

Market Watch

Korea Venture Investment Corporation

vol.09

May 2023



Intro



Disclaimer



KVIC MarketWatch has been prepared by Korea Venture Investment Corp. (KVIC). It is a periodical publication intended to spur investments in SMEs and startups, and bring about a more sophisticated industrial structure by reporting the performance of Korea Fund of Funds and other funds managed by KVIC. The publication ultimately aims to serve public interest and support balanced economic growth.

The content contained in this publication is not intended as a recommendation or solicitation by KVIC of any investment in a particular company and should not be used as the basis for any investment decision. Under no circumstances will KVIC be liable for any loss or damage caused by your reliance on information obtained through this publication. KVIC cannot and does not guarantee the accuracy and completeness of the information contained herein. The information and opinions in the publication are subject to change without notice.

The ownership and rights of this publication including all content, information and data shall be the sole and exclusive property of KVIC. Except media citation, the content of the publication and any information obtained or generated from the content shall not be reproduced, copied, distributed or transmitted, in whole or in part, without the prior written permission of KVIC.

The content of this publication originated in Korean. No warranty of any kind, either expressed or implied, is made as to the accuracy, correctness or reliability of any translations made from Korean into English. KVIC shall not be liable for translation errors.

KVIC kindly asks for your understanding that any primary data owned by KVIC with respect to this publication will not be disclosed.

Contents

May 2023

Vol. 09

05

An Introduction to KVIC & Korea Fund of Funds

13

Korean VC Industry at a Glance

21

Korea Fund of Funds: Trends in Fundraising, Investments and Exits

29

2H2022 KFoF Investments by Industry

36

Analysis of Unicorns and Unicorn Candidates in Korea

Issuer Korea Venture Investment Corp.
KVIC Building, 16 Seocho-daero 45-gil, Seocho-gu, Seoul, South Korea

Publisher WoongHwan Ryu

Editing and Planning Korea Venture Investment Corp. www.kvic.or.kr

Questions MarketWatch@kvic.or.kr

Design KS Sensation

**Market
Watch**

Korea Venture Investment Corporation

An aerial night view of a city skyline, likely Seoul, South Korea, featuring a prominent curved skyscraper and a river. The image is overlaid with a blue-tinted filter and several bright blue laser lines that crisscross the scene, creating a futuristic or technological atmosphere.

AN INTRODUCTION TO **KVIC & KOREA** **FUND OF FUNDS**

The exchange rate applied at the time of writing is USD 1 = KRW 1,263.0
(basic exchange rate or market average rate as of December 31, 2022)

Fund Manager: Korea Venture Investment Corp.

Korea Venture Investment Corp. (KVIC) was established with the aim of promoting investment for the growth and development of small and medium-sized enterprises (SMEs) and startups. KVIC serves as the general partner (GP) of government-backed funds of funds and direct co-investment funds pursuant to the Act on Special Measures for the Promotion of Venture Businesses.

