XBMA ANNUAL REVIEW 2022

INTERNATIONAL INSTITUTE FOR THE STUDY OF CROSS-BORDER INVESTMENT AND M&A 跨国投资并购国际研究协会







CAMBRIDGE Judge Business School

GLOBAL M&A VOLUME *REVERSION TO THE MEAN*

Following record-breaking M&A activity in 2021, M&A over the 12 months ending December 31, 2022 was a reversion to the mean, with a significant slowdown in the second-half of the year. Global M&A volume in 2022 was US\$3.6 trillion, down from US\$6.2 trillion in 2021 and closer to the annual average of US\$4.3 trillion over the prior 10-year period.

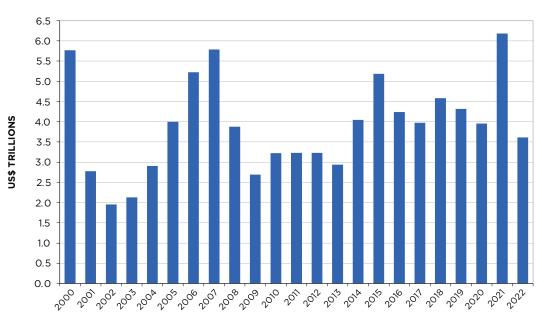
While global M&A volume in the first two quarters of 2022 (US\$2.2 trillion) was relatively consistent with pre-pandemic levels (US\$2.3 trillion in 2019 and US\$2.6 trillion in 2018), the second half of 2022 had the lowest global M&A volume since 2011 (US\$1.4 trillion). The previous year's surge in large (valued between US\$1-5 billion) and mega (valued more than US\$5 billion) deals, which drove the record-breaking deal volumes in 2021, reversed, as the total volume of large and mega deals declined from US\$3.5 trillion in 2021 to US\$2.1 trillion in 2022. Technology was the most active sector for M&A in 2022, with total deal volume in 2022 reaching just over US\$720 billion, followed by the Energy sector (US\$477 billion).

There were eight transactions valued in excess of \$20 billion in 2022, totaling US\$367 billion in value (an average deal size of US\$46 billion), compared to 16 such transactions in 2021, totaling US\$609 billion in value (an average deal size of US\$38 billion). Six out of the top 10 largest global deals this year involved both U.S.-based targets and acquirors.

The largest deals in 2022 included Microsoft's still-pending US\$69 billion acquisition of Activision Blizzard and Broadcom's US\$68 billion acquisition of VMWare. Elon Musk's headlinegrabbing US\$44 billion acquisition of Twitter, was announced in April and completed in October after months of litigation in which Musk sought a way out of the deal.



GLOBAL M&A VOLUME



GLOBAL M&A VOLUME: Q4 SNAPSHOT

2H 2022 M&A VOLUME DECLINES RELATIVE TO PRIOR SECOND HALVES

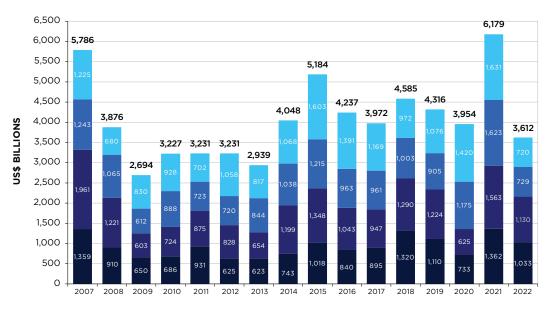
Global M&A volume was US\$720 billion in Q4 2022, the lowest fourth quarter volume since 2011 and the second lowest quarterly volume since Q3 2013, behind only Q2 2020, which included the onset of the COVID-19 pandemic (US\$625 billion). Global M&A volume in Q4 2022 decreased by 56% percent when compared to Q4 2021 (US\$1.6 trillion) and decreased 41% compared to the average volume of global M&A in fourth quarters over the 10-year period from 2012 to 2021 (US\$1.2 trillion).

The volume of M&A involving U.S. targets was US\$314 billion in Q4 2022, an increase of 23% from Q3 2022 (US\$255 billion), but a decrease of 46% from Q4 2021 (US\$587 billion) and a decrease of 38% from the average volume of U.S. M&A in fourth quarters over the 10-year period from 2012 to 2021 (US\$510 billion).

At US\$139 billion in deal volume, Healthcare was the leading sector for M&A activity in Q4 2022, representing approximately 19% of the quarter's total global M&A volume. Three of the five largest deals in the fourth quarter involved targets in the Healthcare industry. The largest deals of the quarter included Schemaquarantatre SpA's US\$52 billion voluntary public tender offer for all shares in Atlantia SpA, Amgen's US\$28 billion acquisition of Horizon Therapeutics and Kroger's US\$20 billion merger with Albertsons.

GLOBAL M&A VOLUME BY QUARTER

QUARTER 1



QUARTER 2

QUARTER 3

QUARTER 4

ALL FIGURES ARE INFLATION-ADJUSTED TO 2022 DOLLARS. DATA IN THIS REPORT DOES NOT INCLUDE SPIN-OFFS ANNOUNCED IN 2022 THAT HAVE NOT BEEN COMPLETED. FIGURES MAY NOT SUM DUE TO ROUNDING. SOURCE: THOMSON

CROSS-BORDER M&A VOLUME

CROSS-BORDER SHARE OF GLOBAL M&A VOLUME SHOWS CONTINUED ATTRACTIVENESS TO DEALMAKERS

Cross-border M&A continued to be attractive to dealmakers in 2022 despite the year's economic and geopolitical turbulence. US\$1.1 trillion, or 32%, of 2022's deals were cross-border – down from averages over the prior 10 years of US\$1.5 trillion and 35%.

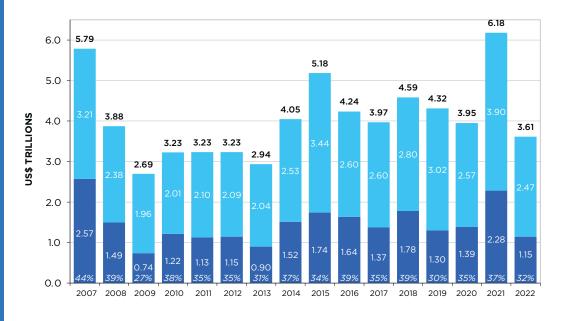
Cross-border M&A volume was US\$214 billion in Q4 2022, a decrease of 18% from Q3 2022 (US\$258 billion), and a decrease of 68% from Q4 2021 (US\$677 billion). 2022's US\$1.1 trillion of cross-border M&A volume was 50% percent lower than the total volume of cross-border M&A in 2021 (US\$2.3 trillion) and 24% lower than average cross-border M&A volume over the prior 10 years (US\$1.5 trillion).

Significant cross-border transactions in Q4 2022 included U.S.-based Amgen's US\$28 billion acquisition of Ireland-based Horizon Therapeutics, the US\$12 billion acquisition of Australia-based Origin Energy by an investor group led by Canada-based Brookfield Corporation, and Canada-based Ritchie Bros Auctioneers's US\$7 billion acquisition of U.S.-based IAA Inc.

