2022 in review

A turbulent 2022 defined by inflation, central banks’ policies and politics

Global equities struggled in 2022 as markets had to cope with high inflation, tightening of global monetary policies, lockdowns in Mainland China, the war in Ukraine and an energy crisis in Europe - all leading to global recession fears.

Despite a brief rally in the second half of the year, major global indices recorded double digit losses for 2022, including the S&P 500 (down 19%), the Stoxx 600 (down 13%), and the Shanghai index (down 15%). The only exception was the energy and commodity heavy FTSE 100 index that closed up 1% for the year. From a global sector perspective, only the energy sector index delivered positive 2022 performance being up 41% for the year.

Volatility remained elevated throughout the year halting equity issuance activity, including IPOs, outside of Mainland China.

The worst global IPO market since 2016 with Mainland China and the Middle East the only bright spots

2022 global IPO proceeds were down more than 70% compared to 2021. This was largely driven by a significant drop in US IPO activity, with IPO proceeds falling more than 90% compared to last year together with European and UK IPO markets remaining largely closed. The exception being the landmark Porsche IPO in Germany, representing around two thirds of the 2022 IPO proceeds in Europe.

2022 saw a rise of the local IPO market issuance with Mainland China taking the number 1 spot, representing 39% of global IPO issuance and the Middle East remaining a bright spot for EMEA as the region delivers on its privatisation strategy. Despite a challenging market backdrop, sizable Mainland China activity was driven by STAR Market and ChiNext, exchanges focused on attracting home-grown science and technology companies, and a wave of home market listings of Chinese mega companies formerly listed on overseas exchanges, such as China Mobile Ltd and CNOOC Ltd that delisted from the US and sought primary listings on the Shanghai Stock Exchange.

The heightened volatility (VIX average of 26 for the year versus an average of 20 in 2021) and the decline in indices showed a clear correlation with the decline in IPO and FO issuance in the US and Europe.
Outlook for 2023

Inflation, interest rates and potential recession will drive markets in 2023

As we enter 2023, market sentiment is dominated by concerns over inflation, the medicine to control it - the extent and longevity of interest rate actions from central banks, and recessions - how severe and for how long. The optimistic scenario is for evidence of inflation abating, allowing central banks to moderate interest rates and for recessions to be shallow and short lived; market sentiment and an opening of any IPO window in western markets will depend on such a scenario starting to be supported by data or bank action. Clearly a materially more pessimistic scenario will make a material IPO window opening much more challenging.

When will IPOs and follow-on equity issuance return?

Market participants, including a backlog of suitable IPO candidates, in the US and Europe are now focused on a potential H2 2023 recovery of the IPO markets, and whilst some issuers may attempt to tap the market earlier in H1, issuers are dedicating their resources early to prepare for “being public”. This mindset is the key ingredient to a successful IPO as the markets re-evaluate fundamentals.

Global follow-on issuance, which was also at reduced levels last year, will start to return when market uncertainty and volatility improves and discounts narrow. Opportunistic equity issuance could be expected once the macro backdrop stabilises. With the higher cost of debt, convertible and structured equity issuance is expected to gain further momentum.

A flight to quality in IPOs as equity markets continue to be impacted by macro headlines and geopolitics

Whilst market uncertainty and recession concerns weigh on investors minds, any appetite for IPOs will be driven by companies with a proven track record of growth and profitability, supported by a clear ESG story, strong balance sheet, stable cash flows and the potential to generate surplus cash for investment/return to shareholders. Companies that are likely to be positively placed for IPO success in 2023 will be those that can demonstrate profitability or at least a clear path to profitability. This backdrop will also present challenges for the Unicorns and we expect winners emerge with robust business models.

Privately held company valuations will also need some adjustment to align with public market valuations to reflect the focus on fundamentals. Sectors such as defensives, pharma and companies with a clear link to the environmental agenda, such as renewables and “clean tech”, are also likely to be at the front of the queue for IPOs in the US and Europe when volatility stabilises and investor confidence returns.

2022, the end of the SPAC boom?

SPAC IPO activity reverted back to pre 2020 levels in 2022; 147 SPACs raised $17bn globally, a significant reduction from the peak of 2021 where 676 SPACs raised $172bn.

In the US there were 182 de-SPAC announcements in 2022, of which 101 completed. With a typical investment period of 24 months, the boom in SPAC IPOs seen in 2020 and 2021 has resulted in more than $75bn of funds held in US SPACs with an investment date expiring in 2023 (excluding extension periods). New SPAC issuance is likely to continue to dwindle downwards with a many existing SPACs facing an uphill battle to close mergers before their maturity.

As the traditional IPO market slowly re-opens, issuers may continue to explore other routes to market including de-SPACs, however, it is likely that a number of SPACs will be unable to identify suitable targets to complete a transaction. Even if a suitable target can be found, the challenging deal conditions (high volume of redemptions and challenging PIPE and debt markets) as well as increased regulatory scrutiny from the SEC, present significant hurdles to deal completion.

SPACs remain a niche solution in the right circumstances, for example spin-offs or a sufficiently developed growth businesses with a cash injection requirement. We expect a large proportion of SPACs will however have to return funds to shareholders without a deal.
**IPOs - 2022 highlights (1 of 2)**

- **2022 global IPO proceeds (traditional IPOs and SPACs)** were the lowest since 2016 with 1,154 deals raising $173bn, largely attributable to the resilience of the IPO market in Mainland China.

- Proceeds were 20% higher than 2016 when the global economy faced declining GDP growth and other macroeconomic and geopolitical events, including the UK’s vote to leave the EU, the US presidential election results and Chinese market crash.

- **Asia-Pacific** IPO proceeds exceeded the Americas for the first time since 2018; 802 IPOs raised $108bn, accounting for over half of global proceeds.