A Glimpse into KVIC History & Milestones

2022	January	Korea Fund of Funds (KFoF) has secured a cumulative total of USD 6,334 million (KRW 8 trillion) in capital commitments. KVIC established its Venture Financing Research Institute.
2021	November	A venture capital (VC) fund was launched with approximately USD 24 million (KRW 30.4 billion) in commitments for regional development in Busan under the Korean New Deal. This fund is called the Busan Regional Innovation Venture Fund.
	October	A VC fund was created with roughly USD 24 million (KRW 30.5 billion) in commitments for regional development in the Chungcheong region under the Korean New Deal. This fund is called the Chungcheong Regional Innovation Venture Fund (also known as Water Sector Fund).
	June	Job Creation Scale-up Fund 2 was established, totaling USD 16 million (KRW 20.5 billion) in commitments.
2020	January	KFoF reached a cumulative total of USD 5,542 million (KRW 7 trillion) in capital commitments.
	August	KVIC became a statutory body under the Venture Investment Promotion Act.
	February	The basis of converting KVIC into a statutory body was enacted on February 11, 2020 and was called the Venture Investment Promotion Act.
2019	January	KFoF achieved USD 3,959 million (KRW 5 trillion) in cumulative commitments.
	September	The Ministry of Land, Infrastructure and Transport (MOLIT) became a limited partner (LP) in KFoF.
2018	December	The Ministry of Oceans and Fisheries (MOF) joined as an LP in KFoF.
	August	KVIC introduced new base bylaws for investee funds.
	June	Job Creation Scale-up Fund was formed with USD 40 million (KRW 50.6 billion) in commitments. KEB Hana-KVIC Fund was launched with USD 87 million (KRW 110 billion) in commitments.
2017	August	KFoF raised USD 3,167 million (KRW 4 trillion) in aggregate commitments on a cumulative basis.
	May	KFoF's cumulative commitments totaled USD 2,375 million (KRW 3 trillion).
2016	April	The Ministry of Education (MOE) participated as an LP in KFoF.
	October	The Ministry of Environment (ME) became an LP in KFoF.
2015	June	KVIC launched Venture Investment Comprehensive System (VICS).
	August	KVIC opened its Korea Venture Investment Center in Singapore (KVIC Singapore Branch).
2014	May	Cumulative commitments to Foreign VC Investment Fund reached USD 792 million (KRW 1 trillion).
	January	KVIC opened its Korea Venture Investment Center in China (KVIC China Branch).
2013	August	KFoF's cumulative commitments hit USD 1,584 million (KRW 2 trillion).
	June	Korea Sports Promotion Foundation (KSPO) joined as an LP in KFoF.
2012	June	KVIC opened its Korea Venture Investment Center in the United States (KVIC U.S. Branch).
	December	The Ministry of Health and Welfare (MOHW) became an LP in KFoF.
2011	June	KVIC launched its Korea Venture Investment Center in the United States (KVIC U.S. Branch).
	May	SME M&A Matching Fund was formed with capital commitments worth about USD 24 million (KRW 30.5 million).
2010	December	Angel Matching Fund No. 1 was set up with USD 8 million (KRW 10 billion) in commitments.
	August	The Ministry of Employment and Labor (MOEL) participated as an LP in KFoF.
2009	August	The Korean Film Council (KOFIC) joined as an LP in KFoF.
	June	The Korean Communications Commission (KCC) became an LP in KFoF.
2006	September	The Korea Communications Commission (KCC) became an LP in KFoF.
	June	KFoF's cumulative commitments reached USD 792 million (KRW 1 trillion).
2005	June	The Ministry of Culture, Sports and Tourism (MCST) participated as an LP in KFoF.
	May	The Korean Intellectual Property Office (KIPO) joined as an LP in KFoF.
2004	June	KFoF, a government VC program, was launched and KVIC was established for the purpose of managing KFoF. KVIC was designated as the GP of KFoF.
	December	The legal basis of KFoF formation and operation was laid down by amendments to the Act on Special Measures for the Promotion of Venture Businesses.
	July	The government announced measures to vitalize startups. The government unveiled its comprehensive initiative aimed at enhancing SME competitiveness.

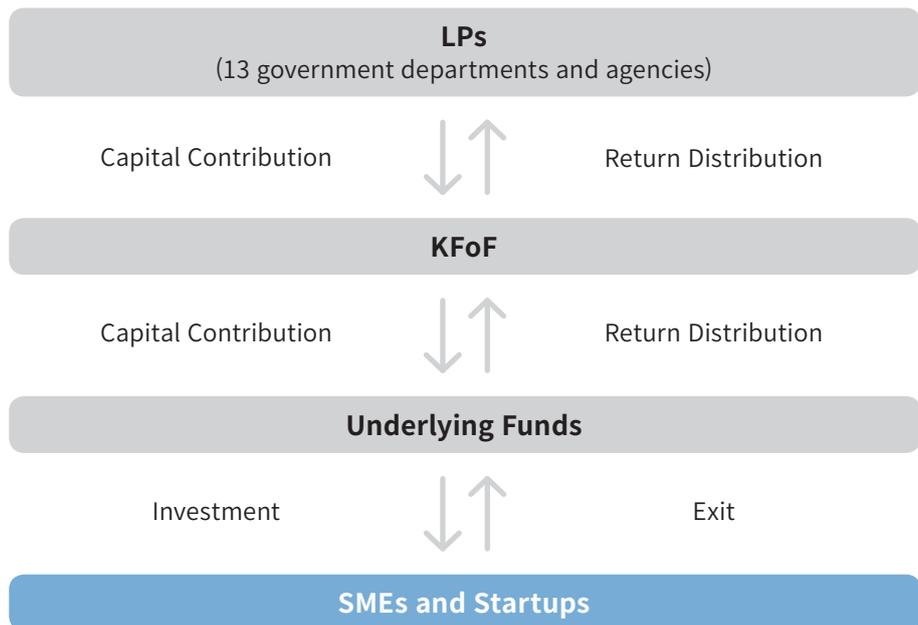
Korea Fund of Funds

Korea Fund of Funds (KFoF) is a publicly backed fund of funds that invests in venture capital (VC) funds managed by private VC firms. Investors or limited partners (LPs) in KFoF are government departments and agencies that have committed capital to the fund for venture investments in their respective policy areas. The underlying funds of KFoF invest in SMEs and venture companies, playing an important part in creating a venture ecosystem.

