

ANNUAL REPORT

Global Bankruptcy Report – 2023





Julian Prower
Chief Operating Officer
Dun & Bradstreet International

Historically, economic downturns were accompanied by a precipitous increase in business bankruptcies. The COVID-19-induced downturn was an anomaly. Contrary to the widely held expectation that the real-economy freeze prompted by the pandemic would lead to an avalanche of bankruptcies, there were fewer bankruptcies in 2020 and 2021 compared to 2018 and 2019. Fiscal packages, monetary policy easing, access to low-cost liquidity, and creditors' forbearance kept businesses afloat during COVID-19. That said, there was an underlying understanding that the tide would turn; factors that kept bankruptcies at artificially low levels are no longer in force. In 2022, the number of bankruptcies grew in ~60% of the monitored countries, compared to ~50% in 2021, and ~30% in 2020.

We have observed an increase in credit card spending by small business, signaling the worsening of credit availability through traditional channels. As credit disbursement and standards tighten, small businesses with a longer cash-to-cash cycle may experience significant challenges in cash flow management. Zombie firms, which rely on revolving credit to stay afloat, are likely to be the first to falter.

The global decline in the number of funds raised in 2022 led to a funding winter for businesses in sectors such as technology, finance, and consumer. This situation has been compounded by the collapse of large banks in early 2023. Although these recent events may not be the turning point for bankruptcies, uncontained significant collapses could amplify funding constraints, suppress investment, reduce corporate earnings, impair debt servicing capabilities, and eventually culminate in a surge in bankruptcies.

Economic growth will be asymmetric in 2023, posing risks and presenting pockets of opportunity. The impact of the economic cycle will be amplified by the depth of corporate linkages, including suppliers, vendors, and customers, spread across other regions. Even companies operating in countries experiencing economic slowdown may be partially immune if most of their corporate family tree (subsidiaries, joint-ventures, affiliates) is operating in countries experiencing rapid economic expansion and vice versa. Corporate linkages may act as a risk deterrent or amplifier depending on their geographical and sectoral characteristics.

As a result, businesses must quickly recognize that the current economic landscape necessitates a more proactive approach to credit risk mitigation. Getting back to the basics with the 5Cs of credit management – Capacity, Capital, Character, Collateral, and Conditions – is vital during these volatile times. By working with trusted analytics experts, businesses have access to dynamic data that can be used to answer questions such as:

- What is the business' financial capacity to pay its invoices?
- What is the business' present capital structure and how has it changed over time?
- Does the business have a track record of paying suppliers on time?
- Is there sufficient collateral that can be liquidated in case of bankruptcy, and how favorable are the industry and economic conditions for the business' growth plans?

In addition to monitoring credit information, businesses also need to consider supply chain linkages to have a comprehensive view of their upstream and downstream risks. Having visibility into the credit risk across the entire global portfolio can help inform treatment strategies and prioritize collections.

Thousands of professionals worldwide rely on Dun & Bradstreet to identify hidden risks in their portfolio, anticipate cash flows in any economic cycle, and gain valuable insights into their pipeline risks. With the global economy in a state of constant flux, it's more important than ever to have access to reliable information that can help you make informed decisions. This report aims to serve as a valuable source of information to assist you in navigating the complex world of credit risk management and maximizing opportunities.

We value your feedback so don't hesitate to get in touch if you have any questions or comments. We can help you achieve your goals and thrive in even the most challenging economic conditions.

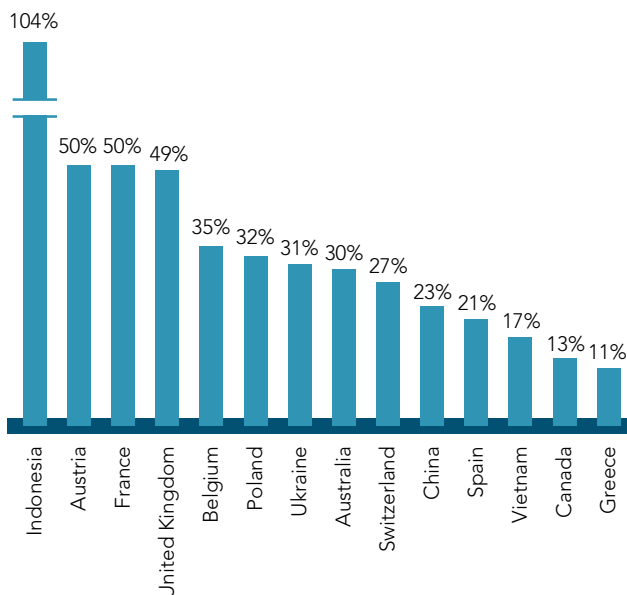
Breaking Point: The Escalating Trend of Bankruptcy Rates

Dr. Arun Singh
Global Chief Economist
Dun & Bradstreet



Nearly three-fifths of the 48 countries monitored by Dun & Bradstreet and its Worldwide Network witnessed an increase in business failures during 2021. Of these, 13 registered the highest bankruptcy filings since the turn of the decade. In 2022, the global economy was on the mend, but then it was struck by two further shocks: the Russia-Ukraine crisis and monetary policy tightening. The fallout from these events had far-reaching implications that derailed the progress of economic growth and elevated the likelihood of bankruptcy across the board.

Economies that reported a spike in bankruptcies during 2022



Source: Dun & Bradstreet Worldwide Network

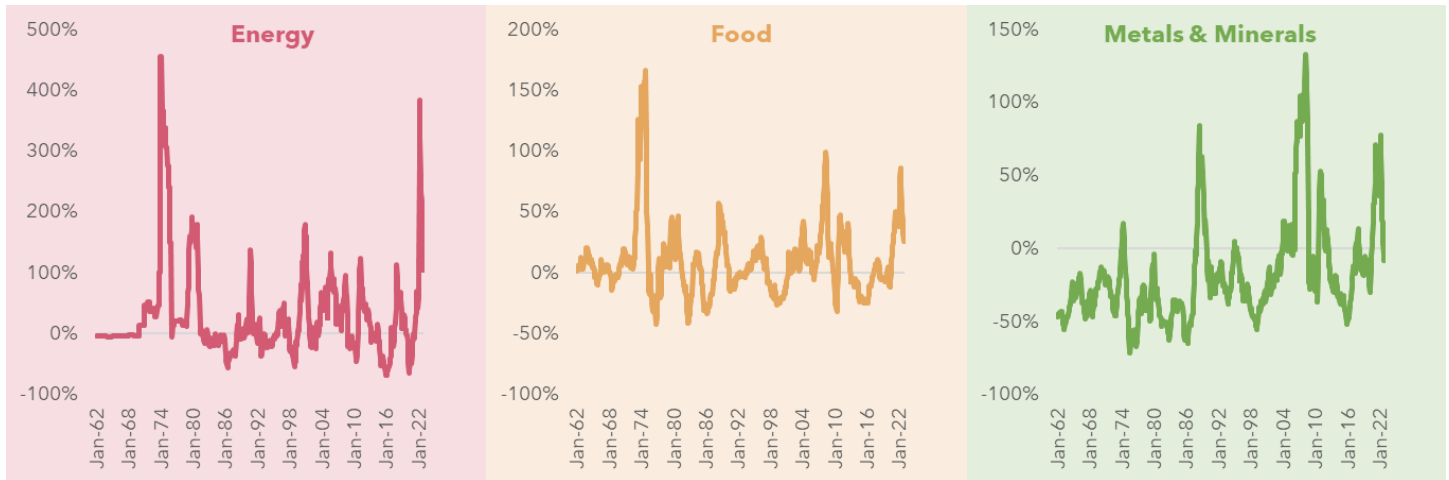


The Bankruptcy Quagmire: Exploring the Cause

Ensuing supply chain disruptions and sanctions on Russia, following its invasion of Ukraine, triggered a massive spike in the prices of energy, food, metals, and minerals. Prices of key commodities such as aluminum, zinc, coal, natural gas, urea, palm oil, soybean oil, soybean meal, maize, and wheat rose to their highest levels ever. As the prices of other key commodities such as Brent crude oil, iron, copper, and nickel also increased significantly, the world witnessed a widespread surge in inflation. This unprecedented price escalation persisted across several major countries, spanning from the UK, where it peaked at three decades, to Canada, the US, France, Spain, and Italy, where it peaked at four decades, to Germany, where it peaked at five.

This was a double whammy for businesses. On one hand, rising input costs hurt the bottom line of businesses, while on the other, the increase in energy and food bills created a cost-of-living crisis for billions of people across the world. As consumers scaled back on discretionary spending, businesses struggled to maintain their revenue streams, thereby impacting their topline as well.

Changes in Commodity Prices (Over a 24-Month Period)



Source: World Bank, Dun & Bradstreet Worldwide Network

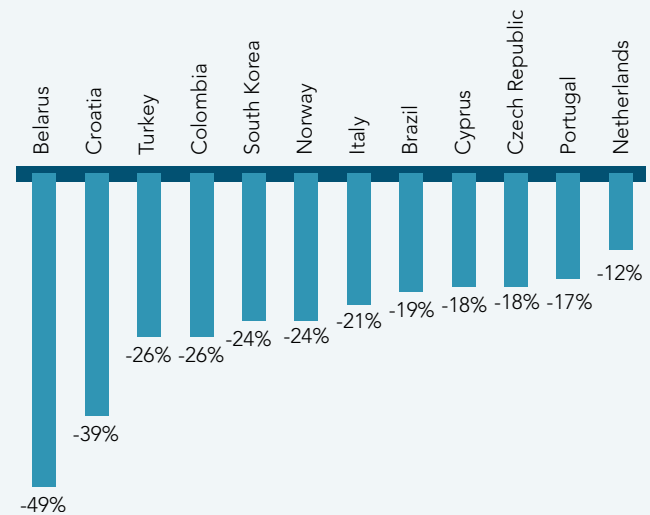
In a bid to curtail inflation, central banks worldwide raced to hike interest rates. A staggering 33 out of the 37 economies tracked by the Bank for International Settlements (BIS) responded by raising their interest rates by an average of 381 basis points (bps) in 2022, propelling the global economy into one of the most internationally synchronous episodes of monetary policy tightening of the past half century. This marked the end of an era of low-cost debt and abundant market liquidity, throwing firms that relied extensively on an accommodative monetary policy to extend their cashflow runway into an uncharted territory. The outstanding amount of total debt securities – which includes the amount borrowed in the domestic and international markets – raised by non-financial corporations declined to US\$ 18.13 trillion as of September 2022, an eight-month low. It is worth noting that this amount had surged 18.2% from March 2020 to March 2022, marking a significant uptick from the 6.3% average annual growth rate witnessed over the preceding five years.



The Calm Before the Storm

Some countries loosened their purse strings to help consumers and firms weather the cost-of-living crisis. For example, the US waved off \$10,000 of student debt for low- to middle-income borrowers, Brazil cut down fuel taxes and increased social welfare payments, Turkey increased its minimum wage by 30% in a midyear adjustment, the Netherlands reduced value-added tax on energy from 21% to 9% and announced a one-off energy subsidy of €1,300, while Norway capped electricity bills and covered 90% of power bills above a certain rate.

Economies that reported a decline in bankruptcies during 2022



Source: Dun & Bradstreet Worldwide Network



The Path Ahead: What You Need to Know

Tight global financing conditions reflect the broader economic challenges in the world today and will likely persist until there is a sustained recovery in global economic growth. Given the persistently high levels of inflation, it is expected that nominal interest rates will continue to remain elevated in the near term. Higher borrowing costs, coupled with low market liquidity, could pose significant challenges in cash flow management.

The recent turmoil in the banking sector could make it challenging and more expensive for banks to access non-deposit funding. Small and midsized banks could be subjected to stricter regulatory scrutiny, which may limit their risk-taking and operating margins. The upshot of all this is that we may see more bank failures in the months to come. It is worth highlighting that more banks folded up in 2009 and 2010 – two years after the fall of Washington Mutual and Lehman Brothers – than in 2008 at the peak of the Global Financial Crisis.

Energy prices are expected to remain high and be influenced by geopolitical events, impacting businesses, particularly those in Europe. Diminished pricing power and rising energy costs will cause significant financial strain in Europe. Dun & Bradstreet's analysis shows that there are over 3.4 million entities across 18 sectors and 18 European countries with medium to high levels of energy intensity.

The level of bankruptcies will differ with sectors and countries. The hospitality and transportation industries are already showing signs of stress, and more industries may follow suit. Accelerating wages also pose a big risk to the bottom line of firms. Without a concurrent increase in productivity levels, the increase in wage price will wipe off profits for several small and midsized businesses. These factors will likely fuel a widespread surge in bankruptcy cases in 2023.