- **IPO activity in the Americas** declined significantly in 2022 falling by $324bn (93%) and $167bn (87%) from 2021 and 2020 levels respectively. 2022 IPO proceeds in the region were even lower than 2016.

- Whilst **EMEA** accounted for 23% of global IPO proceeds in 2022, the majority of issuance was from the Middle East which, similar to Asia, bucked the wider global trend of subdued IPO activity.

- **Mainland China contributed to 39% ($68bn) of 2022 global proceeds**, overtaking the US to take first position in terms of IPO proceeds for the first time since 2010.

- The US accounted for just 13% ($24bn) for global IPO proceeds, compared to 53% ($323bn) in 2021. US IPO proceeds were the lowest since 2008 and saw the lowest number of IPOs since 2016.

- The Middle East experienced a boom in IPOs in 2022, with the UAE and Saudi Arabia ranking 3rd and 6th respectively in terms of global IPO proceeds.

- **South Korea and Germany** secured their positions in the top five territories driven by sizable IPOs, including battery maker, LG Energy Solution ($11bn - South Korea) and the demerger of Porsche AG ($9bn - Germany). Looking ahead to 2023 and beyond, we expect to see further IPO activity in sectors aligned with the energy transition agenda and more corporate demergers / spin-offs as corporates seek to realise value and refocus on strategic evolution of their businesses.

- With the exception of the Porsche AG IPO there was muted IPO activity across other European exchanges resulting in a noticeable absence of European representation in the global IPO league tables.
The Computers & Electronics sector accounted for 23% ($40bn) of global proceeds in 2022, with the majority (73%) of IPOs in this sector taking place in Mainland China. The sector remained in first place and with a similar proportion of global IPO proceeds as 2020 (23%) and 2021 (25%) reflecting the volume of IPOs on the STAR Market and ChiNext which more than offset the declining sentiment towards tech and growth stocks in developed markets of the US and Europe.

Auto/Truck was the second largest sector in 2022 in terms of global IPO proceeds representing 13% ($23bn) of all proceeds, driven by the aforementioned LG Energy Solution and Porsche AG IPOs.

The Finance sector also accounted for 13% of global proceeds, albeit the majority being attributable to SPAC IPOs ($17bn / 77%).

Other notable sectors include Healthcare ($15bn) and Utility & Energy ($11bn):
- Healthcare - $10bn from 45 IPOs in Mainland China.
- Utility & Energy - $7bn from 2 IPOs in the UAE.

With the exception of Life Insurance Corp of India and Corebridge Financial Inc, the Top 10 largest IPOs of 2022 performed better than the MSCI Index post IPO.

Jinko Solar Co Ltd, a solar module manufacturer based in Mainland China, raised $16bn in January 2022. Since listing, the share price has increased by nearly 200%.

The proportion of IPOs outperforming the MSCI World Index following the IPO date are as follows:
- Asia-Pacific - 56%
- Americas - 55%
- EMEA - 47%
2022 FO proceeds were lower than the previous ten years with a significant reduction in issuance across all regions.

Global FO proceeds for the full year 2022 were on par with 2021 IPO proceeds in the Americas alone, illustrating the challenges facing all capital raising activity in 2022 as monetary policy tightened and valuations came under pressure. It is also worth noting the significant capital raised during 2020 and 2021 following the emergence of COVID-19 as companies sort to shore up their balance sheets.

The US and Mainland China accounted for half of global FO proceeds:
- 600 US FOs raised $98bn
- 258 Mainland China FOs raised $79bn

Outside of the US and Mainland China, notable FO issuance was seen in Australia and the UK.

FO issuance was most prevalent in the Finance ($58bn), Computers & Electronics ($44bn) and Healthcare sectors ($41bn).
2022 overview

Americas

US IPO market virtually closed

The US IPO market was virtually closed in 2022 due to higher volatility and falling valuation multiples, especially in the high-growth, high-multiple tech sector. Those factors made it less attractive for prospective companies to price.

There were only 93 traditional US IPOs in 2022, of which only 19 raised >$100m. These were led by the pharma-life sciences, tech and financial services sectors. Excluding one outlier with a very large return, traditional IPO returns were basically flat in 2022. However growth prospects helped drive IPO returns to outperform the S&P loss of 19%.

Regulatory developments

In a recent development, the SEC approved proposals from the Nasdaq and the NYSE to amend several rules around direct listings, including the elimination of the price range restrictions. The changes also include adding a requirement for issuers to have an underwriter on the transaction, which is likely to provide another effective avenue for companies looking to provide liquidity to investors.

Outlook

The health of the 2023 market for IPOs and direct listings in the US will be largely dependent on the Fed’s ability to reduce inflation. Even in the event of a mild recession, we are optimistic that the IPO market will be receptive to high-quality, profitable companies — likely backed by proven financial sponsors such as venture capital and private equity.

A flight to quality will likely continue in 2023. IPO investors are placing a heavy emphasis on financial fundamentals and intrinsic valuation, as opposed to market valuations emphasizing high-growth stories. There is a heightened focus on return via margins, operating leverage and cash flow. Companies that are likely to be positively placed for IPO success in 2023 will be those that can demonstrate profitability or at least a clear path to profitability.

The IPO market was virtually closed in 2022 due to higher volatility and falling valuation multiples, especially in the high-growth, high-multiple tech sector. Those factors resulted in 2022 being the quietest IPO market in over a decade.

As we get more certainty on inflation and the Fed’s response to inflation via interest rate hikes, we expect the market to likely open the second half of 2023 for high-quality, profitable companies and companies with a path to profitability, with the wild card for the market being a potential recession versus a soft landing.

