IMBERIUM

Global Mergers & Acquisitions (M&A) Report

2022 ANNUAL

Contents

Overview

In the year 2022, the global landscape for mergers and acquisitions (M&A) demonstrated resilience despite enduring challenging macroeconomic conditions. A comparison with the preceding year, 2021, revealed a 13.7% decline in M&A value, settling at $4.7 trillion. However, this figure remained robust relative to historical levels and represented the second-best performance in the domain. Notably, 2021 had witnessed a record-breaking surge in global M&A, rebounding from the COVID-19-induced slowdown, flourishing amid increased confidence levels, robust fundamentals, and elevated valuation multiples.

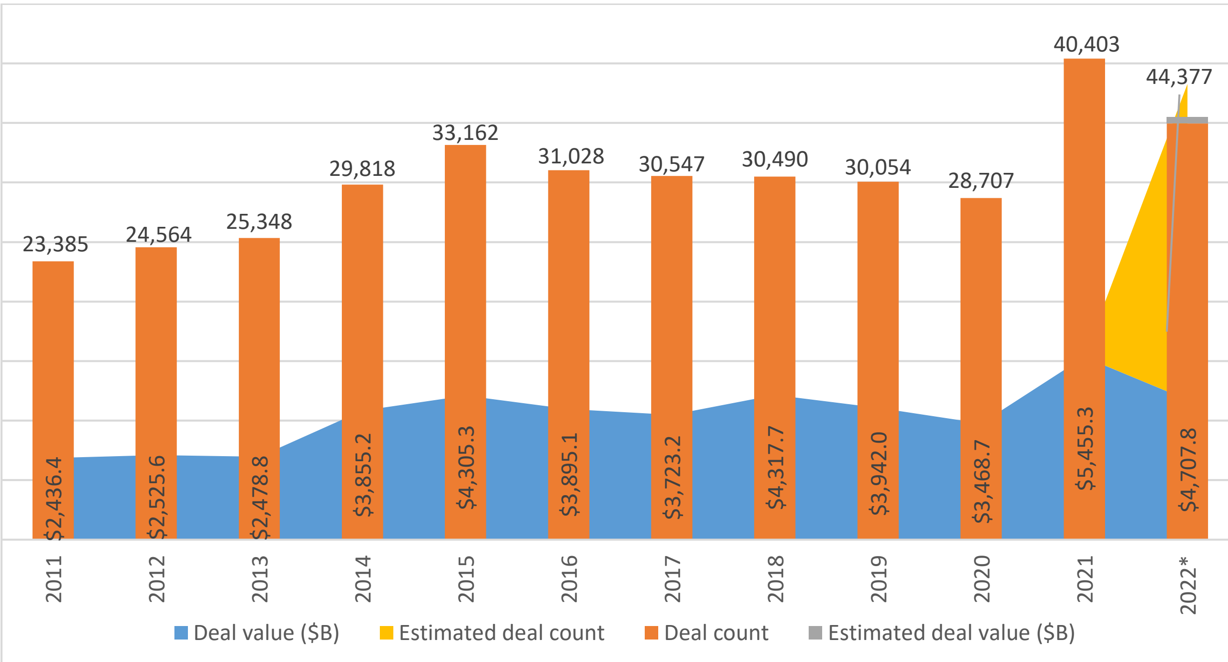

Figure 1: Mergers and Acquisitions Activity Data

As the momentum from the previous year suggested a continued surge in M&A activity, the onset of 2022 brought about several macroeconomic developments that disrupted the markets. Escalating inflation rates worldwide, driven by heightened demand, supply chain challenges, and labor shortages, prompted central banks to adopt an aggressive stance on interest rates. The US Federal Reserve implemented seven interest rate hikes, propelling the federal funds rate to its highest level in 15 years. In a similar vein, Europe departed from years of quantitative easing, with the Bank of England raising interest rates to 3.5% and the European Central Bank elevating its rate to 2%.

The first half of 2022 witnessed a downturn in global equity markets, attributed to the devaluation of company valuations in response to higher discount rates on future cash flows. The invasion of Ukraine by Russia heightened market uncertainty, leading to a temporary pause in Q1 deal making as investors grappled with the repercussions. Private equity (PE) firms faced challenges due to increased borrowing and leverage costs, causing the leveraged loan market to virtually come to a standstill in H2, further complicating deal making. Nevertheless, opportunistic buyers seized the opportunity presented by lower prices, resulting in a decline in median deal multiples to 8.8x EBITDA from the previous 14-year high of 11.1x.

Despite these challenges, M&A activity received support from various factors. PE firms globally still had $1.3 trillion in dry powder, enabling sponsors to capitalize on attractive deals spurred by market downturns, resulting in lower valuations and distressed assets. Sponsors adapted to the challenging financing environment by opting for smaller deal sizes and turning to add-on acquisitions until lending markets became more favorable for larger platform buyouts. Add-ons constituted a record 71.9% of buyout deals in 2022 due to their smaller size and the ease with which they could be financed by their larger acquirers.

Well-capitalized strategic acquirers persisted in pursuing deals for long-term growth. In 2022, 12 strategic acquisitions exceeding $10 billion were announced, including Kroger's planned merger with Albertsons valued at $24.6 billion. Subject to regulatory approval, this merger aimed to establish a more robust national footprint for the combined entity, accelerating profit growth in the grocery industry, which had been impacted by inflation.

Energy deals also featured prominently in the M&A landscape in 2022 as investors sought opportunities arising from the energy crisis triggered by the war in Ukraine. Cross-border M&A continued to be robust compared to historical levels.[1] The 20-year high in the US dollar motivated US-based acquirers to pursue targets overseas. In 2022, M&A involving North American acquirers of European companies reached $315.3 billion, constituting 21.2% of all European M&A value. European acquisitions of North American companies accounted for 10.1% of North American M&A value. Europe's $100.8 billion surplus over North America was the largest in 16 years, second only to 2019.

While geopolitical and economic uncertainties persist, the outlook for cross-border M&A activity remains positive. Market volatility is expected to generate new opportunities, and well-capitalized dealmakers are likely to seek growth through strategic acquisitions.