Fund Overview

Date of Formation	July 15, 2005
Fund Size	USD 6,505 million (KRW 8,015.3 billion) (as of December 31, 2022)
Size of Underlying Funds	USD 29,649 million (KRW 37,447 billion) (cumulative as of December 31, 2022)
Fund Term	30 years (2005 - 2035)
LPs (13 government departments and agencies)	The Ministry of SMEs and Startups (MSS); Korea SMEs and Startups Agency (KOSME); Ministry of Culture, Sports and Tourism (MCST); Korean Intellectual Property Office (KIPO); Korean Film Council (KOFIC); Ministry of Science and ICT (MSIT); Ministry of Employment and Labor (MOEL); Ministry of Health and Welfare (MOHW); Korea Sports Promotion Foundation (KSPO); Ministry of Environment (ME); Ministry of Education (MOE); Ministry of Land, Infrastructure and Transport (MOLIT); Ministry of Oceans and Fisheries (MOF)
GP	KVIC

Fund Structure



Other Funds of Funds

Foreign VC Investment Fund

Foreign VC Investment Fund (FVCIF) was first set up to invest in offshore VC funds managed by non-Korean VCs as part of the Measures to Develop a Virtuous Cycle in the Venture-Startup Funding Ecosystem, unveiled by the government on May 15, 2013. Its mandate is to help local SMEs and startups attract global investors and expand overseas.

	FVCIF	FVCIF II
Date of Formation	October 4, 2013	July 15, 2016
Fund Size	USD 187 million (KRW 236.4 billion) (as of December 31, 2022)	USD 231 million (KRW 291.9 billion) (as of December 31, 2022)
Size of Underlying Funds	USD 5,765 million (KRW 7,281.3 billion) (cumulative as of December 31, 2022)	
Fund Term	21 years (2013 - 2034)	19 years (2016 - 2035)
LPs	KFoF/KVIC	KFoF/KVIC
GP	KVIC	

Angel Fund of Funds

Established in 2015, this fund of funds invests solely in angel funds that concentrate on startup or early-stage businesses.

	Fund Profile
Date of Formation	November 18, 2015
Fund Size	USD 59 million (KRW 74 billion) (as of December 31, 2022)
Size of Underlying Funds	USD 91 million (KRW 114.7 billion) (cumulative as of December 31, 2022)
Fund Term	20 Years (2015 - 2035)
LPs	KFoF/KVIC
GP	KVIC

KEB Hana- KVIC Fund

This fund launched its operations in 2018, primarily financed by KEB Hana Bank, with the aim of building a venture ecosystem and nurturing unicorns. It makes indirect investments in SMEs and startups through its underlying funds.

	Fund Profile
Date of Formation	August 21, 2018
Fund Size	USD 87 million (KRW 110 billion) (as of December 31, 2022)
Size of Underlying Funds	USD 588 million (KRW 742.9 billion) (cumulative as of December 31, 2022)
Fund Term	10 years (2018 - 2028)
LPs	KEB Hana Bank/KFoF/KVIC
GP	KVIC

KEPCO Fund

KEPCO Fund is specially designed to foster the growth of not only the power and energy sectors but also ICT SMEs and startups related to the sectors, and to identify and nurture SMEs and startups in Gwangju and South Jeolla Province (Jeonnam region) in which the Energy Valley is located. The primary LP or investor in this fund of funds is state-run utility Korea Electric Power Corporation (KEPCO).

	Fund Profile
Date of Formation	August 19, 2015
Fund Size	USD 42 million (KRW 52.5 billion) (as of December 31, 2022)
Size of Underlying Funds	USD 70 million (KRW 88 billion) (cumulative as of December 31, 2022)
Fund Term	10 years (2015 - 2025)
LPs	KEPCO/KFoF/KVIC
GP	KVIC

Smart Korea Fund

This fund of funds aims to focus on funding startups and ventures in business areas driving the transition towards a digital economy as part of the Korean New Deal initiative, which was announced on July 14, 2020.