Michael Bellin - David Ethridge
IPO Services Co-Leaders
PwC US
Overview of IPO activity in the Americas

10 year overview - IPO proceeds and number of deals

- **Top 10 IPOs (by value) - Post IPO performance versus MSCI World Index**
  - Corbridge Financial Inc.
  - TPG Inc.
  - Mobileye Global Inc.
  - PGIM Access Income Fund
  - Screening Eagle Acquisition Corp. **
  - Gores Holdings IX Inc. **
  - Exela Technologies Inc.
  - Profaci Holding Corp.
  - GSR II Mintera Acquisition Corp. **
  - Basch & Lamb Corp.

* SPAC IPO
** SPAC IPO with de-SPAC transaction announced

- **Source**: Dealogic, Capital IQ as of 31 December 2022.

- Finance includes 89 SPAC IPOs with $14bn raised, prominently in the US.

**IPOs by sector**

- $3bn, 31%
- $2bn, 22%
- $2bn, 17%

**IPOs by territory**

- $24bn, 179#
- $2bn, 5#
- $1bn, 8#

Source: Dealogic, Capital IQ as of 31 December 2022.
Overview of FO activity in the Americas

10 year overview - FO proceeds and number of deals

<table>
<thead>
<tr>
<th>Years</th>
<th>Proceeds ($bn)</th>
<th>Number of deals</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>$251</td>
<td>1,163</td>
</tr>
<tr>
<td>2014</td>
<td>$236</td>
<td>1,161</td>
</tr>
<tr>
<td>2015</td>
<td>$243</td>
<td>1,055</td>
</tr>
<tr>
<td>2016</td>
<td>$220</td>
<td>1,073</td>
</tr>
<tr>
<td>2017</td>
<td>$216</td>
<td>1,026</td>
</tr>
<tr>
<td>2018</td>
<td>$192</td>
<td>1,055</td>
</tr>
<tr>
<td>2019</td>
<td>$217</td>
<td>1,137</td>
</tr>
<tr>
<td>2020</td>
<td>$341</td>
<td>1,572</td>
</tr>
<tr>
<td>2021</td>
<td>$332</td>
<td>1,593</td>
</tr>
<tr>
<td>2022</td>
<td>$110</td>
<td>809</td>
</tr>
</tbody>
</table>

FOs by sector

- Healthcare
- Utility & Energy
- Finance
- Real Estate/Property
- Computers & Electronics
- Other

Top 10 largest FOs 2022

<table>
<thead>
<tr>
<th>Pricing date</th>
<th>Issuer name</th>
<th>Issuer country</th>
<th>Sector</th>
<th>Deal type</th>
<th>Money raised</th>
</tr>
</thead>
<tbody>
<tr>
<td>16-Jun-22</td>
<td>Compuse Electric Brasileiras SA - ELETROBRAS</td>
<td>Brazil</td>
<td>Utility &amp; Energy</td>
<td>FO - Fully Marketed</td>
<td>$6.8bn</td>
</tr>
<tr>
<td>4-Jan-22</td>
<td>Sea Ltd</td>
<td>Singapore</td>
<td>Computers &amp; Electronics</td>
<td>FO - Bought Deal</td>
<td>$3.0bn</td>
</tr>
<tr>
<td>22-Mar-22</td>
<td>Bank of Montreal</td>
<td>Canada</td>
<td>Finance</td>
<td>FO - Bought Deal</td>
<td>$2.9bn</td>
</tr>
<tr>
<td>2-Jun-22</td>
<td>American Tower Corp</td>
<td>United States</td>
<td>Real Estate/Property</td>
<td>FO - Accelerated Bookbuild</td>
<td>$2.4bn</td>
</tr>
<tr>
<td>4-Jan-22</td>
<td>Alexandria Real Estate Equities Inc</td>
<td>United States</td>
<td>Real Estate/Property</td>
<td>FO - Accelerated Bookbuild</td>
<td>$1.7bn</td>
</tr>
<tr>
<td>7-Nov-22</td>
<td>Amersource Bergen Corp</td>
<td>United States</td>
<td>Healthcare</td>
<td>FO - Bought Deal</td>
<td>$1.6bn</td>
</tr>
<tr>
<td>4-Aug-22</td>
<td>TC Energy Corp</td>
<td>Canada</td>
<td>Utility &amp; Energy</td>
<td>FO - Bought Deal</td>
<td>$1.4bn</td>
</tr>
<tr>
<td>21-Apr-22</td>
<td>Canvias Co</td>
<td>United States</td>
<td>Computers &amp; Electronics</td>
<td>FO - Accelerated Bookbuild</td>
<td>$1.0bn</td>
</tr>
<tr>
<td>12-Dec-22</td>
<td>Bank of Montreal</td>
<td>Canada</td>
<td>Finance</td>
<td>FO - Bought Deal</td>
<td>$1.2bn</td>
</tr>
<tr>
<td>20-Jul-22</td>
<td>Carnival Corp</td>
<td>United States</td>
<td>Leisure &amp; Recreation</td>
<td>FO - Bought Deal</td>
<td>$1.2bn</td>
</tr>
</tbody>
</table>

FOs by territory

- United States
- Canada
- Brazil
- Other

$14bn, 204%

$12bn, 39%

$96bn, 609%

$8bn, 600%
European IPO activity down almost 80% compared to 2021, with significant IPO backlog waiting for the IPO window to reopen

The IPO market in Europe and the UK remained largely closed throughout the year with the exception of the landmark Porsche IPO in Germany, representing about two thirds of the total European IPO proceeds in 2022. However, as the traditional IPO market was not accessible, companies explored other routes to market including de-SPACs, spin-offs and demergers. Some of the notable de-SPAC transactions that completed last year included the $4.3bn equity value business combination of FL Entertainment, online sports betting platform, with Pegasus Entrepreneurs SPAC and its listing on the Euronext Amsterdam (the largest-ever European de-SPAC transaction), the $1.2bn business combination of Azerion, digital entertainment and media platform, with European FinTech SPAC and its listing on the Euronext Amsterdam, and $1.2bn business combination of Deezer, streaming platform, with I2PO SPAC and its listing on the Euronext Paris.