European Merger and Acquisitions

In 2022, the field of European mergers and acquisitions (M&A) displayed resilience despite the challenging macroeconomic environment, witnessing a surge in M&A deal count to a record-breaking 17,900 deals. This represented an 11.7% year-over-year increase from the already remarkable figures of the previous year. Conversely, the total value of European M&A deals experienced a 6.1% year-over-year decline, indicating a higher number of deals with slightly lesser values compared to 2021.

The year 2022 in Europe will be notably remembered for Russia's invasion of Ukraine, marking the onset of an energy crisis across the continent. Soaring commodities prices and rising inflation were direct consequences of this geopolitical event. The most significant M&A transaction of the year unfolded as the German government nationalized Uniper, the country's largest gas importer, for a substantial $33.7 billion in the third quarter. This move aimed to stabilize energy prices amid the crisis. Additionally, Germany also nationalized SEFE (formerly Gazprom Germania) earlier in the year. In a similar vein, the French government fully nationalized EDF in a deal valued at $10.0 billion. EDF controls crucial nuclear power plants in France, playing a vital role in diversifying energy supplies away from Russian gas. Energy-related M&A deals in Europe experienced a notable 34.9% increase, reaching $152.5 billion in 2022.

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[1] https://files.pitchbook.com/website/files/pdf/Q4_2022_PitchBook_Analyst_Note_The_State_of_Cross-Border_M_A.pdf

Cross-border M&A activities continued to bolster the European landscape, with one in every ten deals involving a North American acquirer. North American private equity (PE) firms, aiming to diversify portfolios and capitalize on a robust dollar, showed particular interest in European M&A. Examples include Blackstone's consortium taking Italy's Atlantia private for $20.9 billion, Deutsche Telekom selling part of its tower business to a consortium involving DigitalBridge Group for $9.3 billion, and Clearlake Capital Group and Todd Boehly acquiring Chelsea Football Club for $3.2 billion. PE deals constituted 36.1% of all European M&A deals, marking a 140 basis points increase from 2021.

Among European regions, the UK & Ireland emerged as the most active for M&A, contributing to 29.0% of deals, followed by France & Benelux with 20.7%. Historically, the UK, especially since its withdrawal from the European Union (EU), has had more lenient M&A regulations. While London remains Europe's financial hub, recent news that the French stock market surpassed the UK market in total market capitalization serves as a potential warning for UK deal makers.[2]

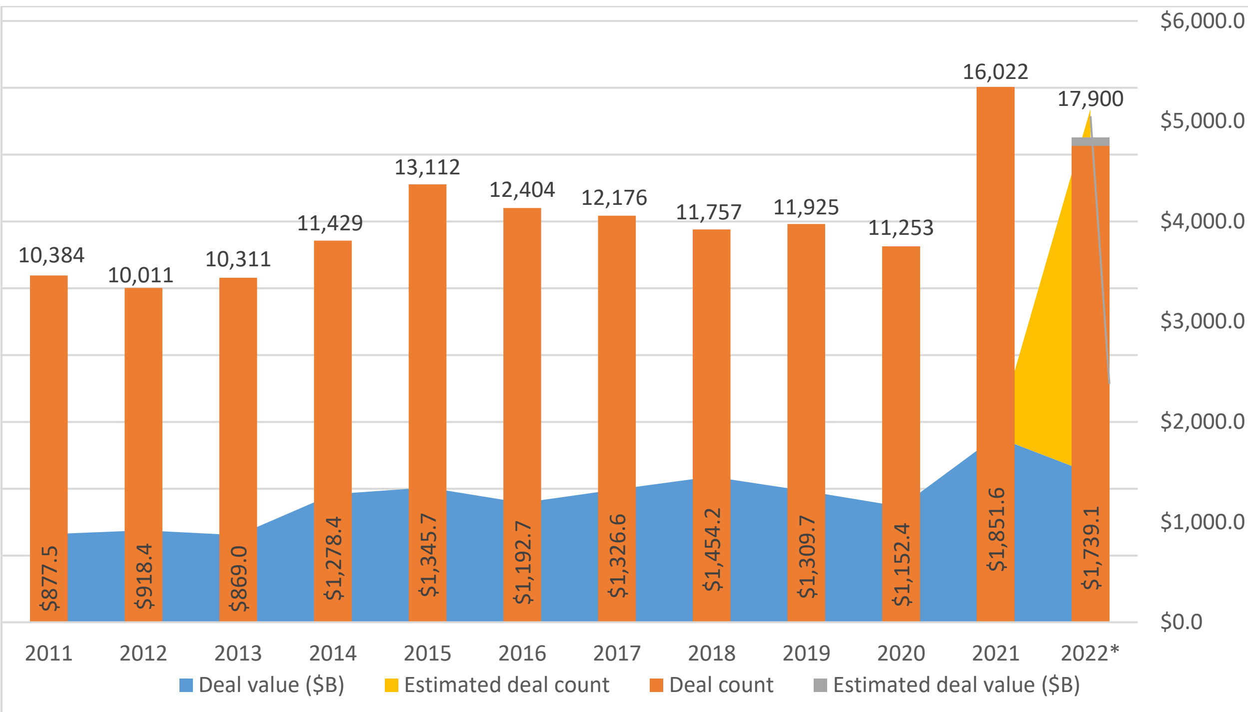

Figure 2: European Mergers and Acquisitions Activity Data

Mergers and Acquisitions of North American

In the year 2022, North American M&A encountered challenges, concluding with around 18,576 deals totaling $2.2 trillion. This marked a notable 21.6% decline in deal value compared to the record-setting activity observed in 2021. The previous year had witnessed a surge in M&A, driven by expanding valuations, robust stock prices, low interest rates, and a broad economic recovery following the onset of

[2] https://www.bloomberg.com/news/articles/2022-11-14/london-loses-its-crown-of-biggest-european-stock-market-to-paris

the pandemic. However, various adverse factors reversed the optimistic market sentiment, leading to a downturn in M&A activity.