	Fund Profile
Date of Formation	August 14, 2020
Fund Size	USD 72 million (KRW 91 billion) (as of December 31, 2022)
Fund Term	12 years (2020 - 2032)
LPs	KBIZ Yellow Umbrella Mutual Aid/ Korea Technology Finance Corp. (KOTEC)/ Se-Ri Pak/KFoF/KVIC
GP	KVIC

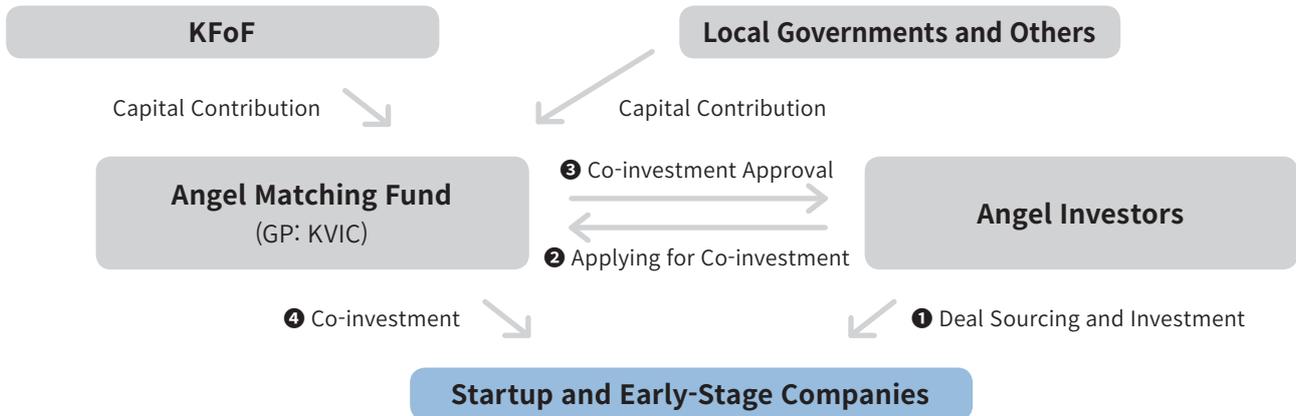
Other Funds

Other funds managed by KVIC include the Fund of Funds for Industrial Technology Commercialization with USD 19 million (KRW 25 billion) in assets under management (AUM), and KoFC-KVIC I and II with USD 95 million (KRW 120 billion) and USD 85 million (KRW 107 billion) in AUM, respectively. The job creation funds, KoFC-KVIC I and II, are now being liquidated.

Co-Investment Funds

Angel Matching Fund

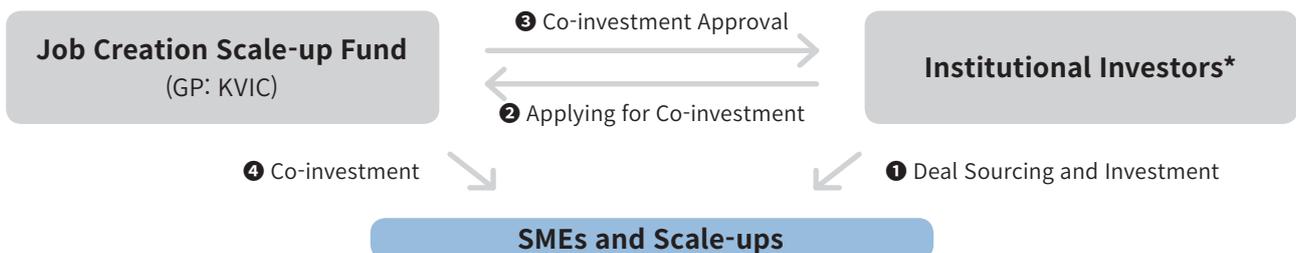
Angel Matching Fund is a public-private co-investment fund that is specially designed to nurture angel investors and angel clubs, thereby laying the foundation for startup creation and helping startup and early-stage companies fill their equity gaps. As of December 31, 2022, there were 16 Angel Matching Funds collectively worth USD 152 million (KRW 192 billion).



Job Creation Scale-up Fund

In August 2018, Job Creation Scale-up Fund was first introduced to co-invest alongside institutional investors in SMEs and scale-up companies that are designated as key drivers of job creation.

	Job Creation Scale-up Fund	Job Creation Scale-up Fund 2	Job Creation Scale-up Fund 3
Date of Formation	August 16, 2018	June 25, 2021	October 26, 2022
Fund Size	USD 40 million (KRW 50.6 billion) (as of December 31, 2022)	USD 16 million (KRW 20.5 billion) (as of December 31, 2022)	USD 8 million (KRW 10.3 billion) (as of December 31, 2022)
Fund Term	8 years (2018 - 2026)	8 years (2021 - 2029)	8 years (2022 - 2030)
LPs	KFoF/KVIC		
GP	KVIC		



* Institutional investors who are qualified to manage Korea Venture Funds (KVF), new technology venture investment partnerships and/or private equity funds (PEFs).