CROSS-BORDER M&A TRANSACTIONS ARE DEFINED AS THOSE IN WHICH THE PARTIES ARE HEADQUARTERED OR BASED IN DIFFERENT COUNTRIES. ALL FIGURES ARE INFLATION-ADJUSTED TO 2022 DOLLARS. DATA IN THIS REPORT DOES NOT INCLUDE SPIN-OFFS ANNOUNCED IN 2022 THAT HAVE NOT BEEN COMPLETED. FIGURES MAY NOT SUM DUE TO ROUNDING. SOURCE: THOMSON



CROSS-BORDER M&A VOLUME



DOMESTIC M&A

LARGE AND MEGA M&A DEALS

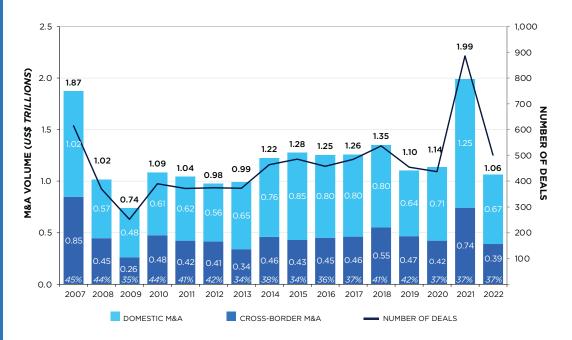
LARGE AND MEGA DEALS CONTINUE TO DRIVE GLOBAL M&A VOLUME DESPITE DECLINE

While global M&A volume in 2021 was primarily driven by record-breaking activity involving large deals and mega deals, in 2022, the volume of large and mega deals declined from their 2021 peaks. Despite these declines, large and mega deals continued to drive global M&A volume, accounting for 60% of 2022 global M&A volume, not far below a 64% share of global M&A volume in 2021.

Large deal M&A volume was US\$249 billion in Q4 2022, an increase of 19% from Q3 2022 (US\$208 billion), but a decrease of 53% from Q4 2021 (US\$531 billion), and was US\$1.1 trillion in 2022, a decrease of 47% from 2021 (US\$2.0 trillion).

Mega deal M&A volume was US\$169 billion in Q4 2022, an increase of 2% from Q3 2022 (US\$166 billion), and a decrease of approximately 63% from Q4 2021 (US\$456 billion), and was US\$1.1 trillion in 2022, a decline of 46% from 2021 (US\$2.0 trillion), and the lowest annual volume since 2013 (US\$634 billion).

VOLUME & NUMBER OF LARGE DEALS US\$1-5 BILLION



VOLUME & NUMBER OF MEGA DEALS > US\$5 BILLION



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M&A VOLUME BY TARGET REGION

DEAL VOLUME TRENDS REMAIN CONSISTENT

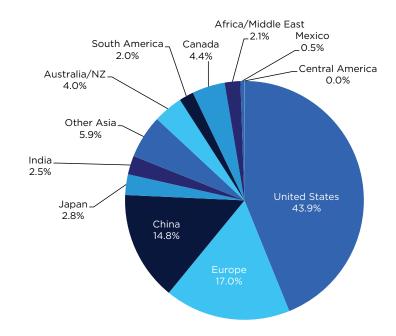
Acquisitions of U.S. companies represented the largest part of global M&A in 2022 (US\$1.5 trillion), constituting approximately 43% of global M&A volume, in line with the proportion in 2021 (44%) and the proportion of global M&A volume since 2013 (44%).

Acquisitions of European companies accounted for about US\$854 billion of M&A volume in 2022, representing 24% of global M&A volume in 2022 and consistent with the 24% proportion in 2021 and the 23% proportion of global M&A volume since 2013.

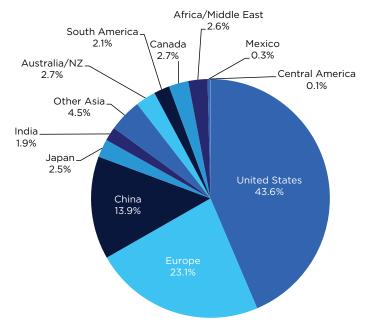
Together, acquisitions of U.S. and European companies accounted for a 67% share of global M&A volume in 2022, in line with their joint 67% share of global M&A volume since 2013.

Acquisitions of Chinese companies accounted for US\$403 billion in 2022, representing 12% of global M&A volume in 2022, slightly above the 10% proportion of global M&A volume in 2021 but below the 14% proportion since 2013.

M&A VOLUME BY TARGET REGION: Q4 2022



M&A VOLUME BY TARGET REGION: 2013-2022



REPRESENTS SHARE OF GLOBAL M&A VOLUME BASED ON TARGET'S HEADQUARTERS. ALL FIGURES ARE INFLATION-ADJUSTED TO 2022 DOLLARS. DATA IN THIS REPORT DOES NOT INCLUDE SPIN-OFFS ANNOUNCED IN 2022 THAT HAVE NOT BEEN COMPLETED. FIGURES MAY NOT SUM DUE TO ROUNDING. SOURCE: THOMSON

TRENDS IN M&A VOLUME BY TARGET REGION

DECLINES RELATIVE TO 2021 ACROSS ALL REGIONS

No region was immune to the decline in M&A activity in 2022; however, M&A volume decreased more drastically in Europe than it did in North America, Asia-Pacific (excluding Japan) and Japan.

M&A activity in North America reached US\$346 billion in Q4 2022, a decrease of 45% from Q4 2021 (US\$623 billion) and a decrease of 36% relative to the average volume over the previous 10 fourth quarters (US\$540 billion). North American M&A volume in 2022 was US\$1.6 trillion, a decrease of 42% from 2021 (US\$2.8 trillion), and 16% lower than the average annual North-American volume over the prior 10 years (US\$2.0 trillion).

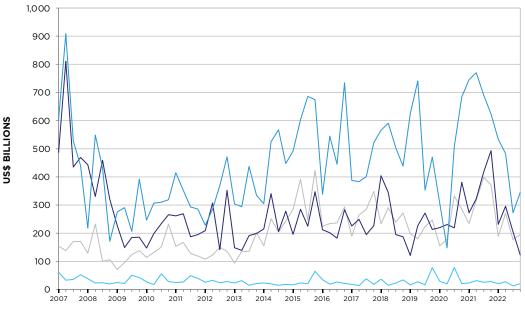
In Europe, M&A volume in Q4 2022 was US\$122 billion, a decrease of 75% from Q4 2021 (US\$494 billion) and 59% lower than its average annual volume over the previous 10 fourth quarters (US\$296 billion). European M&A volume in 2022 was US\$854 billion, a decline of 43% from 2021 (US\$1.5 trillion), and 15% lower than the average annual European volume over the prior 10 years (US\$1.0 trillion).