Key Takeaways

- Bankruptcies, as defined by Dun & Bradstreet and its Worldwide Network Partners, increased in more than half of the economies monitored in 2022, compared with 2021. A reverse of what was observed in 2021 vs. 2020, when almost half of the monitored economies had shown a decline. An outcome indicated in Dun & Bradstreet's 2021 Global Bankruptcy Report.
- Businesses are facing different challenges in 2023, post withdrawal of pandemic-related government/regulatory support, as well as due to tight monetary policy across economies amid inflationary pressures and stricter credit environment, over and above the higher cost of living and operating expenses.
- 2023 could be the year of reckoning for business bankruptcies, due to stricter credit standards (even more so after the SVB and Credit Suisse crises).
- The draught of liquidity from debt markets, constriction of fiscal packages, tight monetary policy and general economic slowdown could add to the liquidity pressures.
- Out of 48 monitored markets, 14 reported higher than 10% year on year increase in bankruptcies in 2022.
- 20 monitored economies reported the highest level of bankruptcy in 2022 in the 3-year period (2020-2022), whereas 12 economies witnessed consistent decline in bankruptcies from 2020.
- Out of 132 countries covered by D&B Country Risk Ratings in December 2022, 68 were categorised RED and 54 AMBER risk rating bands whereas in December 2021, only 63 were rated in RED and 50 AMBER risk categories, depicting an overall increase in risks at country level in the last year.
- Bankruptcies alone cannot reflect credit and supply chain risks as accurately as a source of business intelligence during the pandemic, making actionable firm-level insights and monitoring more crucial.



Global bankruptcies increased 10.8% in 2022 vs. 0.6% in 2021.



Bankruptcies in Austria, France, and the UK increased about 50% in 2022 vs. 2021.



Indonesia reported a more than 100% increase in bankruptcies in 2022 vs. 2021.

Business Failures and Context in Asia Pacific

The Asia Pacific region witnessed a mixed economic performance in 2022. While several major economies saw an economic recovery in the early half of the year driven by the emergence from lockdowns, prospects began weakening soon after – in line with those of the global economy. Rising cost of imports, particularly commodities and energy, had a sobering impact on the external and fiscal balances of several countries. While some countries (such as Bangladesh, Pakistan, and Sri Lanka) took a severe hit, there were those (such as Indonesia, and India) that deployed export bans to arrest price rises and those (such as Australia and Malaysia) that also benefited from a favorable tilt in terms of trade. Troubles in Sri Lanka also precipitated into a political crisis as the island nation defaulted on all its external debt. Overall, inflationary pressures in the region rose but remained contained, especially in comparison to the rest of the world.

The dominant theme, however, was the weakness in Mainland China’s economic performance, which weighed on the region’s economic prospects through 2022. Combined with rising interest rates, weakening currencies, and a roll back on pandemic support measures, it seems to have contributed to higher business liquidations across the region. While the fact that bankruptcies rose in Asia in 2022 was not surprising, in some instances, such as Australia, bankruptcies jumped by as much as 30%. It is worth noting that this relative rise in bankruptcies experienced in several Asian economies was from a low base – in Australia’s case, bankruptcies in 2021 were at their lowest level since 2015. It is also worth noting that bankruptcies rose through H2 2022 when the global economic environment turned more somber with aggressive rate hikes by central banks in the US and EU when there were clear signals that taming inflation required such big moves. The export-oriented economies of Asia suffered from the double whammy of weakening prospects of global growth and rising cost of debt.

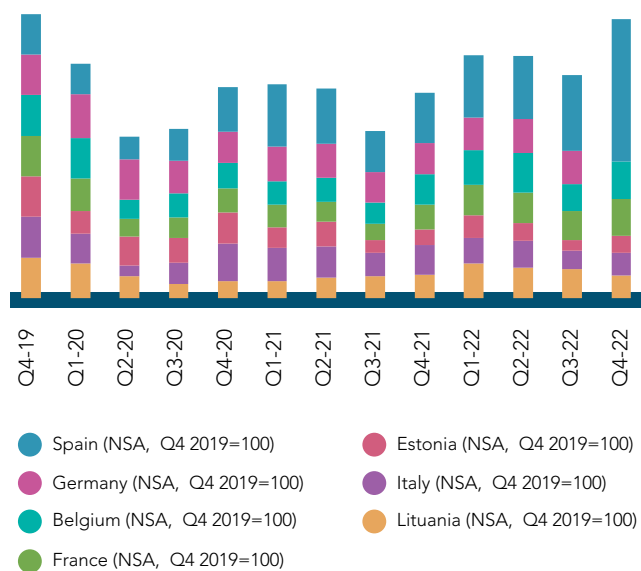
Entering 2023, the Asia Pacific region’s outlook has marginally improved, primarily with the reopening of Mainland China. Tourism-dependent economies in the region are likely to receive a considerable boost, and several central banks in the region have already halted their interest rate increments given that inflation, though elevated, has not been runaway. While this supports a benign economic outlook for the region, we expect bankruptcies to continue rising for some time. Firstly, base effects are likely to continue playing a role in countries such as South Korea, where overall bankruptcies fell for a second consecutive year in 2022 and a rise from a low

base would contribute to higher bankruptcies for the region overall. Secondly, the cost of financing and refinancing debt is likely to stay elevated, even though we are nearing the end of the global monetary tightening cycle. For companies in the region that came to rely on external borrowing specifically, this will weigh on balance sheets and lingering stress could lead to higher liquidations. Thirdly, the Asia Pacific region is also home to some of the fastest growing economies in the world. Bankruptcies in several of these markets are also indicative of higher economic dynamism, as more companies come into existence and fold in lockstep, leading to a higher number of bankruptcies. Finally, the evolution and greater use of bankruptcy courts and insolvency proceedings will also continue to contribute to higher reported numbers of business bankruptcies.

Business Failures and Context in Europe

In Q4 2022, bankruptcies in Europe reached their highest level since 2015, though there was no significant homogeneity in this trend across the region.

BANKRUPTCIES IN THE EUROPE – SELECT COUNTRIES (Q4 2019=100)



Bankruptcies in Spain, for instance, have been increasing steadily since Q1 2022 and grew massively in Q3 2022 (186% higher than in Q4 2019) and Q4 2022 (350% higher than in Q4 2019). This is starkly different than what was observed in some other major European economies (e.g., Italy, Germany, and France), where bankruptcies are still significantly below the pre-pandemic levels (and have been throughout 2020, 2021,

and 2022). Among large European countries, Spain and the UK seem the only two where bankruptcies are on an upward trend, which could be strengthened by recent inflation and growth developments in Europe.

February Eurostat flash estimates show that headline inflation in the Eurozone is still strong (8.5%, unchanged from January). Moreover, core inflation accelerated, with inflationary pressure being higher in most basket items, implying that inflation might become more engrained. On top of roaring core inflation, the risk of a wage-price is still high, leading the ECB on a hiking trajectory that could bring interest rates to 4-4.5%.

Business Failures and Context in the Middle East & North Africa

Studies suggest that the pandemic-induced shock has adversely affected firms across the MENA region, although unevenly, as firms' liquidity and solvency positions took a harder hit in oil-importing compared to oil-exporting countries. Historically, the bankruptcy procedure has been cumbersome in the region and there persists a "negative" attitude towards financial distress. So distressed debt buyers lacking local lending licenses typically act in the market by means of "a participation" in which the buyer acquires the rights to the debt, but the seller remains its legal owner.

Of late, gulf countries have attracted some interest from international investors focused on distressed debt, where banks are making provisions for more non-performing loans due to economic headwinds and the uncertain nature of the recovery. Higher interest rates globally and a strong US dollar – to which most regional currencies are pegged – are translating into higher borrowing and other costs in the non-oil private sector. Corporate restructuring opportunities have improved with the introduction of legislative changes, which are bringing rules more in line with the global standards. For example, Saudi Arabia, the region's largest economy, introduced a bankruptcy law in 2018 and the United Arab Emirates enacted one in 2016 and amended it in 2020. US hedge fund Davidson Kempner recently acquired a non-performing loan portfolio worth \$1.14 billion from the United Arab Emirates' Abu Dhabi Commercial Bank.

The risk of contagion from the collapse of systemically important banks such as Silicon Valley Bank and Credit Suisse is low in the region. Post the \$3.25 billion takeover of Credit Suisse, UBS has agreed to pay its shareholders 0.76 francs per share. This implies that Saudi National Bank, a significant investor in the bank, will likely lose \$1.2 billion or nearly 80%

of its investment. However, Saudi National Bank anticipates that there would be a "nil impact on profitability" from a "regulatory capital perspective". The Qatar Investment Authority, Credit Suisse's second-largest investor, holds a 6.8% stake in the bank, but hasn't disclosed its losses.

Data suggests that the UAE has a higher problem loan ratio than many other Middle Eastern and African economies, and its banks are exposed to high credit risks due to aggressive lending and concentration in the real estate and construction sectors. Bank sales of nonperforming loan portfolios in the United Arab Emirates will become more common as lenders prioritize cleaning up their books and as improving regulations increase the attractiveness of such deals to buyers, according to market observers. Data from Dun & Bradstreet for Saudi Arabia suggests that 99 firms filed for bankruptcy in 2022, almost double of 2021 but close to the figure in 2020.

There is trouble brewing in other countries as well; probability of a sovereign debt default has increased in Tunisia due to economic challenges caused by the coronavirus pandemic and the fallout from the Ukrainian crisis. The country is seeking a loan of \$4 billion to support its economic reform agenda. The crisis may trigger a wave of bankruptcies in the private sector as well, especially the ones with a lot of government projects.

Business Failures and Context in Sub-Saharan Africa

Corporate bankruptcies in Sub-Saharan Africa have been on the rise in recent years. According to a report by the International Finance Corporation (IFC), insolvency regimes in the region are weak and outdated, making it difficult for companies to restructure or liquidate their operations in an efficient and timely manner. In 2019, South Africa had the highest number of corporate insolvencies in Sub-Saharan Africa, with 1,040 companies filing for bankruptcy. This was followed by Nigeria with 596 filings and Kenya with 101 filings. The IFC report noted that the high cost of credit and difficulty in accessing financing were major factors contributing to the increase in bankruptcies in the region.

The COVID-19 pandemic has further exacerbated the economic challenges that companies in Sub-Saharan Africa face, with many struggling to survive amid reduced demand and disruptions to supply chains. According to a private survey, 80% African companies experienced a decline in revenue in 2020 due to the pandemic. In 2020, South Africa recorded a 33% increase in corporate insolvencies compared with 2019, with 215 companies going bankrupt. In Nigeria,

several companies, including airline Arik Air and construction firm CCECC Nigeria Limited, have reportedly experienced financial difficulties.

Fiscal stimulus and an expansionary monetary policy on a global scale have provided support to struggling businesses by increasing consumer demand and providing liquidity to credit markets. With the tide now turning, we believe that corporate bankruptcies will see a sharp spike across the region. Stats SA recently published the latest liquidation data for South Africa, showing that company liquidations shot up over 30% in December 2022 year on year – although overall closures were slightly lower than 2021. In 2022, 1,907 businesses and companies were liquidated, down from 1,932 that had to shut their doors in 2021. Most of the businesses that closed in the country were in financing, insurance, real estate, and business services, followed by trade, catering, and accommodation.

The recent banking sector uncertainties could act as a catalyst. Though the contagion from the failure of the Silicon Valley Bank and Credit Suisse is limited in the African context, increased scrutiny on capital buffers and quality of bank assets might lead to loss of confidence in regional banks. It has implications for the thriving tech start-up sector in countries such as Kenya and Nigeria as well. The three now-defunct US-based lenders, Silicon Valley Bank (SVB), Silvergate Bank, and Signature Bank, had been supporting tech-focused venture capitalists in Africa. Nigeria has launched a \$672 million fund to support its tech startups amid the upheaval caused by the recent collapse of three key US banks to cushion its startups against the kind of situation that Chipper Cash, a victim of the fall of SVB and the bankruptcy of cryptocurrency exchange FTX, finds itself in. The latter is now considering selling itself out.

However, there are also positive developments that could mitigate the risk of corporate bankruptcies in the region. For example, the African Continental Free Trade Area (AfCFTA) agreement, which came into effect in January 2021, could boost intra-regional trade and create new opportunities for businesses. Additionally, several countries in the region, such as Ghana and Rwanda, have implemented reforms aimed at improving the business environment and attracting foreign investment.

Business Failures and Context in Canada

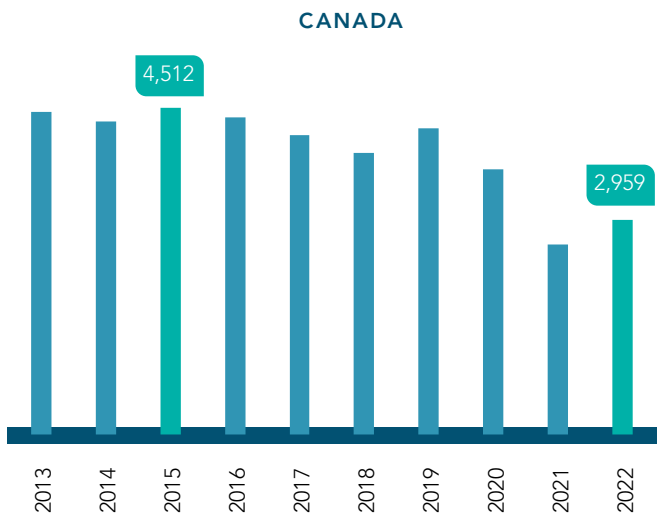
A 13% jump in Canadian business bankruptcies in 2022 reversed the declining trend of the past few years. In Q4 2022, bankruptcy filings grew one-third over the previous year. Tighter monetary policy and weaker economic outlook are expected to lead to higher bankruptcies in 2023.