KOREAN VC INDUSTRY **AT A GLANCE**

This report does not include private equity (PE) activity data and hence there may be some discrepancies in activity statistics between the overall VC market and the VC funds described below.

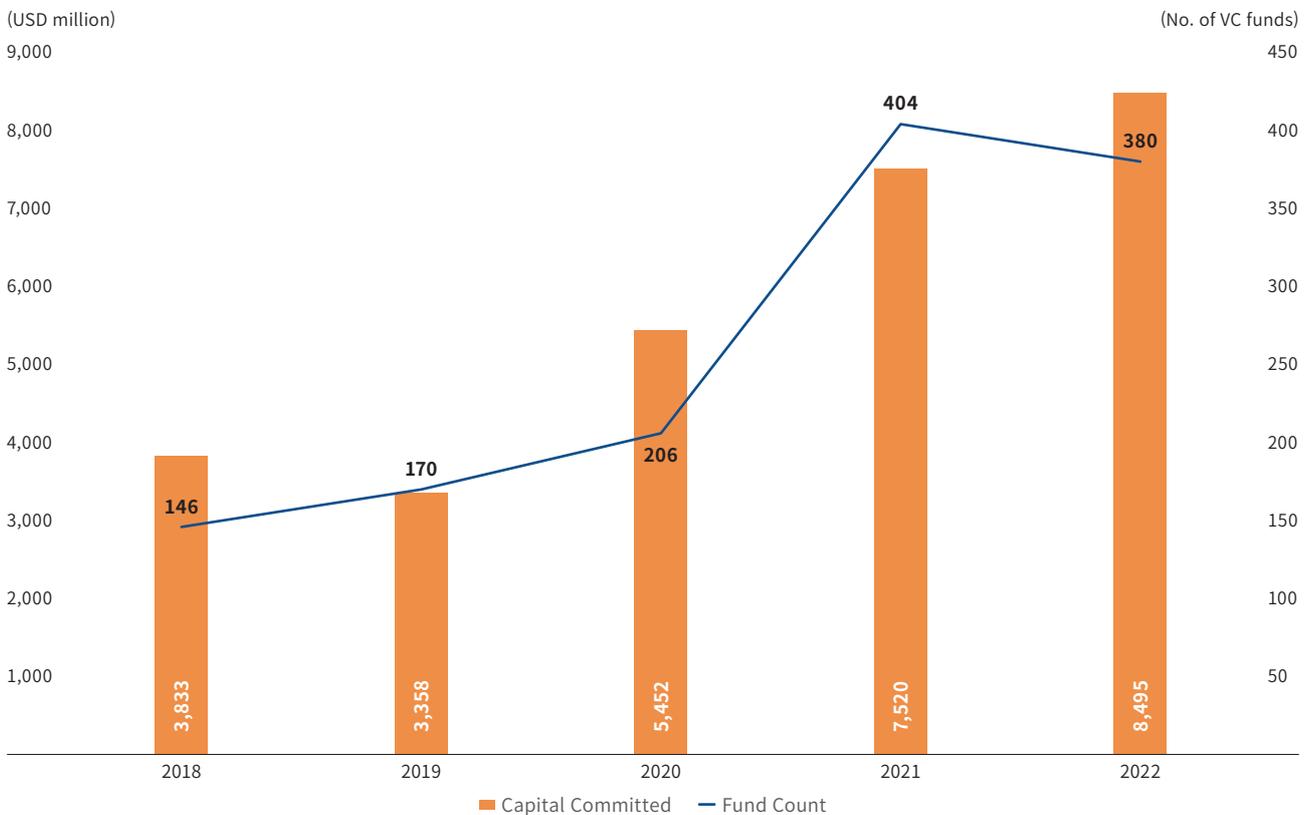
The exchange rate applied at the time of writing this report is USD 1 = KRW 1,263.0
(basic exchange rate or market average rate as of December 31, 2022)

Venture Capital Funds in Korea

Fundraising

The year 2022 saw a rise in the formation of venture capital (VC) funds¹⁾ in Korea when compared to the previous year. As of December 31, 2022, the total capital committed to new funds rose by 1.1x year over year (YoY) to USD 8,495 million (KRW 10,728.6 billion), despite a decline in the number of new funds by 24 to a total of 380.