M&A volume in Asia-Pacific (excluding Japan) was US\$195 billion in Q4 2022, a decrease of 48% from Q4 2021 (US\$371 billion) and a decrease of 31% from the average volume over the previous 10 fourth quarters (US\$282 billion). Asia-Pacific (excluding Japan) M&A volume in 2022 was US\$831 billion, a decrease of 37% from 2021's annual volume (US\$1.3 trillion) and 13% lower than the average annual Asia-Pacific (excluding Japan) volume over the last 10 years (US\$951 billion).

In Japan, M&A volume was US\$20 billion in Q4 2022, a decrease of 28% from Q4 2021 (US\$28 billion) and a decrease of 39% from the average volume over the previous 10 fourth quarters (US\$33 billion). Japanese M&A volume in 2022 reached US\$80 billion, a decrease of 26% from 2021 (US\$107 billion) and 27% lower than the average annual Japanese volume over the last 10 years (US\$108 billion).



TRENDS IN M&A VOLUME BY TARGET REGION



FUROPE

ALL FIGURES ARE INFLATION-ADJUSTED TO 2022 DOLLARS. DATA IN THIS REPORT DOES NOT INCLUDE SPIN-OFFS ANNOUNCED IN 2022 THAT HAVE NOT BEEN COMPLETED. SOLIPCE: TUMISON

NORTH AMERICA

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CROSS-BORDER M&A IN EMERGING ECONOMIES

CROSS-BORDER M&A IN EMERGING ECONOMIES DECLINES SIGNIFICANTLY

After an upward swing in 2021, the volume of M&A involving acquirers and targets in emerging economies fell to its lowest annual volume since 2013.

M&A activity in emerging economies was US\$187 billion in Q4 2022, a decrease of 1% from Q3 2022 (US\$190 billion) and 52% from Q4 2021 (US\$388 billion), and 38% lower than the average fourth quarter volume of emerging economy M&A volume over the prior 10 years (US\$304 billion). At US\$842 billion, emerging economy M&A volume in 2022 fell short of that of previous years, decreasing approximately 33% when compared to 2021 (US\$1.3 trillion) and 15% when compared to the average emerging economy M&A volume over the prior 10 years (US\$994 billion).

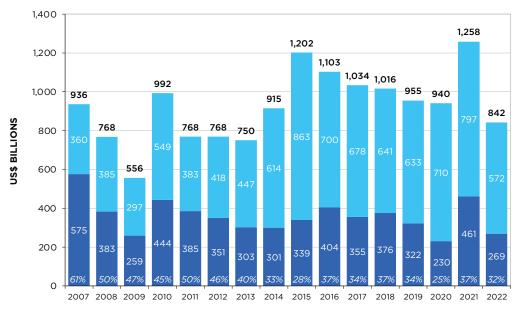
Cross-border transactions accounted for 32% of emerging economy M&A volume in 2022 (US\$269 billion), a slightly lower proportion than in 2021 (37%) and the average proportion over the prior 10 years (35%).

The largest cross-border emerging economy transactions in 2022 were the US\$5 billion acquisition of a stake in the UAE assets of DP World by Canada's Caisse de dépôt et placement du Québec, and the US\$5 billion acquisition of South Africabased Mediclinic International by an investor group comprised of Switzerland-based MSC Mediterranean Shipping Company and South Africa-based Remgro.

EMERGING MARKET TRANSACTIONS ARE DEFINED AS THOSE IN WHICH EITHER OR BOTH PARTIES ARE HEADQUARTERED OI BASED IN AN EMERGING ECONOMY. CROSS-BORDER M&A TRANSACTIONS ARE DEFINED AS THOSE IN WHICH THE PARTIES ARE HEADQUARTERED OR BASED IN DIFFERENT COUNTRIES. ALL FIGURES ARE INFLATION-ADJUSTED TO 2022 DOLLARS. DATA IN THIS REPORT DOES NOT INCLUDE SPIN-OFFS ANNOUNCED IN 2022 THAT HAVE NOT BEEN COMPLETED. FIGURES MAY NOT SUM DUE TO ROUNDING. DEVELOPED AND EMERGING ECONOMIES ARE DEFINED BY IMF CLASSIFICATION. SOURCE: THOMSON



EMERGING ECONOMY M&A VOLUME



DOMESTIC M&A

DISTRESSED DEALS

DISTRESSED M&A VOLUME CONTINUES TO STALL AT NEAR-RECORD LOWS

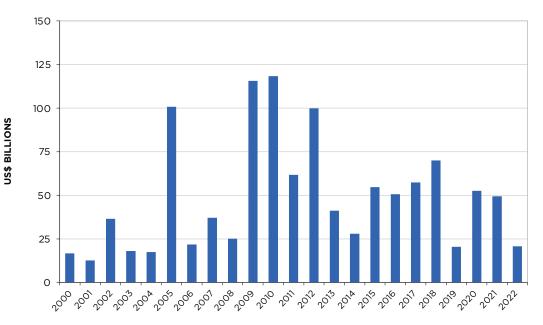
While the Q1 2022 volume of distressed M&A (US\$13 billion) had increased compared to Q3 2021 and Q4 2021, the volume in the last three quarters of 2022 declined to near-record lows. Q3 2022 distressed M&A volume fell to US\$1 billion for the quarter, and while the volume of distressed M&A in Q4 2022 increased relative to the prior quarter to US\$4 billion, the average volume of distressed M&A for the last three quarters of 2022 was US\$3 billion, an 80% decrease compared to the average quarterly volume of the prior 10 years (US\$13 billion). On the year, distressed M&A volume was US\$21 billion, a 58% decline from the volume of 2021 (US\$49 billion) and a 60% decline from the average prior 10 years (US\$52 billion).

Notable distressed deals this year included the BAM Trading Services (d/b/a Binance.US) \$1 billion acquisition of bankrupt Voyager Digital and the \$699 million acquisition of a majority stake in South Korea's Ssangyong Motor Co by an investor group led by KG Group.

ALL FIGURES ARE INFLATION-ADJUSTED TO 2022 DOLLARS. DISTRESSED TRANSACTIONS INCLUDE THOSE IN WHICH HE TARGET ENTITY IS UNDERGOING RESTRUCTURING OR HAS REDUCED THE DEBT ON INTS BALANCE SHEET THROUGH A BANKRUPTCY SALE, A TENDER OFFER OR AN EXCHANGE OFFER FOR EXISTING DEBT SECURITIES, OR A LOAN MODIFICATION. AN ENTITY IS CONSIDERED TO BE UNDERGOING RESTRUCTURING IF IT HAS PUBLICLY CONFIRMED RETENTION OF A RESTRUCTURING ADVISOR, PLANS TO RESTRUCTURE ITS DEBT. HAS FILED FOR BANKRUPTCY OR HAS DEFAULTED ON ITS DEBT. HAS RECEIVED AN S&P OR MOODY'S RATING OF CCC+/CAA1 OR BELOW BEFORE OR IN REACTION TO THE ANNOUNCEMENT OF A TRANSACTION, OR ITS CREDIT FACILITY OR DEBT SECURITIES CARRY A YIELD OF 1,000 BPS ABOVE THAT OF US. TREASURIES.



