











 PFR Ventures inovo^{VC}

Polish VC Market Outlook 2023



Authors

Analytics Team

-  **Radosław Kuchar**
Investment Manager, PFR Ventures
-  **Piotr Marszałek**
Investment Associate, PFR Ventures
-  **Martyna Zwierzchowska**
Analyst, PFR Ventures
-  **Dmytro Golournyi**
Investment Associate, PFR Ventures
-  **Łukasz Kajdas**
Investment Manager, PFR Ventures
-  **Karol Lasota**
Principal, Inovo.vc
-  **Łukasz Nikitiuk**
Operations Specialist, Commercialization Department, NCBR
-  **Katarzyna Syta**
Operations Specialist, Commercialization Department, NCBR
-  **Bogusław Taźbirek**
Operations Specialist, Commercialization Department, NCBR
-  **Artem Orlov**
Capital Markets Expert, BGK

Opracowanie raportu

PFR Ventures

PFR Ventures manages funds of funds that invest in venture capital and private equity funds together with private investors, business angels and corporations. The goal of PFR Ventures is to use this capital to support innovative Polish companies at various stages of development. PFR Ventures currently has a portfolio of over 70 funds, which have made over 800 investments.

inovo^{vc}

Inovo.vc is a venture capital fund that invests in the most ambitious entrepreneurs from Poland and the CEE region. We invest up to EUR 4 million in early stage startups and help them build global brands. Over the past 10 years, we have funded more than 80 entrepreneurs from 35 startups, including Booksy, Infermedica, Spacelift, Tidio and Zowie, and have co-invested with top global VC funds, including Insight Partners, a16z, Gradient Ventures and Tiger Global. With its three funds, Inovo.vc will manage more than EUR 160 million in capital.

Local data sources:



2023 highlights

> **399**

businesses received funding

2022: 435
2021: 379
2020: 300

> **466**

EUR m invested

> **210**

funds involved

> **-42%**

Decrease in funding value 2023 to 2022*

Europe: -45%
North America: -29%

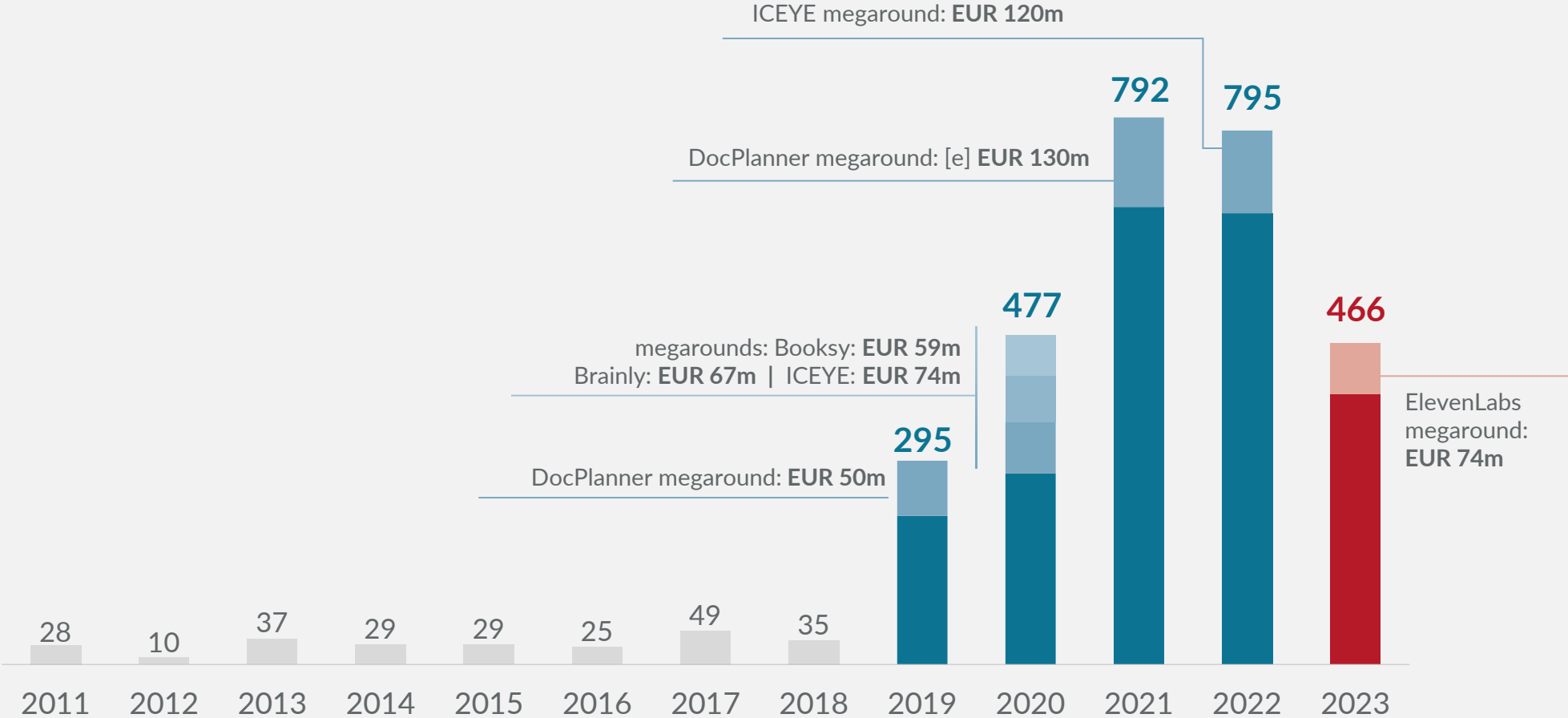
Section 1

Market Outlook



VC investments in Poland 2011 – 2023

Value of investments (EUR m)



(1) Source of archived data 2011-2018: Invest Europe;
 (2) Megarounds that distort the statistical picture are intentionally shown separately (see: outlier);
 (3) A megaround is defined as a transaction that exceeds 10% of the value of all investments in a given year.

Authors' comments



Aleksander Mokrzycki

Vice-President of the Board, PFR Ventures

In the face of the global crisis, VC funds, especially those investing in growth-stage companies, have reduced activity. This has resulted in fewer large investments and lower company valuations. As a result, some companies have changed their strategy to focus on profitability rather than scale. However, it is worth noting that a significant number of early-stage companies are still being funded in Poland. Seed capital remained available in 2023. The driving force is still the public sector. However, we should not forget that the funds invested are always combined with private money.

I expect the first half of 2024 to be a difficult period on the Polish market: there will be less capital for seed projects. The picture will change significantly in the second half of the year with the inflow of FENG (European Funds for a Modern Economy) funds. By then, I anticipate that the success of companies that have recently raised seed rounds will persuade international investors of the merits of reinvesting in the Polish market.



Karol Lasota

Principal, Inovo.vc

The key event of 2023 was the spectacular growth of ElevenLabs, which became a unicorn company in record time. The success the founders have achieved in such a short time is a remarkable inspiration for the entire startup ecosystem. They have proven that it is possible to build a billion-dollar business with VC backing in a short time. Of course, it is not easy: it requires countless sacrifices, time and capital, and even then, there is no certainty of success.

This milestone has the potential to become a catalyst for the entire VC market. It is an inspiration for founders, a proof point for investors and an incentive for Western later-stage funds to look for promising startups in Poland. We are already seeing an increase in the number of ambitious founders with great vision in the market, attracting the attention of excellent funds. So, what's the plan for 2024? Let's find the next ElevenLabs!

Authors' comments



Bogusław Taźbirek
Operations Specialist,
Commercialization Department,
NCBR

The phasing out of the Bridge Alpha programme resulted in the low number of transactions in the fourth quarter of last year, causing the quarterly median to reach its highest level since the end of 2019. This will continue into 2024, as Bridge Up (the successor to Bridge Alpha under FENG Measure 2.8) will not allow these transactions to be included in the calculations until early 2025. The discontinuity in the funding of Polish companies in the seed stage by the only programme aimed at founders without financial backing may have a negative impact on valuations and feasibility of new innovative ideas.

We are currently witnessing a growing impact of the companies (more than 1,200) participating in this programme on the market and the Polish economy, e.g. Noctiluca SA will soon be another Bridge Alpha participant present on the WSE's main trading floor, alongside Bioceltix SA, and more companies have appeared on the list of major VC transactions in 2023.



Paweł Chorąży
Managing Director for EU Funds,
BGK

We successfully completed the disbursement of funds from the Regional Operational Programme (ROP), despite the general decline that the Polish VC market experienced in 2023. Under the ROP we invested in more than 100 projects in 6 regions. The main areas of investment were Health and Internet Services. Due to the end of the portfolio-building period, the largest number of investments was made in 2023, with an increase of almost 40% compared to 2022.

2024 saw the launch of the new European Fund for the Modern Economy (FENG) programme. Under FENG, BGK together with PFR Ventures will implement the following instruments: Starter, Biznest, Otwarte Innowacje, KOFFI and CVC. Funds from the FENG programme will enable investments in at least 500 companies from the SME sector, which will contribute to further highs in the Polish VC market.



Luiza Nowacka
Investment Manager,
Vinci

In 2023, we saw a decrease in the value and number of rounds (compared to 2022). The statistics are affected by the end of the EU funding perspective, the economy, geopolitics, lower risk appetite of investors, among others. Reduced investment resources lead to a natural selection that excludes weaker players. Investment funds are looking for funding from organisations such as the EIF, which will determine the direction of investments in health or clean environment, among others. We hope for the release of EU funds in H2 2024.

CVC fund structures such as Vinci S.A. are developing dynamically. The fund's high capitalisation, active project scouting and high ticket (EUR 2.5m+) will have a positive impact on the market. It will also be important for the sector to attract foreign co-investors. Collaboration and relationship building should drive the ecosystem.

They found a Polish unicorn

PFR Ventures

inovo[®]

ElevenLabs investors involved in the Polish ecosystem



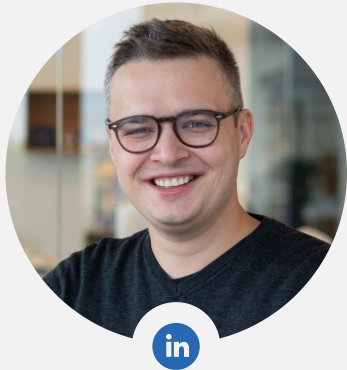
From left: Bartek Pucek, Bartek Sobczak, Bartosz Majewski, Maciej Gnutek, Marta Pyrzyk, Peter Czaban, Piotr Karwatka, Tomasz Karwatka, Tytus Cytowski
The first round was led by the Credo Fund, in which Maciej Gnutek is a partner. Some of the investors allocated their capital through a syndicate led by Bartek Pucek.

Funding timeline



Source: dealroom, analysis by PFR Ventures

Polish unicorn



Maciej Gnutek

Partner
Credo Ventures

Large technology companies can be created anywhere in the world, including Central and Eastern Europe or, more specifically, Poland. However, for a company to reach unicorn status, many factors must come into play.