[Figure 1] 5-year Trends in VC Fund Creation



Source: Korea Venture Capital Association (KVCA)

*As of December 31, 2022

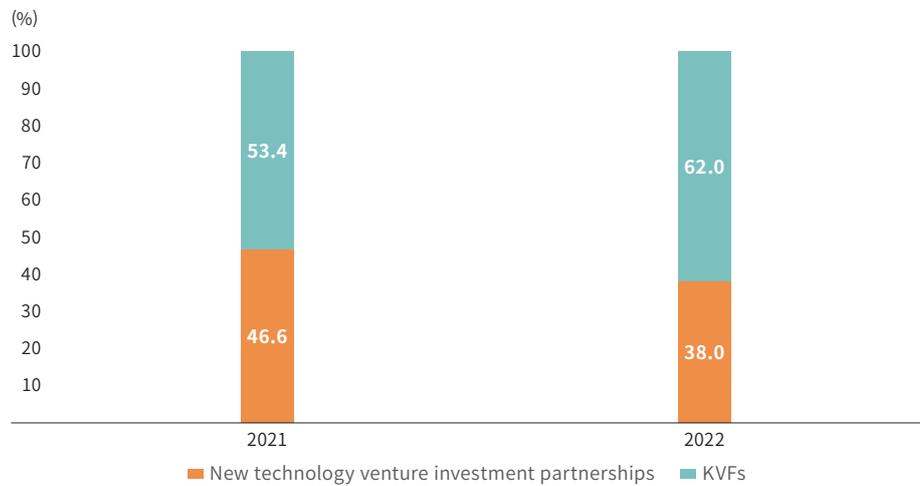
1) Korea's VC market has two main types of investment vehicles: Korea Venture Funds (KVF) and new technology venture investment partnerships. While the Ministry of SMEs and Startups (MSS) is the competent authority for KVF, the Financial Services Commission (FSC) is the competent authority for new technology venture investment partnerships. Each competent authority collates and analyzes VC data and produces VC statistics annually. The proportion of KVF in total capital committed to VC was 53.4% in 2021 and 62.0% in 2022, which illustrates their vital role in the Korean VC market. For this report based on VC data from KVCA, KVF are defined as VC funds.

Korean VC Industry
at a Glance

Main Types of
Investment Vehicles
in the Korean VC Market

Vehicle	KVF	New Technology Investment Partnership
Applicable Law	Venture Investment Promotion Act	Specialized Credit Finance Business Act
GP	Startup investment company, new technology venture investment company, limited company, limited liability company, etc.	New technology venture investment company
Competent Authority	Ministry of SMEs and Startups (MSS)	Financial Services Commission (FSC)