DISTRESSED M&A VOLUME

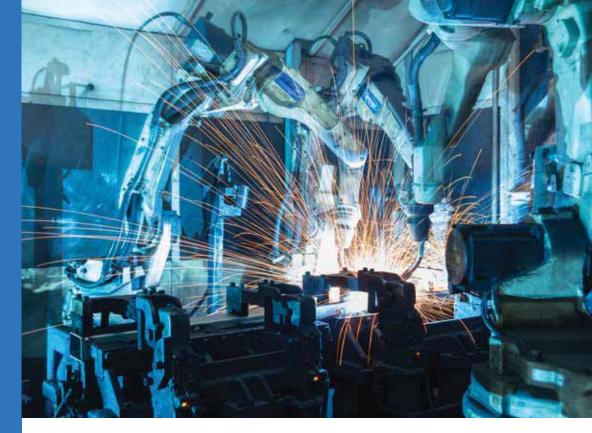


GLOBAL M&A BY SECTOR: LAST 12 MONTHS

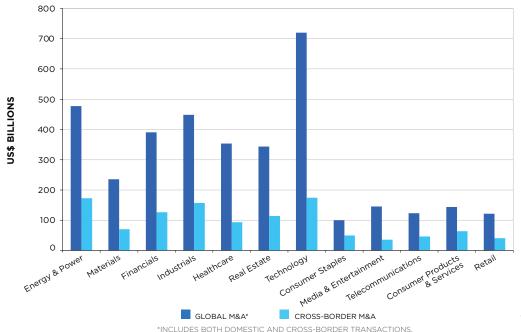
TECHNOLOGY REMAINS ON TOP

Since 2020, Technology has been the top sector for M&A. In 2022, Energy and Industrials were the second and third largest sectors. Over the last 12 months, these three sectors represented approximately US\$720 billion, US\$477 billion and US\$449 billion of global M&A volume respectively, and in the aggregate accounted for 46% of global M&A volume (US\$1.6 trillion). This year, the largest deals in these respective sectors included Microsoft's \$69 billion acquisition of Activision Blizzard, the US\$12 billion acquisition of a 60% ownership interest in UK-based National Grid Plc's gas transmission and metering business by an investor group comprised of Castik Capital Partners and Macquarie Group, and the US\$52 billion buyout of Italybased Atlantia SpA by Schemaquarantatre SpA.

The sectors with the highest proportions of crossborder M&A volume in 2022 were Consumer Staples and Consumer Products and Services, with 50% and 44% of their total M&A volume, respectively, attributable to crossborder transactions.



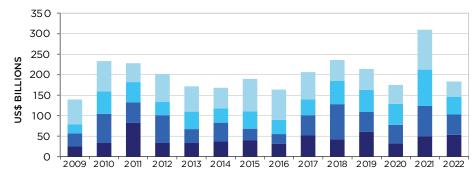
M&A VOLUME BY SECTOR - LAST 12 MONTHS



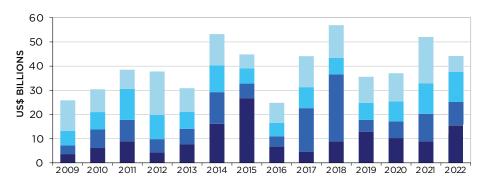
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AGGREGATE VALUE OF DEALS

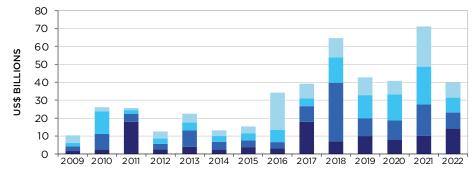
FROM DEVELOPED INTO EMERGING ECONOMIES



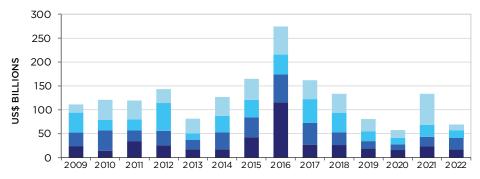
INBOUND CHINESE DEALS



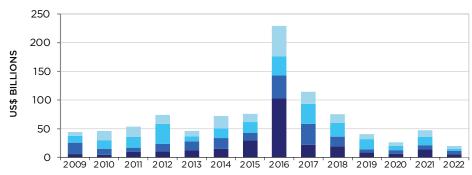
INBOUND INDIAN DEALS



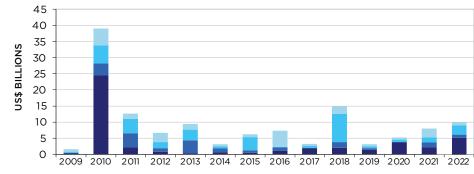
FROM EMERGING INTO DEVELOPED ECONOMIES



OUTBOUND CHINESE DEALS



OUTBOUND INDIAN DEALS



QUARTER 1 QUARTER 2 QUARTER 3 QUARTER 4

TOP 10 GLOBAL DEALS ANNOUNCED IN Q4 2022

TOP 10 GLOBAL DEALS ANNOUNCED IN 2022

ACQUIRER*	TARGET*	TARGET INDUSTRY	DEAL VALUE**	ACQUIRER*	TARGET*	TARGET INDUSTRY	DEAL VALUE**
Schemaquarantatre SpA Italy	Atlantia SpA	Industrials	52,057	Microsoft Corp United States	Activision Blizzard Inc United States	Technology	68,676
Amgen Inc United States	Horizon Therapeutics PLC	Healthcare	27,569	Broadcom Inc United States	VMware Inc United States	Technology	68,319
The Kroger Co United States	Albertsons Companies Inc United States	Retail	19,543	HDFC Bank Ltd	Housing Development Finance Corp Ltd	Financials	60,390
Johnson & Johnson United States	Abiomed Inc United States	Healthcare	18,362	Schemaquarantatre SpA	Atlantia SpA Italy	Industrials	52,057
Novozymes AS Denmark	Chr Hansen Holding AS Denmark	Healthcare	12,443	X Holdings I Inc United States	Twitter Inc United States	Technology	44,000
Investor Group led by Brookfield Corp Canada	Origin Energy Ltd Australia	Energy and Power	11,792	Amgen Inc United States	Horizon Therapeutics PLC	Healthcare	27,569
Royal Bank of Canada Canada	HSBC Bank Canada Canada	Financials	10,002	Prologis Inc United States	Duke Realty Corp United States	Real Estate	25,424
Walgreens Boots Alliance Inc United States	Summit Health United States	Healthcare	8,900	Koninklijke DSM NV Netherlands	Firmenich International SA Switzerland	Consumer Products and Services	20,720
Thoma Bravo LP and Abu Dhabi Investment Authority - United Arab Emirates United States, United Arab Emirates	Coupa Software Inc United States	Technology	8,002	The Kroger Co United States	Albertsons Companies Inc United States	Retail	19,543
Investor Group comprised of Brookfield Corp and Cameo Corp Canada	Westinghouse Electric Co LLC United States	Industrials	7,900	Adobe Inc United States	Figma Inc United States	Technology	18,752