Soaring inflation and aggressive interest rate hikes negatively impacted investor sentiment, while ongoing geopolitical tensions and supply chain issues heightened market uncertainty. In the United States, stock markets faced significant losses, deterring potential investors. Three major indexes recorded their most substantial annual declines since 2008: the S&P 500 concluded the year with a 19.4% drop, shedding approximately $8 trillion in market cap; the Dow Jones Industrial Average fell by 8.8%, and the Nasdaq Composite experienced a substantial 33.1% decline.

Efforts to mitigate the most severe price pressures in four decades slowed down M&A activity, as rising interest rates led to lower equity valuations and increased the cost of financing acquisitions. After reaching a 40-year high with a 9.1% year-over-year increase in June, the Consumer Price Index (CPI) ended the year with a 6.5% rate, signaling a moderation in inflationary pressures for 2023. Markets rallied in response to the news, anticipating a slowdown in the Federal Reserve's interest rate hikes. However, some economists cautioned that the Fed's statements suggest a commitment to keeping rates higher for a more extended period than the market anticipates. The current federal funds rates range between 4.25% and 4.5%, with expectations to surpass 5% in the first half of 2023 and remain at those levels throughout the rest of the year. In Canada, the CPI rose by 6.8% annually in November, hinting at another rate hike in January to address persistent inflation.

Despite the intense market volatility, North American M&A deal count and value remained above the three-year pre-pandemic average (2017 to 2019). This indicates that while 2022's M&A levels were subdued compared to the preceding year's peak, deal activity is adjusting to a more sustainable pace in line with historical norms. In 2022, a total of 330 deals valued at $1 billion or more were announced or closed, showcasing that buyers persisted in finding attractive acquisition targets amid the market downturn.

The information technology (IT) and energy sectors exhibited varying trends. The IT sector experienced minimal disruption in annual M&A deal value as investors continued to pursue growth in technological capabilities. In contrast, the energy sector saw an increase in deal value due to heightened demand in traditional oil & gas and sustained growth in renewable energy capacity.

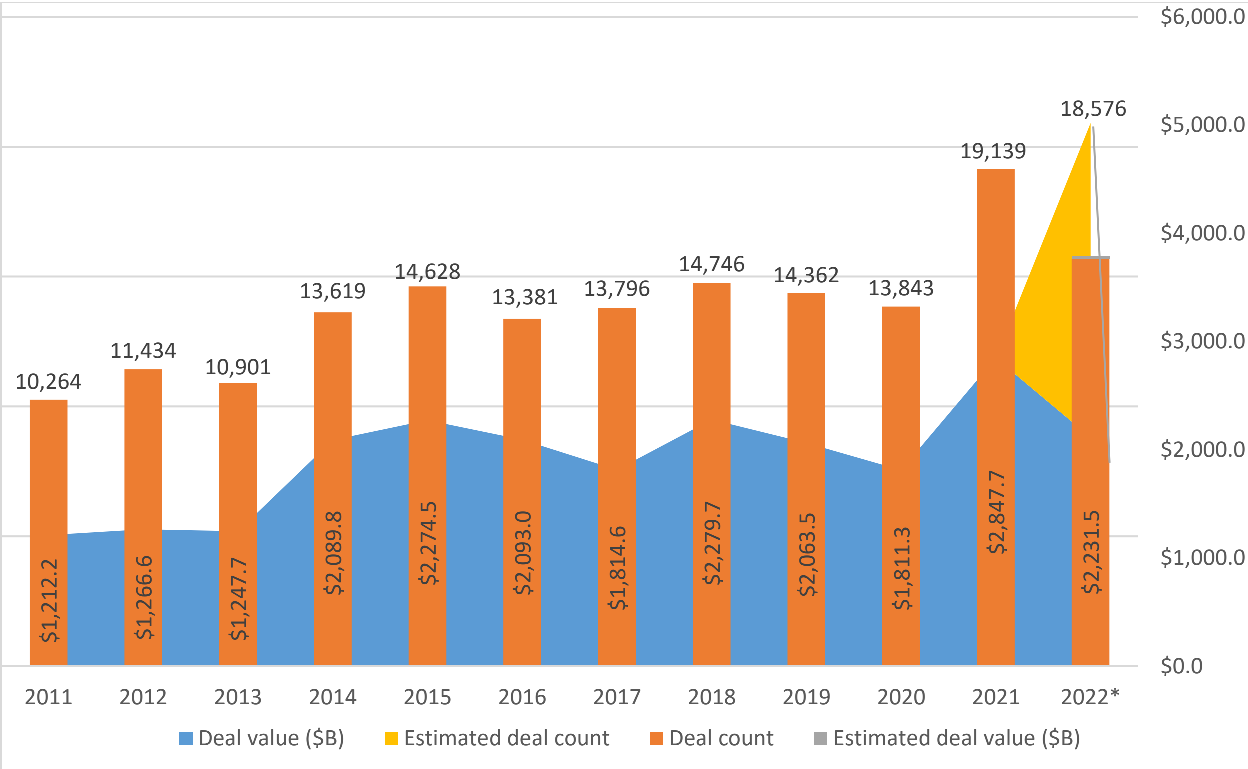

Figure 3: North American Mergers and Acquisitions Activity Data

B2B

Founder-owned enterprises are prevalent, with the B2B sector experiencing a resurgence in popularity throughout 2022. In comparison to the previous year, B2B witnessed a notable 1.5% increase in its share of deal count, surpassing all other sectors. A total of 12,968 deals, constituting 37.1% of all deals across various sectors, were either announced or completed in 2022. The sector's allure for both corporate and private equity (PE) buyers lies in its substantial number of bootstrapped and founder-owned businesses. In 2022, a remarkable 11,483 such privately owned companies were acquired in the B2B sector, twice as many as any other sector. Given the current challenging environment where finding willing sellers is arduous, and both corporate and financial sponsors wait for improved prices, these founder-owned B2B companies are highly valued and sought after.

