EUROPEAN INVESTOR SENTIMENT INDEX

Quaterly Survey

Q4/2022

January 26, 2023

GROWTH IN EUROPE AMID CHALLENGES: RENEWABLE ENERGY AND ENERGY SHORTAGE ADAPTATION.

The first quarter of 2022 began with impressive results, surpassing expectations in terms of total investment volume and overall investment activity. This progress was significantly impacted by the Russian invasion of Ukraine. The conflict was one of the most significant and shocking events of the year, with a powerful effect on the entire economy, particularly on European ventures. As noted in our Q3 2022 report, the unexpected extension of the war between Russia and Ukraine has further exacerbated existing macroeconomic challenges, such as high inflation and supply chain shortages, which were primarily resulted from the COVID-19 pandemic. The Euro area has seen significantly higher levels of inflation since the beginning of 2022, starting at 5.1% in January 2022 and ending the year at 9.2% in December 2022. The energy sector saw particularly high inflation, with 25.7%. Additionally, the sector of food, alcohol, and tobacco experienced also saw a sharp inflation from 3.5% in January 2022 to 13.8% in December 2022 (Eurostat, 2023). It is important to note that Europe appears to be adapting to the current macroeconomic environment, as inflation began to decline from its peaks in Q2-Q3 2022. This is particularly evident in the energy sector, where the inflation rate of 25.7% in December 2022 is significantly lower compared to 34.9% and 41.5% in November and October. This trend can likely be attributed to decreased energy consumption by European countries as they have already managed to fill up their energy reserves, as well as an unusually warm winter which contributed to reduced consumer demand for energy (Deutsche Welle, 2023).

The military conflict between Russia and Ukraine has also led to a significant energy crisis in the European macroeconomic environment, as Europe imposed various sanctions on Russia. However, there are clear signs of European adaptation to the natural gas supply by passing Russia. The EU directive to secure energy availability and market resilience, which set a minimum filling level of 80%, has been successful in facilitating a transition from the Russian natural gas supply to other sources. The directive has led to a 15% reduction in energy demand compared to the five-year average, further reinforcing the transition (IEA, 2022).

As previously noted, while these changes have had severe negative consequences for the overall European venture ecosystem, they have also stimulated the renewable energy sector in terms of total investment volume. The total private equity investment volume in the European renewable energy sector amounted to USD 5.51 billion with 26 deals by September 2022. This represented a 769% increase compared to the entire 2021, when investment volume amounted to USD 633.9 million with 21 deals. Additionally, there has been a significant increase in the average deal size, from USD 30.2 million in 2021 to USD 211.9 million by September 2022, representing a 600% increase (S&P Global, 2022). The largest deals in the sector throughout 2022 were UK-based Newcleo and the Swiss-based Climeworks, which raised USD 316 million and USD 647 million respectively, and French company NW Groupe, which attracted USD 313 million. As a result, the positive development of this sector can be seen in contrast to a slowdown in other venture sectors (EU-Startups, 2022; CB Insights, 2023).

> Inflation was skyrocketing, ongoing supply chain constraints, and the war in Ukraine let market sentiment slide into negative territory. Institutional and private investors showed much lower activity and very restrictive investment behavior. This slowdown in venture capital investment activity, is a global phenomenon.
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> Fundraising has become incredibly difficult, complex, and is posing a threat particularly to startups in early growth stage. Investors are more cautious than ever before, focusing on their existing portfolio and continuing to invest primarily in existing portfolio winners. Our study shows a continuous disconnection bias, between the current market and the outlook, which does indicate (maybe exaggeratedly stress) an even more difficult Q1 2023. However, most experts in our interviews believe that European entrepreneurs are taking measures to adapt to the current environment (e.g. shifting to profitability if they can), which will not only stabilize the ecosystem but also should result in more reasonable valuations and more sustainable companies.
>
> **Berthold Baurek-Karlic**
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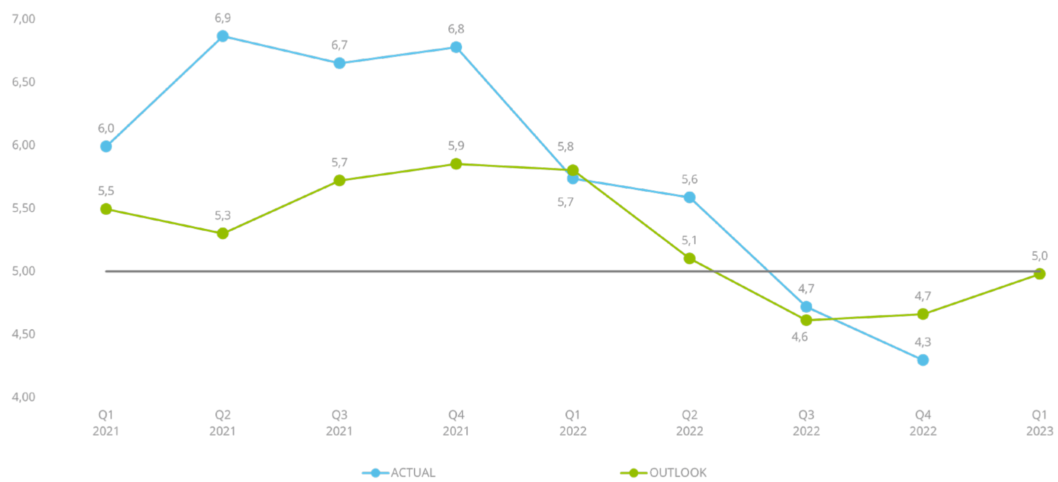
> President European Super Angels Club