Business bankruptcies jumped 13% year on year in 2022 to just under 3,000. Bucking the declining rates of the past three years and reaching a trough in Q3 2021, latest quarterly cessation data reveals a broadly upward trend. The surge in bankruptcies in 2022 may not reflect a wholesale deterioration in circumstances of Canadian firms, but given our softer outlook for the economy, businesses will be under greater operating pressures than recent years.

Increasing rates of bankruptcies started ahead of The Bank of Canada's hiking cycle beginning Q1 2022, which saw a 400 basis points (bps) hike in 2022 to address rising inflation. The squeeze on businesses has been two-folds: high inflation has eroded real incomes of consumers, which is why the demand for goods and services has fallen; and high interest rates have impacted firms' ability to meet their debt repayment obligations. The upshot has been a sharp rise in companies falling into administration, especially in Q4 2022, which saw a 33.2% increase year on year.

On top of the rapid set of interest rate hikes in 2022, the further 25bps hike in January 2023 to 4.5% means rates have moved higher still and the lagged impact of tighter policy is likely to continue feeding through to the real economy. We expect inflation only to moderate from 6.8% in 2022 to 4.3% in 2023, and so the central bank has little incentive to lower borrowing costs soon. While small firms using the federal government's Canada Emergency Business Account (CEBA) loan arrangement will still be able to use this facility, they will come under pressure from rising financing costs and still-high raw material and fuel prices. Alongside this, we anticipate Canada's GDP growth to markedly slow to 0.9% in 2023 from

3.8% in 2022. Our forecast – taken together with The Bank of Canada’s Outlook Survey, which reports that more businesses are facing demand and credit pressures and with the majority expecting recession in the next 12 months – indicates that bankruptcies will continue to grow in 2023.

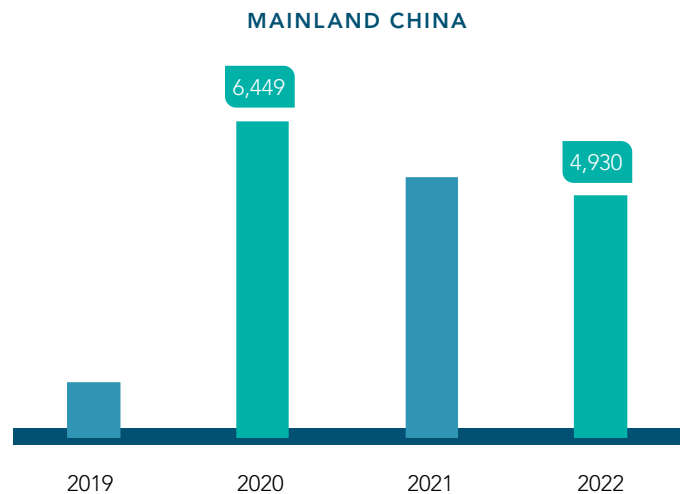


The collapse of Silicon Valley Bank (SVB) in the US could pose problems for Canada’s technology start-ups looking for funding and leave them at the mercy of domestic lenders who may be more selective in financing new ventures. The risk of contagion from the collapse itself is not high, as the Office of the Superintendent of Financial Institutions (OSFI) swiftly took permanent control of the Canadian branch’s assets to restructure the branch into an FDIC-operated ‘bridge bank’.

Business Failures and Context in Mainland China

As the year 2022 ended, a series of concrete actions – a pull back from regulatory tightening, targeted loosening of monetary policy, and a move toward full reopening- should help revive economic growth in 2023. However, lingering stress in the property sector, structural dampeners to growth, and external headwinds pose downside risks to credit conditions.

Bankruptcy law in Mainland China was updated in 2007. Over 2007-2015, the number of cases filed and settled under the law remained low and even declined. Starting 2015, the authorities’ focus on containing leverage and increased reliance on market-led solution drove an increase in the use of this law. This was marked by setting up and use of over 100 specialized bankruptcy courts and bankruptcy tribunals in various provinces to deal with corporate bankruptcies. This was also accompanied by the Supreme People’s Court of China setting up an online platform to publicly disclose progress on bankruptcy proceedings, thereby improving efficiency and increasing transparency. More recently, Mainland China has piloted personal bankruptcy regulations, delivering its first verdict under that regulation in 2021. Although, along with cross-border bankruptcy settlements, it remains an area for more legislative work.



Dun & Bradstreet’s Worldwide Network data shows that between January and November 2022, the number of business insolvencies in Mainland China grew 23% against the same 11-month period in 2021. This trend in data mirrors the state of the economy in 2022. In 2022, the Chinese economy faced three specific headwinds – (1) the negative spillovers of the Russia-Ukraine conflict on the global economy, (2) a deepening of the deleveraging crisis in the economically important property sector, and (3) a surge of COVID cases, leading to stringent movement restrictions that hampered economic activity. Consequently, the economy expanded only 3% vs. a growth target of 5.5%. The property sector was among the most stressed sectors, witnessing a series of high-profile defaults on bonds, including a default by the Evergrande group. Sectors such as hospitality and airlines suffered

considerably from COVID-linked movement restrictions, while some financial institutions at the local level faced instances of debt-distress and depositor runs. Given the weakness in the economy, a rise in insolvencies experienced during the year seems unsurprising. Interestingly, several of D&B risk ratings highlighted this weakness through the year. During the period coinciding with this rise in bankruptcies, the Short-Term Economic Outlook rating deteriorated from DB4b to DB5a and the risk rating for the Credit Environment deteriorated from DB3a to DB3c.

It is worth highlighting that an accommodative monetary policy stance has set the country on a divergent course with the key global central banks, including the US Fed. The pressure of rising interest rates, which has been a contributor to tighter credit conditions elsewhere in the world, is absent in Mainland China’s case. And as the year 2022 ended, a series of concrete actions – a pull back from regulatory tightening, targeted loosening of credit conditions, and a move toward full reopening – have created conditions that should help revive economic growth in 2023. We expect growth to recover with domestically oriented sectors, with hospitality, retail sales, and services likely to lead this economic recovery. This should help bankruptcies to remain contained through 2023. However, there are three downside risks to this expectation:

1) Property sector distress: While green shoots have emerged in the property sector, the level of distress experienced by the sector was considerable. We expect a slow recovery in this sector, and with authorities still focused on maintaining long-term stability by curbing speculation, we could see bankruptcies in this sector rising again in the short term.

2) Structural growth dampeners: While authorities are deploying policy support to revive growth, the structural dampeners on growth such as demographics mean Mainland China will likely grow at a slower pace than the type of high growth experienced in the past years. With base effects, Mainland China’s growth at around 5% is also massive, but investments and leverage based on the expectations of past growth experience may meet disappointing outcomes.

3) External headwinds: An ongoing conflict between two European nations, worsening credit conditions in key export markets, and the more recent scare induced by a banking crisis negatively affect growth in Mainland China as well. The external sector in Mainland China is likely to continue witnessing poor demand. In addition, geopolitically motivated sanctions, and trade restrictions (e.g., the recently introduced restrictions on the sale of high-end chips and semiconductor manufacturing equipment to Chinese firms) could result in sudden shocks to the sector.

The authorities are cognizant of these risks, and it possibly explains a growth target of 5% for 2023, a lower level than one set for 2022.

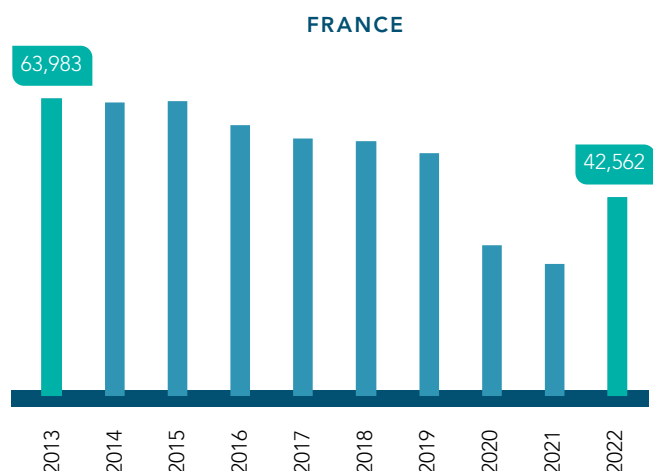
Business Failures and Context in France

Bankruptcies in France are rising as the government has revoked the protection measures implemented during COVID-19 pandemic and as the slowdown concerns mount. This is pushing many small and medium enterprises in energy-intensive industries towards insolvency. Higher cost of credit and weak market demands are also forcing uncompetitive firms towards insolvencies.

In France, corporate bankruptcies grew 49.9% in 2022 with rapid escalation observed in Q4 2022. Post the outbreak of COVID, a total of 103k firms have defaulted in France. The rate of default could have been higher in the absence of extensive government support on COVID-19 protection and subsequently on energy price.

Along with recessionary pressures and rising interest rates, the escalating energy prices were primarily responsible for rising bankruptcies. This also exposed the underlying economic fragility.

A total of 3,214 proceedings were opened in 2022, and the cases of bankruptcies were significantly higher (+78%) among SMEs with fewer than 100 employees. Companies that are less than three years old appear particularly vulnerable: Bankruptcies have almost doubled (+94%) in this category. Along with high energy prices, high labor cost is also driving bankruptcy cases.



Bankruptcies were also driven by a sudden build-up of order books, especially among small and medium enterprises engaged in manufacturing activities and fraught with inaccessibility of labor and capital, supply chain issues, and the subsequent inability to honor contracts.

The French government extensively supported businesses through monetary incentives and relaxations in regulatory compliance. However, the end of this support mechanism in 2022 contributed to higher bankruptcies. The government extended support to the tune of EUR 240 billion in the form of loans – including EUR 145 billion in state-backed loans to 700,000 companies – and subsidies. Over 2020 and 2021, the French government’s ‘whatever-it-takes’ policy kept the number of insolvencies at a historically low level; only 5,500 companies filed for bankruptcy with the number of insolvencies in Q3 2021 being the lowest in 25 years.

In 2022 however, reversal of policy support led to spike in reported firm insolvencies. In France, smaller firms have been affected the most by bankruptcies.

Business Failures and Context in Germany

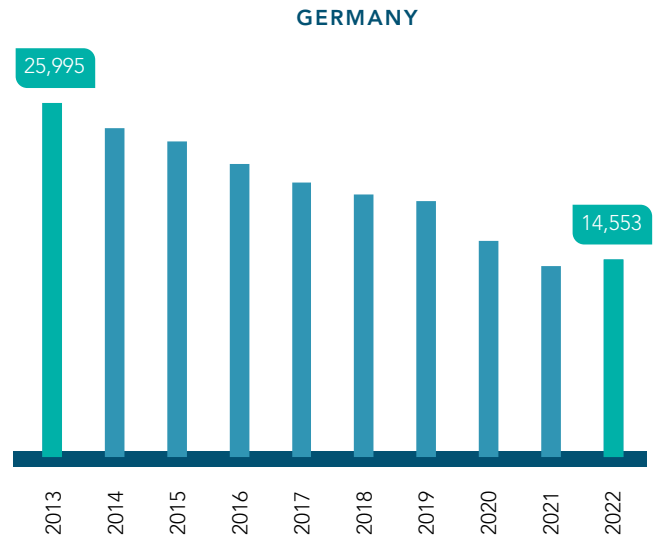
As higher interest rates feed through the real economy, the modest increase in insolvencies seen in 2022 (4% year on year relative to 2021) might give way to substantially higher business failure rates. The German government has repeatedly stated its willingness to suspend bankruptcy laws if deemed necessary.

Business bankruptcies in Germany grew just 4% year on year in 2022, reaching slightly higher than 14,500, a low number in historical terms and when compared with pre-pandemic levels.

While bankruptcies have been on a declining trend over the last decade, this trend accelerated markedly at the outset of the pandemic, with the number of bankruptcies faring at around 70% of their pre-pandemic level (Q1 2019) between the end of 2020 and Q1 2021. By the end of 2021, bankruptcies had started to moderately grow, though remaining considerably below historical levels and just at around 80% of the pre-pandemic one.

Several factors might help rationalize the behavior of bankruptcy rates in Germany. First, pandemic restrictions dramatically altered business dynamics and courts’ ability to

rule on bankruptcies. Second, because Germany was strongly hit by the pandemic toward the end of 2021, the government kept economic support for firms and incomes well beyond the end of the year. Third, since the invasion of Ukraine and the energy shock that struck Europe, Germany deployed around 7% of its GDP to support firms and households. This is more than Italy, the UK, or France spent over the same period for the same purpose (5.2%, 3.8%, and 3.7%, respectively).



On one hand, the massive support implemented by the German government will work to further postpone the normalization of business dynamism in the country in 2023, while on the other, interest rates rising from 0% to 3% in less than a year is a push in the opposite direction, by making the fulfillment of payment obligations more difficult. Which force will come to dominate will also depend on the willingness of the government to suspend bankruptcy laws.