Piotr Dąbkowski noticed the potential of transformer models several years before the release of ChatGPT and began researching the use of this technology early enough to found ElevenLabs with Mateusz Staniszewski exactly when the market was experiencing a quantum leap in quality in every modality: images, films, text, and indeed – voice.

Before ElevenLabs, there were already several large companies in Poland, some possibly valued at over a billion dollars. So far, this has not translated into an exponential increase in the number and quality of startups established on the Vistula River. I would not expect this to change from now on.

At Credo, we invested in three companies valued at >\$1B, and each time the playbook was very similar: based on unique expertise, the team put in an incredible amount of work to build a "10x better" product that hit the market at the perfect time and defined or created a category - whether it be voice synthesis and AI dubbing (ElevenLabs), Robotic Process Automation (UiPath), or product management software (Productboard). An ecosystem is needed, but the best teams will always find a way to change the status quo. We will be looking for the next "unicorns" in markets undergoing major technological or structural changes. And which markets those are is the billion-dollar question.

Looking for the next unicorns (PFR Ventures analysis)

Unicorn definition*: a private company, with a valuation over USD 1 billion

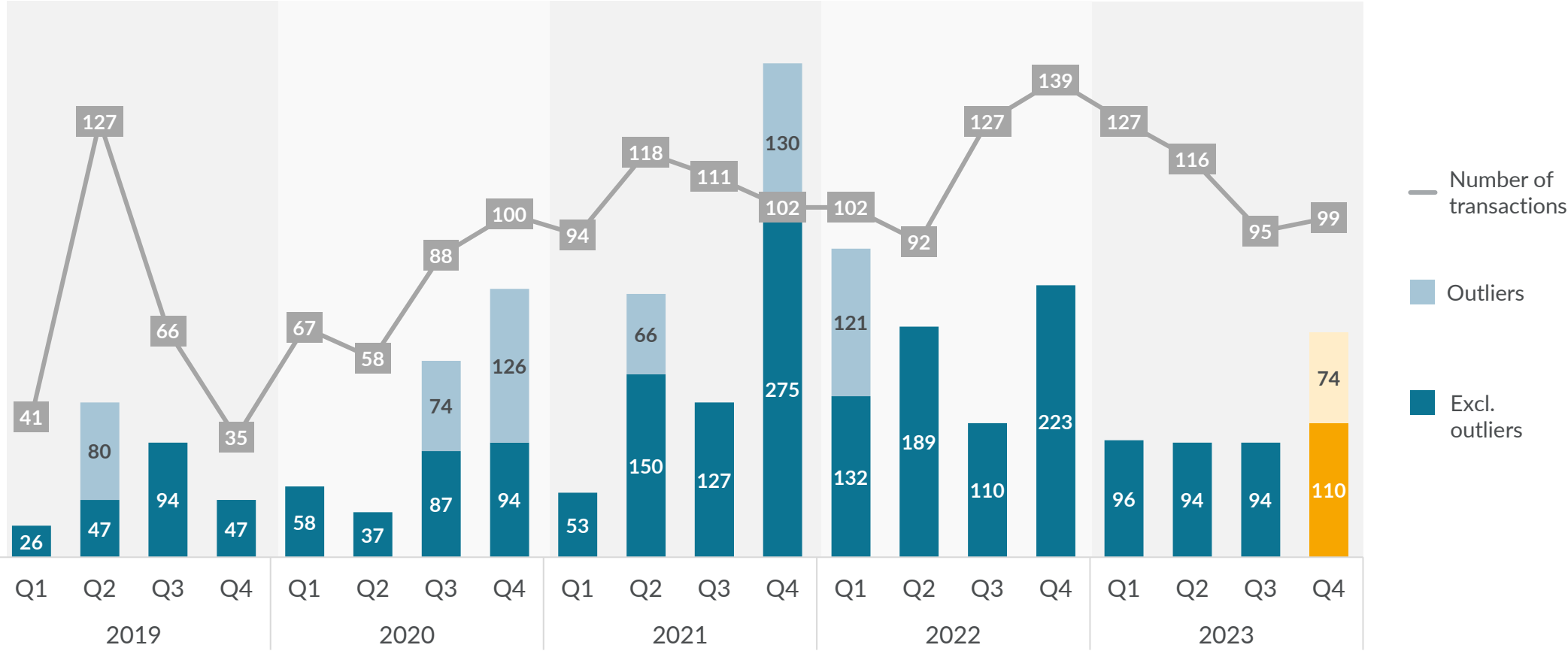
	Valuation USD 1 bn	Private company
Allegro	✓	✗
Booksy	✗	✓
Brainly	✗	✓
CD Projekt	✓	✗
Docplanner	?	✓
ElevenLabs	✓	✓
eObuwie	✓	✗
ICEYE**	✗	✓
InPost	✓	✗
Pracuj.pl	✓	✗
Ramp	✗	✓
WP	✓	✗

*methodology adopted by the report's authors

**ICEYE can be classified as both Finnish and Polish company, therefore its status is also not self evident

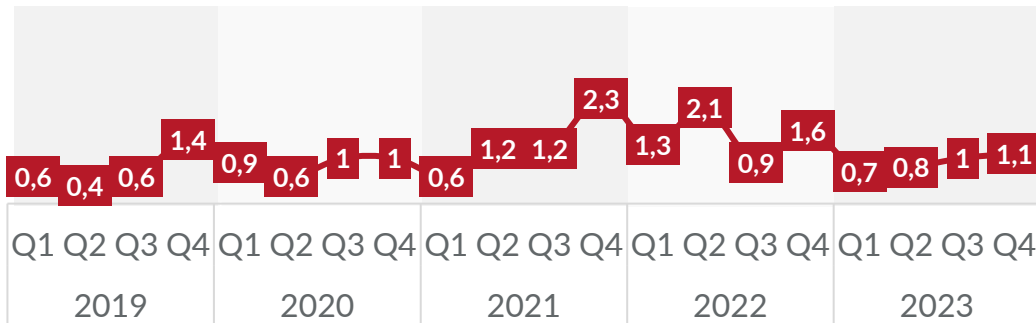
VC investments in Poland 2019 – 2023

Quarterly, value and number of transactions (EUR m)

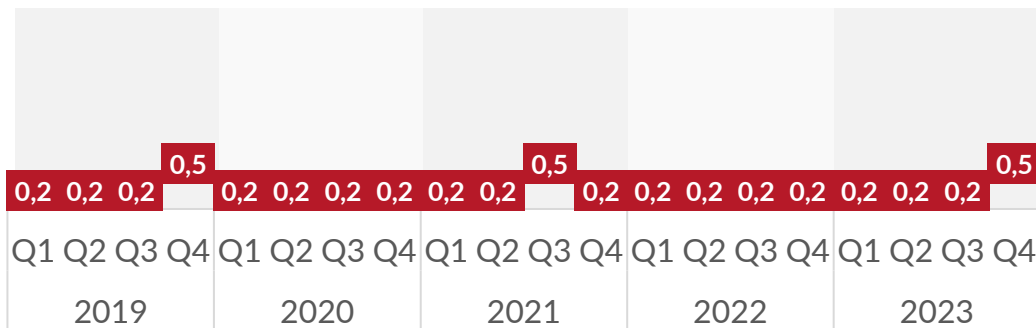


VC investments in Poland 2019 – 2023

Quarterly, average transaction value (EUR m)



Quarterly, median transaction value (EUR m)



Our calculations for the median transaction value exclude outliers. For the median, all rounds were counted.

The average transaction value on the Polish venture capital market increased steadily throughout 2023, reaching an annual average of EUR 1 million. This is the lowest result since 2020, when the average transaction value was EUR 0.8 million. By contrast, the median transaction value in 2024 remained stable at EUR 0.2 million until Q3, a trend that, with a few exceptions, has remained almost unchanged since the start of our report. In Q4, the median reached an exceptionally high level of EUR 0.5 million, most likely due to the end of the investment periods of the funds from the BridgeAlpha programme.

Both average and median transaction values are likely to reach higher levels in the first half of 2024 than we have seen so far. This trend should continue at least until the new VC funds co-funded by PFR Ventures and NCBR, which have historically had a significant impact on both of these statistics, are launched.

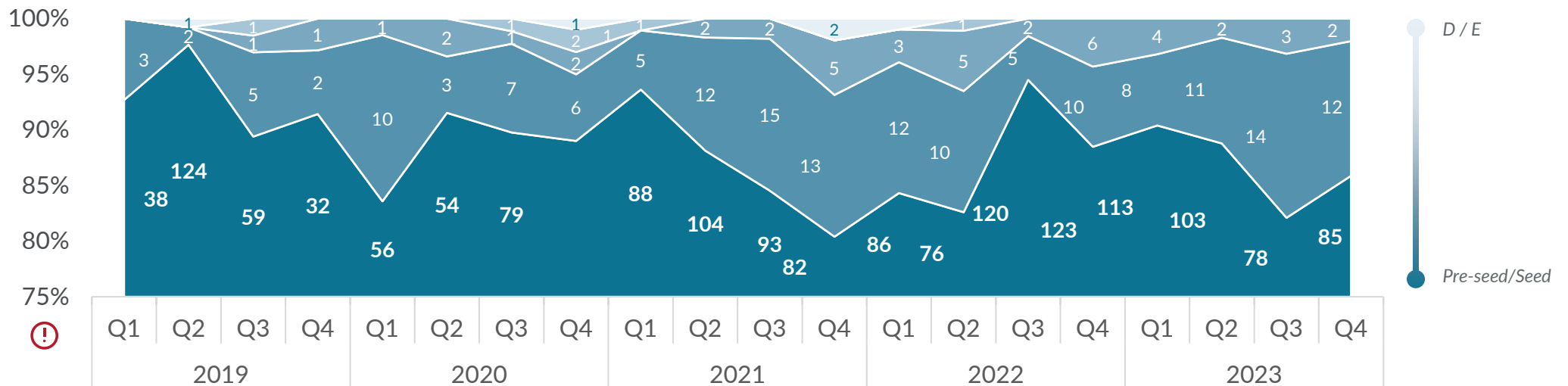


Piotr Marszałek

Investment Associate, PFR Ventures

VC investments in Poland 2019 – 2023

Series distribution (quarterly, number of transactions with a focus on later rounds)