A growing trend is observed in companies transitioning to private ownership. Among the top 20 deals in Q4 2022, 11 involved buyouts by PE funds. Among these, eight transactions featured a public company either being completely taken private or selling a portion of itself to a PE buyer. Noteworthy examples include the $1.3 billion take-private of User Testing by Thoma Bravo and Sunstone Partners. This customer experience platform provider, which had been public for only a year, was once again taken private by financial sponsors at an EV-to-revenue multiple of 6.1x. In November, Emerson Electric divested its climate technologies business to Blackstone for $14.0 billion, reflecting 12.7x EBITDA and 2.8x net sales. Emerson will maintain a 45.0% interest in the newly established standalone company until Blackstone identifies a buyer or facilitates an IPO.[3]

Aerospace & defense remains a vibrant sector, fueled by geopolitical uncertainties, substantial increases in government defense budgets, and the recovery in commercial airline travel. Noteworthy transactions in Q4 include Aerojet Rocketdyne's agreement to be acquired by L3Harris for $4.7 billion, representing 21.7x EBITDA and 2.0x revenue. This strategic move positions L3Harris to expand its presence in civil space, strategic defense systems, and precision munitions. In November, German defense contractor Rheinmetall announced the acquisition of EXPAL Systems for $1.2 billion, equivalent to 1.4x revenue. EXPAL Systems, a player in precision munitions and other weapon systems, adds to the robustness of the aerospace & defense industry.

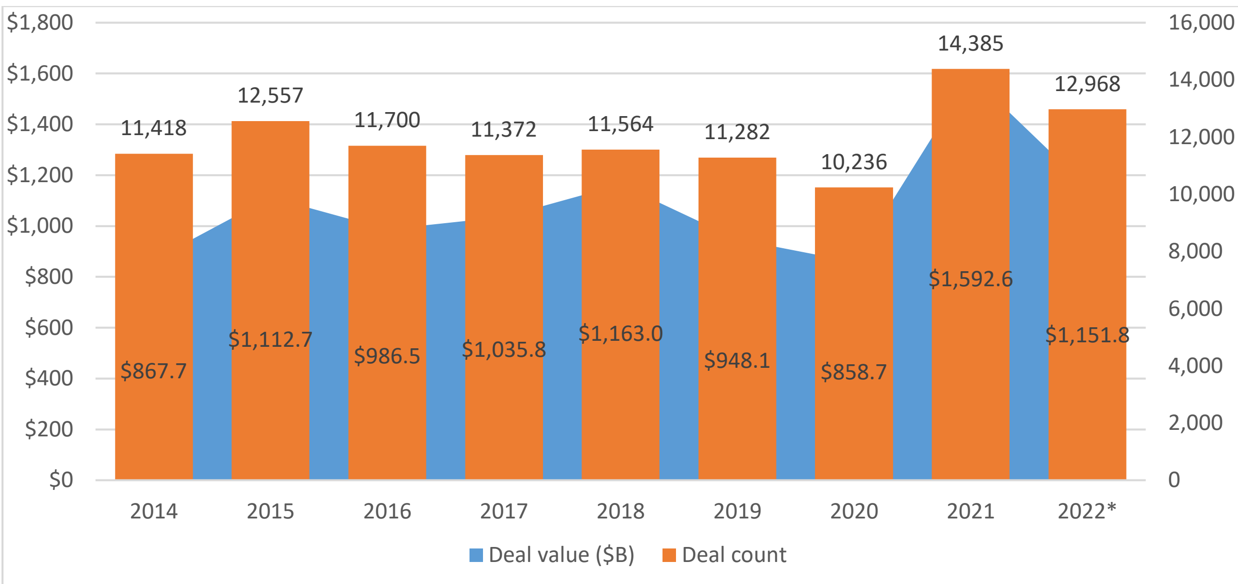

Figure 4: B2B Mergers and Acquisitions Activity Data

B2C

The B2C M&A landscape in 2022 displayed a deviation from the robust trends seen in the record-setting year of 2021. A total of 7,031 B2C M&A deals were either concluded or announced during the year, amounting to a combined value of $657.8 billion. This represented year-over-year declines of 9.5% in deal count and a substantial 31.9% in deal value. Following the unprecedented figures reached in 2021, M&A activity in 2022 normalized, reflecting a return to historical averages. Consumers encountered challenges that curtailed demand for the industry, contributing to this reversion.

The median deal size declined to $20.6 million, although it remained the second-highest on record, trailing behind the 2021 median deal size of $23.2 million. Over the past couple of years, heightened consumer spending on goods and services in areas such as leisure, retail, and hospitality had propelled B2C M&A. This surge was complemented by a zero-interest-rate environment, excess liquidity, and government stimuli that buoyed M&A activity. However, in 2022, despite sustained elevated consumer spending

[3] https://www.blackstone.com/news/press/emerson-to-sell-majority-stake-in-climate-technologies-to-blackstone-in-transaction-valuing-the-business-at-14-0-billion/

levels, a shift occurred. Credit card debt increased, while the personal savings rate decreased, prompting consumers to adopt a more rational approach. With an impending recession and changing spending habits, the impact on the B2C space is poised to be closely monitored in 2023.

Notable in the B2C sector in 2022 were corporate divestitures, responding to the drastic shifts in consumer behavior from the boom of 2021. Corporations adapted their business strategies, emphasizing carveouts as part of portfolio revamps. Facing headwinds, corporations aimed to deleverage or exit noncore assets, re-evaluating their operations to enhance efficiency and reduce costs. This shift created opportunities for both private equity (PE) firms and corporations. For example, PepsiCo divested Tropicana, Naked, and other North American juice brands to French PE firm PAI Partners for $3.3 billion in Q1. This strategic move allowed PepsiCo to strengthen its balance sheet and invest organically in its core business, while PAI Partners envisioned plans for product innovation and expansion.[4] In October, Starbucks divested Seattle's Best Coffee to Nestlé for $7.2 billion, enabling Starbucks to concentrate on its core business, while Nestlé aimed to drive sustained growth in the coffee category.