Moreover, the European Central Bank hiked rates by 50 bps in February 2023. Since monetary policy works with a lag, part of the effects of tighter policy on the real economy will likely manifest in 2023 and beyond, with price growth dynamics determining, more than anything else, the course of monetary policy. With core inflation in the Eurozone being more stubborn than expected, we expect headline inflation in Germany to average at around 7% in 2023. This is lower than in 2022 (8.7%) but still elevated and far from the ECB’s target, which will lead the monetary policy on a hiking trajectory in the near term, pushing up credit risk.

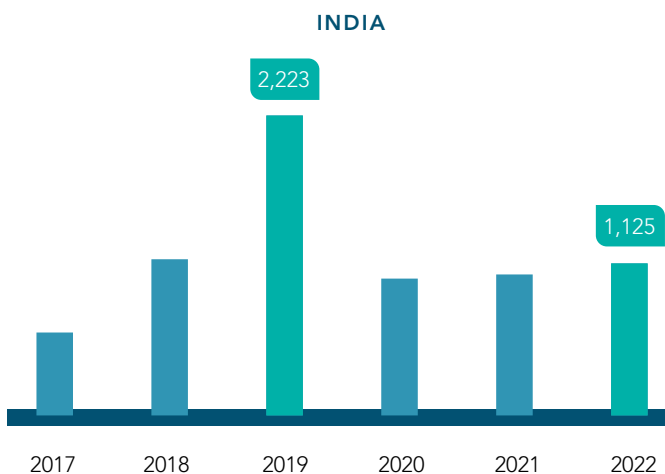
In a nutshell, the evidence suggests that bankruptcies in Germany will rise gradually over the course of 2023 but remain below pre-pandemic levels, in a context where EU bankruptcies also will rise.

Business Failures and Context in India

Bankruptcy cases in India witnessed a modest increase in 2022 from the previous two years. Despite international spillovers and a challenging global environment, sound macroeconomic fundamentals and healthy financial and non-financial sector helped India navigate the difficult external environment. Resilient domestic demand, easing of supply chain pressures, buoyant credit demand, improved asset quality, and resilient capital and liquidity buffers supported the growth of businesses.

Bankruptcy cases in India witnessed modest increase in 2022 from the previous two years but remained substantially lower than 2019. Despite international spillovers and a challenging global environment, sound macroeconomic fundamentals helped India navigate the difficult external environment. Resilient domestic demand, easing of supply chain pressures, and resilient capital and liquidity buffers support businesses. The banking sector's gross non-performing assets (GNPA) ratio has been steadily trending down to a seven-year low of 5.0% in September 2022, while net non-performing assets (NNPA) have dropped to a 10-year low of 1.3% of total assets.

Of the total number of cases admitted under the corporate insolvency resolution process (CIRP), 45% have been liquidated while the remaining were closed on appeal, review, settlement, or withdrawal – reflecting a very slow pace of the process. Further breakdown of data showed that, of the total number of cases admitted under CIRP, 39% were from the manufacturing sector, followed by real estate (21%) and construction (11%).



57% cases were open at the end of 2022. The share of open cases in the total admitted cases under CIRP has been increasing over the year, and the time taken for admission of resolution application as well as the final resolution and liquidation has steadily increased. The average time taken for closure of CIRP yielding liquidation was 437 days. Of the ongoing liquidation cases, almost half have pendency of over 2 years. The goal of a time-bound liquidation process as envisaged in the BLRC report is yet to be achieved. The CIRP regulations have been amended recently to improve the realised value, reduce delays in the process, enhance efficiency of available time, and improve information availability. Through another amendment, performance-linked incentives have been introduced for insolvency professionals, to maximize the realized value beyond the stressed asset's liquidation value and for timely resolution. India has proposed more than 40 amendments to its insolvency law, which could impact how recoveries are shared among creditors. In 2023, bankruptcy cases in India are expected to remain low as the risk of global spillover wanes, economic recovery gains some traction, and business profitability improves. Nonetheless, businesses exposed to markets in the US, the UK, and the EU should be closely monitored and undergo due diligence.

Business Failures and Context in Italy

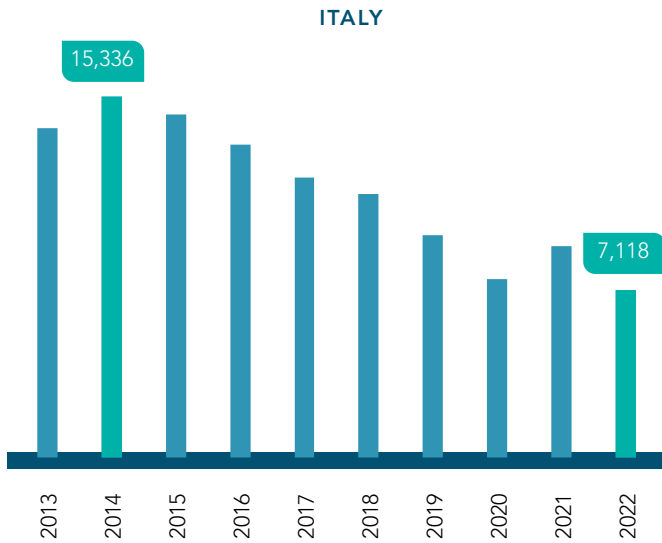
A slow adjustment towards pre-pandemic levels of business failures is taking place in Italy, with insolvencies increasing by 18% y/y in 2021 and 21% y/y in 2022. As energy-related support measures are possibly withdrawn and tighter monetary policy transmits through the real economy, insolvencies could increase dramatically in 2023.

After rising 18% year on year in 2021, business bankruptcies in Italy fell 21% year on year in 2022, reaching slightly higher than 7,000 – a lower number than pre-pandemic levels.

While bankruptcy rates have been on a declining trend over the last decade, Italian bankruptcies have shown elevated volatility from the onset of the pandemic. In Q1 2020, bankruptcies bottomed at around 30% of their pre-pandemic level (Q1 2019), before reaching more than 16% above it by the end of 2020. Since then, bankruptcies have been constantly below pre-pandemic levels on a quarterly basis, reaching slightly above 67% in Q4 2022.

Multiple factors might help explain the behavior of bankruptcy rates in Italy. First, pandemic restrictions prevented courts from normally ruling on bankruptcies, somewhat freezing the

country's business dynamism. Second, some of the income support and debt relief measures introduced at the onset of the pandemic were in place for most of 2021. Third, since the invasion of Ukraine and the energy shock that struck Europe, Italy deployed around 5.2% of its GDP to support firms and households. This is less than what Germany spent over the same period for the same purpose (7%) but more than what countries such as the UK and France spent (3.8% and 3.7%, respectively).



The sizeable support implemented by the Italian government will likely continue to alter business dynamism in 2023. At the same time, interest rates rising from 0% to 3% in less than a year will be a push in the opposite direction, by making the fulfillment of payment obligations more difficult. Importantly, in February 2023, the Italian government scrapped the so-called Superbonus introduced during the pandemic, a tax credit scheme that allowed homeowners to avail a tax credit of up to 110% on the cost of improving their property, which had led to a wave of building renovations in the country. The abrupt termination of the scheme is likely to be felt strongly in the construction sector and may affect thousands of firms.

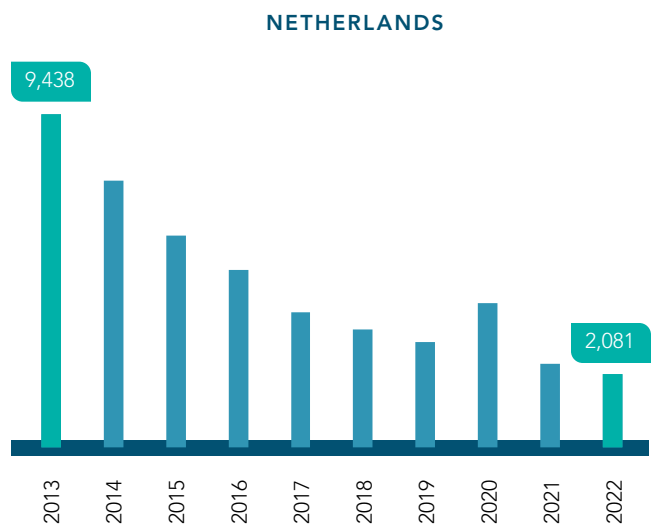
Moreover, the European Central Bank hiked rates by 50bps in February 2023. Since monetary policy works with a lag, a part of the effects of tighter policy on the real economy will likely manifest in 2023 and beyond, with price growth dynamics determining, more than anything else, the course of monetary policy. With core inflation in the Eurozone being more stubborn than expected, we expect headline inflation in Italy to average at around 6% in 2023. This is lower than in 2022 (8.7%) but still elevated and far from the ECB's target, which will lead the monetary policy on a hiking trajectory in the near term, pushing up credit risk.

To sum it up, evidence suggests that bankruptcies in Italy could rise significantly over the course of 2023, albeit remaining below pre-pandemic levels, in a context where EU bankruptcies will also rise.

Business Failures and Context in the Netherlands

The Netherlands has fared better than peers, but we anticipate a rise in bankruptcies in 2023. The Central Planning Bureau has warned that although the massive fiscal support was successful in keeping bankruptcies low, there is a risk of a sharp uptick once the measures are withdrawn, increased financing costs and input prices.

The Netherlands outperformed its peers yet again in 2022 as the number of bankruptcy filings was lower than even 2021. We had anticipated a small uptick in the number of liquidations, but the data surprised us positively, showing a decline of 12.4% over 2021 to 2,081 which is the lowest on our records. Several European peers, such as France, Belgium, and Spain, have seen an increase in bankruptcies over the same period, but the Netherlands has bucked the trend, likely due to the government's extensive support measures. Businesses benefitted significantly from several key support measures implemented in response to the pandemic; for example, the fixed costs grant scheme (TVL), the temporary emergency scheme for job retention (NOW), and the general tax payment deferral option were all extended until April 2022.



We anticipate the number of bankruptcies to increase sharply in 2023, as the final effects of the government’s coronavirus support measures will have worn off. That, combined with rising inflation, interest rates, and energy costs, will push many companies toward liquidation. Having said that, we think the number will still be significantly lower than the peak of 9,438 reached in 2013.

Our findings are consistent with bankruptcy statistics provided by the Dutch Central Bureau of Statistics, which estimates an 18% drop in businesses and institutions (including sole proprietorships) that were declared bankrupt in 2022. Bankruptcies were the highest in the trade sector, followed by construction. The most bankruptcy filings occurred in industries that were most severely impacted by the pandemic, particularly retail and wholesale commerce, and food manufacturing. This indicates that, despite significant fiscal support, there are still fault lines in the financial health of corporates.

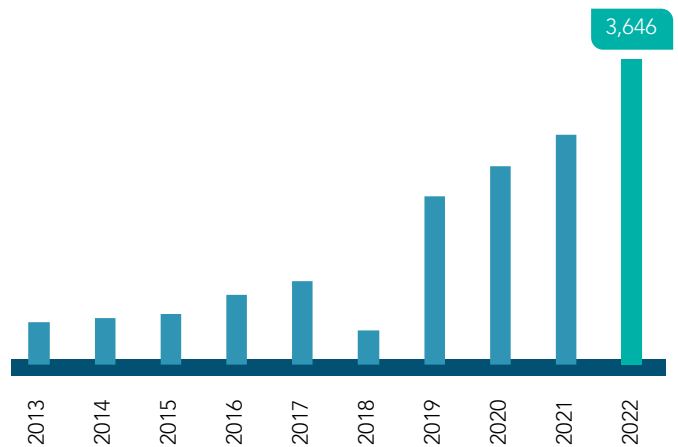
Bankruptcies might also be impacted by the collapse of Credit Suisse in Switzerland. Although the direct exposure of Dutch banks to Credit Suisse is small, the collapse may lead to a Euro-wide systemic crisis. One of the biggest markets for “contingent convertible” bonds, the banks in Netherlands are under pressure as well following the write-off of Credit Suisse bonds. Although the ECB has taken precautions to guarantee that there is an appropriate buffer in the system to survive any shock, this might have unfavorable effects on businesses in the euro region.

Business Failures and Context in Poland

Bankruptcy in Poland rose 32% year on year in 2022 due to worsening economic scenarios, especially for businesses in the transportation, manufacturing, trade, construction, and services sectors.

Bankruptcies in Poland grew 32% from 2,752 in 2021 to 3,646 in 2022. Corporate insolvencies are expected to rise with a sharp increase in the use of out-of-court procedure (OCR). Insolvencies are rising across industries due to worsening economic scenario especially for businesses in transportation sector which is the worst hit, followed by trade, construction, and services. The manufacturing sector remained resilient to some extent in 2022, mainly because the economy is facing a demand slowdown and business confidence is diminishing due to high operating costs and increased interest rates.

POLAND



Despite healthy household consumption sustaining economic growth, the high inflation has dampened consumer confidence. Firms in wholesale and retail trade are facing higher bankruptcies on account of high interest rates and uncertain business environment causing insolvencies to rise as much as 57% in 2022. The transportation sector remains another weak spot where insolvencies nearly doubled from last year. With these uncertain macroeconomic environments, the number of insolvencies is set to further rise, especially as the government is withdrawing some of the support mechanism it earlier provided.