TOP 10 DEALS FROM DEVELOPED INTO EMERGING ECONOMIES* ANNOUNCED IN Q4 2022

TOP 10 DEALS FROM DEVELOPED INTO EMERGING ECONOMIES* ANNOUNCED IN 2022

ACQUIRER**	TARGET**	TARGET INDUSTRY	DEAL VALUE***	ACQUIRER**	TARGET**	TARGET INDUSTRY	DEAL VALUE***
Duchess Avenue Pte Ltd	PT Golden Energy Mines Tbk	Materials	3,710	Caisse de dépôt et placement du Québec - Province of Quebec Canada	DP World Ltd - UAE Assets United Arab Emirates	Industrials	5,000
Porsche Automobil Holding SE Germany	Beijing Horizon Robotics Technology Co Ltd China	Technology	2,300	Investor Group comprised of Remgro Ltd and MSC Mediterranean Shipping Company Holding SA South Africa, Switzerland	Mediclinic International PLC South Africa	Healthcare	4,905
Macquarie Group Ltd Australia	ALAFCO Aviation Lease and Finance Co KSCP - Aircraft Kuwait	Industrials	2,215	Duchess Avenue Pte Ltd Singapore	PT Golden Energy Mines Tbk	Materials	3,710
Jupiter Wellness Acquisition Corp United States	Chijet Motor Co Inc	Industrials	1,600	United Overseas Bank Ltd Singapore	Citigroup Inc - South East Asia Consumer Banking Business Indonesia, Malaysia, Thailand, Vietnam	Financials	3,653
Savannah Energy PLC United Kingdom	PETRONAS Carigali Nile Ltd	Energy and Power	1,250	COVA Acquisition Corp United States	ECARX Holdings Inc	Technology	3,400
Darling Ingredients Inc United States	Gelnex Indústria E Comércio Ltda Brazil	Consumer Staples	1,200	Porsche Automobil Holding SE Germany	Beijing Horizon Robotics Technology Co Ltd China	Technology	2,300
Hapag-Lloyd AG Germany	SAAM Logistics SA	Industrials	1,000	Macquarie Group Ltd	ALAFCO Aviation Lease and Finance Co KSCP - Aircraft Kuwait	Industrials	2,215
Caisse de dépôt et placement du Québec - Province of Quebec Canada	National Highways Authority of India - Eastern Peripheral Expressway India	Industrials	777	ArcelorMittal SA Luxembourg	Companhia Siderúrgica do Pecém Brazil	Materials	2,200
Advent International Corp	Suven Pharmaceuticals Ltd	Healthcare	763	Investor Group comprised of Nippon Steel Corp and ArcelorMittal SA Japan, Luxembourg	Essar Global Holdings Ltd - Ports Business India	Industrials	2,050
Rose Hill Acquisition Corp	Inversiones e Inmobilaria GHC Ltda Chile	Consumer Staples	673	WestRock Co United States	Gondi S de RL de CV	Materials	1,763

*DEVELOPED/EMERGING ECONOMIES ARE DEFINED BY IMF CLASSIFICATION, AVAILABLE AT HTTP://WWW.IMF.ORG/EXTERNAL/PUBS/FT/WEO/2010/01/WEODATA/GROUPS.HTM. **COMPANY NATIONALITY DETERMINED BY LOCATION OF HEADQUARTERS OR BY LOCATION OF TARGET ASSETS. ***US\$MILLIONS

TOP 10 DEALS FROM EMERGING INTO DEVELOPED ECONOMIES* ANNOUNCED IN Q4 2022

TOP 10 DEALS FROM EMERGING INTO DEVELOPED ECONOMIES* ANNOUNCED IN 2022

ACQUIRER**	TARGET**	TARGET INDUSTRY	DEAL VALUE***	ACQUIRER**	TARGET**	TARGET INDUSTRY	DEAL VALUE***
Qatar Investment Authority - State of Qatar Qatar	RWE AG Germany	Energy and Power	2,379	Emirates Telecommunications Group Co PJSC - United Arab Emirates United Arab Emirates	Vodafone Group PLC United Kingdom	Telecomm	4,400
Hainan State Farms Investment Group Co Ltd China	Halcyon Agri Corp Ltd	Industrials	1,607	Biocon Ltd India	Viatris Inc - Biosimilars Business United States	Healthcare	3,335
Abu Dhabi Developmental Holding Co PJSC - United Arab Emirates United Arab Emirates	Noatum Port Holdings SLU Spain	Industrials	684	Saudi Arabian Oil Co - State of Saudi Arabia Saudi Arabia	Valvoline Inc - Global Products Business United States	Industrials	2,650
PHP Ventures Acquisition Corp Malaysia	Modulex Modular Buildings PLC United Kingdom	Industrials	600	Petroliam Nasional Bhd Malaysia	Perstorp Holding AB	Materials	2,540
Investor Group comprised of Minerva SA and Saudi Agricultural & Livestock Investment Co - State of Saudi Arabia Brazil and Saudi Arabia	Australian Lamb Co Pty Ltd	Consumer Staples	251	Fomento Economico Mexicano SAB de CV Mexico	Valora Holding AG Switzerland	Retail	2,466
Full-Life Technologies	Focus-X Therapeutics Inc United States	Healthcare	245	Qatar Investment Authority - State of Qatar _{Qatar}	RWE AG Germany	Energy and Power	2,379
Motus Holdings Ltd South Africa	Motor Parts Direct Ltd	Retail	203	Wuxi Xichan Microchip Semiconductor Co Ltd China	Ampleon Netherlands BV Netherlands	Energy and Power	1,945
Investor Group comprised of The Public Investment Fund of the Kingdom of Saudi Arabia and GLy Capital Management Ltd Saudi Arabia, Hong Kong	Volocopter GmbH Germany	Industrials	182	Hainan State Farms Investment Group Co Ltd China	Halcyon Agri Corp Ltd	Industrials	1,607
C* Yildirim Holding AS Turkey	Elementis Chromium Inc United States	Materials	170	Investor Group comprised of Mansour Group Ltd and Africa Finance Corp Egypt, Nigeria	Lekela Power BV Netherlands	Energy and Power	1,500
Alpha Dhabi Holding PJSC United Arab Emirates	Gordon Tech LLC United States	Energy and Power	164	Agility Public Warehousing Co KCSP Kuwait	John Menzies PLC United Kingdom	Industrials	1,261

*DEVELOPED/EMERGING ECONOMIES ARE DEFINED BY IMF CLASSIFICATION, AVAILABLE AT HTTP://WWW.IMF.ORG/EXTERNAL/PUBS/FT/WEO/2010/01/WEODATA/GROUPS.HTM. **COMPANY NATIONALITY DETERMINED BY LOCATION OF HEADQUARTERS OR BY LOCATION OF TARGET ASSETS. ***US\$MILLIONS