Middle East IPO boom set to run on into 2023 and beyond

2022 built on the foundation that the Middle East region has been steadily establishing over the last few years. Much of the activity observed now is a manifestation of the various regional government initiatives such as Saudi Arabia’s Vision 2030 and UAE’s Vision, which led to a number of privatisation of government assets and IPOs of state-owned entities, such as the $6bn IPO of Dubai Electricity and Water Authority (“DEWA”) in April 2022 that was 37 times oversubscribed and the $1bn IPO of Saudi Aramco Base Oil Company, Luberef, in December 2022.

IPOs are better understood in the region now, together with a more developed regulatory environment, increasingly established market practices and experienced community of advisors. In addition to the listing of state-sponsored assets, the region is also seeing an increase in the number of IPOs of private companies such as Jeddah based Nahdi medical group and Abu Dhabi based Burjeel hospital group raising $1bn and $0.3bn respectively.

Large international events such as the Expo 2020 in the UAE and the FIFA World Cup in Qatar, along with some mega IPOs such as Saudi Aramco’s $29bn IPO in 2019, have increased investors’ awareness of the Middle East region’s potential. The sheer volume of transactions has also led to growing liquidity in the region, most notably in Saudi Arabia and the UAE. In December, we witnessed the first ever dual listing across Saudi Arabia’s Tadawul and UAE’s ADX by Americana Restaurants International that resulted in $2bn of proceeds.

I expect the Middle East IPO momentum to continue into 2023 although geopolitical instability in other corners of the world may bring some uncertainty.

Muhammad Hassan
Capital Markets Leader
PwC Middle East
Overview of IPO activity in EMEA

10 year overview - IPO proceeds and number of deals

Top 10 IPOs (by value) - Post IPO performance versus MSCI World Index

IPOs by sector

IPOs by territory

Source: Dealogic, Capital IQ as of 31 December 2022.
Overview of FO activity in EMEA

10 year overview - FO proceeds and number of deals

Top 10 largest FOs 2022

<table>
<thead>
<tr>
<th>Pricing date</th>
<th>Issuer name</th>
<th>Issuer country</th>
<th>Sector</th>
<th>Deal type</th>
<th>Money raised</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-Apr-22</td>
<td>Electricité de France SA-EDF</td>
<td>France</td>
<td>Utility &amp; Energy</td>
<td>FO - Rights Offer</td>
<td>$3.5bn</td>
</tr>
<tr>
<td>4-Nov-22</td>
<td>Monte dei Paschi</td>
<td>Italy</td>
<td>Finance</td>
<td>FO - Rights Offer</td>
<td>$2.8bn</td>
</tr>
<tr>
<td>8-Dec-22</td>
<td>Credit Suisse Group AG</td>
<td>Switzerland</td>
<td>Finance</td>
<td>FO - Rights Offer</td>
<td>$2.4bn</td>
</tr>
<tr>
<td>14-Jun-22</td>
<td>Air France-KLM</td>
<td>France</td>
<td>Transportation</td>
<td>FO - Rights Offer</td>
<td>$2.4bn</td>
</tr>
<tr>
<td>5-Jul-22</td>
<td>Petro Rabigh</td>
<td>Saudi Arabia</td>
<td>Oil &amp; Gas</td>
<td>FO - Accelerated Bookbuild (Rump Placement)</td>
<td>$2.2bn</td>
</tr>
<tr>
<td>15-Jul-22</td>
<td>Saipem SpA</td>
<td>Italy</td>
<td>Finance</td>
<td>FO - Rights Offer</td>
<td>$2.0bn</td>
</tr>
<tr>
<td>15-Oct-22</td>
<td>Nordia Bank A/S</td>
<td>Norway</td>
<td>Finance</td>
<td>FO - Accelerated Bookbuild</td>
<td>$1.8bn</td>
</tr>
<tr>
<td>24-Nov-22</td>
<td>Credit Suisse Group AG</td>
<td>Switzerland</td>
<td>Finance</td>
<td>FO - Cash Placing</td>
<td>$1.0bn</td>
</tr>
<tr>
<td>11-Apr-22</td>
<td>Deutsche Bank</td>
<td>Germany</td>
<td>Finance</td>
<td>FO - Accelerated Bookbuild</td>
<td>$1.4bn</td>
</tr>
<tr>
<td>16-Dec-22</td>
<td>ALD SA</td>
<td>France</td>
<td>Finance</td>
<td>FO - Rights Offer</td>
<td>$1.3bn</td>
</tr>
</tbody>
</table>

FOs by territory

- United Kingdom
- France
- Switzerland
- Sweden
- Germany
- Italy
- Norway
- Saudi Arabia
- Other

FOs by sector

- Finance
- Computers & Electronics
- Utility & Energy
- Oil & Gas
- Transportation
- Real Estate/Property
- Healthcare
- Other

Proceeds ($bn) and Number of deals

- Proceeds: $160, $204, $191, $190, $120, $110, $99, $751, $977, $1,029, $87
- Number of deals: 639, 738, 808, 754, 946, 759, 751, 755, 1,029, 630, 87
2022 overview

Asia-Pacific

Record year for Mainland China exchanges

IPOs on the Shanghai and Shenzhen exchanges raised $38bn and $30bn respectively in 2022, together representing the best year in terms of IPO proceeds in the last 10 years.

Mainland China’s STAR Market and ChiNext, exchanges focused on attracting home-grown science and technology companies have continued to see growth into 2022 representing half of all Mainland China IPO proceeds from 116 IPOs.