Proportional Split of
Korea's VC Fundraising



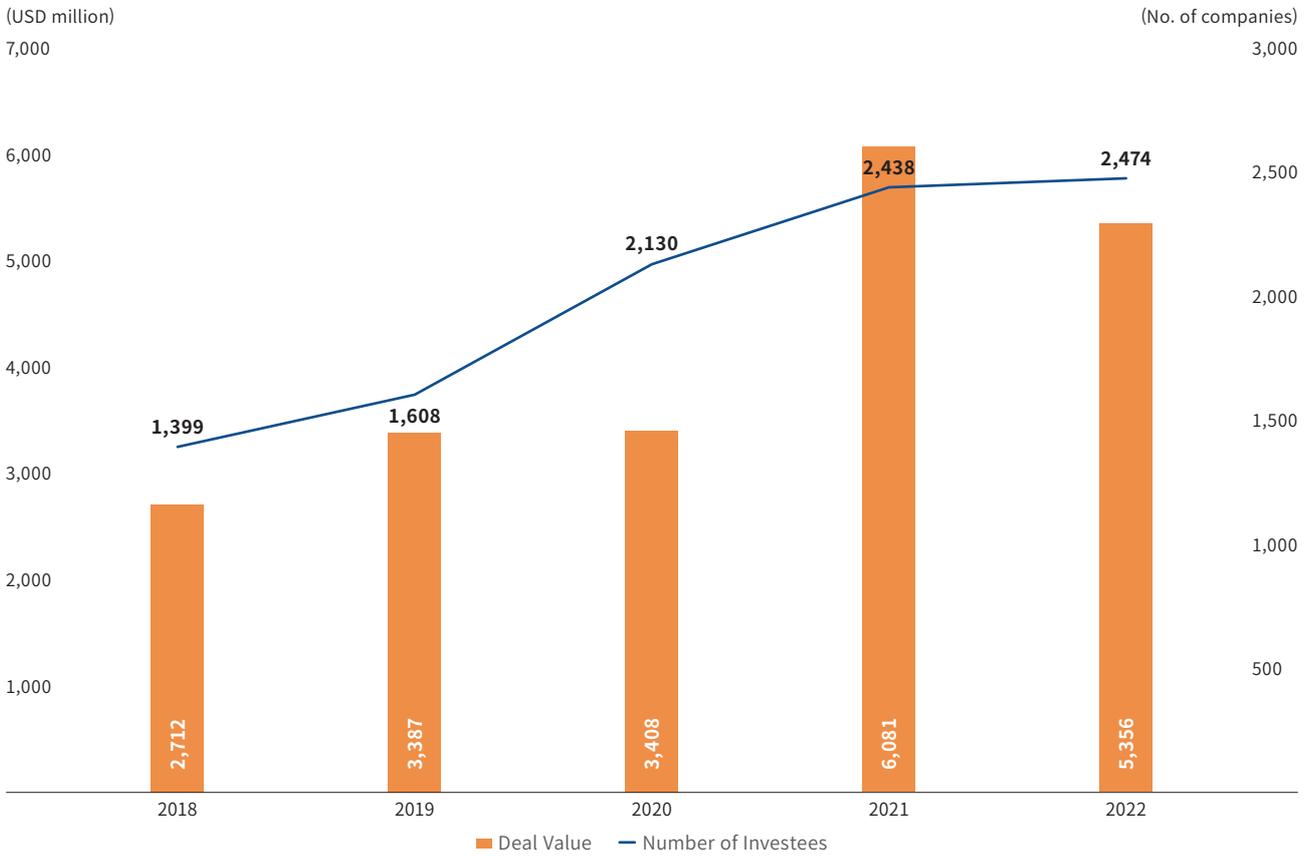
* Two separate acts relating to venture investment under the MSS were consolidated into a single act called the Venture Investment Promotion Act, which came into effect on August 12, 2020.

Investments

Investments by VC Funds

Korean VC funds invested USD 5,356 million (KRW 6,764 billion) in 2,474 companies as of December 31, 2022. This represents an 11.9% decrease in deal value compared to the prior year. However, the number of companies receiving VC investments increased by 36, indicating a drop in the average amount invested per company. In fact, the average deal size shrank by USD 0.3 million (KRW 0.42 billion) YoY to USD 2.2 million (KRW 2.73 billion).

[Figure 2] 5-year Trends in Investments by VC Funds

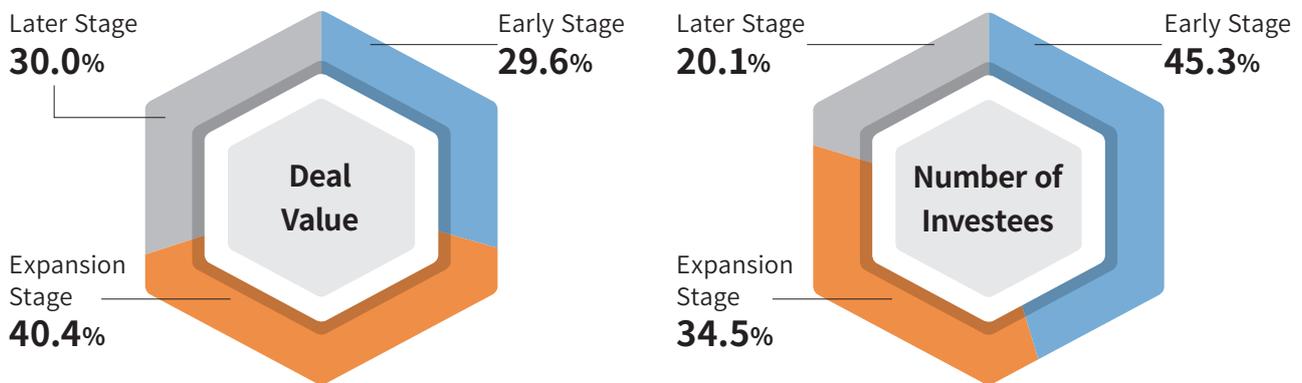


Source: KVCA
* As of December 31, 2022

Deals by Stage and Industry

When breaking down the fresh investments made by Korean VC funds as of December 31, 2022 by stage of an investee company²⁾, expansion-stage companies received USD 2,162 million (KRW 2,730.5 billion) or 40.4% of total deal value, while later-stage companies raked in USD 1,606 million (KRW 2,028.5 billion) or 30.0% of the total, and early-stage companies pulled in USD 1,587 million (KRW 2,005 billion) or 29.6% of the total. On a count basis, early-stage, expansion-stage and later-stage companies constituted 45.3%, 34.5%, and 20.1% of all investee companies, respectively.