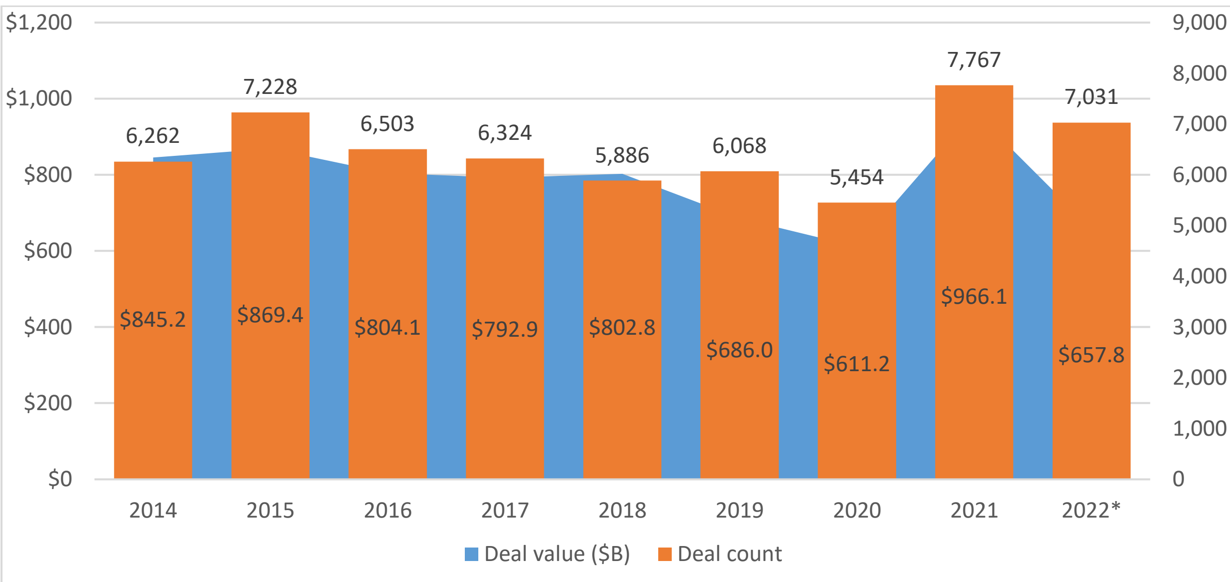

Figure 5: B2C Mergers and Acquisitions Activity Data

Energy

The incursion of Russia into Ukraine significantly impacted the landscape of Energy M&A activity. Although the energy sector witnessed a decline in overall M&A activity, a stark departure from the trend observed in the years leading up to 2021, the deal value surged to unprecedented levels not seen since 2016. Throughout 2022, the sector experienced the closure or announcement of 1,076 deals, amounting to a collective value of $407.7 billion. This surge in value can be attributed to companies strategically leveraging higher prices and increased demand, spurred by the energy crisis arising from the conflict in Ukraine. The European Union (EU) faced heightened tensions and a winter marked by limited gas supplies from Russia, further intensifying the urgency in the energy sector.

[4] https://www.foodnavigator-usa.com/Article/2021/08/03/PepsiCo-divestment-of-Tropicana-Naked-Juice-reflects-evolving-focus-on-zero-calorie-beverages-water

Oil & gas M&A activity remained robust in 2022 as corporations and nations sought to address their energy needs. Many EU countries have long relied on Russian-supplied oil & gas, and for some, this dependence has grown since transitioning away from coal, nuclear, and gas production domestically. The war in Ukraine drove several significant deals in the energy space in 2022, with the objective of expediting energy independence and stabilizing the energy market in anticipation of a harsh winter in many EU nations. Notably, in August, PKN ORLEN concluded its acquisition of Grupa LOTOS for $10.1 billion, aiming to enhance Poland's energy independence and ensure stable fuel prices for all customers.

While clean energy took a back seat to oil & gas, it continued to witness an uptick in deal activity. The year 2022 highlighted Europe's vulnerability to Russian gas, underscoring the global significance of securing energy production. Many countries, despite their reliance on traditional oil and natural gas, increasingly considered renewable sources. The renewables sector witnessed several multi-billion-dollar deals, emphasizing the growing demand for alternative energy resources. For instance, Australian company Squadron Energy acquired CWP Renewables for over 4 billion Australian dollars ($2.7 billion) to scale up its operations and meet the rising demand for green energy in eastern Australia.[5]

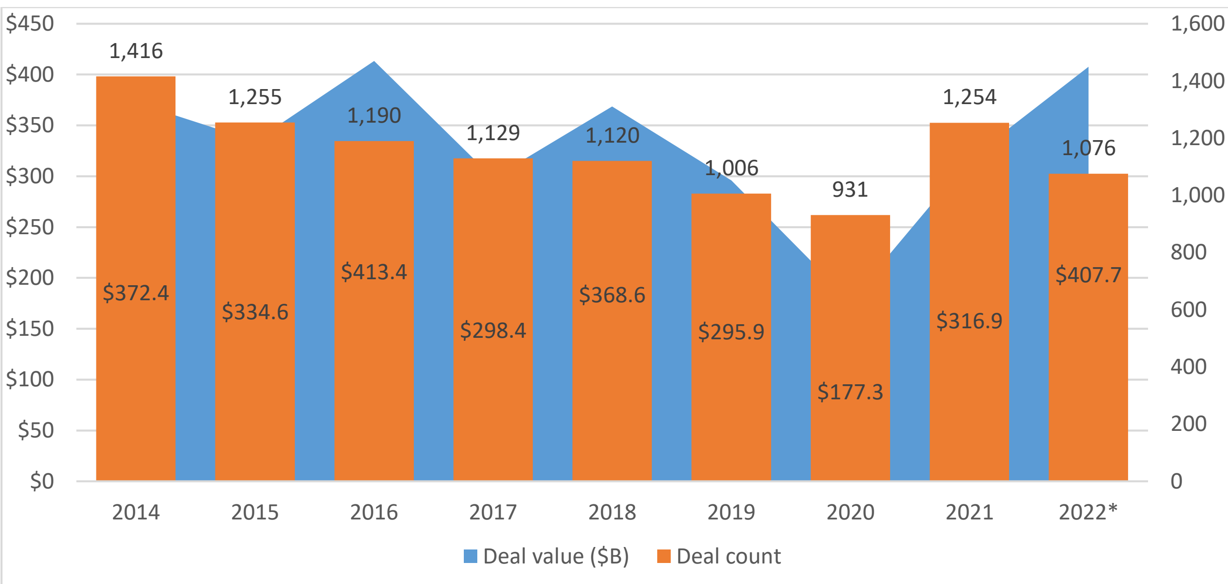

Figure 6: Energies Mergers and Acquisitions Activity Data

Financial Service

Mergers and acquisitions (M&A) persisted in an environment of rising interest rates during 2022, with 2,745 financial services deals announced or completed, reaching a cumulative value of $459.7 billion. The financial sector experienced a more gradual ascent in 2021 compared to other industries, leading to a less pronounced decline in 2022. The sector's share of total deal value increased to 11.0%, rebounding from a five-year low of 9.7% in 2021. Notably, the financial sector exhibited smaller deal sizes, a consequence of ongoing industry consolidation, and featured a higher ratio of private equity (PE) add-ons, accounting for 81.8% compared to the PE average of 71.9%. Amidst the backdrop of rising interest rates, the financial