TOP 10 NORTH AMERICAN DEALS ANNOUNCED IN Q4 2022

TOP 10 NORTH AMERICAN DEALS ANNOUNCED IN 2022

ACQUIRER*	TARGET*	TARGET INDUSTRY	DEAL VALUE**	ACQUIRER*	TARGET*	TARGET INDUSTRY	DEAL VALUE**
The Kroger Co Singapore, United States	Albertsons Companies Inc United States	Retail	19,543	Microsoft Corp United States	Activision Blizzard Inc	Technology	68,676
Johnson & Johnson United States	Abiomed Inc United States	Healthcare	18,362	Broadcom Inc United States	VMware Inc United States	Technology	68,319
Royal Bank of Canada Canada	HSBC Bank Canada Canada	Financials	10,002	X Holdings I Inc United States	Twitter Inc United States	Technology	44,000
Walgreens Boots Alliance Inc United States	Summit Health United States	Healthcare	8,900	Prologis Inc United States	Duke Realty Corp United States	Real Estate	25,424
Thoma Bravo LP and Abu Dhabi Investment Authority - United Arab Emirates United States, United Arab Emirates	Coupa Software Inc United States	Technology	8,002	The Kroger Co United States	Albertsons Companies Inc United States	Retail	19,543
Investor group comprised o Brookfield Corp and Camec Corp Canada	f Westinghouse Electric Co LLC United States	Industrials	7,900	Adobe Inc United States	Figma Inc United States	Technology	18,752
Ritchie Bros Auctioneers Inc	IAA Inc United States	Retail	7,264	Johnson & Johnson United States	Abiomed Inc United States	Healthcare	18,362
RWE AG Germany	Con Edison Clean Energy Businesses Inc United States	Energy and Power	6,800	Elliott Capital Advisors LP and Vista Equity Partners Management LLC United States	Citrix Systems Inc United States	Technology	16,432
Advent International Corp United States	Maxar Technologies Inc United States	Telecomm	6,340	Intercontinental Exchange Inc United States	Black Knight Inc United States	Technology	15,960
Blackstone Inc United States	Emerson Electric Co - Climate Technologies Business United States	Technology	6,300	Elliott Capital Advisors LP and Brookfield Corp United States, Canada	Nielsen Holdings PLC United States	Media and Entertainment	15,312

TOP 10 ASIA-PACIFIC DEALS ANNOUNCED IN Q4 2022

TOP 10 ASIA-PACIFIC DEALS ANNOUNCED IN 2022

ACQUIRER*	TARGET*	TARGET INDUSTRY	DEAL VALUE**	ACQUIRER*	TARGET*	TARGET INDUSTRY	DEAL VALUE**
Investor Group led by Brookfield Corp Canada	Origin Energy Ltd Australia	Energy and Power	11,792	O HDFC Bank Ltd	Housing Development Finance Corp Ltd	Financials	60,390
BHP Group Ltd Australia	OZ Minerals Ltd Australia	Materials	6,400	Investor Group led by Brookfield Corp Canada	Origin Energy Ltd Australia	Energy and Power	11,792
Duchess Avenue Pte Ltd Singapore	PT Golden Energy Mines Tbl Indonesia	< Materials	3,710	EQT AB Sweden	Baring Private Equity Asia Ltd Hong Kong	Financials	7,587
Porsche Automobil Holding SE Germany	Beijing Horizon Robotics Technology Co Ltd China	Technology	2,300	BHP Group Ltd Australia	OZ Minerals Ltd Australia	Materials	6,400
Jiangsu Shagang Group Co Ltd China	Nanjing Iron & Steel United	Materials	2,222	O Adani Enterprises Ltd	Ambuja Cements Ltd	Materials	6,228
EIG Global Energy Partners	Tokyo Gas Co Ltd - Four Australian Integrated LNG Projects Australia	Energy and Power	2,150	KKR & Co Inc United States	Hitachi Transport System Ltd	Industrials	5,985
Lotte Chemical Corp	ILJIN Materials Co Ltd South Korea	Materials	1,891	China Liberal Education Holdings Ltd China	Aiways Holdings Ltd	Industrials	5,500
MBK Partners South Korea	Medit Corp South Korea	Healthcare	1,883	Investor Group led by Macquarie Group Ltd Australia	Roads Corp - Registration & Licensing & Custom Plates Businesses Australia	Government and Agencies	5,452
Shandong Gold Mining Co Ltd China	Yintai Gold Co Ltd	Materials	1,869	Investor Group led by Alibaba Group Holding Ltd China	Ruili Integrated Circuit Co	Technology	5,211
China Resources Co Ltd	Huayujiang (Wuhan) Real Estate Development Co Ltd China	Real Estate	1,782	MaxLinear Inc United States	Silicon Motion Technology Corp Hong Kong	Technology	3,970

TOP 10 EUROPEAN DEALS ANNOUNCED IN Q4 2022

TOP 10 EUROPEAN DEALS ANNOUNCED IN 2022

ACQUIRER*	TARGET*	TARGET INDUSTRY	DEAL VALUE**	ACQUIRER*	TARGET*	TARGET INDUSTRY	DEAL VALUE**
Schemaquarantatre SpA	Atlantia SpA Italy	Industrials	52,057	Schemaquarantatre SpA	Atlantia SpA	Industrials	52,057
Amgen Inc United States	Horizon Therapeutics PLC	Healthcare	27,569	Amgen Inc United States	Horizon Therapeutics PLC Ireland	Healthcare	27,569
Novozymes AS Denmark	Chr Hansen Holding AS Denmark	Healthcare	12,443	Koninklijke DSM NV Netherlands	Firmenich International SA Switzerland	Consumer Products and Services	20,720
Investor Group consisting of Global Infrastructure Partners Inc and KKR & Co Inc United States	Vantage Towers AG Germany	Telecomm	7,000	Philip Morris International Inc United States	Swedish Match AB	Consumer Staples	15,943
ASR Nederland NV Netherlands	Aegon Nederland NV Netherlands	Financials	4,981	Investor Group comprised of Castik Capital Partners GmbH and Macquarie Group Ltd Germany, Australia	National Grid PLC - Gas Transmission & Metering Business United Kingdom	Energy and Power	12,660
Chart Industries Inc United States	Howden Group Ltd	Industrials	4,475	Novozymes AS Denmark	Chr Hansen Holding AS Denmark	Healthcare	12,443
Veritas Capital Fund Management LLC United States	Wood Mackenzie Ltd United Kingdom	Consumer Products and Services	3,300	Investor Group comprised of Brookfield Asset Management Inc and Digital Bridge Group Inc Canada, United States	Deutsche Telekom AG - Tower Assets Germany	Telecomm	10,764
Thermo Fisher Scientific Inc	The Binding Site Group Ltd	Healthcare	2,612	Polski Koncern Naftowy ORLEN Spólka Akcyjna Poland	Polskie Górnictwo Naftowe i Gazownictwo SA Poland	Energy and Power	9,295
Kismet Capital Group LLC Russia	Avito Group Russia	Technology	2,397	Masmovil Ibercom SA Spain	Orange Espagne SAU Spain	Telecomm	7,964
Qatar Investment Authority State of Qatar Qatar	- RWE AG Germany	Energy and Power	2,379	Investor Group consisting of Global Infrastructure Partners Inc and KKR & Co Inc United States	Vantage Towers AG Germany	Telecomm	7,000