Significant return listings in 2022 but developments with US regulators may stem the flow in the near term

In 2022, China Mobile Ltd (pricing date: 21 Dec 2021) and CNOOC Ltd delisted from the NYSE and sought primary listings on the Shanghai Stock Exchange. The mega listings together raised over $12bn and propelled the Mainland China exchanges to the top of the global exchange league table.

In December 2022, the PCAOB announced it had secured complete access to inspect and investigate public accounting firms headquartered in Mainland China and Hong Kong, an early positive step which temporarily removes the risk of forced delisting of Chinese companies from US stock markets.

Resilience across the Asia-Pacific region

Outside of Mainland China, other territories in the Asia-Pacific region accounted for 23% of global IPO proceeds including: South Korea ($13.4bn), Hong Kong SAR ($8.5bn), India ($7.8bn) and Thailand ($3.4bn). The region proved somewhat resilient to geopolitical and macroeconomic developments impacting the US and Europe.

Mainland China exchanges lead in the 2022 global IPO activity league table accounting for 39% of global IPO proceeds. Transactions included sizable IPOs of domestic new economy companies and home market listings of Chinese mega companies formerly listed on overseas exchanges. Market activity was propelled by the effects of major structural market oriented initiatives to reform listing approval and the regulatory framework.

We expect the growth and significance of the Mainland China capital market will continue as the pace of economic growth will resume as the resumption of business activities and lifting of border restrictions will boost domestic consumption and new investments in growth industries in 2023.

Brian Choi
Capital Markets and Accounting Advisory Services Leader
PwC China
Overview of IPO activity in Asia-Pacific

10 year overview - IPO proceeds and number of deals

[Graph showing 10-year overview of IPO proceeds and number of deals.]

IPOs by sector

- Computers & Electronics, $34bn, 225#
- Auto/Truck, $34bn, 384#
- Healthcare, $5bn, 49#
- Chemicals, $9bn, 43#
- Machinery, $12bn, 88#
- Other, $14bn, 17#

Top 10 IPOs (by value) - Post IPO performance versus MSCI World Index

[Graph showing top 10 IPOs by value with their performance against the MSCI World Index.]

IPOs by territory

- Mainland China, $10bn, 241#
- South Korea, $8bn, 74#
- Hong Kong SAR, $13bn, 108#
- India, $68bn, 327#
- Other, $8bn, 72#
Overview of FO activity in Asia-Pacific

10 year overview - FO proceeds and number of deals

Top 10 largest FOs 2022

<table>
<thead>
<tr>
<th>Pricing date</th>
<th>Issuer name</th>
<th>Issuer country</th>
<th>Sector</th>
<th>Deal type</th>
<th>Money raised</th>
</tr>
</thead>
<tbody>
<tr>
<td>23-Jun-22</td>
<td>Contemporary Amperex Technology Co Ltd</td>
<td>China</td>
<td>Auto/Truck</td>
<td>FO - Cash Placing</td>
<td>$6.7bn</td>
</tr>
<tr>
<td>11-Apr-22</td>
<td>CNDCOC Ltd</td>
<td>China</td>
<td>Finance</td>
<td>FO - Fully Marketed</td>
<td>$5.1bn</td>
</tr>
<tr>
<td>26-Jan-22</td>
<td>CITIC Securities</td>
<td>China</td>
<td>Finance</td>
<td>FO - Rights Offer</td>
<td>$3.8bn</td>
</tr>
<tr>
<td>18-Aug-22</td>
<td>China Tourism Group Bhd</td>
<td>China</td>
<td>Retail</td>
<td>FO - Fully Marketed</td>
<td>$2.3bn</td>
</tr>
<tr>
<td>29-Apr-22</td>
<td>Orient Securities Co Ltd</td>
<td>China</td>
<td>Finance</td>
<td>FO - Rights Offer</td>
<td>$1.1bn</td>
</tr>
<tr>
<td>6-Jul-22</td>
<td>Tianqi Lithium Corp</td>
<td>China</td>
<td>Chemicals</td>
<td>FO - Fully Marketed</td>
<td>$1.7bn</td>
</tr>
<tr>
<td>16-Sep-22</td>
<td>Atlas Arteria</td>
<td>Australia</td>
<td>Transportation</td>
<td>FO - Guaranteed</td>
<td>$1.7bn</td>
</tr>
<tr>
<td>7-Jul-22</td>
<td>Xinjiang Daqo New Energy Co Ltd</td>
<td>China</td>
<td>Chemicals</td>
<td>FO - Cash Placing</td>
<td>$1.1bn</td>
</tr>
<tr>
<td>25-Aug-22</td>
<td>Industrial Securities Co Ltd</td>
<td>China</td>
<td>Finance</td>
<td>FO - Rights Offer</td>
<td>$1.3bn</td>
</tr>
<tr>
<td>25-Jul-22</td>
<td>MapleTree Commercial Trust</td>
<td>Singapore</td>
<td>Real Estate/Property</td>
<td>FO - Guaranteed</td>
<td>$1.3bn</td>
</tr>
</tbody>
</table>

FOs by sector

- Computers & Electronics
- Finance
- Chemicals
- Auto/Truck
- Healthcare
- Real Estate/Property
- Oil & Gas
- Other

FOs by territory

- Mainland China
- Australia
- Hong Kong SAR
- India
- Other
Basis of preparation