[5] https://www.reuters.com/markets/deals/australian-billionaire-snaps-up-cwp-renewables-over-27-bln-2022-12-06/

landscape displayed varying performance among different segments. Banking, for instance, thrived due to widening spreads, while asset management and insurance faced challenges attributed to lower returns from long-duration assets.

Banking activities remained dynamic, exemplified by HSBC's announcement in Q4 regarding the sale of its Canadian business to Royal Bank of Canada (RBC) for $10.0 billion, equivalent to 2.8 times attributable net asset value. This strategic move followed HSBC's decision to exit the Canadian market, providing RBC with a premier international banking franchise that aligns with its position as Canada's largest bank. In December, New York Community Bancorp concluded its acquisition of Michigan-based Flagstar Bank for $2.6 billion, representing 0.8 times book value. The regulatory scrutiny that spanned 20 months underscored the expansion of New York Community Bancorp's geographic footprint and product offering through Flagstar's mortgage lending business, operating across all 50 states.

The insurance sector witnessed significant divestitures as owners orchestrated strategic moves to fortify balance sheets or explore new markets. Aegon chose to divest its Dutch pension and life insurance operations to domestic rival ASR Nederland in a deal valued at $4.9 billion. This transaction enabled Aegon to unlock capital from mature businesses and strategically position itself for growth, particularly in its U.S. Transamerica unit and in the UK. In another notable move, Swiss InsurEvolution divested its private placement life insurance unit for $2.6 billion to Octium Group, a privately held insurer based in Ireland. Octium interpreted this deal as fortifying its European footprint and facilitating global development.

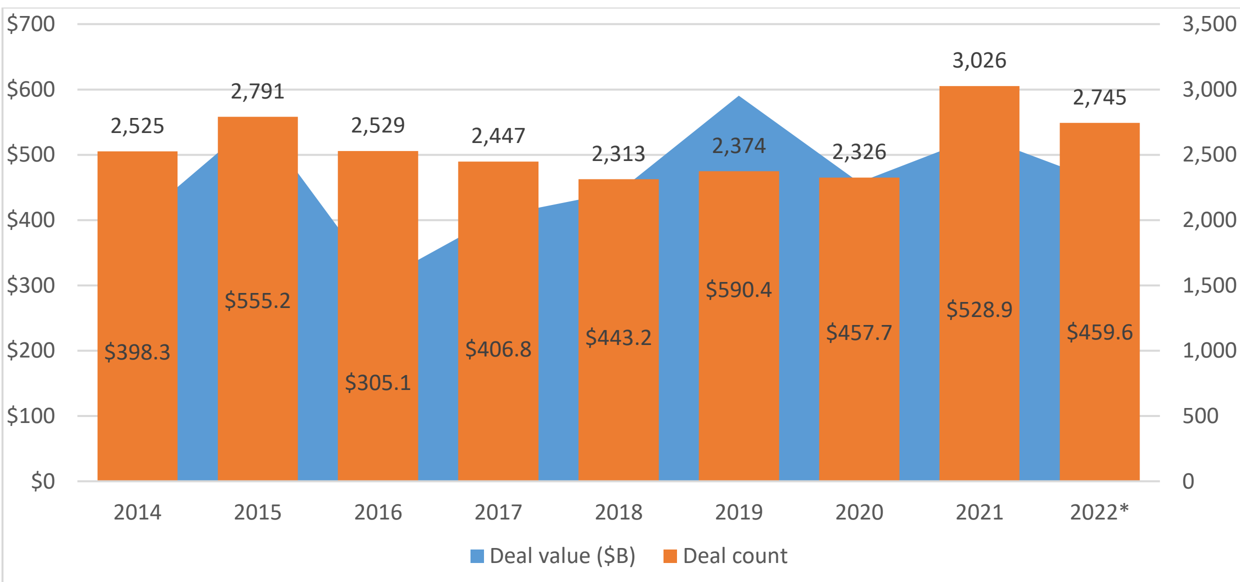

Figure 7: Financial Services Mergers and Acquisitions Activity Data

Healthcare

Healthcare deal value experienced a slight uptick in Q4 but fell short of the peak reached in 2021. Throughout 2022, the healthcare sector contributed to 11.0% of the global M&A deal value and 9.3% of deal count, marking a decline from the previous year's figures of 13.0% and 10.7%, respectively. In a landscape where major Big Tech players are scaling back, Oracle distinguished itself by acquiring Cerner for $28.0 billion, a prominent player in cloud-based electronic health records. It is unlikely that we will witness more significant healthcare deals from Big Tech, given the ongoing deterioration in the macroeconomic environment and the cost-cutting measures implemented by technology companies.

While there has been a slowdown in major deal flow within the medtech sector, typically characterized by high deal activity, major companies with robust balance sheets have the capacity to make strategic moves if valuations remain subdued. This is evident in Johnson & Johnson's recent acquisition of Abiomed. However, an air of caution prevails among corporate leaders, making mega-deals a challenging prospect.

Despite an overall decline in deal flow, a notable surge in biotech acquisitions occurred in the latter part of 2022. This includes Amgen's acquisitions of ChemoCentryx ($3.7 billion) and Horizon Therapeutics ($26.4 billion), along with Pfizer's $11.6 billion buyout of Biohaven. Large biotech companies, buoyed by ample cash reserves and lowered sector valuations, may lead to increased activity in 2023. Biotech M&A tends to remain resilient even during periods of economic uncertainty, as evidenced by significant deals during the 2008 financial crisis. With growing interest in Alzheimer's treatments and notable developments such as Biogen's Aduhelm, companies like Alnylam and Karuna Therapeutics could emerge as potential targets.