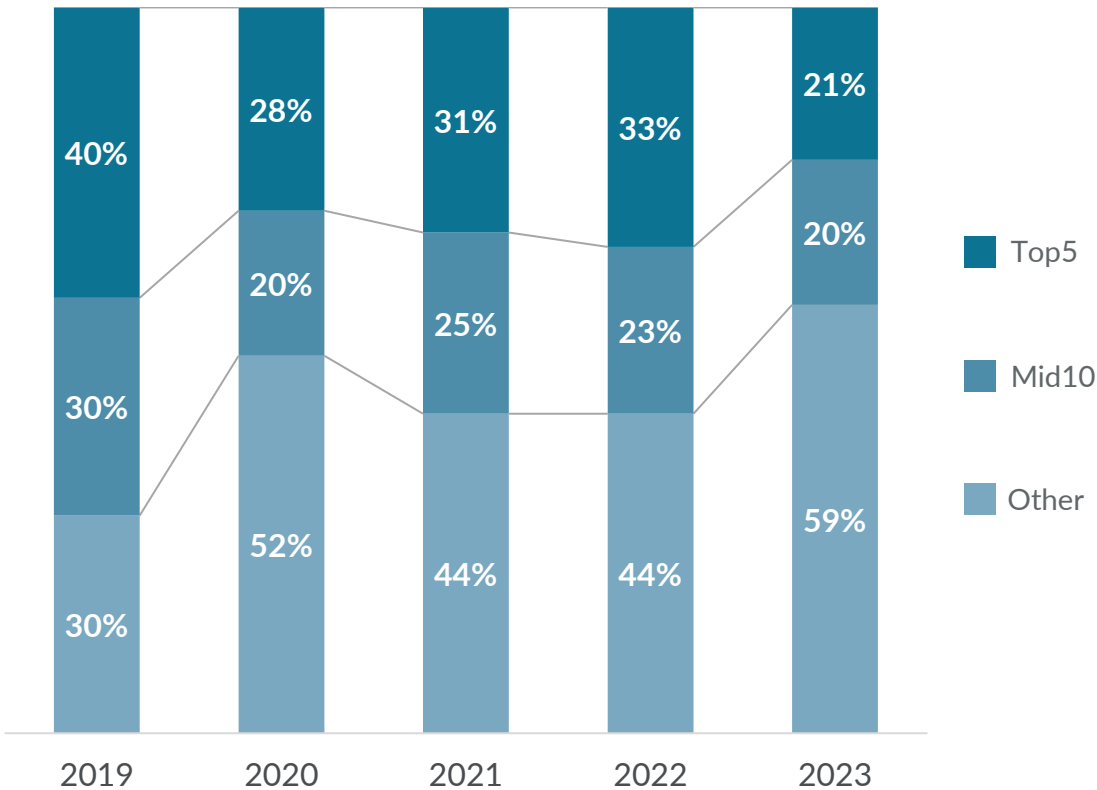
Maciej Małysz
Partner, Inovo.vc

The Polish VC market has a significant opportunity to adapt to global trends. In 2023, more than 80% of investments were focused on pre-seed/seed rounds, which is typical for a market at our stage of development. However, with increasing competition and rapid technological advances, Polish early-stage funds need to be bolder. Simple strategies based on safe bets are no longer enough to develop our market and increase the share of later-stage rounds led by global VC/Growth funds. They are looking for ambitious projects with the potential to reach multi-billion dollar markets, led by founders with the right skills and vision. An example of such a success story is ElevenLabs, which demonstrates the power law effect in the VC/startup industry and serves as an inspiration to others. This is exactly the kind of ambition that should drive the Polish VC market - boldness in decision-making, focusing on projects with global potential and supporting founders with ambitious visions.

Where a round is undefined by a startup/fund at the time the transaction is announced, we use data from Dealroom, PitchBook or Crunchbase, taking into account (a) the company's funding history; (b) the investor's profile; (c) the value of the funding raised.






VC investments in Poland 2019 – 2023

Share of largest rounds in 2019-2023



Mid10 represents 10 consecutive transactions following Top5, excluding outliers *amount of round announced in 1Q23 + extension in 2Q23

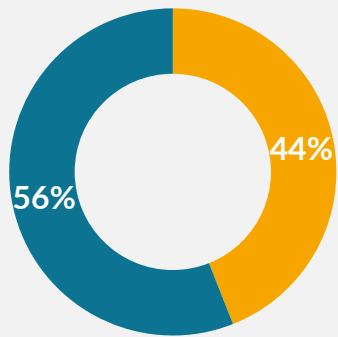
Top5 rounds in 2023 (excl.outliers)

 Vue Storefront	EUR 18.6m Series A	1Q23	
lElevenLabs	EUR 17.5m Series A	2Q23	
 KYP AI	EUR 17.5m Series A	3Q23	
 BLANK.	EUR 15.8m Seed	4Q23	
 contec	EUR 15.1m* Series B	1H23	

Sources of capital

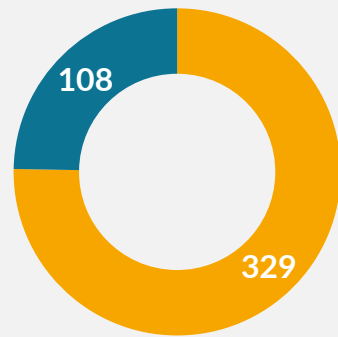
Share of private and public-private funding in 2023

Value of transactions



Public-private

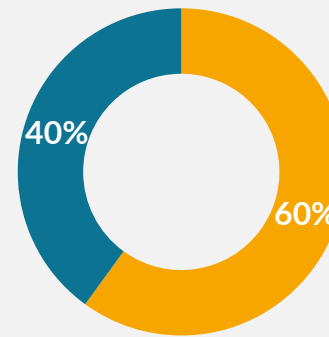
Number of transactions



Private

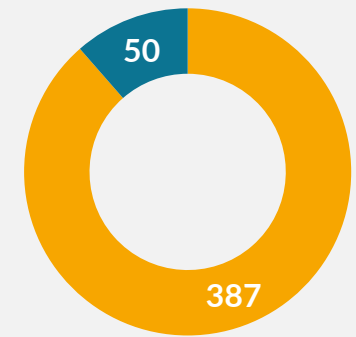
Share of funding from international and Polish funds in 2023

Value of transactions



Polish funds

Number of transactions



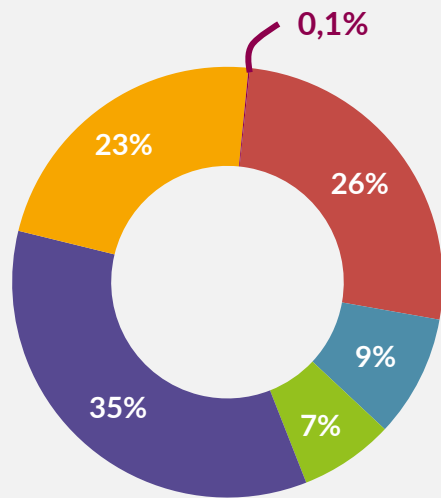
International funds

- (1) Individual transactions have been classified according to the predominant share of private or public-private equity funding;
- (2) International fund transactions include all transactions involving at least one international fund.

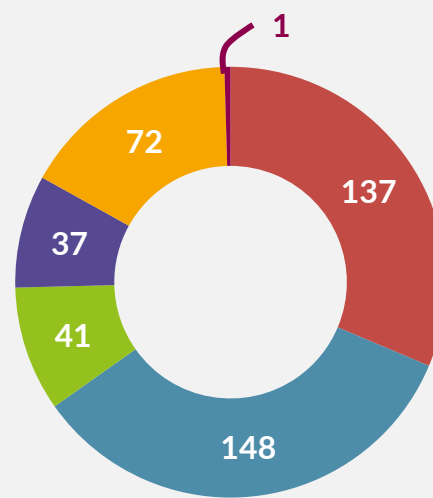
Sources of capital

Public programmes and private capital in 2023

Value of transactions



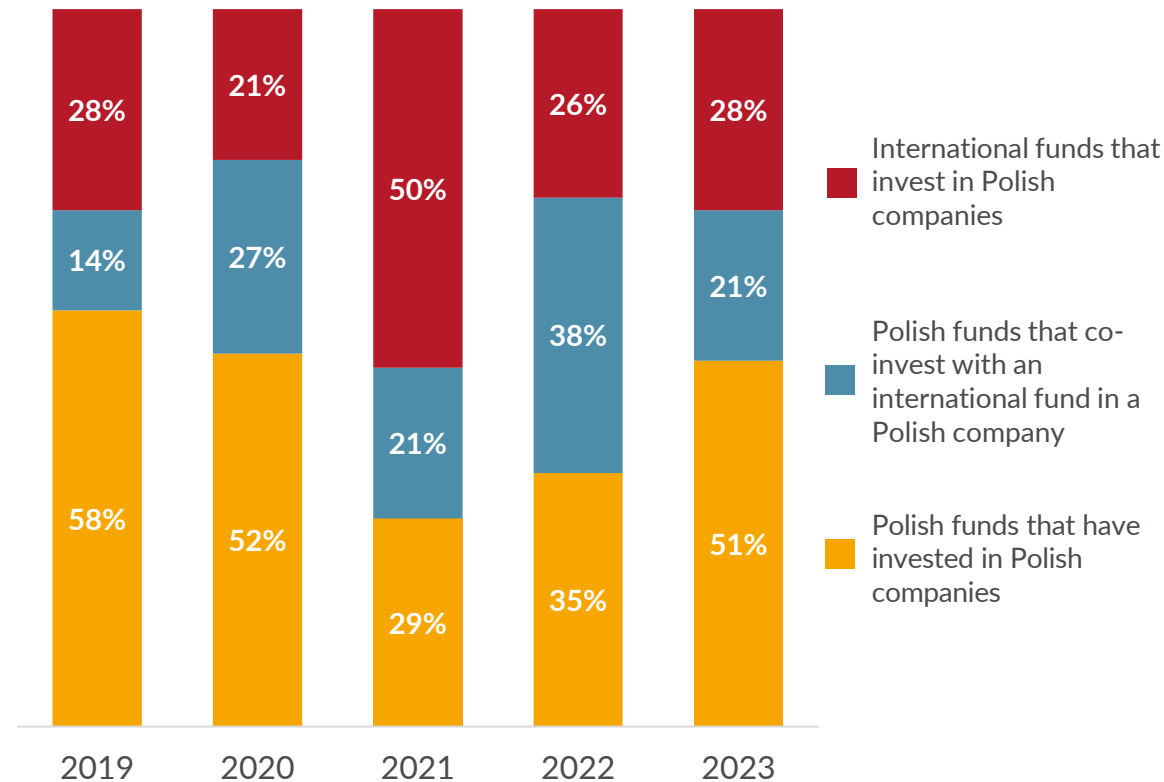
Number of transactions



- (1) Individual transactions have been allocated on the basis of the predominant share of private or public-private capital involved;
- (2) International fund transactions include all transactions involving at least one international fund;
- (3) Some of the transactions classified as "PFR Ventures" originate from the PFR NCBR CVC programme, which was jointly developed with the National Centre for Research and Development;
- (4) Some of the transactions classified as "PFR Ventures" were also co-financed by BGK funds or State Treasury companies (e.g. Orlen VC).

Investments and co-investments 2019 – 2023

Share in the total transaction value



The above overview does not include outliers

Co-investments by Polish and international funds reflect the amount of capital flowing into Polish startups at the stage of Series A+ rounds. It is no secret that raising a round above EUR 5m most often requires the participation of foreign funds, which operate with much higher investment tickets.

The decline in co-investments and the overall presence of international funds in the Polish ecosystem is linked to the global crisis in the venture capital market. Investors are definitely more cautious about startups and expect not only a clear vision, but also business results.

At the same time, the number of funds willing to invest in Series A+ rounds is growing in Poland. This trend could have a significant impact on the 2024 statistics. I expect to see a larger number of transactions by Polish funds with higher amounts.