- The **Global IPO Watch** publication analyses IPO and FO trends on a quarterly basis, both at a global and regional level.
- This document includes data derived from data provided under Licence by Dealogic. Dealogic retains and reserves all rights in such Licenced data.
  - Unless otherwise stated, all data has been derived from Dealogic on 4 January 2023 supplemented with PwC analysis.
- Only transactions with a minimum of $5 million money raised have been included.
- Transaction proceeds include the over allotment option (if exercised).
- The data excludes PIPOs and transactions on Over-The-Counter exchanges.
- If a company has an existing listing and either; undertakes a secondary listing or changes its primary listing to another exchange, this is classified as a FO.
- In case IPOs or FOs take place on two or more exchanges, the full amount of money raised is attributed to all exchanges. The same applies to countries and regions. This does not apply to two exchanges within the same country.
- Country indicates the company’s country of domicile.
- Industry classification is based on Dealogic classifications.
- Index performance is based on pricing data extracted from Capital IQ (S&P Global Market Intelligence, LLC).
Contacts

Stuart Newman
PwC Global IPO Centre Leader – PwC UK
stuart.newman@pwc.com

David Ethridge
IPO Services Co-Leader - PwC US
david.a.ethridge@pwc.com

Michael Wisson
Partner, Capital Markets – PwC UK
michael.a.wisson@pwc.com

Michael Bellin
IPO Services Co-Leader - PwC US
michael.i.bellin@pwc.com

Nadja Picard
PwC Europe Capital Markets Leader – PwC Germany
nadja.picard@pwc.com

Brian Choi
Capital Markets and Accounting Advisory Services Leader - PwC China
brian.my.choi@cn.pwc.com

Stephan Wyrobisch
Partner, Capital Markets – PwC Germany
stephan.wyrobisch@pwc.com

Shen Jie
A-Share Capital Market Leader, Capital Market Services - PwC China
jie.shen@cn.pwc.com

Muhammad Hassan
Capital Markets Leader - PwC Middle East
muhammad.hassan@pwc.com

Edmond Chan
Hong Kong Capital Market Leader, Capital Market Services - PwC Hong Kong
edmond.chan@hk.pwc.com
Appendix

• Top 10 transactions by region
# Top 10 IPOs and FOs 2022 - Global

<table>
<thead>
<tr>
<th>Pricing date</th>
<th>Issuer name</th>
<th>Issuer Country</th>
<th>Sector</th>
<th>Exchange</th>
<th>Money raised</th>
<th>Aftermarket performance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1-day</td>
</tr>
<tr>
<td>14-Jan-22</td>
<td>LG Energy Solution Ltd</td>
<td>South Korea</td>
<td>Auto/Truck</td>
<td>Korea Exchange-KOSPI</td>
<td>$10.7bn</td>
<td>68%</td>
</tr>
<tr>
<td>28-Sep-22</td>
<td>Dr Ing hCF Porsche AG</td>
<td>Germany</td>
<td>Auto/Truck</td>
<td>Frankfurt Stock Exchange-Prime</td>
<td>$8.7bn</td>
<td>0%</td>
</tr>
<tr>
<td>6-Apr-22</td>
<td>DEWA</td>
<td>United Arab Emirates</td>
<td>Utility &amp; Energy</td>
<td>Dubai Financial Market</td>
<td>$6.1bn</td>
<td>16%</td>
</tr>
<tr>
<td>12-May-22</td>
<td>Life Insurance Corp of India</td>
<td>India</td>
<td>Insurance</td>
<td>Bombay Stock Exchange-BSE</td>
<td>$2.7bn</td>
<td>-8%</td>
</tr>
<tr>
<td>31-May-22</td>
<td>Borouge plc</td>
<td>United Arab Emirates</td>
<td>Chemicals</td>
<td>Abu Dhabi Securities Exchange</td>
<td>$2.0bn</td>
<td>22%</td>
</tr>
<tr>
<td>24-Nov-22</td>
<td>Americana Restaurants International PLC</td>
<td>United Arab Emirates</td>
<td>Dining &amp; Lodging</td>
<td>Saudi Stock Exchange</td>
<td>$1.8bn</td>
<td>8%</td>
</tr>
<tr>
<td>14-Sep-22</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$1.7bn</td>
<td>13%</td>
</tr>
<tr>
<td>9-Aug-22</td>
<td>Shanghai United Imaging Healthcare Co Ltd</td>
<td>China</td>
<td>Healthcare</td>
<td>So-Tech Innovation Board (STAR Market)</td>
<td>$1.6bn</td>
<td>65%</td>
</tr>
<tr>
<td>2-Aug-22</td>
<td>Hygon Information Technology Co Ltd</td>
<td>China</td>
<td>Computers &amp; Electronics</td>
<td>So-Tech Innovation Board (STAR Market)</td>
<td>$1.6bn</td>
<td>67%</td>
</tr>
<tr>
<td>14-Jan-22</td>
<td>Jinko Solar Co Ltd</td>
<td>China</td>
<td>Computers &amp; Electronics</td>
<td>So-Tech Innovation Board (STAR Market)</td>
<td>$1.6bn</td>
<td>111%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pricing date</th>
<th>Issuer name</th>
<th>Issuer Country</th>
<th>Sector</th>
<th>Exchange</th>
<th>Money raised</th>
</tr>
</thead>
<tbody>
<tr>
<td>10-Jun-22</td>
<td>Centrais Eletricas Brasileiras SA</td>
<td>Brazil</td>
<td>Utility &amp; Energy</td>
<td>BM&amp;FBOVESPA-Novo Mercado</td>
<td>$5.9bn</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>New York Stock Exchange-NYSE</td>
<td></td>
</tr>
<tr>
<td>22-Jun-22</td>
<td>Contemporary Amperex Technology Co Ltd</td>
<td>China</td>
<td>Auto/Truck</td>
<td>Shenzhen Stock Exchange-ChiNext</td>
<td>$6.7bn</td>
</tr>
<tr>
<td>11-Apr-22</td>
<td>CNOOC Ltd</td>
<td>China</td>
<td>Oil &amp; Gas</td>
<td>Shanghai Stock Exchange</td>
<td>$5.1bn</td>
</tr>
<tr>
<td>26-Jan-22</td>
<td>CITIC Securities</td>
<td>China</td>
<td>Finance</td>
<td>Shanghai Stock Exchange</td>
<td>$3.5bn</td>
</tr>
<tr>
<td>5-Apr-22</td>
<td>Electrique de France SA</td>
<td>France</td>
<td>Utility &amp; Energy</td>
<td></td>
<td>$3.5bn</td>
</tr>
<tr>
<td>4-Jan-22</td>
<td>Sea Ltd</td>
<td>Singapore</td>
<td>Finance</td>
<td>New York Stock Exchange-NYSE</td>
<td>$3.0bn</td>
</tr>
<tr>
<td>22-Mar-22</td>
<td>Bank of Montreal</td>
<td>Canada</td>
<td>Finance</td>
<td>Toronto Stock Exchange</td>
<td>$2.5bn</td>
</tr>
<tr>
<td>4-Nov-22</td>
<td>Monte dei Paschi</td>
<td>Italy</td>
<td>Finance</td>
<td>Borsa Italiana</td>
<td>$2.5bn</td>
</tr>
<tr>
<td>8-Dec-22</td>
<td>Credit Suisse Group AG</td>
<td>Switzerland</td>
<td>Finance</td>
<td>SIX Swiss Exchange</td>
<td>$2.4bn</td>
</tr>
<tr>
<td>14-Jun-22</td>
<td>Air France-KLM</td>
<td>France</td>
<td>Transportation</td>
<td>Paris</td>
<td>$2.4bn</td>
</tr>
</tbody>
</table>