The Polish government introduced the National Register of Debtors (KRZ) for submission of bankruptcy applications electronically and correspondence with the court. The introduction of the register lengthened bankruptcy procedures and positive conclusion of cases, thereby reducing the number of insolvencies for most part of 2021 and H1 2022.

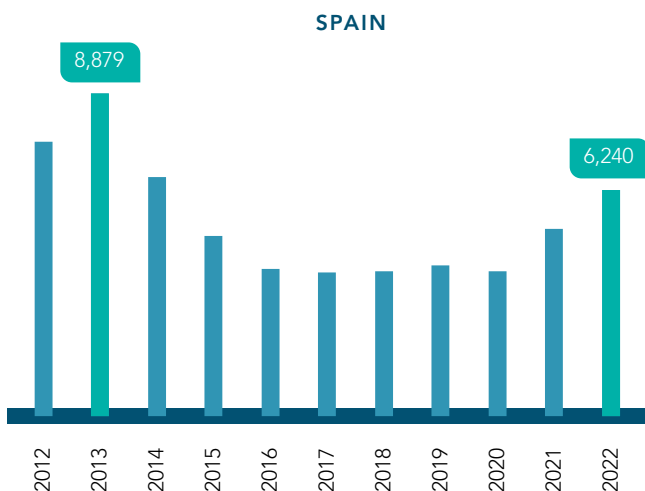
Business Failures and Context in Spain

The number of bankruptcy filings are expected to remain elevated as firms take advantage of the changes to the country’s insolvency law. In addition, increase in financing costs and high input prices also heighten the risk of payment delays and insolvencies in 2023, especially for small businesses.

Data from Dun & Bradstreet’s Worldwide Network partner, Informa, showed a 21% jump in Spanish bankruptcy filings in 2022 with the number of filings at the highest since the 2013 Euro crisis. This was driven by a particularly sharp increase in H2 2022, after changes to the country’s insolvency law.

Business liquidations grew 49% between July and December of 2022, compared with the same six-month period in 2021.

Spain overhauled the Recast Insolvency Act of 2003 in September 2022 (“Act 16/2022”) in compliance with EU directives making it easier for companies to restructure their debt. The reform has resulted in significant changes to insolvency legislation, especially when it comes to pre-insolvency, as well as a more flexible insolvency process. Some of the major reforms include: (1) the expanded scope and importance given to pre-insolvency; (2) tools that encourage and facilitate businesses to resort to restructuring, giving creditors more power; and (3) the introduction of a new specific set of rules governing the sale of productive units. Steel company Celsa, which is undergoing a legal process to restructure its €2.8 billion debt, is one of the first significant Spanish corporations to test the new rules.



We believe that the modification of the Insolvency Law will lead to a further increase in the number of firms requesting restructuring in the short term. Empowering creditors will make it simpler to pursue debt settlement processes, which, in our opinion, will encourage the acquisition of struggling businesses and lead to more M&As. Particularly, debt holders will find it simpler to purchase equity interests in troubled companies as shareholders struggle to prevent their holdings from being eroded.

The implosion of Credit Suisse in Switzerland has further ramifications on bankruptcies. Though the direct exposure of Spanish banks to Credit Suisse is limited, estimated at under EUR 1 billion, the collapse has the potential to translate into a systematic crisis that might rattle markets. Spain also has one of the largest ‘contingent convertible’ bond markets, which have come under intense pressure after the write-off of Credit Suisse bonds. This could potentially have negative consequences for businesses in the euro area, though the ECB

has taken steps to ensure that there is adequate buffer in the system to withstand any shock.

Notwithstanding the distortion in data brought about by the reform, we were expecting an increase in bankruptcy filings after the government decree suspending the obligation to declare bankruptcy, introduced post COVID, expired in June 2022. The results are consistent with our observations in the 2021 report, when the Delinquency Risk Predictor for Spanish companies – which predicts the likelihood that a company will pay in a severely delinquent manner or seek legal relief over the next 12 months – had detected an increase in stress levels. We believe that the reform to the insolvency law will induce more Spanish firms to declare bankruptcies in 2023, and businesses, especially MSMEs, will continue to remain vulnerable to failure given the near-term prospect of rising financing costs and high input prices.

Business Failures and Context in Switzerland

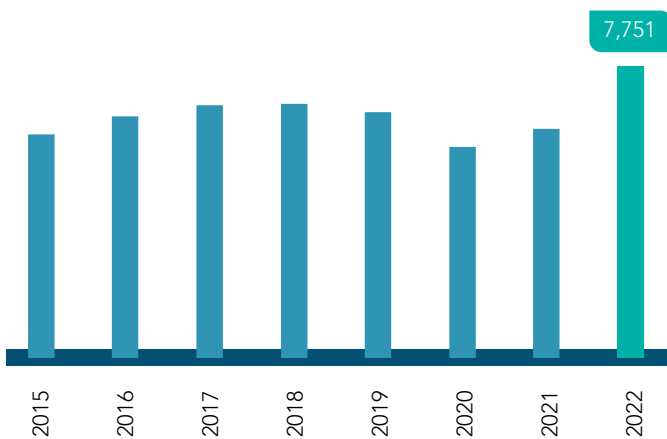
Bankruptcies in Switzerland grew 27% in 2022 year on year and the curve was steeper towards Q4 2022. Bankruptcy rate is expected to go up even higher in Q1 2023 as the export markets slow down and the regulators further relax bankruptcy proceedings and remove some of the benefits provided during COVID-19 pandemic.

Bankruptcy among Swiss firms grew 27% to 7,751 in 2022 compared with 2021. The steep rise is partially attributed to COVID-19-related delinquencies, while a general demand slowdown in user industries among export markets could have led to additional insolvencies. The inability to hedge against rising commodity and energy prices, along with disruptions witnessed in supply chain during 2022 also caused higher rates of bankruptcy filings among small and medium enterprises.

In 2023, it is expected that insolvency filings would rise further due to economic uncertainties sparked by the Ukraine war, the increase in energy costs, high inflation in the euro area, and likely recessions in many countries.

Bankruptcies were more severe in case of small and medium enterprises that were left defenseless due to the sudden rise in energy and electricity prices, along with high prices and interrupted supplies of industrial commodities. A high proportion of small and medium firms do not hedge on energy prices and were subject to extreme volatilities of energy prices witnessed in 2022.

SWITZERLAND



The Swiss construction, building services, and real estate sectors had the highest number of bankruptcy proceedings filed in 2022, followed by the wholesale trade and food and beverage sectors. Other sectors at risk were wood and furniture, crafts, hotels and restaurants, and land transport and logistics. Mechanical engineering, IT, banking, finance, and insurance providers also witnessed higher bankruptcy filing than the previous year. Conversely, organizations and associations, training services, real estate, and architectural firms are the areas least threatened by bankruptcy.

As per Dun & Bradstreet data, insolvency filings were the highest in the Zurich region (816 cases, +38%) and Central Switzerland (546 cases, +25%), although no region has been spared. With 975 cases, the Lake Geneva region recorded an increase of 21% in bankruptcies – a figure similar to the national average. Next in line are Mittelland (704 cases, +19%), Ticino (300 cases, +17%), Northwestern Switzerland (536 cases, +11%), and Eastern Switzerland (472 cases, +10%).

Business Failures and Context in the UK

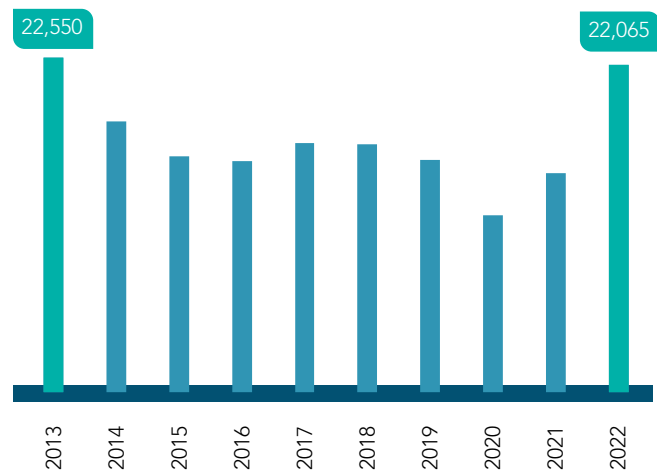
After constantly increasing throughout 2022 (49% year on year relative to 2021), because of fading energy-related support measures, weak growth and the (lagged) effects of tighter monetary, insolvencies are set to increase also in 2023, albeit at a possibly slower pace than in the previous year.

Business bankruptcies in the UK grew 49% year on year in 2022, reaching slightly higher than 22,000, a level not seen since 2013. Interestingly, over 2019-2022, UK bankruptcies

exhibited a wing-shaped pattern, which appears to be marked by key shocks and policy interventions.

In Q1 2020, when COVID hit, bankruptcies dropped to about 60% of their pre-pandemic level (Q1 2019) and remained well below it until Q3 2021, when most of the COVID-related support measures ended and restrictions on people's mobility were eliminated. However, by Q4 2021, bankruptcies had rebounded to pre-pandemic levels, to reach 50% higher than pre-pandemic levels, by the end of 2022.

UNITED KINGDOM



While bankruptcy rates had started to increase ahead of the Bank of England's tightening cycle (December 2021), the interest rate hike from 0.10% to 4% in the space of a little over a year has contributed dramatically to increased credit risk: businesses found and will find it more difficult to meet payment obligations. The same businesses also had to bear the brunt of the surge in input prices, in a context where demand was strongly depressed by double-digit inflation, which also contributed to business insolvencies.

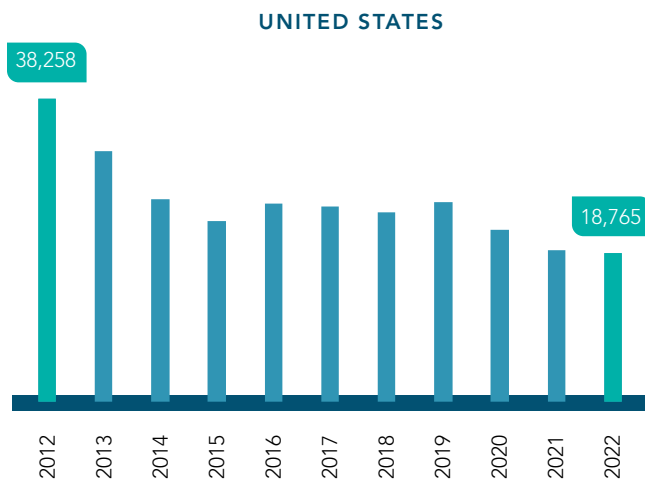
The Bank of England hiked rates by 50 bps in February 2023. Since monetary policy works with 'long and variable lags', whether rates will continue to raise or not, the effects of tighter policy on the real economy have not yet fully manifested. At the same time, the future rates trajectory will primarily hinge upon price growth dynamics. After robust growth in 2022, we expect the economy to contract 0.3% in 2023 and inflation to decline to 6.5%, from 9.1% in 2022, indicating that the battle against inflation is far from won.

Taken together, the evidence on lead indicators of bankruptcy dynamics suggests that they will continue to rise in 2023, albeit at a possibly slower pace than in the previous year, as some of the driving forces lose steam.

Business Failures and Context in the US

The fall of Silicon Valley Bank in March 2023 sets the tone for the remaining year. Bankruptcies are likely to rise as economic risks are tilted to the downside. Even if interest rates don't go much higher from here, credit conditions to remain restrictive.

Bankruptcies in the US fell 2% year on year in 2022. This decline comes on the back of a 12% decline in overall business bankruptcies in 2021 vs. 2020. The fall in overall business bankruptcies has defied the expectations of a jump in business failures, following the rollback of pandemic support measures in 2021. This somewhat points to the fundamental strength of the economy and to the efficacy of the pandemic support in helping businesses survive. Excess household savings that were driving consumption so far have been run down and elevated stress in the financial system has marginally increased the likelihood of a recession.



Consumption, the mainstay of the US economy, has stayed strong through the year, supporting overall real GDP growth averaging 2.1% through 2022. In H1 2022, lingering effects of supply chain issues and the spike in energy prices, following the conflict in Europe, contributed to difficult economic conditions. Bankruptcies during the period were led by companies in the manufacturing, finance, insurance, and real estate sectors, with a few big names such as Revlon filing for

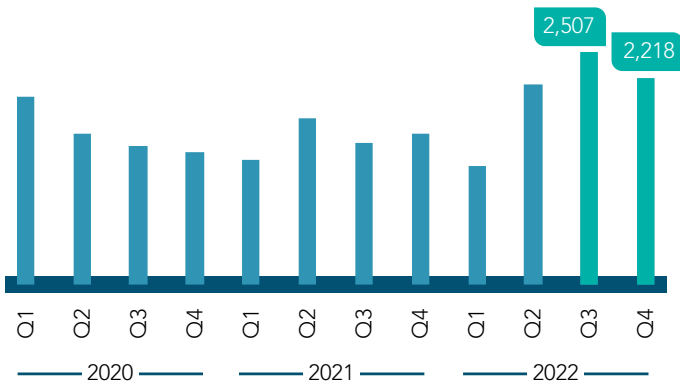
bankruptcy in June 2022. After grappling with high levels of inflation throughout 2021, the US Fed began hiking interest rates in Q1 2022 and ramped up the pace of rate hikes through the year, delivering a cumulative increase of 425 bps through the year. As credit conditions tightened, we saw business bankruptcies rise throughout 2022 as well. It is worth highlighting that an overall decline in bankruptcies in 2022 masks the recent uptick in business bankruptcies. The first two quarters of 2022 witnessed a year on year fall in bankruptcies, but in Q3 and Q4 2022, bankruptcies increased on a year on year basis. Tightening credit conditions are also visible in Dun & Bradstreet's Small Business Health Index, which has sequentially registered five months of decline ending in January 2023.