Radosław Kuchar

Investment Manager, PFR Ventures

Major transactions 2023

Rounds by investment thresholds

	Investors	Company		Funding	Round*
EUR 6-15	Prudence VC, FJ Labs, Inovo.vc, Tera Ventures, Innovation Nest	AI.Clearing		EUR 13m	A
	APER Ventures, Adamed Technology, ARIA, angel investors	Inuru		EUR 11m	A
	<i>undisclosed</i>	<i>undisclosed</i>		EUR 8-12m	B
	DC24	Saule Technologies		EUR 9m	B
	Fidiasz EVC, Sirius Investment	HiProMine	 	EUR 7m	B
	Inovo.vc, Kraken Ventures, Ar.ca, Fabric Ventures	Fiat Republic		EUR 7m	Seed
	Cogito Capital Partners, Innovation Nest, Edge VC, Taiwania Capital, HTGF	Sky Engine AI	 	EUR 6m	A
EUR 4-5	Cavalry Ventures, Act.VC, Atlantic Bridge, Firestreak Ventures, Expeditions Fund, Hustle Fund	Oblivius		EUR 5m	A
	J2 Ventures, Story Ventures, Chiratae Ventures	Aether Biomedical		EUR 5m	A
	Virgin Orbit	SatRevolution		EUR 5m	B
	Crescent City Capital	TerGo		EUR 5m	A
	GEM Capital	Sad Cat Studios		EUR 5m	A
	Warsaw Equity Group, angel investors	3Soft (Occubee)		EUR 4m	B
	Orlen VC, PKO VC, Freya Capital, Level2 Ventures	cThings	 	EUR 4m	A

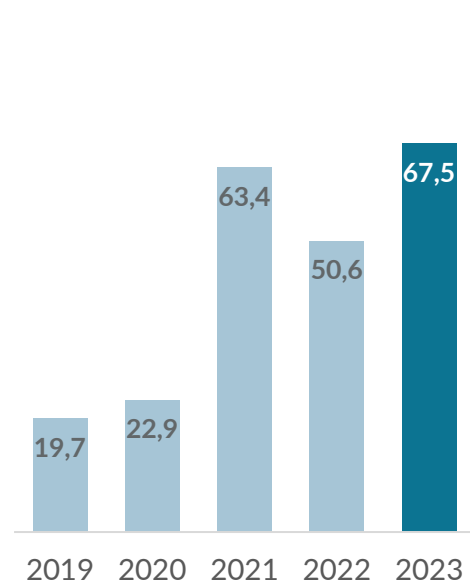
*Individual classification based on the amount of capital raised in the absence of information or distorted order of rounds.

Activity of Polish funds 2019 – 2023

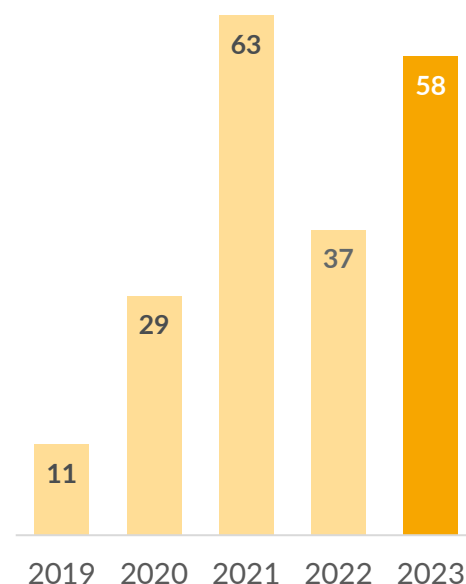
Investments of Polish funds in foreign companies

Value of transactions

EUR m



Number of transactions



In 2023, the market did not break the records set in 2021 for either the number or value of transactions. However, the upward trend continued (looking at 2019-2023). The number of investments fell slightly short, while the value of transactions was around 17% lower than in the record year of 2021.

In the last 3 months of 2023, 14 investments by Polish funds abroad were recorded. The repeat of the previous quarter's result shows that funds continue to actively seek attractive investments outside Poland.

Of the 58 foreign investments made in 2023, a significant number of these companies have one thing in common - they operate in the ClimateTech sector, and the sustainability element (recycling, reuse) is central to the solutions they offer. Perhaps it is this component that Polish startups are still lacking?

These figures are not included in the statistics on the Polish VC market on pp. 1-16.



Dmytro Golournyi

Investment Associate, PFR Ventures

Section 2

Sectors and business models



Sector-specific investments



Maciej Ćwikiewicz

President of the Board
PFR Ventures

We can look at the startup market from many angles. The most common are: the stage of development of the company, its region of origin, but also the industry in which it operates or the problem it solves. The previous pages of the report focus on stages of development and funding amounts. The report naturally covers the Polish startup and VC ecosystem. The following pages are devoted to individual industries.

At PFR Ventures, **we have identified four priority areas that we want to support through VC investments.** Each of them touches on issues that are relevant from the perspective of living or doing business in Poland. They are HealthTech, ClimateTech, FinTech and FoodTech. We will launch, and in the case of ClimateTech we have already launched, programmes to provide capital to funds whose strategy is to invest in a specific sector.

Since 2020, HealthTech has been the most popular sector among entrepreneurs and investors. Its share of the total number of transactions is declining, but it is still the largest. The COVID-19 pandemic has highlighted the problems and challenges in healthcare and helped accelerate work to address them.

Our first launch was the PFR Green Hub FoF programme, where we invest in so-called green

funds. Our portfolio already includes 5 teams, Polish and international, investing in companies at different stages of development. The aim is to support Poland's energy transition and the achievement of climate targets.

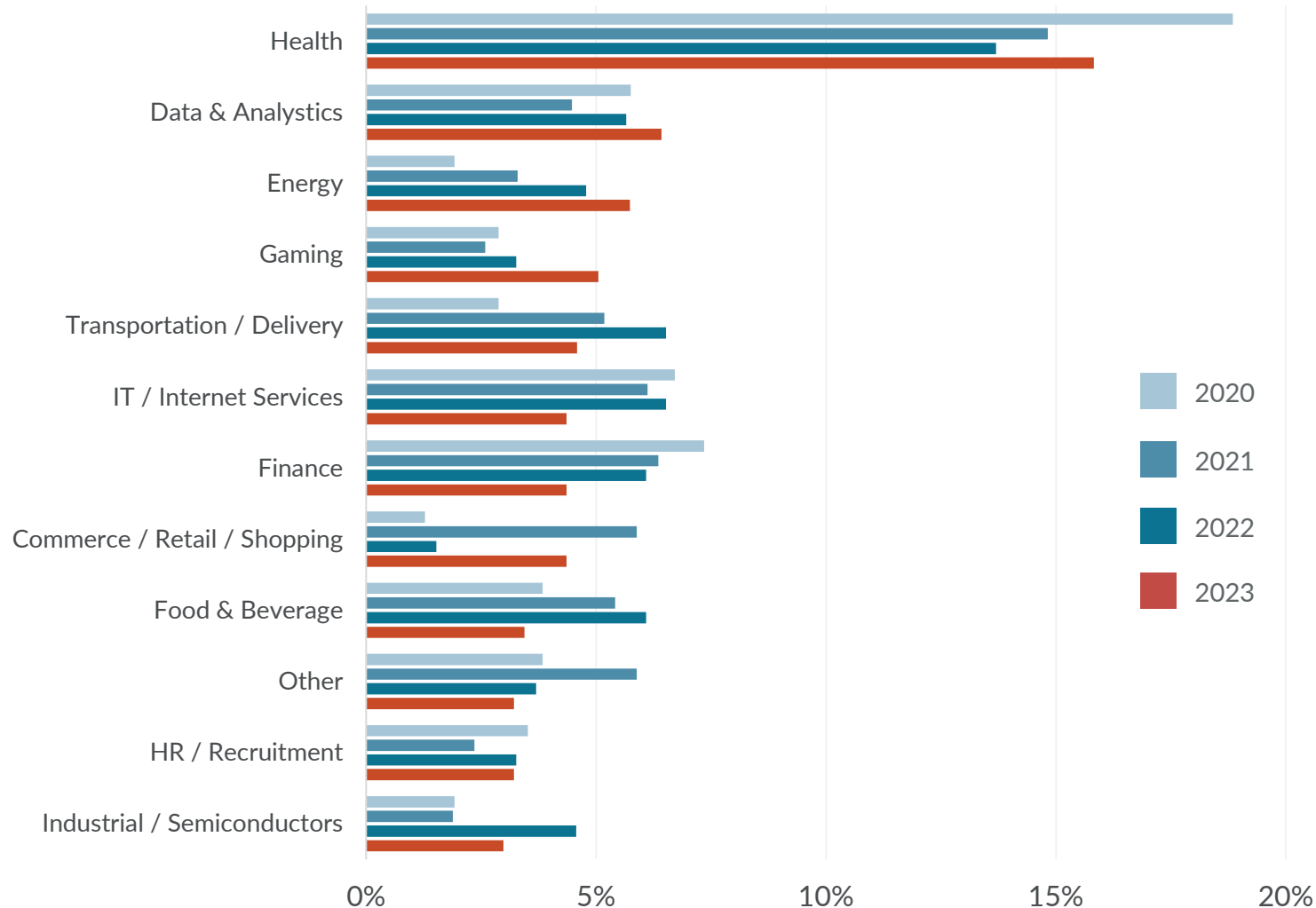
Going forward, we will invest in the FinTech and FoodTech sectors. Both are close to consumers, but FinTech is also an infrastructure that facilitates the development of startups (such as Ramp, Uncapped, or Vodeno). The development of the FoodTech industry, on the other hand, has a direct impact on health care and climate protection.

In parallel with our sector approach, we will continue to invest in funds with a view to catalysing companies at different stages of development. We do this through our programmes supported by EU funds and the Polish Development Fund.

The next page also shows a breakdown of VC funding rounds by industry, according to the Dealroom classification. This is a different approach to our methodology - for example, companies in the "Energy" or "Industrial" sectors in the Dealroom classification may be classified as GreenTech. However, the classification provides a broader picture of the Polish ecosystem than the 4 sectors.

What do the funds invest in?

Percentage share of individual industries in total number of transactions



Industries with a share of <3% in 2023



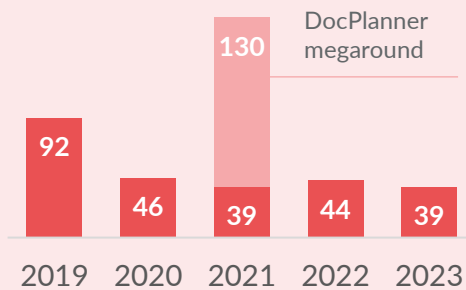
The following slides present data for selected sectors. We have used a different methodology there, so the figures will not match the statistics above. For example, a company listed under Cybersecurity in the above chart could be included in the FinTech sector in the following slides.