TOP 10 INBOUND CHINESE DEALS ANNOUNCED IN Q4 2022

TOP 10 INBOUND CHINESE DEALS ANNOUNCED IN 2022

ACQUIRER*	TARGET*	TARGET INDUSTRY	DEAL VALUE**	ACQUIRER*	TARGET*	TARGET INDUSTRY	DEAL VALUE**
Porsche Automobil Holding SE Germany	Beijing Horizon Robotics Technology Co Ltd China	Technology	2,300	EQT AB Sweden	Baring Private Equity Asia Ltd Hong Kong	Financials	7,587
Jupiter Wellness Acquisition Corp United States	Chijet Motor Co Inc	Industrials	1,600	COVA Acquisition Corp United States	ECARX Holdings Inc	Technology	3,400
John Swire & Sons Ltd United Kingdom	Sino-Ocean Taikoo Li Chengdu China	Real Estate	629	Sino Suisse Capital Pte Ltd	Aim Clever Holdings Ltd	Real Estate	2,645
Catalyst Biosciences Inc United States	Beijing Continent Pharmaceutical Co Ltd China	Healthcare	555	Porsche Automobil Holding SE Germany	Beijing Horizon Robotics Technology Co Ltd China	Technology	2,300
Boston Scientific Corp United States	Acotec Scientific Holdings Ltd China	Healthcare	523	Mountain Crest Acquisition Corp IV United States	Ch-AUTO Technology Co Ltd	Industrials	1,706
Hainan Manaslu Acquisition Corp Cayman Islands	Able View Inc Hong Kong	Media and Entertainment	400	Jupiter Wellness Acquisition Corp United States	Chijet Motor Co Inc	Industrials	1,600
John Swire & Sons Ltd United Kingdom	Chengdu Yingang Real Estate Co Ltd China	Real Estate	157	INEOS Ltd Isle of Man	Shanghai SECCO Petrochemical Co Ltd China	Energy and Power	1,557
Sembcorp Industries Ltd Singapore	Hunan Xingling New Energy Co Ltd China	Energy and Power	149	Power Corp of Canada Canada	China Asset Management Co Ltd China	Financials	905
Brunei Investment Agency - Brunei Darussalam Brunei	EVYD HK Technology Ltd	Financials	55	Investor Group led by Recco Control Technology Pte Ltd Singapore	Hollysys Automation Technologies Ltd China	Energy and Power	760
Innosophi Co Ltd Western Samoa	Chance Achieve Ltd Hong Kong	Industrials	52	Investor Group comprised of BNP Paribas SA and Bank of Nanjing Co Ltd France, China		Financials	638

TOP 10 OUTBOUND CHINESE DEALS ANNOUNCED IN Q4 2022

TOP 10 OUTBOUND CHINESE DEALS ANNOUNCED IN 2022

ACQUIRER*	TARGET*	TARGET INDUSTRY	DEAL VALUE**	ACQUIRER*	TARGET*	TARGET INDUSTRY	DEAL VALUE**
Hainan State Farms Investment Group Co Ltd China	Central Halcyon Agri Corp Ltd	Industrials	1,607	Wuxi Xichan Microchip Semiconductor Co Ltd China	Ampleon Netherlands BV Netherlands	Energy and Power	1,945
HH&L Acquisition Co Hong Kong	DiaCarta Inc United States	Healthcare	460	Hainan State Farms Investment Group Co Ltd China	Halcyon Agri Corp Ltd	Industrials	1,607
Zijin Mining Group Co Ltd	Rosebel Gold Mines NV	Materials	360	Ganfeng Lithium Co Ltd	Lithea Inc Argentina	Materials	962
Full-Life Technologies	Focus-X Therapeutics Inc United States	Healthcare	245	Baring Private Equity Asia Ltd Hong Kong	O IGT Solutions Pvt Ltd	Technology	800
Sichuan Development Holding Co Ltd China	Colluli Mining Share Co	Materials	166	Lenovo Group Ltd Hong Kong	Digital Era Enterprises Ltd and PCCW Network Services Ltd India, British Virgin Islands	Technology	614
Hainan Mining Co Ltd	Roc Oil Co Ltd Australia	Energy and Power	163	PAG Hong Kong	Huis Ten Bosch Co Ltd	Media and Entertainment	481
Sichuan Yahua Industrial Group Co Ltd China	SSC Afrique Holdings Ltd	Materials	145	HH&L Acquisition Co	DiaCarta Inc United States	Healthcare	460
Cathay Industries	Venator Materials PLC - Iron Oxide Business United Kingdom	Materials	140	Link Real Estate Investment Trust Hong Kong	Investa Gateway Offices Australia	Real Estate	428
Hillhouse Capital Group	George Clinical Pty Ltd	Healthcare	135	Baring Private Equity Asia Ltd Hong Kong	Hilton Hotel - Sydney Australia	Media and Entertainment	368
Shanghai Fosun Pharmaceutical (Group) Co Ltd China	Cenexi SAS France	Healthcare	124	Kingboard Holdings Ltd Hong Kong	Two London Wall Place Ltd - 2 London Wall Place Building United Kingdom	Real Estate	360

TOP 10 INBOUND INDIAN DEALS ANNOUNCED IN Q4 2022

TOP 10 INBOUND INDIAN DEALS ANNOUNCED IN 2022

ACQUIRER*	TARGET*	TARGET INDUSTRY	DEAL VALUE**	ACQUIRER*	TARGET*	TARGET INDUSTRY	DEAL VALUE**
Caisse de dépôt et placement du Québec - Province of Quebec Canada	O National Highways Authority of India - Eastern Peripheral Expressway India	Industrials	777	Investor Group comprised of Nippon Steel Corp and ArcelorMittal SA Japan, Luxembourg	Essar Global Holdings Ltd - Ports Business India	Industrials	2,050
Advent International Corp United States	O Suven Pharmaceuticals Ltd	Healthcare	763	Investor Group led by Gulf Investment Corp Kuwait	Sembcorp Energy India Ltd	Energy and Power	1,472
TPG Capital LP United States	Poonawalla Housing Finance Ltd India	Financials	473	Investor Group comprised of The Carlyle Group Inc and Advent International Corp United States	9 Yes Bank Ltd India	Financials	1,118
KKR & Co Inc United States	Serentica Renewables India Pvt Ltd India	Energy and Power	400	Investor Group comprised of Canada Pension Plan Investment Board - State of Canada, Ontario Teachers Pension Plan Board - Province of Ontario and others Canada, United States	VerSe Innovation Pvt Ltd	Technology	805
Partners Group Holding AG Switzerland	O SunSure Energy Pvt Ltd	Technology	400	Baring Private Equity Asia Ltd Hong Kong	O IGT Solutions Pvt Ltd	Technology	800
Sembcorp Industries Ltd Singapore	Vector Green Energy Pvt Ltd	Energy and Power	345	Caisse de dépôt et placement du Québec - Province of Quebec Canada	National Highways Authority of India - Eastern Peripheral Expressway India	Industrials	777
Innovative International Acquisition Corp United States	O ZoomCar Inc India	Consumer Products and Services	336	Advent International Corp United States	Suven Pharmaceuticals Ltd	Healthcare	763
KKR & Co Inc United States	O Advanta Enterprises Ltd	Consumer Staples	300	Investor Group led by Invesco Ltd United States	Bundl Technologies Pvt Ltd	Retail	700
Singapore Airlines Ltd - State of Singapore Singapore	O Air India Ltd India	Industrials	252	Alphabet Inc United States	Bharti Airtel Ltd India	Telecomm	695
Investor Group led by Qatar Investment Authority - State of Qatar _{Qatar}	C Think & Learn Pvt Ltd	Consumer Products and Services	250	Investor Group led by BlackRock Inc and Mubadala Investment Co PJSC - United Arab Emirates United States, United Arab Emirates	Contract Tata Power Renewable Energy Ltd India	Financials	526