Entering 2023, business bankruptcies have remained elevated, and the fall of Silicon Valley Bank in March 2023 has set the tone for the remaining year. There are several reasons to believe that business bankruptcies in 2023 are likely to go higher. First, the failure of two large banks – Silicon Valley Bank and Signature bank – in quick succession, and the fallout on Credit Suisse has put the spotlight on the global financial system. While central bank authorities across the board have stepped in decisively to limit a contagion, a panic-induced banking crises will only exacerbate the economic pain. Credit conditions will tighten regardless, while the chances of a recession will increase considerably. This is likely to contribute to higher business bankruptcies in 2023. Even if such an adverse scenario does not materialize, the most aggressive monetary tightening cycle in decades is still underway as the US Fed delivered another 25 bps hike in its March 2023 meeting. Given how far current inflation levels are from target, the expectation is that even if the Fed moves incrementally or even stops further rate hikes, it is unlikely to cut rates anytime soon.

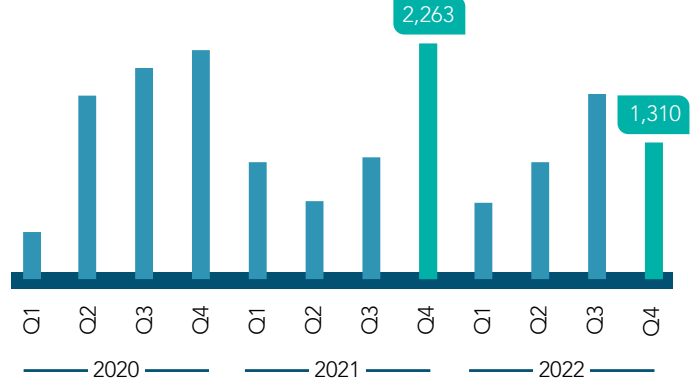
This means that the cost of refinancing and issuing new debt is likely to remain high for some time. The longer these dynamics hold, more likely are pockets of debt distress to emerge, which will again lead to higher bankruptcies. Finally, over the past few quarters, demand from consumers has shifted from consuming goods to consuming services. With households running down their excess savings from the pandemic era and inflation still running high, consumer demand is likely to moderate. In fact, discretionary spending, particularly on goods, has already begun weakening. This, too, is likely to result in higher bankruptcies.