In preparation for the rise of specialty oncology testing, diagnostic giants like Thermo Fisher completed a $2.8 billion acquisition of the UK diagnostics company, The Binding Site. Thermo Fisher's interest in adding flagship tests for the detection and monitoring of multiple melanomas indicates a broader trend among major diagnostics companies (such as Abbott, Roche, BD, and Siemens) to expand their portfolios in cancer screening and treatment selection. Other life science firms like Agilent, Labcorp, and Quest may also express interest in enhancing their offerings in oncology. However, caution is warranted due to potential antitrust risks associated with the consolidation of oncology tests and related diagnostic equipment. Meanwhile, Illumina is navigating challenges in its pursuit of the acquisition of multicancer testing company Grail, receiving conflicting decisions from US and EU regulators.

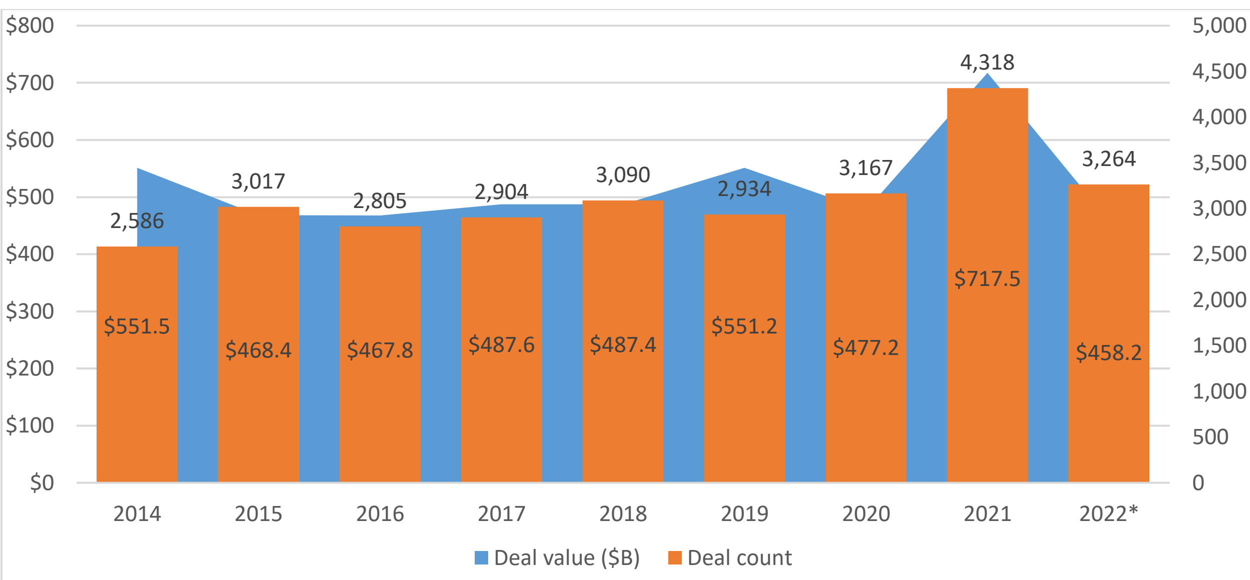

Figure 8: Healthcare Mergers and Acquisitions Activity Data

IT

The technology sector showcased its resilience, marking its second-best year in deal count and value amidst heightened market volatility. By the close of 2022, IT deal making saw 6,750 transactions, accumulating a total value of $902.8 billion. While experiencing a 16% to 17% drop from the record levels set in 2021, the sector remained robust, constituting 21.6% of global M&A values for the year. The persistent trends of digitalization and technological advancement attracted capital, sustaining the sector's strength. The initial half of 2022 maintained a brisk pace in tech M&A, but activity slowed in the latter half. Challenges arose as stakeholders grappled with adapting valuations, corporate restructuring in major tech firms, and broader inflationary pressures.

Mega-deals (those valued at $1 billion or more) decelerated toward the year's end, with Q4 witnessing the announcement of 10 mega-deals totaling less than $30 billion, compared to 19 deals exceeding $184 billion in Q2. This decline is expected to persist as rising interest rates and financing difficulties dissuade investors from pursuing large acquisitions and extensive take-privates that previously fueled M&A activity. Instead, private equity (PE) firms are anticipated to play a pivotal role, capitalizing on the expanding pool of significantly discounted public companies. The aftermath of the tech deSPAC and IPO boom of the past two years has left 644 new listings trading below $1 billion in market capitalization, presenting attractive M&A opportunities at an average discount of 76.5% below their initial listing prices.

Antitrust regulation has gained momentum globally, with a particular focus on the technology sector due to ongoing consolidation efforts. Under the Biden administration, US regulatory bodies, such as the Federal Trade Commission and Department of Justice, have pursued multiple lawsuits against major tech companies since 2020. President Biden's signing of a bill at the end of 2022 raised filing fees on substantial M&A deals, with the additional revenue earmarked to bolster antitrust enforcement. The measure is aimed at fees generated from large acquisitions by Big Tech companies and will fund efforts to counteract antitrust concerns.[6] Similarly, the European Union has targeted Big Tech through the Digital Markets Act, signed into law in September. This legislation imposes new restrictions on tech giants to foster a more competitive digital market.