EUROPEAN INVESTOR SENTIMENT INDEX
Q4/2022

FOURTH CONSECUTIVE DECLINE IN SENTIMENT, DESPITE A SLIGHTLY POSITIVE OUTLOOK.

The fourth quarter of 2022 saw a continuation of the negative trend that began in the first quarter, with the index dropping from 4.7 in Q3 to 4.3 in Q4, a decrease of 8.9% compared to the previous quarter and 36.6% compared to the previous year. This represents the lowest index value since its launch, and the third-lowest point recorded in the past two quarters.

The economic environment has had a severe impact on market perception among European investors, which is currently more negative than during the COVID-19 pandemic restrictions.

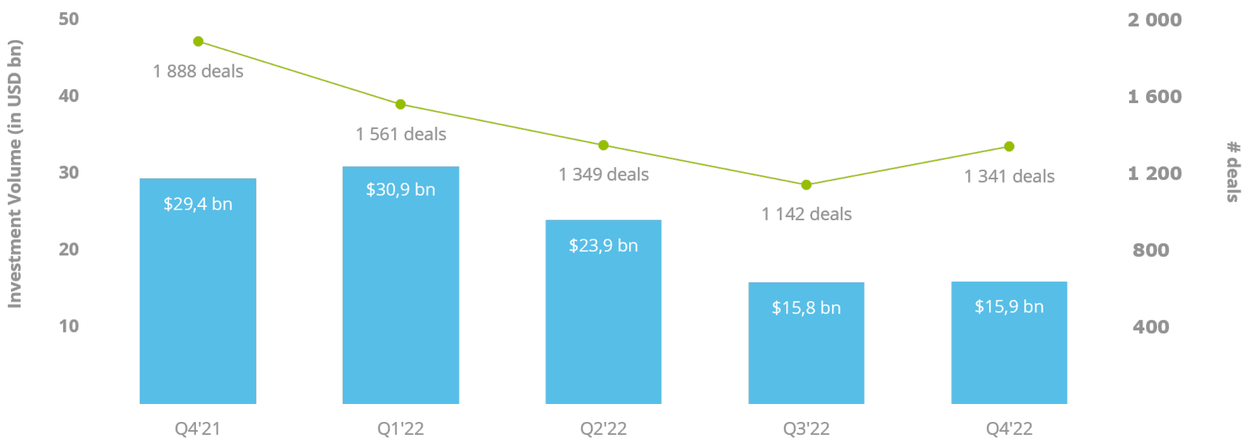
Despite the negative trend, investors have raised their expectations for Q1 2023, with the outlook reaching the neutral line at 5.0. The outlook for Q4 2022, which was anticipated to be 4.7, measured in Q3, did not align with the recorded 4.3 actual in Q4.

High levels of inflation and a slowdown in the VC and PE sectors have made it difficult for institutional and some private investors to allocate funds, especially with the increasing signs of a potential recession. Europe is working to adapt to the current macroeconomic environment by decreasing inflation levels, which may reverse the negative trend in the upcoming quarter.

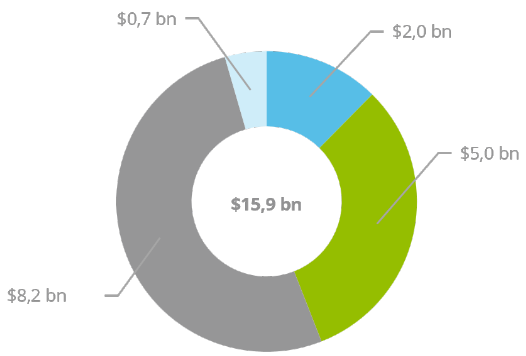
The most significant reductions in the index actual come from a 22.1% decrease in the perception of the current fundraising environment and a 13.9% decrease in the overall activity of European investors compared on a QoQ basis. Participants reported a slightly lower sentiment for current startup valuations and deal flow quality compared to the previous quarter. This can also be noticed on the market where we saw a sharp decrease in the average deal size and the overall investment volume.