Charts - Asia Pacific

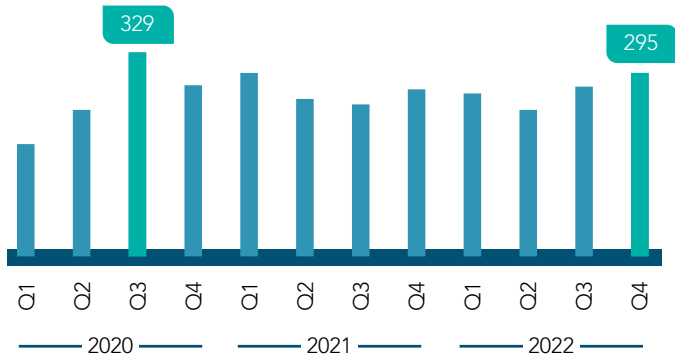
AUSTRALIA



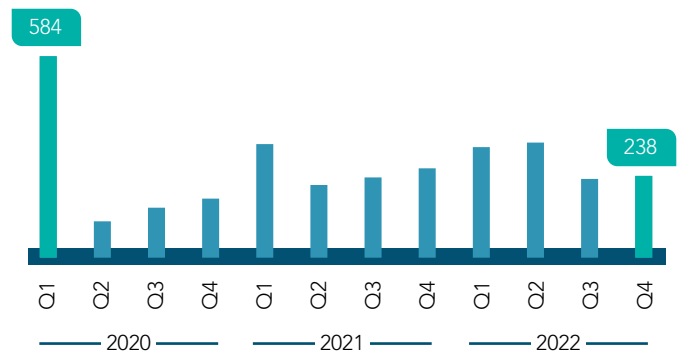
MAINLAND CHINA



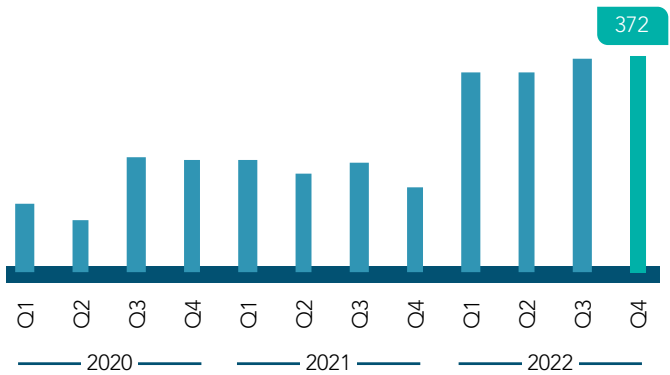
HONG KONG



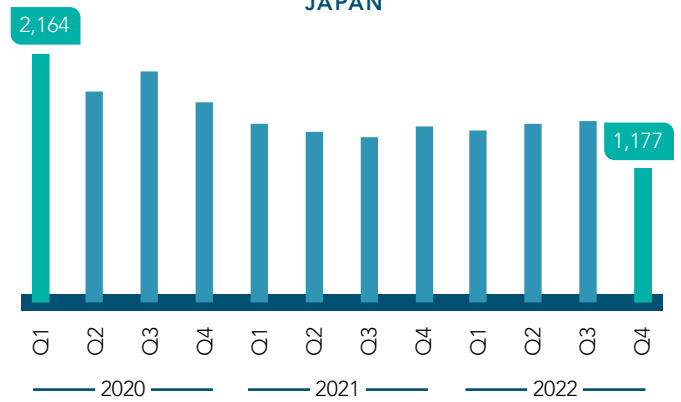
INDIA



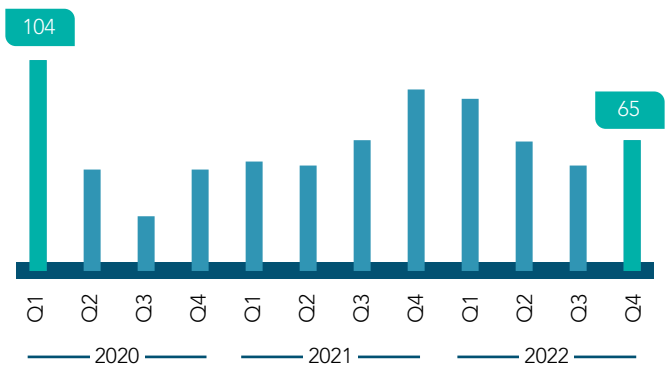
INDONESIA



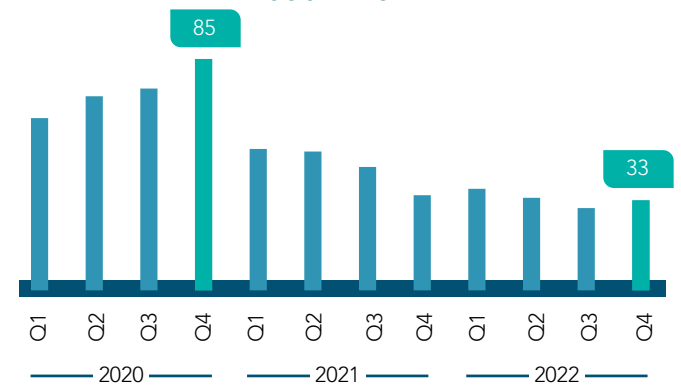
JAPAN



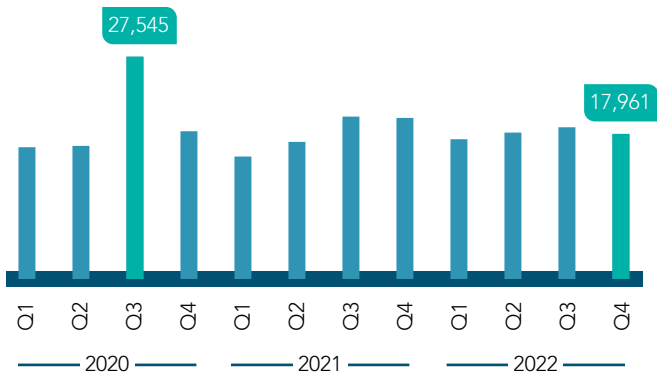
SINGAPORE



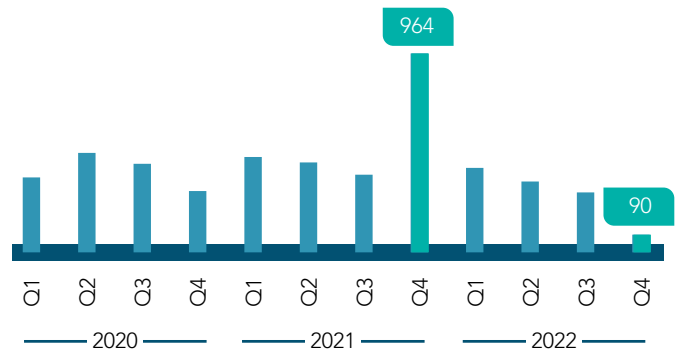
SOUTH KOREA



TAIWAN REGION

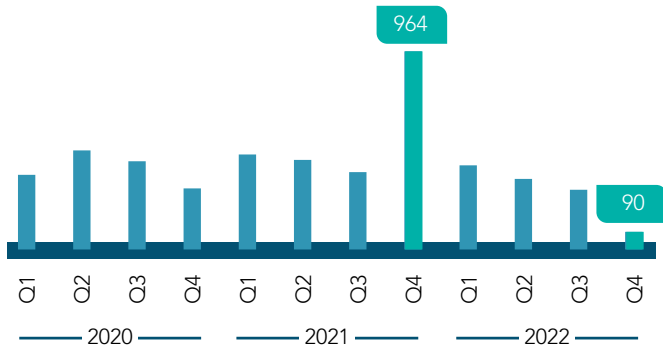


VIETNAM

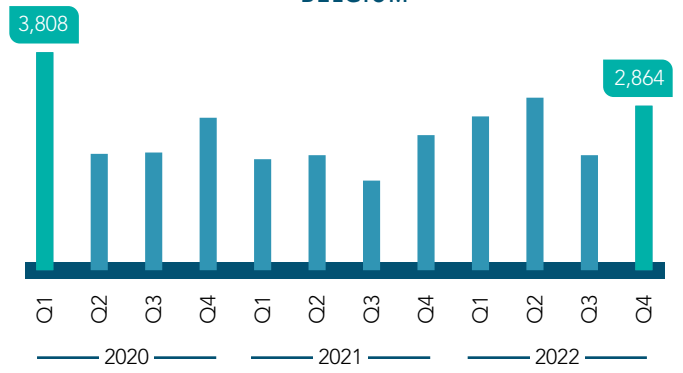


Charts - Europe

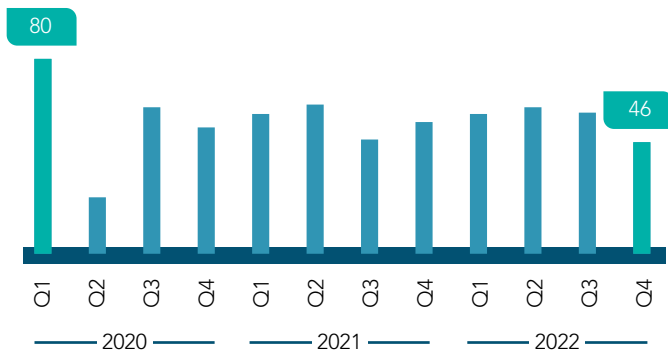
BELARUS



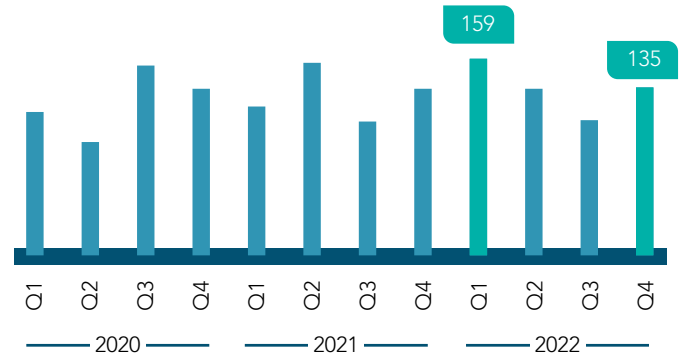
BELGIUM



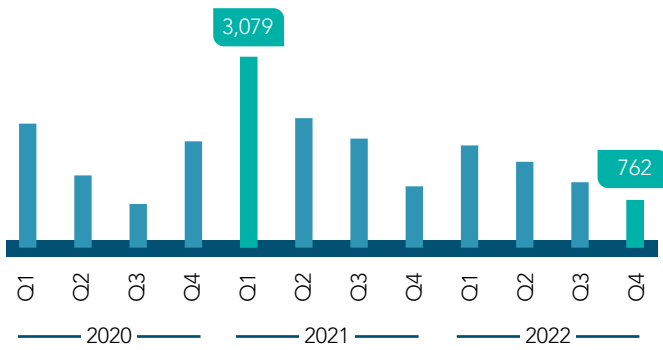
BOSNIA



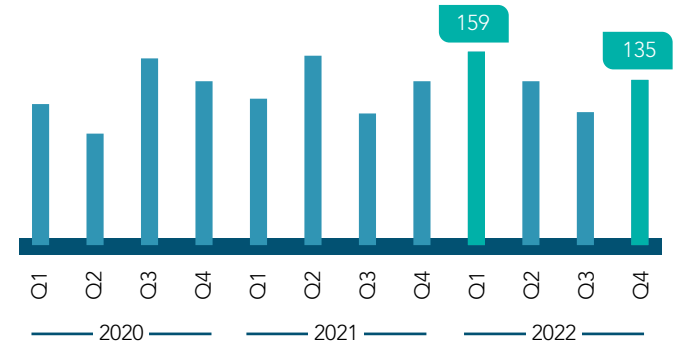
BULGARIA



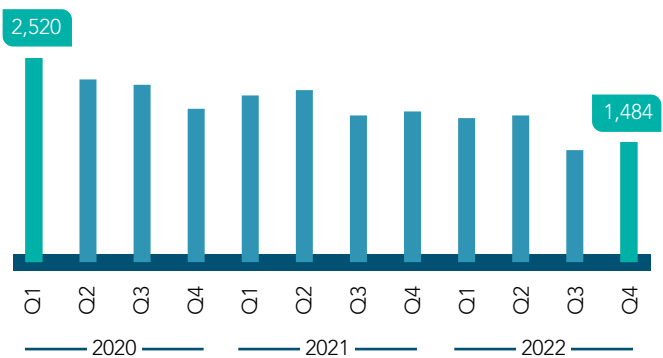
CROATIA



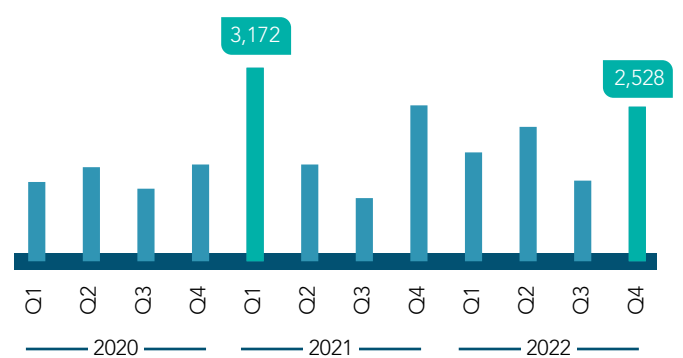
CYPRUS



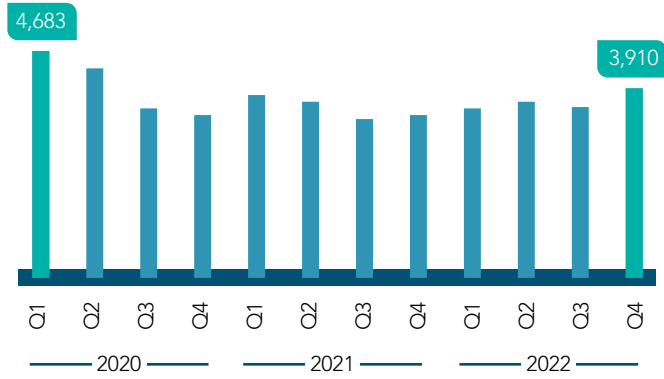
CZECH REPUBLIC



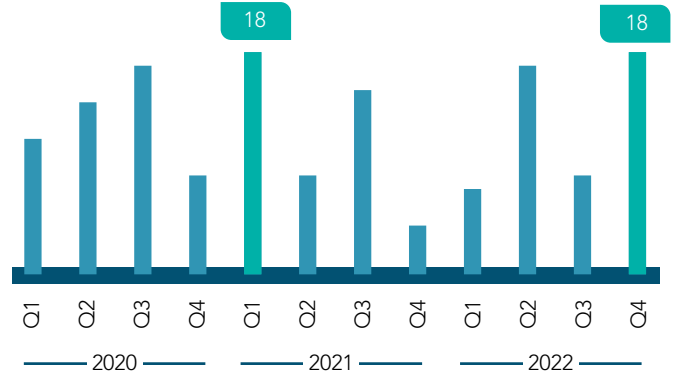
DENMARK



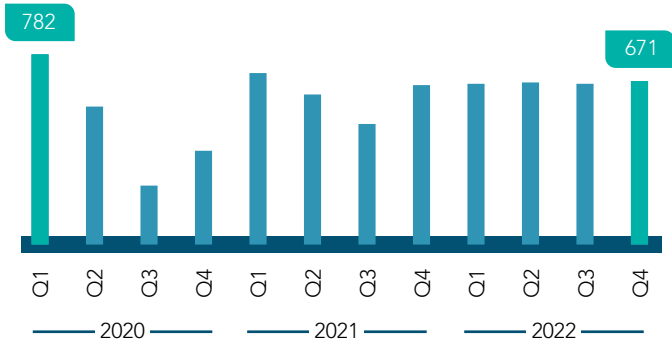
GERMANY



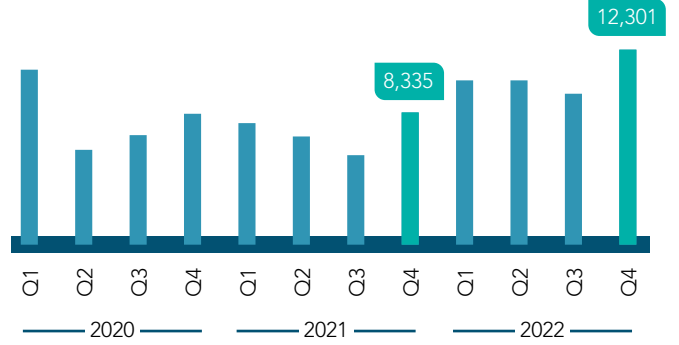
GREECE



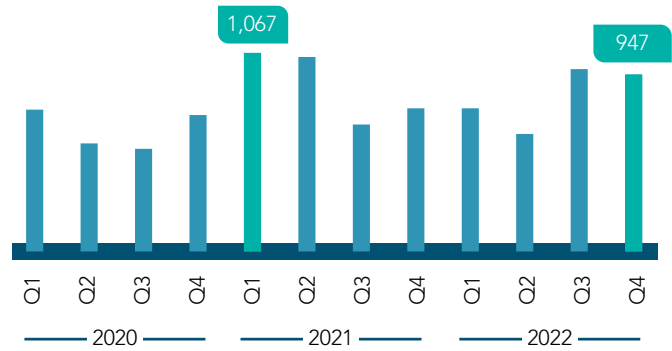
FINLAND



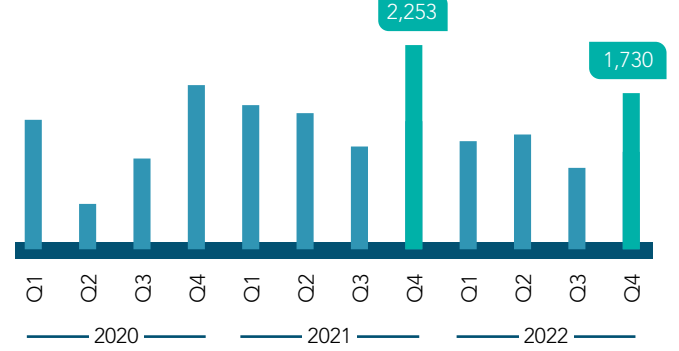
FRANCE



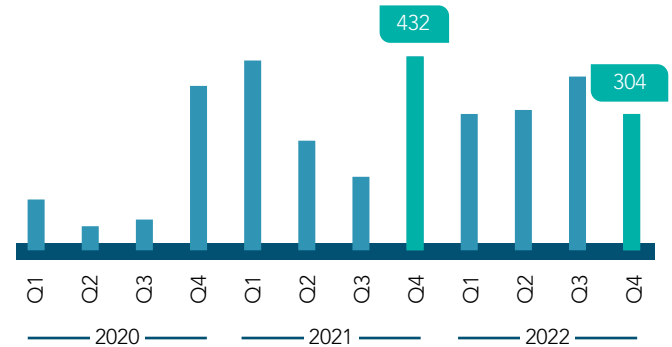
HUNGARY



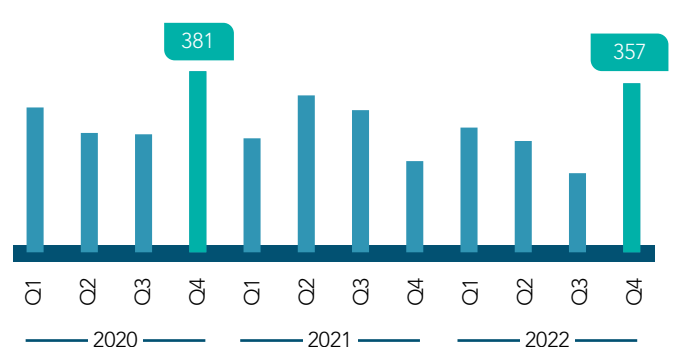
ITALY



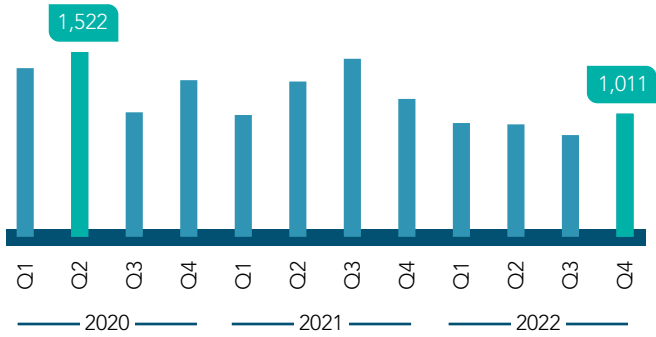
KAZAKHSTAN



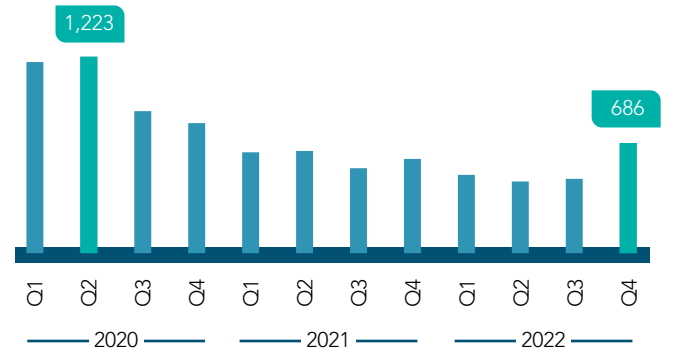
LUXEMBOURG



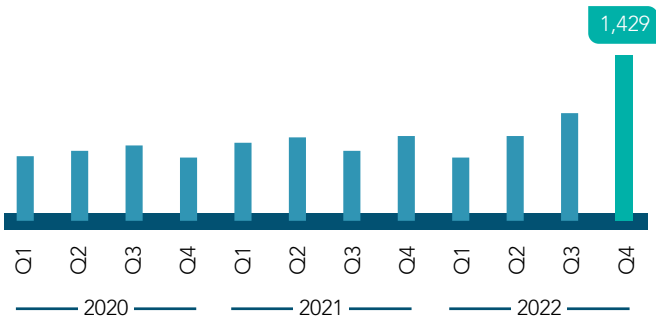
NORWAY



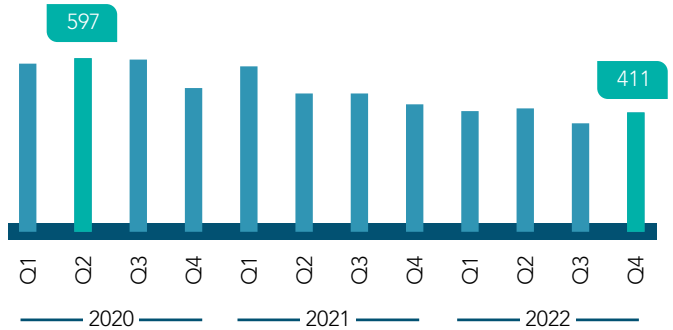
NETHERLANDS