Source: Capital IQ as of 31 December 2022.
# Top 10 IPOs 2022 - Americas

<table>
<thead>
<tr>
<th>Pricing date</th>
<th>Issuer name</th>
<th>Issuer Country</th>
<th>Sector</th>
<th>Exchange</th>
<th>Money raised</th>
<th>Aftermarket performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>14-Sep-22</td>
<td>Corebridge Financial Inc</td>
<td>United States</td>
<td>Insurance</td>
<td>New York Stock Exchange-NYSE</td>
<td>$1.7bn</td>
<td>-1% -5% -4%</td>
</tr>
<tr>
<td>12-Jan-22</td>
<td>TPG Inc</td>
<td>United States</td>
<td>Finance</td>
<td>NYSE</td>
<td>$1.1bn</td>
<td>15% 5% -4%</td>
</tr>
<tr>
<td>25-Oct-22</td>
<td>Mobileye Global Inc</td>
<td>Israel</td>
<td>Computers &amp; Electronics</td>
<td>NYSE</td>
<td>$1.0bn</td>
<td>38% 40% 56%</td>
</tr>
<tr>
<td>26-Jan-22</td>
<td>PIMCO Access Income Fund</td>
<td>United States</td>
<td>Closed End Funds</td>
<td>New York Stock Exchange-NYSE</td>
<td>$0.9bn</td>
<td>0% 0% -24%</td>
</tr>
<tr>
<td>5-Jan-22</td>
<td>Screaming Eagle Acquisition Corp</td>
<td>United States</td>
<td>Finance</td>
<td>Ibovespa B3; NYSE</td>
<td>$0.8bn</td>
<td>0% 0% 0%</td>
</tr>
<tr>
<td>5-May-22</td>
<td>Bausch &amp; Lomb Corp</td>
<td>Canada</td>
<td>Healthcare</td>
<td>New York Stock Exchange-NYSE</td>
<td>$0.7bn</td>
<td>11% 13% -13%</td>
</tr>
<tr>
<td>12-January-22</td>
<td>Gores Holdings IX Inc</td>
<td>United States</td>
<td>Finance</td>
<td>NYSE</td>
<td>$0.9bn</td>
<td>0% 0% 0%</td>
</tr>
<tr>
<td>12-Apr-22</td>
<td>Excelerate Energy Inc</td>
<td>United States</td>
<td>Oil &amp; Gas</td>
<td>New York Stock Exchange-NYSE</td>
<td>$0.4bn</td>
<td>12% 0% 3%</td>
</tr>
<tr>
<td>12-May-22</td>
<td>ProFrac Holding Corp</td>
<td>United States</td>
<td>Oil &amp; Gas</td>
<td>NASDAQ-US</td>
<td>$0.3bn</td>
<td>1% 26% 19%</td>
</tr>
<tr>
<td>24-Feb-22</td>
<td>GSR II Meteoria Acquisition Corp</td>
<td>United States</td>
<td>Finance</td>
<td>NASDAQ-US</td>
<td>$0.3bn</td>
<td>0% 1% 1%</td>
</tr>
</tbody>
</table>