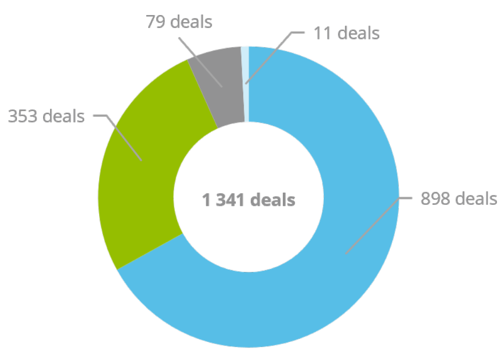
The outlook for Q1 2023 has increased by 6.8% QoQ, continuing the recovery trend from Q4 2022. This is driven by a substantially increased perception of fundraising difficulties and anticipated higher activity of investors (17.9% and 16.1% increases, respectively).

EUROPEAN VENTURE CAPITAL DASHBOARD



Investment Volume		# deals	
QoQ	YoY	QoQ	YoY
▲+0,7%	▼-45,7%	▲+17,4%	▼-29,0%





However, investors expect increased competition for deals and decreased valuations. Participants are primarily concerned with the war in Ukraine, followed by the threat of continuing high inflation, supply-chain bottlenecks, and energy crisis.

Despite Q4 2022 being the most depressive quarter, the sentiment outlook signals a potential recovery. However, this is not a clear indicator at this stage. With potential further increases of interest rates in the EU, venture investment might continue to decline.

DECELERATION OF VENTURE MARKET IN EUROPE AND THE UNITED STATES: Q4 2022 INVESTMENT VOLUME AND DEAL ACTIVITY.

European venture activity continued to decelerate in Q4 2022, with a total investment volume of USD 15.9 billion raised in 1,341 investment transactions. This represents a minor 0.7% increase (QoQ) in aggregate investment volume, but a 45.7% decrease when compared on a yearly basis. While the number of deals increased on a QoQ basis by 17.4%, there was a 29% decrease YoY, with 1,888 deals in Q4 2021. Furthermore, the average deal size decreased significantly, totalling approximately USD 11.9 million in Q4 2022, a 14.2% and 23.5% decrease in QoQ and YoY, respectively. This negative trend is reflected by investors' sentiment.

In contrast, the leading venture ecosystem in the United States saw a decline in aggregate venture investments, from USD 36.5 billion in Q3 2022 to USD 31.9 billion in Q4 2022, a 12.6% decrease. A more significant decrease can be seen when comparing investment volume YoY, with a 65.9% decrease. Unlike Europe, the average deal size in the US decreased by 5% on a QoQ basis. It is worth noting that the global investment distribution by stages remains similar on both a QoQ and YoY basis, indicating a proportional development of the VC market worldwide (CBInsights, 2023).

SIGNIFICANT LEAD FOR THE UK VENTURE ECOSYSTEM, FOLLOWED BY FRANCE AND GERMANY.

British startups experienced an increase in overall investment activity in Q4 2022, unlike other European venture ecosystems, with a total of USD 3.5 billion raised, a 6% increase on a QoQ basis. This solidifies the UK as the top European venture ecosystem, despite the 51.4% decrease compared to Q4 2021. France followed as the second leading venture ecosystem in during the quarter, raising a total of USD 1.8 billion, representing 21.7% and 33.3% decreases on a QoQ and YoY basis, respectively. The UK's performance allowed it to surpass Germany, which raised USD 1.7 billion in Q4 2022, a 5.6% and 72.1% decrease compared to Q3 2022 and Q4 2021, respectively.

Notable deals in Europe in Q4 2022 include Greek-based cloud-based neo bank Viva Wallet, which raised the largest VC round in Europe in a corporate minority round of USD 869 million in December. The second largest round was a USD 200 million Series C investment round of German-based Matter Labs, an accelerator of public blockchain adoption in November. The third largest round was raised by UK-based cloud-native application security provider Snyk, which attracted USD 196 million from Qatar Investment Authority and others as part of a Series G investment round in December.

METHODOLOGY

Over 4000 highly experienced investors (business angels, (corporate) venture fund managers and family offices) from 8 European countries were invited to participate in December 2022 and January 2023 in the European Venture Sentiment Survey, conducted by Venionaire Capital. Venionaire Capital collects answers from a focus group in computer-assisted personal interviews and a much smaller control group to assess the indices based on a quarterly recurring survey. Those datasets are collected in two waves and finally merged. In both groups, Venionaire has aligned similar sets of investors, ranging from business angels to large corporate venture units as well as early- to later-stage venture capital funds from all over Europe (incl. Switzerland and the UK).