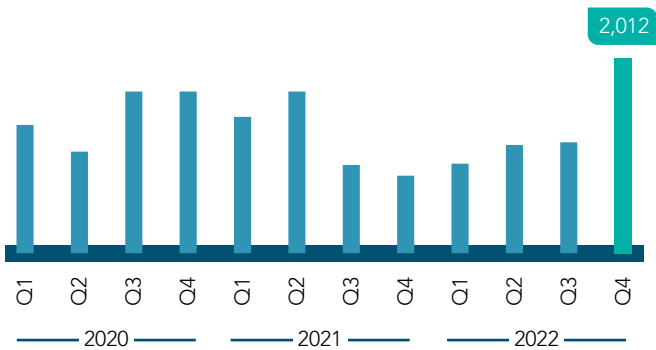
POLAND



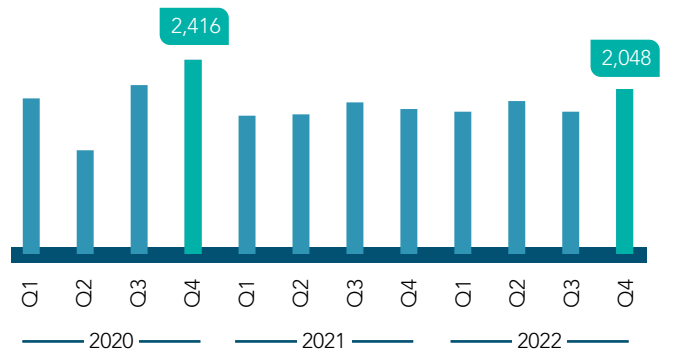
PORTUGAL



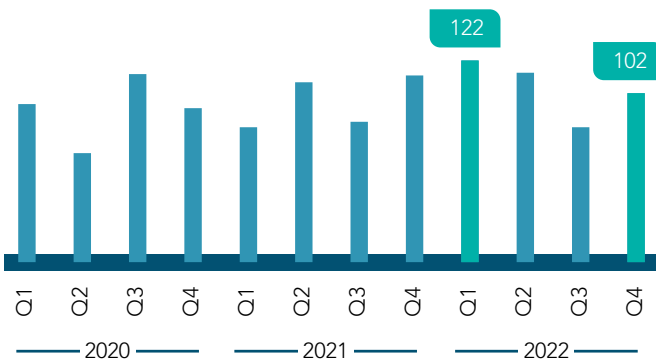
ROMANIA



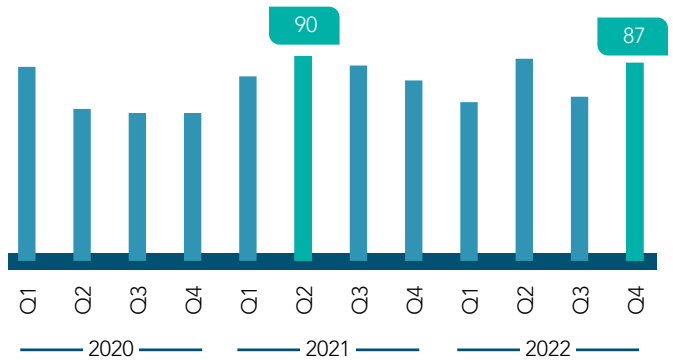
RUSSIAN FEDERATION



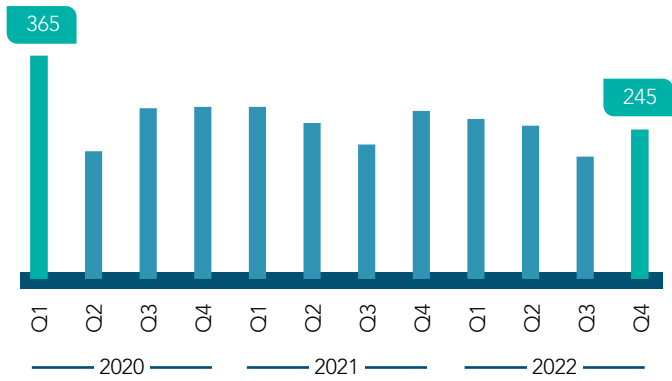
SERBIA



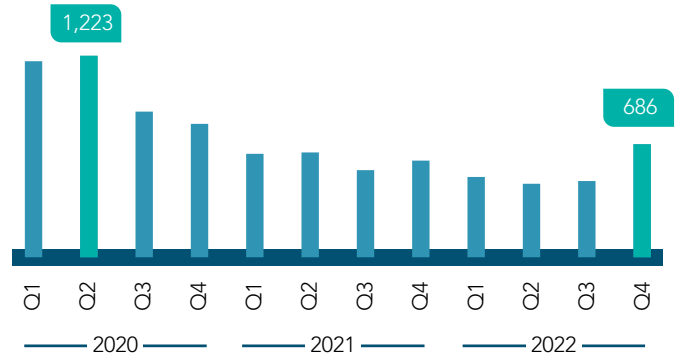
SLOVAKIA



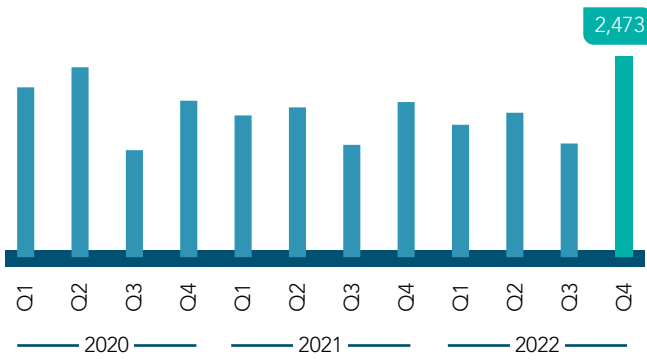
SLOVENIA



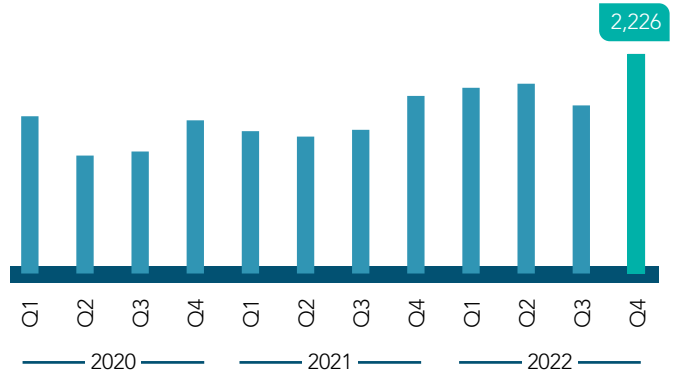
SPAIN



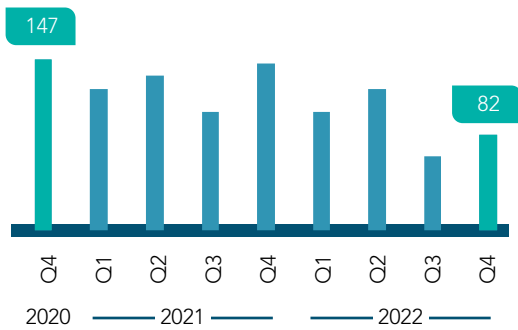
SWEDEN



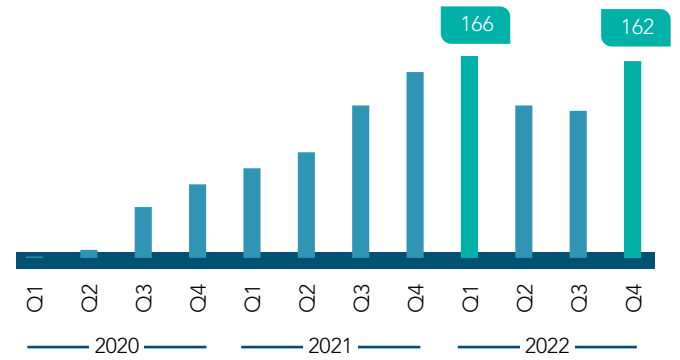
SWITZERLAND



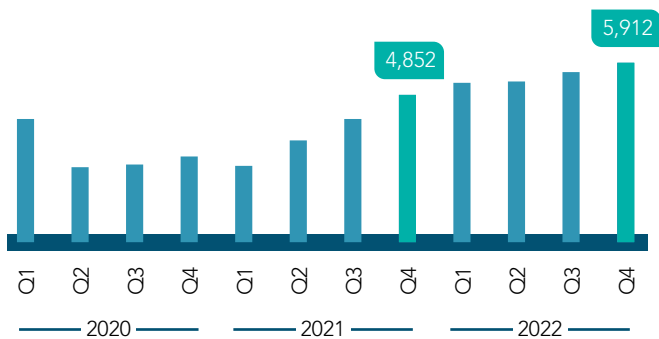
TURKEY



UKRAINE

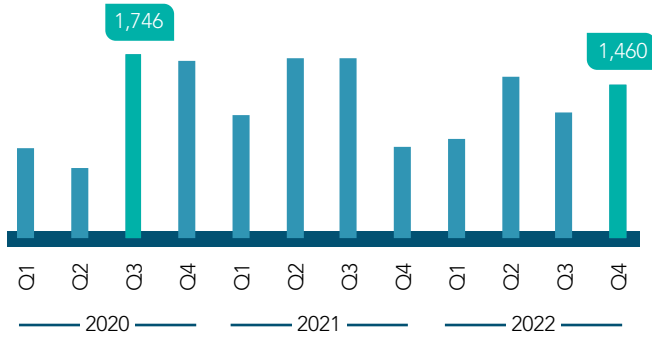


UNITED KINGDOM

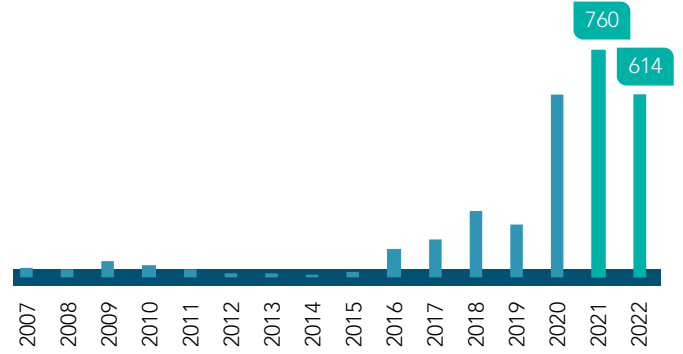


Charts - Americas

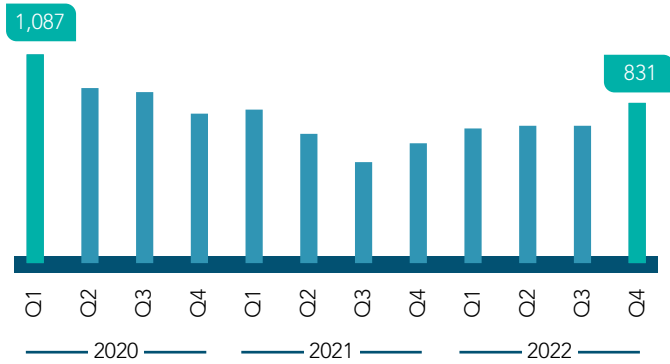
ARGENTINA



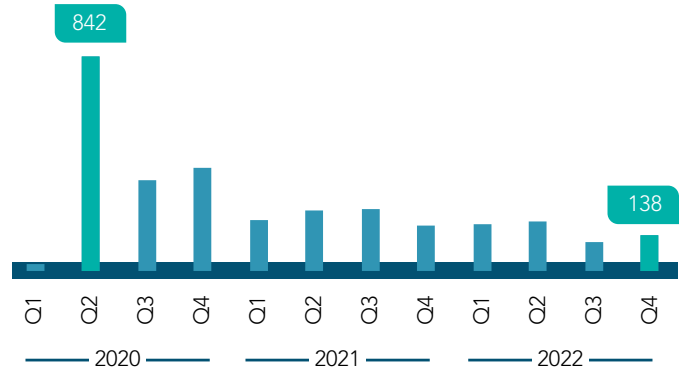
BRAZIL



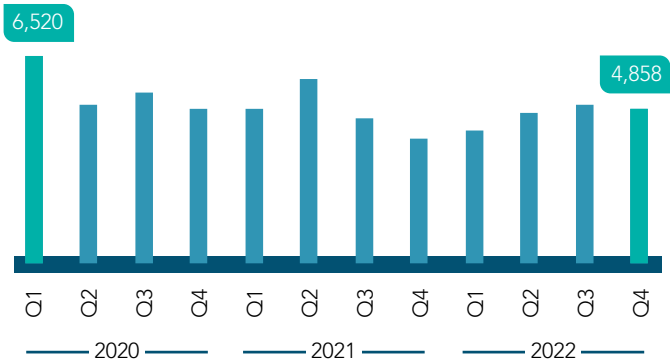
CANADA



COLOMBIA



UNITED STATES



ABOUT DUN & BRADSTREET®

Dun & Bradstreet, a leading global provider of B2B data, insights and AI-driven platforms, helps organizations around the world grow and thrive. Dun & Bradstreet's Data Cloud fuels solutions and delivers insights that empower customers to grow revenue, increase margins, manage risk, and help stay compliant—even in changing times. Since 1841, companies of every size have relied on Dun & Bradstreet. Dun & Bradstreet is publicly traded on the New York Stock Exchange (NYSE: DNB). Twitter: @DunBradstreet

© Dun & Bradstreet, Inc. 2023. All rights reserved. (CR-1204326501701397 6/23)

dnb.com