HealthTech

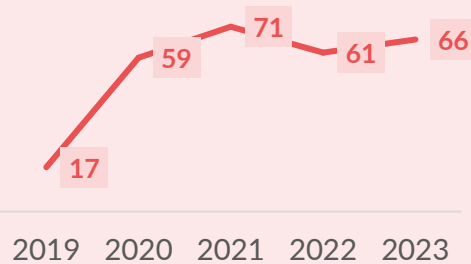


Value of transactions

EUR m



Number of investments



Marcin Szczeciński

Head of Capital Investments
Adamed

Major rounds 2019-2023

Company	Round value (EUR m)	Investors
DocPlanner	130 (e)	undisclosed
DocPlanner	80	Goldman Sachs PE, One Peak Partners, Piton Capital, ENERN Investments
Infermedica	26	One Peak Partners, Karma Ventures, Inovo.vc, EBRD, Heal capital
Infermedica	9	Karma Ventures, Heal Capital, Inovo.vc, EBRD, DreamIt Ventures
Mindgram	6	Credo Ventures, PortfoLion, Nunatak Capital, Market One Capital, Pamoja Capital Group

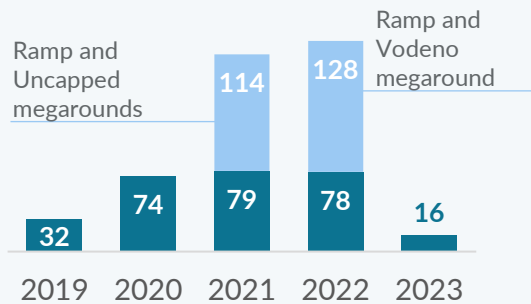
The last four years have been an exciting time for the HealthTech sector. A time of successes, unexpected twists and turns, and ultimately a time of testing.

Although we are beginning to put it behind us, the COVID-19 pandemic had a huge impact on investment in the HealthTech sector. Powerful enough to shut down entire industries overnight, it also reminded us of the fundamental value of human health. In the VC world, this has led to a massive flow of funding into projects focused on protecting that value.

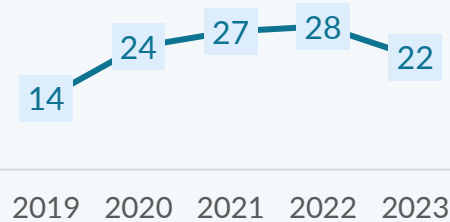
The last few months have seen a radical shift in market sentiment that has had a painful impact on HealthTech. It has been a period of collapsing valuations, a flight from risk and great difficulty in raising capital. I am confident that the very best will be able to navigate their way to their goals despite the headwinds, and that the most resilient organisations will emerge from the tough times in the HealthTech world.

Value of transactions

EUR m



Number of investments



Zbigniew Jagiełło

Manager, strategist, innovator
25+ years of experience in banking

In Poland, do FinTech companies compete with banks or the other way round?

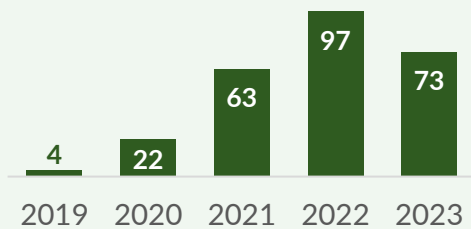
The modern development of Polish banking has led to FinTech companies in Poland operating on the periphery of the banking sector. The investment rounds of Ramp Network or Vodeno in 2021 and 2022 are good examples of this. It is extremely time-consuming and capital-intensive to get startup ideas off the ground in this sector. At the same time, the successes of companies such as BlueMedia, Blik or Alior show that there is room for new players who can patiently scale their business regardless of the amount of capital they have and the form of support from investors. I am convinced that it will be BankTech companies or TechBanks (depending on which side of the business we look at) that will succeed in this market. The penetration of financial services by Allegro or InPost also looks promising. Or will disruption come from a different direction?

Major rounds 2019-2023

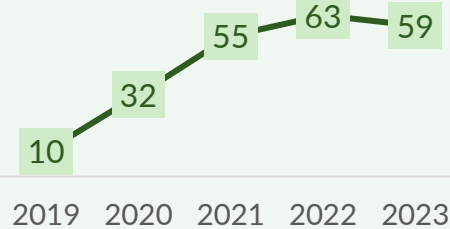
Company	Round value (EUR m)	Investors
Ramp Network	70	Mubadala Capital, Korelya Capital, Balderton Capital, Cogito Capital Partners
Uncapped	66	Lakestar, Global Founders Capital, White Star Capital, Seedcamp, Mouro Capital, All Iron Ventures, Cogito Capital Partners
Vodeno	58	NatWest Group
Ramp Network	48	Balderton Capital, NFX, Galaxy Digital, Seedcamp, Firstminute Capital, Fabric Ventures
Silent Eight	37	HSBC, Wavemaker Partners, S.C. Ventures, OTB Ventures, Aglaia, TYH Ventures,

Value of transactions

EUR m



Number of investments



Michal Miszulowicz

Head of Startup & Scaleup Center of Expertise
BNP Paribas Polska

Major rounds 2019-2023

Company	Round value (EUR m)	Investors
SunRoof*	28.5	Alantra, SMOK Venture Capital, Inovo.vc, Alfabeat, ODDO BHF, World Fund, Nordic Alpha Partners, Legal & General Capital
Proteon Pharmaceuticals	21	PFR Life Science, Nutreco, Montis Capital, Seventure, Aqua-spark, Newtree,
Nevomo	15	EIC Accelerator
Contec*	15	Vinci (BGK), Warsaw Equity Group
Undisclosed	8-15	Undisclosed

With the new corporate carbon footprint requirements, the Climate Tech sector has picked up wind in its sails. Being "green" is definitely no longer marketing, but a regulatory requirement combined with a strong competitive advantage. The implementation of decarbonisation solutions by traditional companies is a very strong driver for technology development in this area. As the market continues to grow, this will be an attractive destination for VC funds.

The largest rounds have been raised by already mature companies. However, I think the need is still far from being met and the scale of the business suggests that we will see more fundraising soon.

Despite a slight decrease in the amount of funding in 2023, I am confident that we will see growth again in 2024. Companies will reach the next stages of technological development or complete the proof of concept phase and need recapitalisation to launch at scale. Climate Tech is not just about hardware, but also about software - the best example of this is the partnership between BNP Paribas Bank and Envirly, which resulted in an equity investment at end-2023.

*Both transactions presented as the sum of the originally announced round and extension

FoodTech

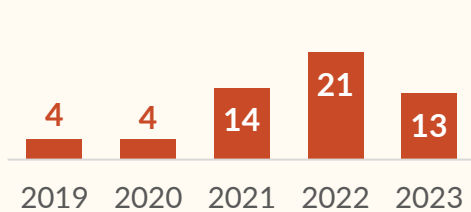
PFR Ventures

INOVO^{VC}

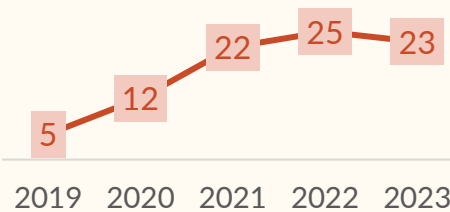
foodtech.ac

Value of transactions

EUR m



Number of investments



Piotr Grabowski

Co-founder
foodtech.ac

Major rounds 2019-2023

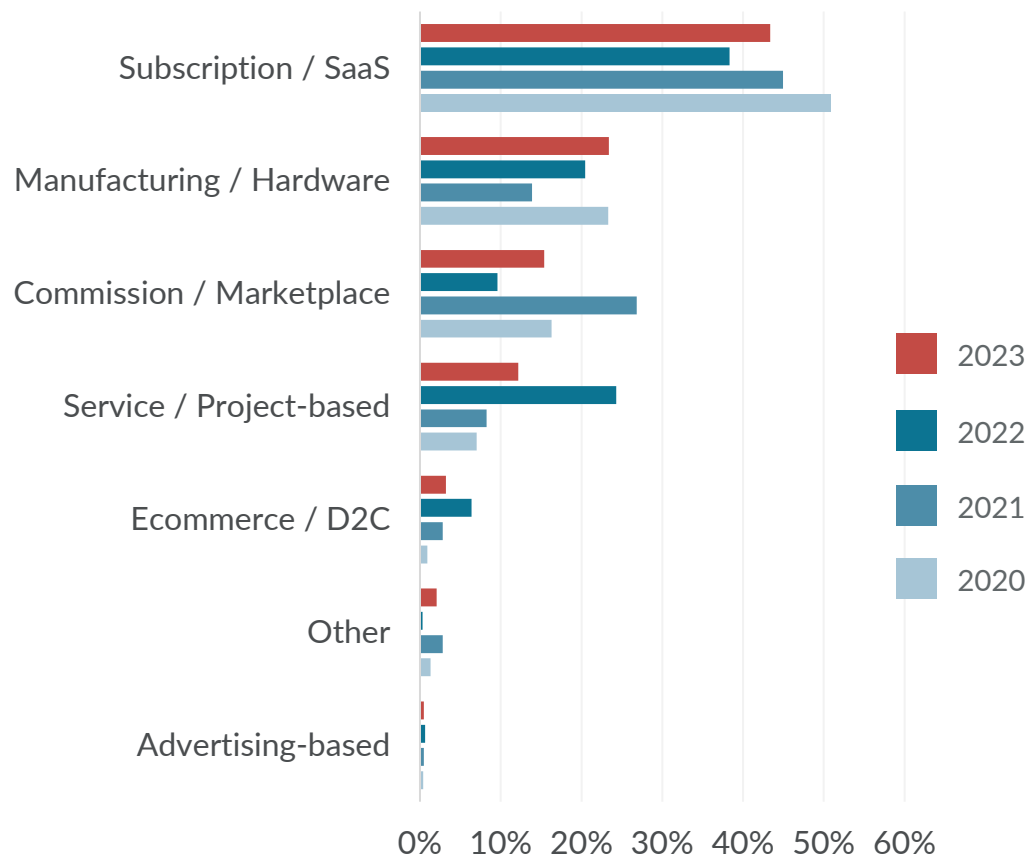
Company	Round value (EUR m)	Investors
HiProMine	7	Fidiasz EVC, Sirius Investment
Sundose	6	Delivery Hero VC, Atmos Ventures, Investible Club, Polipo Ventures, ARIA AIFM, Venture Inc., Knowledge Hub, Ataraxy Ventures Noga, Delivery Hero VC, angel investors
Restaumatic	6	Supercharge Capital, Deal Fund, Inventures
Undisclosed	2-5	undisclosed
Undisclosed	2-5	undisclosed

2023 is the third good year for Polish FoodTech and I am very happy that this sector is already regularly included in startup reports. Our foreign counterparts and FoodTech accelerators are increasingly interested in our local companies. Foodsj, EcoBean, HiProMine, Plantalux or Fresh Inset, among others, are attracting particular attention. In addition, the sector has earned a major international event here in Poland - the Food Tech Congress. This is the first conference in our country to bring together speakers, startups, investors and food industry companies from around the world. Last year also saw the exit of StockEasy to Goodspeed and the merger of Wojna Warzyw and Lokalny Rolnik. Corporate interest in startups is also growing - products from startups such as Apollo Roślinny Qurczak, Listny Cud, SERio, Planeat, Food Jack and Cudo Kombucha have found their way onto Carrefour's shelves and Żabka's e-commerce platforms.