The indices for current sentiment and projected outlook are weighted indices, with emphasis on the ability/willingness of investors to invest, the perception of startup valuations and the quality of deal flow.

COMPARABILITY

Sentiment surveys and indices are nothing new. They have been around for decades to quantify how a specific group of people feel about a market or economy. One of the most notable examples is the Consumer Confidence Index (CCI), which provides an indication of future consumption and saving of households. There are also surveys that focus on a specific market, or even an individual security. How can the results of these market sentiment surveys help market participants?

Let's look at the venture capital industry. This general economic information can greatly benefit both the investor and start-ups within a market. Investors can compare their own views and opinions to

those of the general market or across different geographical regions and industry verticals. This will help them to adjust their investment behavior. Start-ups can use this information when growing their business internationally, when they prepare for fundraising or to slow down their business (return to bootstrapping – ahead of time) if the economic environment worsens. Market sentiment indicators are important for us in all industries and markets.
Nevertheless, there is a limited number of market sentiment indices for the venture capital or start-up market available, which we found useful to work with.

Most indices available focus on a specific region, investors group or industry. Take EIF's VC Survey, which targets a highly professional group of regulated investors across Europe, but does not take accelerators or business angels into account. Our partners of Deutsche Börse Venture Network conducted a great report on market sentiment during the COVID-19 pandemic. It offers great insights, but it was a onetime publication.

We have developed our own "European Venture Sentiment Index", which shows in one simple number the general state of sentiment today and shows the current outlook in a second number.

THE EUROPEAN INVESTOR SENTIMENT INDEX

The index is based on feedback from different economic regions, as well as start-up sectors and reflects the general European Venture Sentiment. The methodology of the index was designed by Venionaire Capital in mid-2019. The project was led by its founder and managing partner, Berthold Baurek- Karlic, a serial entrepreneur and leading venture capital expert from Vienna, Austria. Berthold started his career in the statistics department of the Austrian Central Bank (OeNB).

"We attach great importance to providing our investors with an actual overview of the current investment climate in the European start-up sector. After this index has proven to be an important tool for our clients - including start-ups as well as investors - we have decided to make the results available to the public for the first time during the COVID-19 pandemic in the first quarter of 2020. Our aim was to draw public attention to the threatening situation of innovative young companies in Europe", explains Berthold Baurek-Karlic.

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Berthold Baurek-Karlic is the founder and managing director of Venionaire Capital, which specializes in M&A and venture capital. The Venionaire Group also includes the investment company MOTEC VENTURES (motec.vc) and the software provider DEALMATRIX (dealmatrix.com).

He is also founder and secretary general of the Business Angel Institute (businessangelinstitute.org), board member of the European Super Angels Club (superangels.club), Homeppl (homeppl.com), Flovtec (flovtec.com), Unmanned Life (unmanned.life) and chairman of the supervisory board of Blockpit (blockpit.io). Furthermore, he is an expert partner of various accelerators and consultants of various venture funds, as well as external consultant in the EU programs Horizon2020 (today Horizon Europe) and Innovation Radar.

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David is responsible for the identification, screening, and evaluation of startups. Furthermore, David specializes in financial modelling; he supports Venionaire's clients with deal structuring, financial engineering and valuations. Before joining the team at Venionaire, he gained experience by accompanying a tyrolean startup in a leading position as Controller & Financial Analyst from early-stage through a Series A round up to a Share Deal exit. David has a Bachelor degree in Business Management & Entrepreneurship from the FHWien der WKW.

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Samuel manages deal flow, analyses business models and prepares investment decisions. Prior to Venionaire, Samuel has gained professional experience in London, Sofia, Vienna and Berlin.

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Denis supports our analysts regarding deal flow, analyses business models and prepares investment decisions. He has gained professional experience working on international projects between Russia and China. Denis is currently pursuing an undergraduate degree in International Business Administration with a finance major in Lauder Business School.

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ABOUT

VENIONAIRE CAPITAL

The European Venture Sentiment Survey is conducted with the lead of Venionaire Capital. Venionaire is a entrepreneurial partner for investors, founders and institutionals. Our partners and team are specialized in venture capital and private equity investments, with an extensive over a decade-long track-record. We offer transaction and corporate advisory services – from due-diligence, valuation, deal structuring, (ghost) negotiating to alternative fund management – for investors, corporates, public entities and growth companies (startups / scaleups). Our track-record as entrepreneurs, advisors and investors shows deals in fields of corporate finance (M&A), (Corporate) venture capital, corporate startup engagement (CSE), digital transformation and high-tech innovation with a total volume of more than a billion Euros. In addition we serve as trusted partners for scouting, screening, technology-, market- and competitive analysis and valuation for bespoke investors and accelerators in Europe. We are proud of our performance within managed portfolios and increase our high-tech footprint everyday to support a future-proof economy.

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