TOP 10 OUTBOUND INDIAN DEALS ANNOUNCED IN Q4 2022

TOP 10 OUTBOUND INDIAN DEALS ANNOUNCED IN 2022

ACQUIRER*	TARGET*	TARGET INDUSTRY	DEAL VALUE**	ACQUIRER*	TARGET*	TARGET INDUSTRY	DEAL VALUE**
Investor Group comprised of Premji Invest Ltd, Andreesen Horowitz LLC and others India, United States	TripActions Inc United States	Consumer Products and Services	154	Biocon Ltd India	Viatris Inc - Biosimilars Business United States	Healthcare	3,335
WNS (Holdings) Ltd	The Smart Cube Ltd	Consumer Products and Services	125	Tech Mahindra Ltd	Com Tec Co IT Ltd	Technology	354
Safex Chemicals India Ltd	Briar Chemicals Ltd United Kingdom	Consumer Staples	81	O Toyam Industries Ltd	Pacific Star Sports Services Lic United Arab Emirates	Media and Entertainment	220
O Lupin Ltd India	Sunovion Pharmaceuticals Inc - Two Inhalation Brands United States	Healthcare	75	Reliance Industries Ltd India	Glance InMobi Pte Ltd Singapore	Technology	200
Hinduja Global Solutions Ltd	TekLink International Inc United States	Technology	59	Investor Group comprised of Premji Invest Ltd, Andreesen Horowitz LLC and others India, United States	TripActions Inc United States	Consumer Products and Services	154
Tata Communications Ltd	The Switch Enterprises LLC United States	Media and Entertainment	59	O Sundaram Clayton Ltd	Norton Motorcycles (UK) Ltd	Industrials	131
Eicher Motors Ltd India	Stark Future SL Spain	Retail	53	WNS (Holdings) Ltd	The Smart Cube Ltd United Kingdom	Consumer Products and Services	125
Zetwerk Manufacturing Businesses Pvt Ltd India	Unimacts Global LLC United States	Industrials	39	Investor Group led by Dream Capital and Alpha Wave Global LP India, United States	Digital Collectibles Pte Ltd Singapore	Technology	120
O WNS (Holdings) Ltd	OptiBuy Sp z o o Poland	Technology	32	0 ITC Ltd India	PTC Inc - PLM Business United States	Technology	115
0 NIIT Ltd India	St Charles Consulting Group LLC United States	Consumer Products and Services	23	0 Infosys Ltd India	Base Life Science AS	Technology	110



2022 M&A ADVISOR LEAGUE TABLES

LEGAL ADVISORS: US M&A

FINANCIAL ADVISORS: US M&A

RANK	INSTITUTION	NUMBER OF DEALS	TOTAL DEAL VOLUME*	RANK	INSTITUTION	NUMBER OF DEALS	TOTAL DEAL VOLUME*
1	Wachtell, Lipton, Rosen & Katz	76	\$310,033	1	Goldman Sachs & Co	213	\$673,881
2	Simpson Thacher & Bartlett	127	233,868	2	Morgan Stanley	116	466,299
3	Kirkland & Ellis	656	233,682	3	JP Morgan	159	459,998
4	Skadden	119	222,095	4	BofA Securities	99	279,235
5	Gibson Dunn & Crutcher	137	173,883	5	Citi	72	271,752
6	Latham & Watkins	376	158,148	6	Barclays	100	270,127
7	Sidley Austin	292	157,448	7	Credit Suisse	44	166,828
8	Weil Gotshal & Manges	113	155,436	8	Allen & Co	11	146,663
9	Sullivan & Cromwell	72	112,404	9	Wells Fargo & Co	49	143,844
10	Cleary Gottlieb Steen & Hamilton	39	107,291	10	Evercore Partners	127	139,388

LEGAL ADVISORS: EUROPE M&A

FINANCIAL ADVISORS: EUROPE M&A

RANK	INSTITUTION	NUMBER OF DEALS	TOTAL DEAL VOLUME*	RANK	INSTITUTION	NUMBER OF DEALS	TOTAL DEAL VOLUME*
1	Hengeler Mueller	72	\$125,340	1	Goldman Sachs & Co	120	\$319,211
2	Freshfields Bruckhaus Deringer	144	124,773	2	JP Morgan	103	218,747
3	Linklaters	211	99,753	3	BofA Securities	69	184,859
4	Simpson Thacher & Bartlett	36	88,827	4	Morgan Stanley	73	175,848
5	Latham & Watkins	213	84,634	5	Citi	61	161,265
6	Clifford Chance	154	76,364	6	Rothschild & Co	353	160,531
7	Allen & Overy	169	75,336	7	Lazard	149	153,646
8	Legance Avvocati Associati	74	67,374	8	BNP Paribas	117	145,377
9	Sullivan & Cromwell	28	65,724	9	USB	48	97,983
10	Schoenherr Attorneys at Law	81	65,366	10	Barclays	61	97,373

LEGAL ADVISORS: ASIA M&A

FINANCIAL ADVISORS: ASIA M&A

RANK	INSTITUTION	NUMBER OF DEALS	TOTAL DEAL VOLUME*	RANK	INSTITUTION	NUMBER OF DEALS	TOTAL DEAL VOLUME*
1	AZB & Partners	188	\$111,147	1	Morgan Stanley	84	\$121,043
2	Cravath Swaine & Moore	2	60,390	2	Citi	35	110,209
2	Argus Partners	1	60,390	3	CITIC	77	110,088
2	M.M. Singhi & Company	1	60,390	4	Goldman Sachs & Co	52	105,272
2	Wadia Ghandy & Co	2	60,390	5	JP Morgan	41	91,174
6	Cyril Amarchand Mangaldas	139	38,380	6	BofA Securities	35	85,548
7	Allens	60	37,156	7	Nomura	91	81,277
8	King & Wood Mallesons	84	34,836	8	Credit Suisse	33	78,561
9	Herbert Smith Freehills	105	34,069	9	BNP Paribas	11	67,929
10	Nishimura & Asahi	177	33,351	10	HSBC Holdings	19	67,439

*US\$MILLIONS LEGAL ADVISOR RANKINGS REFLECT PRINCIPAL REPRESENTATIONS ONLY. SOURCE: THOMSON REUTERS



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