Source: Capital IQ as of 31 December 2022.
## Top 10 IPOs 2022 - EMEA

<table>
<thead>
<tr>
<th>Pricing date</th>
<th>Issuer name</th>
<th>Issuer Country</th>
<th>Sector</th>
<th>Exchange</th>
<th>Money raised</th>
<th>Aftermarket performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>28-Sep-22</td>
<td>Dr Ing hcF Porsche AG</td>
<td>Germany</td>
<td>Auto/Truck</td>
<td>Frankfurt Stock Exchange-Prime</td>
<td>$8.7bn</td>
<td>0% 21% 14%</td>
</tr>
<tr>
<td>6-Apr-22</td>
<td>DEWA</td>
<td>United Arab Emirates</td>
<td>Utility &amp; Energy</td>
<td>Dubai Financial Market</td>
<td>$6.1bn</td>
<td>16% 10% -7%</td>
</tr>
<tr>
<td>31-May-22</td>
<td>Borouge plc</td>
<td>United Arab Emirates</td>
<td>Chemicals</td>
<td>Abu Dhabi Securities Exchange</td>
<td>$2.0bn</td>
<td>22% 20% 7%</td>
</tr>
<tr>
<td>24-November-22</td>
<td>Americana Restaurants International PLC</td>
<td>United Arab Emirates</td>
<td>Dining &amp; Lodging</td>
<td>Abu Dhabi Securities Exchange</td>
<td>$1.8bn</td>
<td>8% 11% 14%</td>
</tr>
<tr>
<td>10-March-22</td>
<td>Nahdi Medical Co</td>
<td>Saudi Arabia</td>
<td>Retail</td>
<td>Saudi Stock Exchange</td>
<td>$1.4bn</td>
<td>15% 30% 29%</td>
</tr>
<tr>
<td>11-Dec-22</td>
<td>Saudi Aramco Base Oil Co - Luberef</td>
<td>Saudi Arabia</td>
<td>Oil &amp; Gas</td>
<td>Saudi Stock Exchange</td>
<td>$1.3bn</td>
<td>N/A N/A -5%</td>
</tr>
<tr>
<td>7-February-22</td>
<td>Abu Dhabi Ports Co</td>
<td>United Arab Emirates</td>
<td>Transportation</td>
<td>Abu Dhabi Securities Exchange</td>
<td>$1.1bn</td>
<td>13% 6% 85%</td>
</tr>
<tr>
<td>22-Sep-22</td>
<td>Salik Co PJSC</td>
<td>United Arab Emirates</td>
<td>Transportation</td>
<td>Dubai Financial Market</td>
<td>$1.0bn</td>
<td>11% 15% 25%</td>
</tr>
<tr>
<td>25-Oct-22</td>
<td>Marafiq</td>
<td>Saudi Arabia</td>
<td>Utility &amp; Energy</td>
<td>Saudi Stock Exchange</td>
<td>$0.9bn</td>
<td>3% 3% 3%</td>
</tr>
<tr>
<td>15-Feb-22</td>
<td>Var Energi ASA</td>
<td>Norway</td>
<td>Oil &amp; Gas</td>
<td>Oslo Stock Exchange</td>
<td>$0.9bn</td>
<td>11% 5% 17%</td>
</tr>
</tbody>
</table>

Source: Capital IQ as of 31 December 2022.
## Top 10 IPOs 2022 - Asia-Pacific

<table>
<thead>
<tr>
<th>Pricing date</th>
<th>Issuer name</th>
<th>Issuer Country</th>
<th>Sector</th>
<th>Exchange</th>
<th>Money raised</th>
<th>Aftermarket performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>14-Jan-22</td>
<td>LG Energy Solution Ltd</td>
<td>South Korea</td>
<td>Auto/Truck</td>
<td>Korea Exchange-KOSPI</td>
<td>$10.7bn</td>
<td>68% 40% 47%</td>
</tr>
<tr>
<td>12-May-22</td>
<td>Life Insurance Corp of India</td>
<td>India</td>
<td>Insurance</td>
<td>Bombay Stock Exchange-BSE National Stock Exchange of India</td>
<td>$2.7bn</td>
<td>-8% -29% -23%</td>
</tr>
<tr>
<td>9-Aug-22</td>
<td>Shanghai United Imaging Healthcare Co Ltd</td>
<td>China</td>
<td>Healthcare</td>
<td>Sci-Tech Innovation Board (STAR Market)</td>
<td>$1.6bn</td>
<td>65% 52% 64%</td>
</tr>
<tr>
<td>2-August-22</td>
<td>Hygon Information Technology Co Ltd</td>
<td>China</td>
<td>Computers &amp; Electronics</td>
<td>Sci-Tech Innovation Board (STAR Market)</td>
<td>$1.8bn</td>
<td>67% 55% 17%</td>
</tr>
<tr>
<td>14-January-22</td>
<td>Jinko Solar Co Ltd</td>
<td>China</td>
<td>Computers &amp; Electronics</td>
<td>Sci-Tech Innovation Board (STAR Market)</td>
<td>$1.8bn</td>
<td>111% 132% 198%</td>
</tr>
<tr>
<td>28-Sep-22</td>
<td>CALB Co Ltd</td>
<td>China</td>
<td>Auto/Truck</td>
<td>Hong Kong Exchange-Main Board</td>
<td>$1.3bn</td>
<td>13% -30% -72%</td>
</tr>
<tr>
<td>30-March-22</td>
<td>PT GoTo Gojek Tokopedia Tbk</td>
<td>Indonesia</td>
<td>Computers &amp; Electronics</td>
<td>Indonesia Stock Exchange</td>
<td>$1.0bn</td>
<td>0% -38% -47%</td>
</tr>
<tr>
<td>11-Jul-22</td>
<td>Thai Life Insurance pcl</td>
<td>Thailand</td>
<td>Insurance</td>
<td>Stock Exchange of Thailand</td>
<td>$1.2bn</td>
<td>-1% -1% -6%</td>
</tr>
<tr>
<td>16-Sep-22</td>
<td>Hubei Wanrun New Energy Technology Co Ltd</td>
<td>China</td>
<td>Chemicals</td>
<td>Sci-Tech Innovation Board (STAR Market)</td>
<td>$0.9bn</td>
<td>-28% -34% -40%</td>
</tr>
<tr>
<td>11-Apr-22</td>
<td>Suzhou Novosense Microelectronics Co Ltd</td>
<td>China</td>
<td>Computers &amp; Electronics</td>
<td>Sci-Tech Innovation Board (STAR Market)</td>
<td>$0.9bn</td>
<td>13% 36% 41%</td>
</tr>
</tbody>
</table>

Source: Capital IQ as of 31 December 2022.