[6] https://www.axios.com/2022/09/29/house-bill-raise-merger-fees-doj-ftc?stream=top

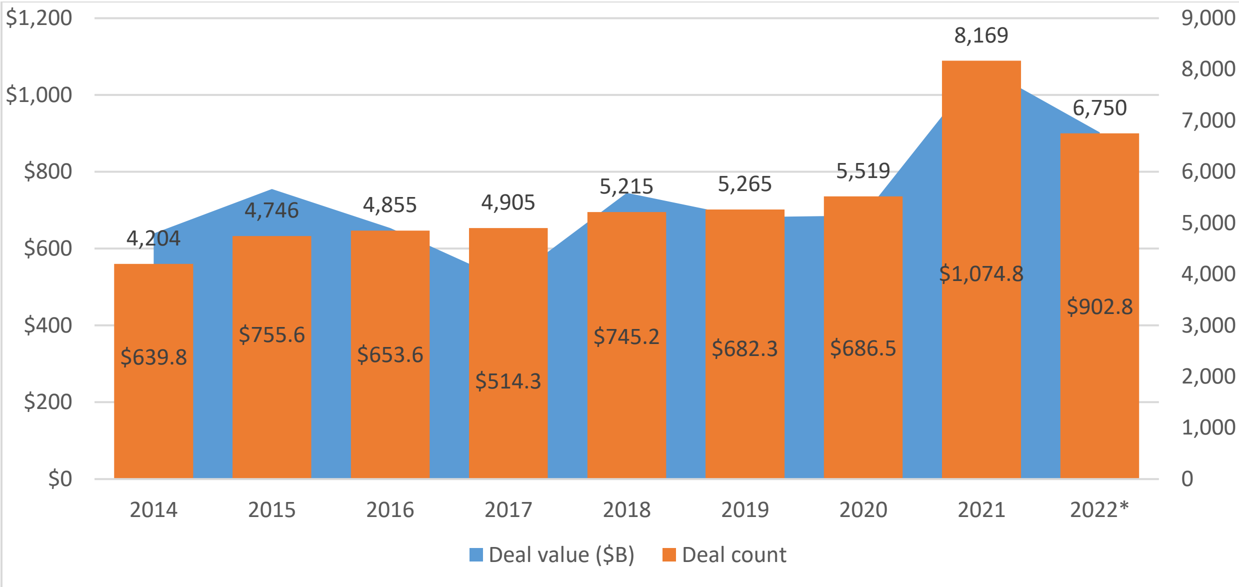

Figure 9: IT Mergers and Acquisitions Activity Data

Materials and Resources

M&A activity in the materials & resources sector has hit a nine-year low as corporate and financial sponsor buyer's shift away from the sector. Despite a 29.1% surge in deal value in 2021, propelled by robust commodity performance, the sector has now retreated to its lowest dollar volumes since 2013. Investors are exercising caution, avoiding more cyclical businesses in anticipation of an impending recession. Additionally, companies in the sector are grappling with increased scrutiny related to environmental, social & governance (ESG) factors as the global push for net-zero emissions gains momentum.

Within the mining & minerals segment, notable deals took center stage in Q4 2022. Two of the largest transactions involved commodities linked to a lower carbon footprint. In November, OZ Minerals, a prominent copper producer, agreed to a $6.2 billion acquisition by Australian mining giant BHP. This marks BHP's most significant deal in a decade and underscores the company's strategic shift toward "future-facing" metals like copper, integral to electric vehicle production and clean technologies. Another significant move involved the full merger of South Korea-based LS MnM, a copper producer, into LS Holdings of Japan. LS Holdings, the largest minority shareholder, acquired all remaining shares of LS MnM in a $664.1 million deal, valuing the company at $1.3 billion.

The containers & packaging sector is also witnessing activity with a focus on ESG-friendly initiatives. In November, Liquibox entered into a $1.1 billion acquisition deal with Sealed Air, at a multiple of 3.2x revenue. Liquibox has developed a recyclable alternative for metallic laminated bags, aligning with Sealed Air's strategy to expand its presence in various beverage sectors and e-commerce-ready solutions. Another significant transaction in the beverage industry involved Verallia's acquisition of Allied Glass Containers for $357.0 million, or 1.9x revenue. Allied, a leading producer of premium glass packaging for spirits in the UK market, will be combined with Verallia's Cryovac Fluids & Liquids business to drive growth in sustainable packaging solutions.[7]

[7] https://www.businesswire.com/news/home/20221101005643/en/SEE-to-Acquire-Liquibox

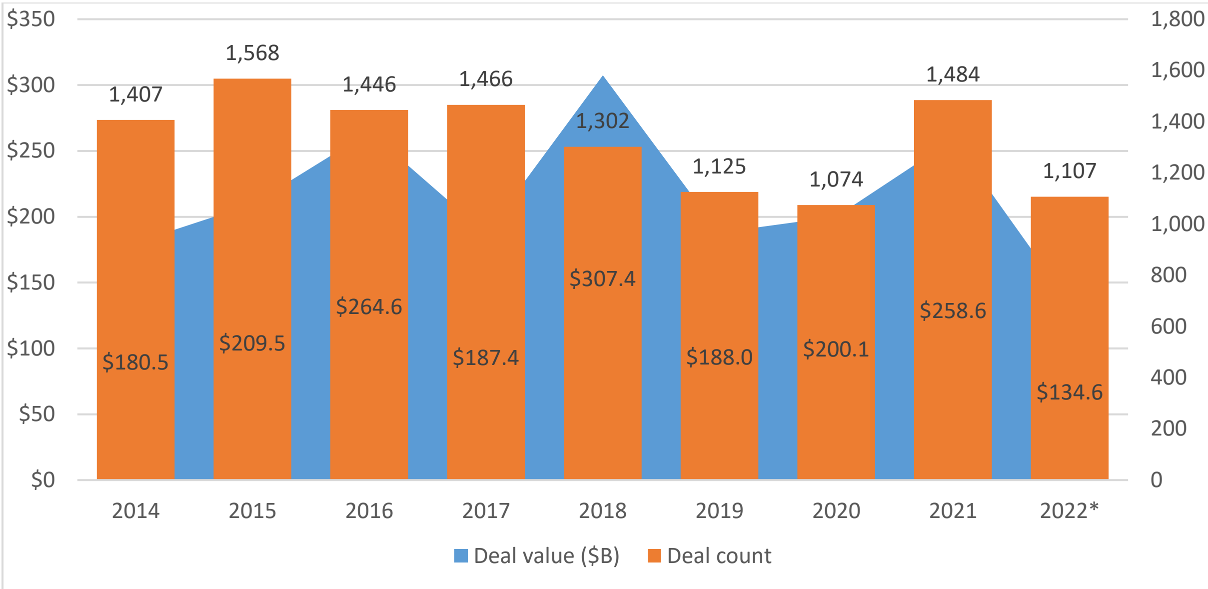

Figure 10: Healthcare Mergers and Acquisitions Activity Data

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