2024 will be a landmark year for Polish FoodTech. FENG funds will play an important role. When the previous EU perspective started, the term "FoodTech" did not work at all in Poland. Now the picture is reversed.

What models do startup companies use?

Percentage share of individual business models in total number of transactions



Subscription-as-a-service startups have been at the top of our rankings for years, and again outperformed the competition last year. In 2023, this trend continued, with subscription models becoming more prevalent in the healthcare, fitness or lifestyle industries. Funds went to, among others, ElevenLabs, which recently joined the ranks of home-grown unicorns, Fiat Republic and Sky Engine.

It is worth noting the sharp decline in e-commerce/d2c projects. Apparently, in an era of more expensive money, funding such projects is no longer attractive to investors. It can be expected that project founders in this area will seek capital on crowdfunding platforms, for example, or try to grow by bootstrapping.

The hardware sector is also interesting. Investors often say that such projects are more difficult to fund. However, companies such as Aether Biomedical, a developer of bionic prostheses, and Coat-it, a producer of additives for the coatings industry, have managed to raise capital.



Martyna Zwierzchowska
Analyst, PFR Ventures



Section 3

Contributions from market experts

GPS for CEOs: What to focus on in 2024?



Bartosz Majewski
Co-owner of Casbeg, investor



PFR Ventures

INOVO^{vc}

If you are a CEO, you will have noticed the change in investor sentiment that has taken place since late 2021. For the most part, expectations of extremely fast growth at any (valuation) cost have given way to expectations of speedy growth at reasonable (valuation) cost. To some extent, AI startups are (still) exempt from the previous sentence. I will introduce you to 3 concepts that can help you navigate.

I can assure you that investors will like you more and you will need their money a little less once you get to know them. Better times will come, but only for those who know how to navigate the bad times.

Burn Multiple

As investors have come to expect efficient growth, a metric has emerged to quantify it. How is it calculated?

If in Q1 2024 a SaaS startup adds PLN 1 million ARR to the annual result and burns half a million PLN cash, then the value of the burn multiple is 0.5. Perfect, are you looking for investors?

If the same team adds PLN 1 million ARR and burns PLN 2 million cash, the value of the burn multiple is 2. Not bad, as long as the money doesn't run out.

Zero cash date

If you are burning cash, you want to know when you will run out and be 120% sure that this date has been properly counted. Mistakes along this line result in missed payments.

Buyback period

This metric shows how quickly the capital we spend on growth comes back to us in revenue. If it costs us \$1,000 to acquire a customer and the customer gives us \$250 a month, then the acquisition breaks even in 4 months. Anything less than or equal to 4 is great. If this metric is 10 and above, then either we are at a very early stage and have not perfected our go-to-market or we are in trouble and need to rethink how we are spending money at this point. For example, if half of our customers pay upfront and our payback period is 4 months, then our effective marketing budget is infinite - because whatever we spend will come back to us in a matter of moments.

Winston Churchill once said, "If you're going through hell, don't stop", which is very good advice for today. At the same time, it is worth remembering that the road from typing on a Macbook to hell is a long one. I wish you much growth and good luck!

Polish AI talent can't be overlooked

 **Artur Kurasiński**
Entrepreneur and investor



 PFR Ventures

 INOVO^{vc}

Polish engineers specialising in AI work in all global technology corporations (especially in OpenAI). In terms of staff, we have nothing to be ashamed of - it is worse when it comes to the needs and awareness among Polish companies.

According to data from a study by the Polish Economic Institute (PIE), 18% of companies in Poland say they will invest in artificial intelligence (AI) in 2024. Looking at the revolution brought about by generative artificial intelligence, we can see that technological innovation is not valued in our country.

According to the Startup Poland report, the biggest challenges for the development of startups in Poland are: the cost of hiring employees (54%), the difficulty of finding funding (49%), the lack of support in finding sources of funding (69%), and almost half of respondents reported problems in working with investors.

As a result of the pandemic, three sectors led the way for Polish startups: e-commerce, education and medicine (accounting for 43% of the domestic market). Will Polish VCs understand where the opportunities lie and jump on the AI train?

In the UK there is Stability.ai, in France Mistral and Huggin Face or LightOn, in Germany Aleph Alpha and nyonic. I don't know if there will be a Polish AI startup of this size in 2024, but probably its funding beyond the seed stage will come from outside Poland due to the low amount of funding from domestic VCs.

In 2023, there was a lot of buzz around Polish startups: ElevenLabs, AI Clearing, SentiOne, Synerise or Cosmose AI. Is this a lot or a little for an ecosystem where 33% of companies are active in "AI, deep tech and the Internet of Things" (according to the Startup Poland report)?

31% of the companies that secured funding raised between PLN 1 and 2 million, 19% of them raised between PLN 2 and 5 million. This is very bad news (i.e. funding that is hard to come by) and shows that truly innovative companies have nothing to look for in Polish VCs.

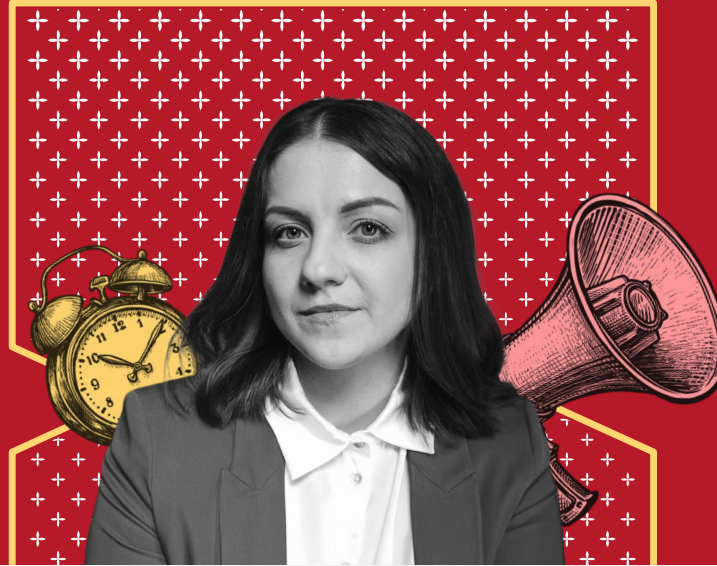
We possess a significant asset (our specialist workforce). We must ensure that this potential is not wasted.

The best specialists are available only for a while



Róża Szafranek

Founder and CEO at HR Hints



PFR Ventures

INOVO^{VC}

The reliance of startups on narrow specialisation in hiring is steadily declining. Increasingly, founders need to hire people who are versatile, with a variety of experiences. Even the unsuccessful ones who drove someone to failure. This seems reasonable in the light of the crisis and the high level of resilience needed in a startup today.

On a broader scale, you can see fatigue in experienced leaders who have had to shoulder a lot over the last few years. What exactly?

- The war in Ukraine
- Lockdowns and a new working model
- Investor pressure to improve performance in the face of the crisis
- Changing employee expectations and new trends in the labour market (six-month or yearly sabbaticals, lazy girl, silent resignation, Bare Minimum Monday and more)

Recruiting good C-level and mid-level management to a startup will be harder than ever. Young organisations will need to find the budget and space to mentor and develop their people.

It is already clear that hiring is taking longer than it did a year ago (the average time to hire in the market is 1.5 times longer than in 2022). Leaders seem to believe that the greater availability of candidates on the market means they are of higher quality, and can afford to be record-breakingly picky. Meanwhile, competing SME employers, consultancies and corporates are not sleeping and are processing the same candidates - just faster. As a result, the startup industry risks losing out on this potential talent.

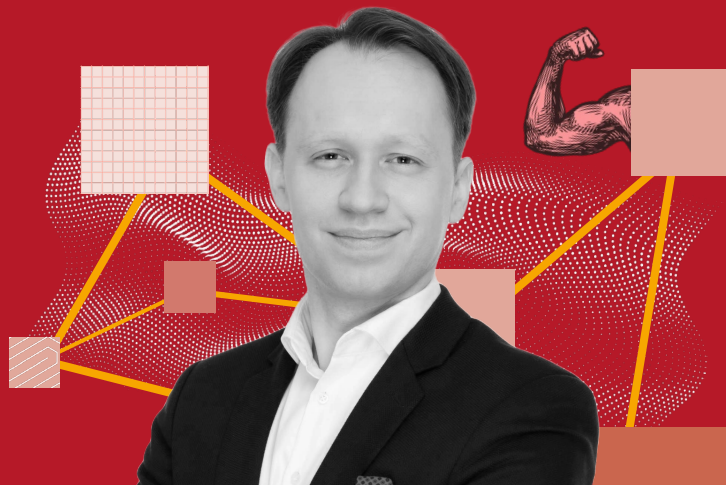
AI is an important part of the startup debate in terms of the technology and business being developed, but its impact on the employee side of organisations themselves is much more limited. There is no AI wolf in the woods, but it seems that many people still fear it in the wake of BigTech redundancies and the general crisis. Leaders of tech startups, from whom we might expect a great need and willingness to automate the human domain, say, when asked directly, that they do not want to and will not automate the human domain in their organisations for the time being. This is the conclusion of a survey we conducted as Culturivy among 60 founders of companies that are already product-market fit and after the first seed rounds.

Paradigm shift in the VC industry



Robert Ditrych

Investor, adviser to boards



 PFR Ventures

 INOVO^{vc}

The global startup ecosystem has grown rapidly in recent years, following the principle of "growth at any cost". The era of cheap money, like music, forced everyone to dance. Projects were funded that would not normally have received capital. In the second half of 2022, the music stopped playing and the rise in interest rates led to a sharp drop in the valuations of tech companies, which was particularly quickly felt in the public market.

In 2023, the value of startups has been redefined, giving way to the paradigm of capital efficiency as the key to success. Following the lead of tech giants such as Mark Zuckerberg (Meta) and Elon Musk (Twitter/X, Tesla), we are once again in an era where "flatter is faster" and "leaner is better".

The challenges ahead

Startups that have raised funding in recent years face difficult decisions. Both the courage of the founders and the maturity of the investors will be required to manage potential down-rounds and changes in capital structures. 90% of projects are unlikely to meet valuation expectations in 2020-2021, but not all of these are projects without prospects.

Opportunities

At a time when AI is making it possible to build solutions at a lower cost, we will simultaneously see an offensive of new projects based on the new paradigm. This market environment will create favourable conditions for active private investors and LPs in newly established VC funds. The opportunity will be to invest in new projects as well as those that have shown promise in recent years.

AI will remain the leading sector attracting the most attention from investors. The Polish VC ecosystem will aim to repeat the dynamic path of ElevenLabs (the first Polish early-stage project with a valuation of USD 1 billion) by funding more projects based on this technology. In turn, global investors' affection for AI will mean that we will see projects around the world raising further rounds in the short term.

2024 promises to be an exciting time for active market participants. Best of luck!

