180	96	(84)
Recruit Holdings Co Ltd	JAPAN	77	158	81
Shin-Etsu Chemical Co Ltd	JAPAN	20	100	80
Industria de Diseno Textil SA	SPAIN	82	160	78
Alstom SA	FRANCE	104	176	73
Schneider Electric SE	FRANCE	35	106	71

3. International Investing Trends

Institutional DR Ownership – FY 2022

Total value of DRs held by institutional investors is \$736 billion



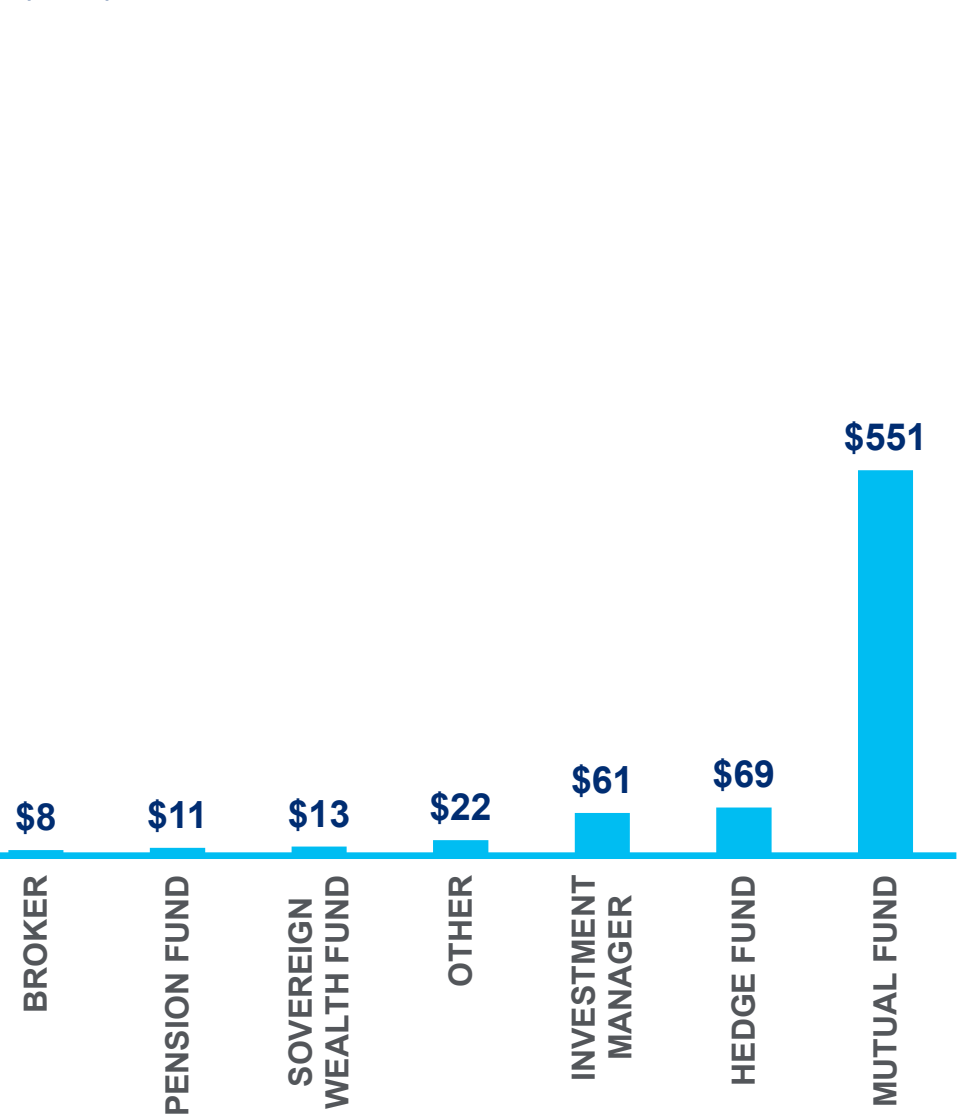
Source: S&P Global; Data as of 12/31/2022

Institutional DR Ownership – FY 2022 (cont.)

Top 10 DR Investors by Value of DRs Held (\$bn)

Investor	Investment Style	Value of DRs Held
Capital Group	Multi	\$42.8
BlackRock	Multi	\$26.9
Fidelity Management	Multi	\$26.1
Fisher Investments	GARP	\$25.5
T. Rowe Price	Multi	\$21.1
Dodge & Cox	Value	\$14.1
J.P. Morgan	Multi	\$12.7
Wellington Management	Value	\$12.1
Invesco Advisers	Multi	\$11.9
GQG Partners, LLC	Growth	\$10.3

Global DR Institutional Investor Types (\$bn)



Source: S&P Global; Data as of 12/31/2022

Contact Us

ISSUERS

Global / North America
Andrew Leamon
andrew.leamon@citi.com

Asia-Pacific
Valentina Chuang
valentina.chuang@citi.com

EMEA
Sean Ruby
sean.ruby@citi.com

LATAM
Michael Morcom
michael.morcom@citi.com

INTERMEDIARIES AND INVESTORS

North America
Jason Zoppel
jason.zoppel@citi.com

North America
Michael O'Leary
michael.oleary@citi.com

North America
Christian Glynn
christian.glynn@citi.com

EMEA
Michael Woods
michael.woods@citi.com

GDNS

Global
Justin Karol
justin.s.karol@citi.com

Global / APAC / LATAM
Georgina Novelli
georgina.novelli@citi.com

EMEA
Aliya Iskakova
aliya.iskakova@citi.com

Citi

Citi, the leading global bank, has approximately 200 million customer accounts and does business in more than 160 countries and jurisdictions. Citi provides consumers, corporations, governments and institutions with a broad range of financial products and services, including consumer banking and credit, corporate and investment banking, securities brokerage, transaction services, and wealth management.

About Citi's Depositary Receipt Services

Depositary Receipt Services is a leader in bringing quality issuers to the U.S. and other markets and promoting Depositary Receipts (DRs) as an effective capital markets tool. Citibank began offering ADRs in 1928 and today is widely recognized for providing non-U.S. companies with a gateway to the resources of Citi and the means to diversify shareholder bases and increase liquidity. For further information, visit citi.com/dr.

Past performance is not indicative of future results.

© 2023 Citibank, N.A. All rights reserved. Citi, Citi and Arc Design and other marks used herein are service marks of Citigroup Inc. or its affiliates, used and registered throughout the world.

The information provided in this communication is being provided solely for information purposes by Citi. At the time of publication, this information was believed to be accurate, but Citi makes no representation or warranty as to correctness of the information set forth above. The information provided in this communication does not constitute a recommendation, solicitation or offer by Citi for the purchase or sale of any securities, nor shall this material be construed in any way as investment or legal advice or a recommendation, reference or endorsement by Citi.

Certain GDR facilities have not been registered under the Securities Act of 1933 ("the Securities Act"). Neither these GDRs nor the underlying securities may be resold unless registered under the Securities Act or pursuant to an exemption from registration thereunder. These GDRs may only be issued or sold to certain investors upon the provision of appropriate certifications and representations. Do not pass on any information with respect to the GDRs to prospective investors unless you have established that they are eligible holders of such GDRs. Nothing contained herein shall be deemed to be an offer to sell, or a solicitation of an offer to buy, any such ADRs, GDRs or underlying securities.