Section 4

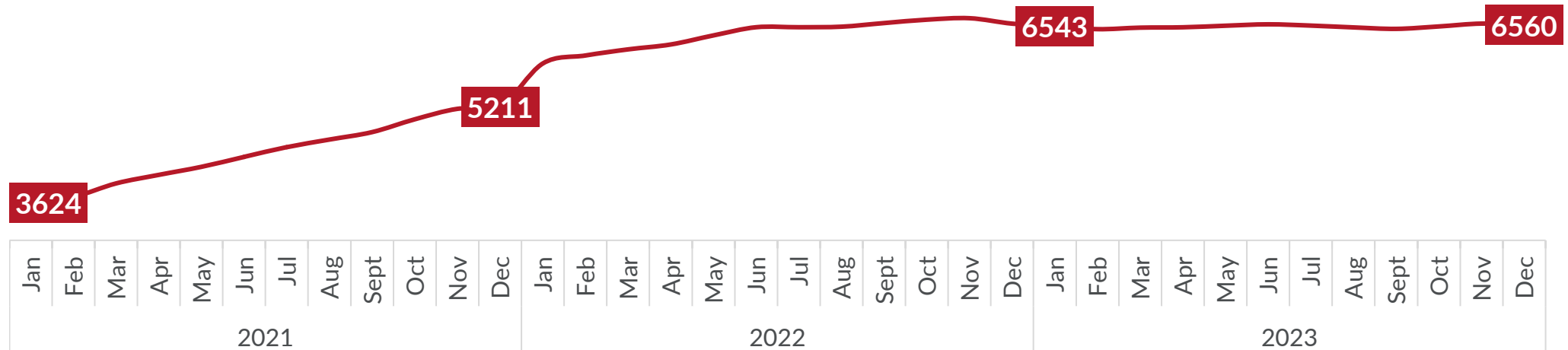
Case Studies



Startup jobs

Number of employees in 2023

(19* startups in terms of round size 2019-2023, >30 employees)



+17
jobs in 2022

+228%
highest increase (*ElevenLabs*)

59%
average share of employees from
Poland

2,304
total staff from PL 12/2023

Source: LinkedIn (data from main company profiles), analysis by PFR Ventures

*In 2021, we mapped 15 startups according to these criteria. In 2022, we added 3 new startups that would enter the top 15 without discarding their predecessors. In 2023, we added one startup. Data for 2022 has been updated.

Startup jobs

Number of employees in 2023

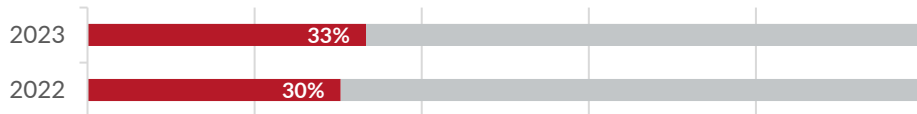
(19* startups in terms of round size 2019-2023, >30 employees)

	Jan 22	Dec 22 ↓	%PL employees 12/22	Annual % change
Docplanner	2,519	2,711	10%	8%
Brainly	844	683	31%	-19%
Booksy	634	570	53%	-10%
ICEYE	477	556	13%	17%
Packhelp	175	151	91%	-14%
Codility	204	143	41%	-30%
Tylko	201	213	92%	6%
Infermedica	206	204	68%	-1%
eStoreMedia	152	142	80%	-7%
Proteon Pharmaceuticals	104	111	87%	7%
Uncapped	75	85	19%	13%
Silent Eight	148	114	64%	-23%
Vue Storefront	122	114	63%	-7%
Ramp	157	180	76%	15%
Grid Esports	95	95	21%	0%
SatRev	62	62	94%	0%
Tidio	174	172	75%	-1%
Synerise	176	195	90%	11%
ElevenLabs	18	59	14%	228%
number=total, %=average	6,543	6,560	59%	-3%

Transactions from a legal perspective

Popularity of selected provisions in investment contracts of Polish companies, 2022-2023

Use of Convertible Notes, 2022 vs 2023



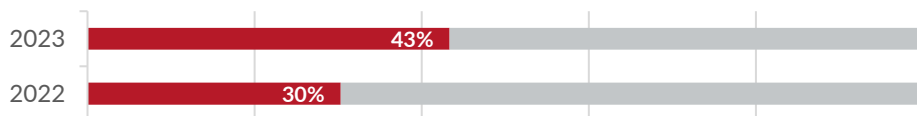
Liquidation Preference clause, 2022 vs 2023



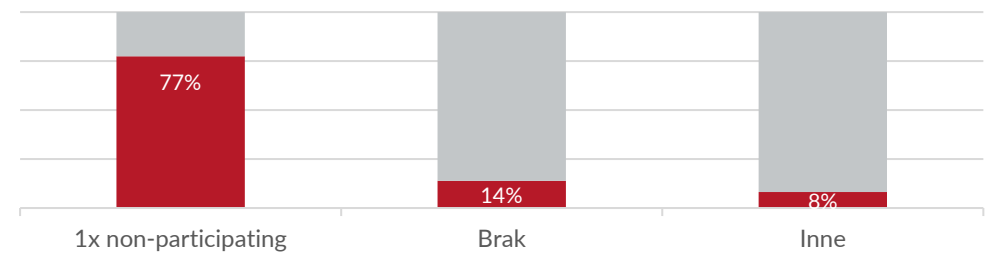
ESOP clause, 2022 vs 2023



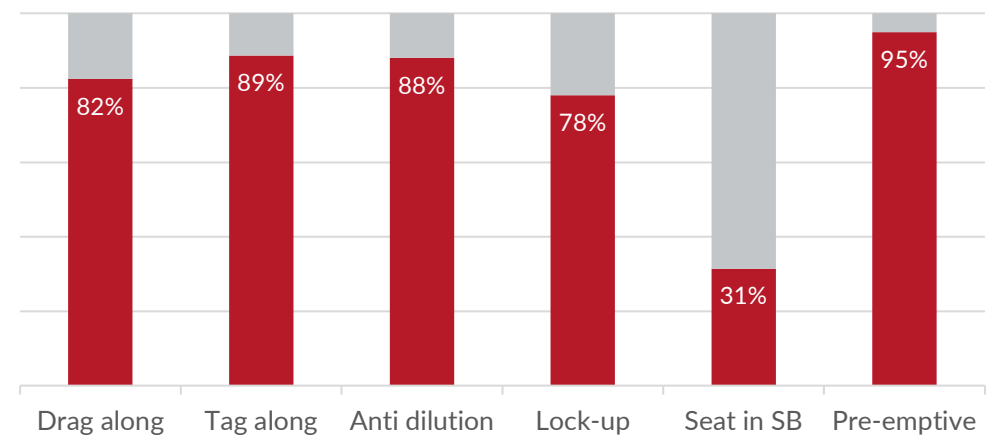
Reverse Vesting clause, 2022 vs 2023



Form of the Liquidation Preference clause, cumulative figures 2022 and 2023



Popularity of selected rights, cumulative figures 2022 and 2023

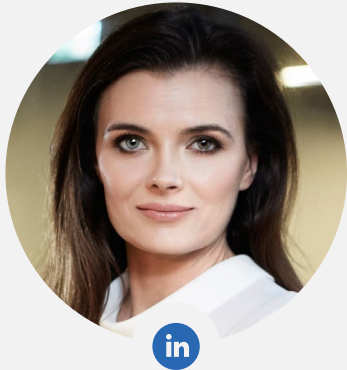


2022 = 99 contracts, 171 investors, total > EUR 110m, seed transactions = 86
 2023 = 60 contracts, 110 investors, total > EUR 55m, seed transactions = 52

Sources of data on contract terms:



Transactions from a legal perspective



Agnieszka Syguła

Head of Legal
PFR Ventures

Sources of data on contract terms:



LAWMORE®



The popularity of selected provisions in investment contracts of Polish companies in 2022/23 shows that the market relies mostly on standard contractual clauses. Their parameters are negotiated, but not the essence of their existence.

For example: liquidation preference is present in ~90% of contracts. It is predominantly non-participating in nature. It is still possible to find "fully participating" or "capped participating" solutions on the market, where investors first receive a certain guaranteed amount (usually equal to their investment in the company), but also participate in the allocation of funds among the remaining shareholders (in full or up to a predetermined level).

There has also been an increase in the popularity of reverse vesting (currently 43% vs. 30% last year), where the mechanism for the gradual issue of additional share rights is replaced by the sanctioned loss of part of these rights (e.g. if certain milestones are not met). This solution is most often introduced for founders who already have a certain shareholding. The solution is based on a negative incentive. The gradual acquisition of shares is a better incentive than the threat of losing them, as it is more beneficial for the founders and management to deliver results and be rewarded for doing so than to be penalised for failing to meet targets.

We have seen a slight increase in the use of option-based Employee Stock Ownership Plans (ESOPs), which were present in 68% of contracts. This is a very good development. A well-designed ESOP not only attracts talented employees to the company, but also motivates and retains outstanding talent within the company. It is also valued by most investors.

Of the provisions ensuring protection against the early exit of major shareholders, pre-emption rights are still the most commonly used, in a sense "cementing" the company by allowing it to remain in the hands of existing shareholders. Along with drag-along, tag-along and lock-up clauses, pre-emption rights can be found in up to 95% of investment agreements. In my view, for companies with the potential for rapid growth, this clause will have little relevance, as both founders and early investors will be interested in raising further funding and bringing in further investors, rather than buying out shares themselves. The anti-dilution and tag and drag-along clauses will then play a much more important role (at least from a VC fund perspective).

Surprisingly few VC funds provide board membership, which is the most basic form of control over the proper functioning of the company. Perhaps this is because funds use their power at the general meeting level by making key decisions subject to general meeting approval or even veto rights on key decisions.

The data suggest a generally positive conclusion - the market is evolving and standardising, clauses that used to be frightening because of their English names have become standard and properly regulate the relationship between founders and investors without creating mistrust on either side.

Funds most active in providing seed capital

The funds that most frequently backed seed companies

(EUR <1m)

(a-z)	Number of new investments
Brave VC	10+
Enerfund	
Epic Alfa	
Netrix Ventures	
bValue	7-10
Green Alpha	
Movens Capital	
Scitech Fund	
Sunfish Partners	
Tar Heel Capital Pathfinder	

 PFR Ventures

 INOVO

VENTURE PARTNERS

A key growth factor for technology companies is ensuring the stability of capital inflows. This was particularly important in 2023 - we saw a strong reversal of roles, with even strong teams potentially struggling to raise funding. Looking at the number of deals, Polish public-private funds backed by PFR Ventures, BGK or NCBR continued to play a dominant role in pre-seed and seed rounds. Many of them remained active over the past year, maintaining an investment pace of one new investment every 1-2 months.

Considering that the total number of transactions in Poland exceeded 400 in 2023, we can see that at least when it comes to first-time investments in companies, Polish founders had relatively many options - none of the aforementioned funds managed to reach even a few-per cent share in the number of transactions. Unfortunately, the situation may worsen in the near future due to the expected funding gap in H1 2024.



Artur Banach

Managing Partner, Movens Capital

Aula Polska selects the best startups with global potential

		FUNDING	TOTAL ROUND VALUE (PLN m)	NO. EMPLOYEES (as at 12.2023)
Main category	SURFER	Bootstrap	0	90
	worktrips.com	Commercial Tech, AlpVent AG, ABC Accelerator, DialCom24, Alfabeat Alfa + angel investors	17.5	54
	foodsi	AIP Seed, Cofounder Zone, Satus VC + 7 angel investors	6.6	46
"Bootstrap"	SURFER	Bootstrap	0	90
"Rookie of the Year"	Noctuai	NCBR	8	20

aulapolska.pl

Follow the 2024 meeting schedule! The first one will already take place on 13 March.

Ukrainian startups in Poland

PFR Ventures

inovo^{vc}

ain

techosystem

MOVENS
CAPITAL

14

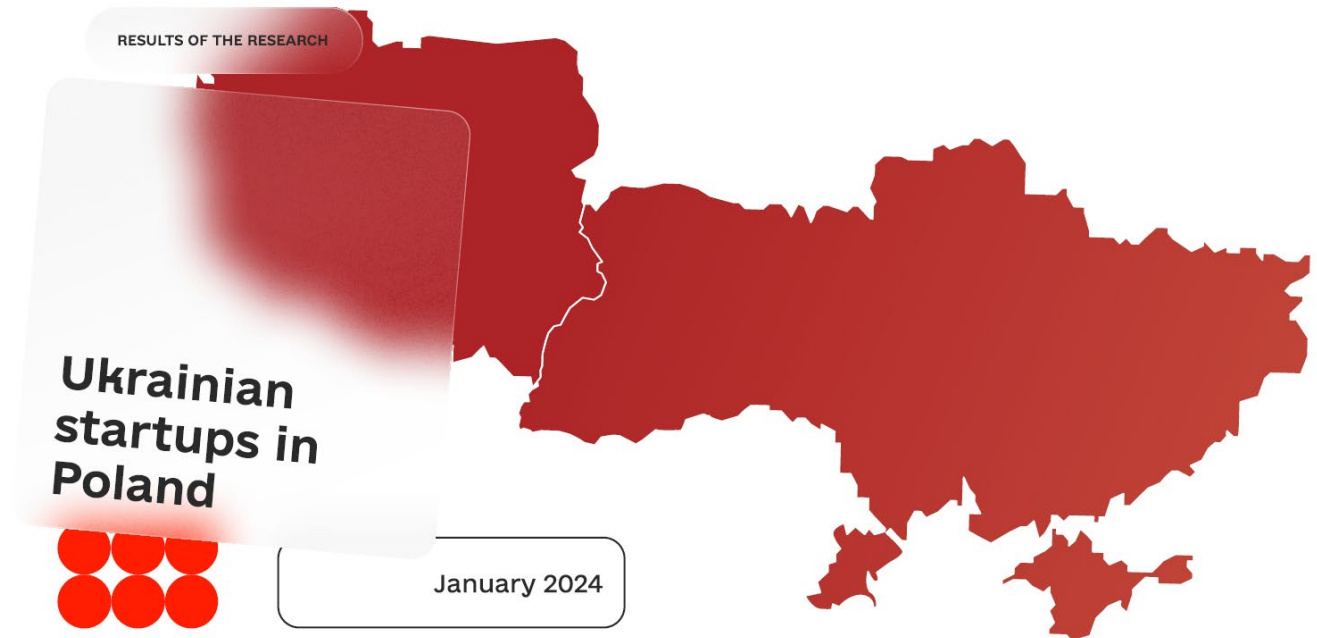
Ukrainian startups raised VC funding after transferring* to Poland

15m USD

total value of the rounds that went to these companies after their transfer to Poland

4.7m USD

this is how much of the above amount (USD 17m) came from Polish management teams



<https://bit.ly/3HEJ7WX>

Read the full report.

*transfers are usually temporary and partial

Glossary

International/foreign fund

An international fund is considered to be one that has international partners on its team or relies on foreign capital.

Activity on the Polish VC market

Activity on the Polish VC market is interpreted as local investments (Polish fund-Polish company) and foreign investments (foreign fund-Polish company).

What is a Polish company?

Selection is determined by meeting 3 out of 4 criteria:

- % of employees working in Poland
- Polish founder/co-founder
- Polish capital
- Self-identification

Data sources

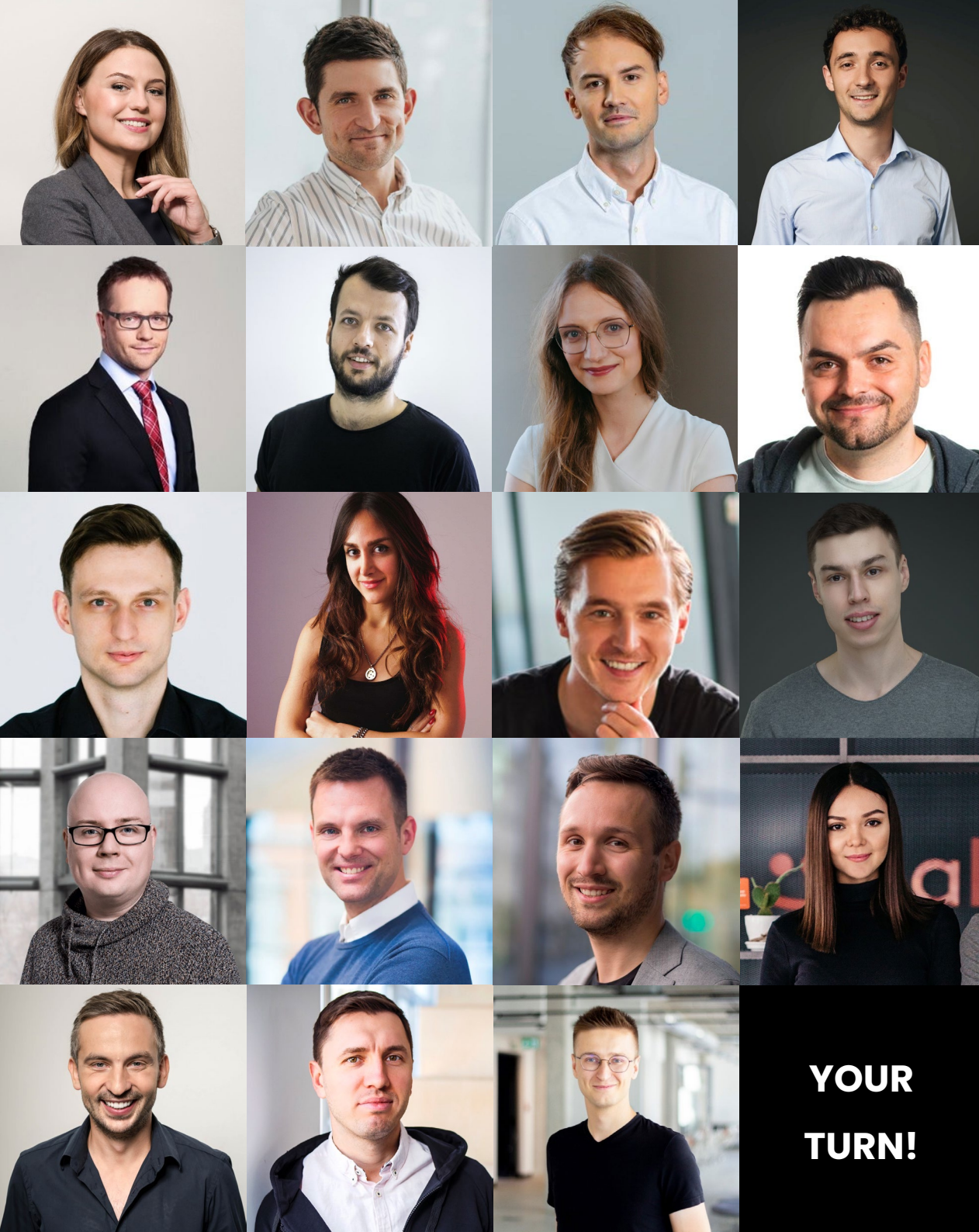
The data used for this study were taken from internal reports of PFR Ventures, Bank Gospodarstwa Krajowego (BGK), National Centre for Research and Development (NCBR) and Inovo VC. Some of the information was obtained from Invest Europe research as well as media reports and publicly available data.

EUR/USD to PLN exchange rates

We have used a 3-month average rate for most statistics. The exceptions are the pages dedicated to the most notable transactions, where we have presented the amounts as reported in the media.

More info:

kontakt@pfrventures.pl | 800 800 120




inovo^{vc}

Stay ambitious,
we have your back

If you are looking to build something great and want to join the community of the best founders in Poland – let us know!

Find us here:

 inovo.vc/team

**YOUR
TURN!**



Polish Innovation Ecosystem

PFR Ventures

inovo^{vc}



Together with Dealroom.co we have prepared a map of the Polish innovation ecosystem. We encourage all funds and startups to become part of it.

Here you can add information on your organisation:

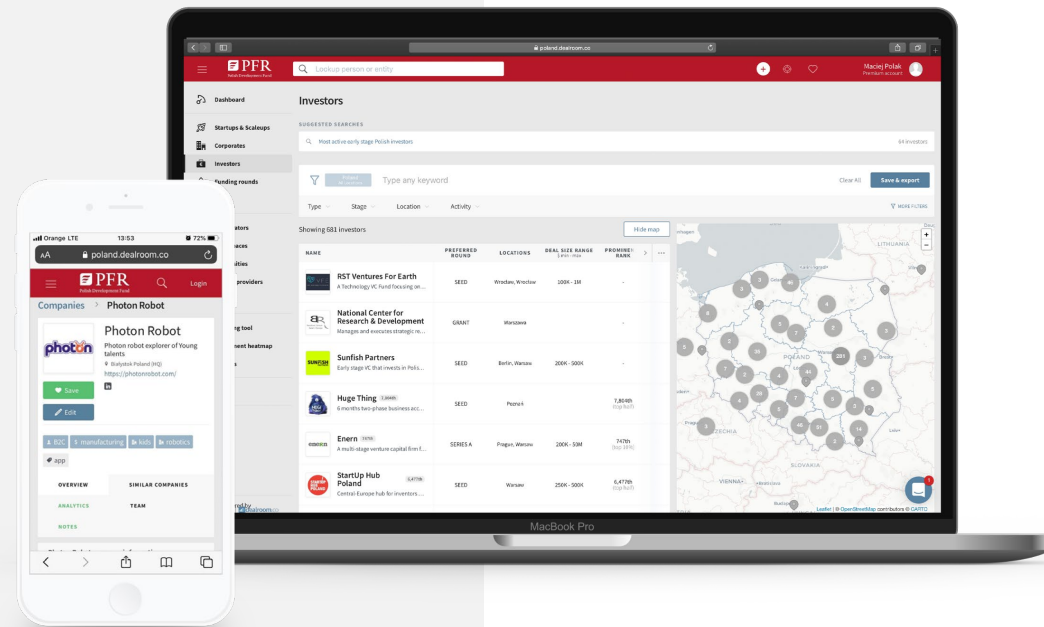
 startup.pfr.pl/ekosystem-innowacji

+3,000

startups

+100

VC funds



dealroom.co



startup.pfr.pl