[Figure 3] 2022 Deal Activity by Stage - VC Funds



Source: KVCA
*As of December 31, 2022

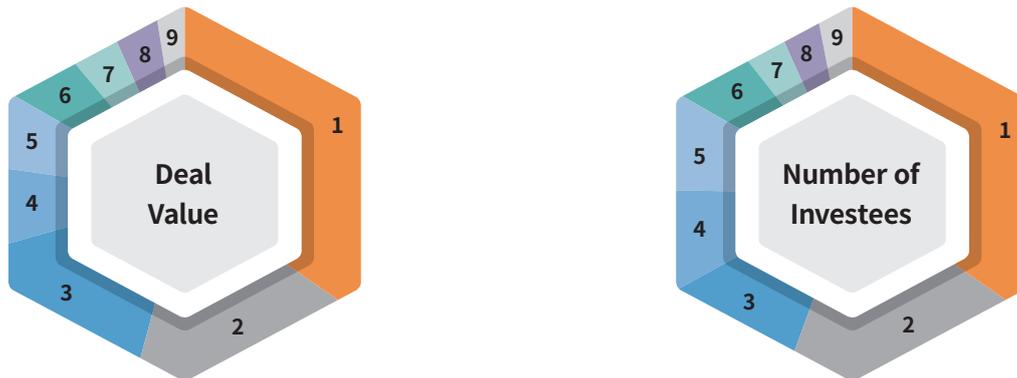
In 2022, ICT services topped the list as the industry³⁾ that received the largest share of funding from Korean VC funds, totaling USD 1,862 million (KRW 2,351.8 billion). This industry accounted for 34.8% of the total deal value, followed by distribution/services with USD 1,039 million (KRW 1,312.6 billion) or 19.4% of the total, and biotechnology/healthcare with USD 876 million (KRW 1,105.8 billion) or 16.3% of the total. In terms of the number of investees, ICT services, distribution/services, and biotechnology/healthcare took the top three spots, representing 34.9%, 20.9%, and 11.3% of the investee companies, respectively.

2) Stages of an investee company are determined based on the time elapsed between the date of its founding and the date of its VC investment received. This provides information about the stage at which the investee company has received VC funding, with early stage defined as less than 3 years, expansion stage as 3-7 years, and later stage as more than 7 years.
3) The above industry breakdown is based on the KVCA Industry Classification Standard.

Korean VC Industry
at a Glance

Industry	Sub-Industry
ICT Manufacturing	Semiconductor/other electronic components; computer/peripheral equipment; broadcasting and communications equipment; audio and video equipment
ICT Services	Communications; software; information services
Electrics/Machinery/Equipment	Electrical equipment; general purpose machinery; transport equipment/parts; precision instruments
Chemicals/Materials	Chemical materials/products; rubber/plastics; metals; non-metallic minerals
Biotechnology/Healthcare	Medical devices; medical materials/pharmaceuticals; healthcare facilities/services
Film and TV/Performing Arts/Recording	Publishing/broadcasting; audiovisual content; performing arts/exhibition/music
Game	Game software; sports/leisure
Distribution/Services	Wholesale and retail trade; transportation; accommodation/food services; education; professional services
Other	Food and beverages; textiles/clothing/leather; wood/paper/printing/furniture; energy/resources; construction; finance; real estate/renting and leasing; other

[Figure 4] 2022 Deal Activity by Industry - VC Funds



No	Sector	% of Total
1	ICT Services	34.8
2	Distribution/Services	19.4
3	Biotechnology/Healthcare	16.3
4	Film and TV/Performing Arts/Recording	6.8
5	Electrics/Machinery/Equipment	6.1
6	Other	5.5
7	ICT Manufacturing	4.4
8	Chemicals/Materials	4.2
9	Game	2.4

No	Sector	% of Total
1	ICT Services	34.9
2	Distribution/Services	20.9
3	Biotechnology/Healthcare	11.3
4	Film and TV/Performing Arts/Recording	8.3
5	Other	8.0
6	Electrics/Machinery/Equipment	6.2
7	Chemicals/Materials	3.9
8	ICT Manufacturing	3.6
9	Game	2.9

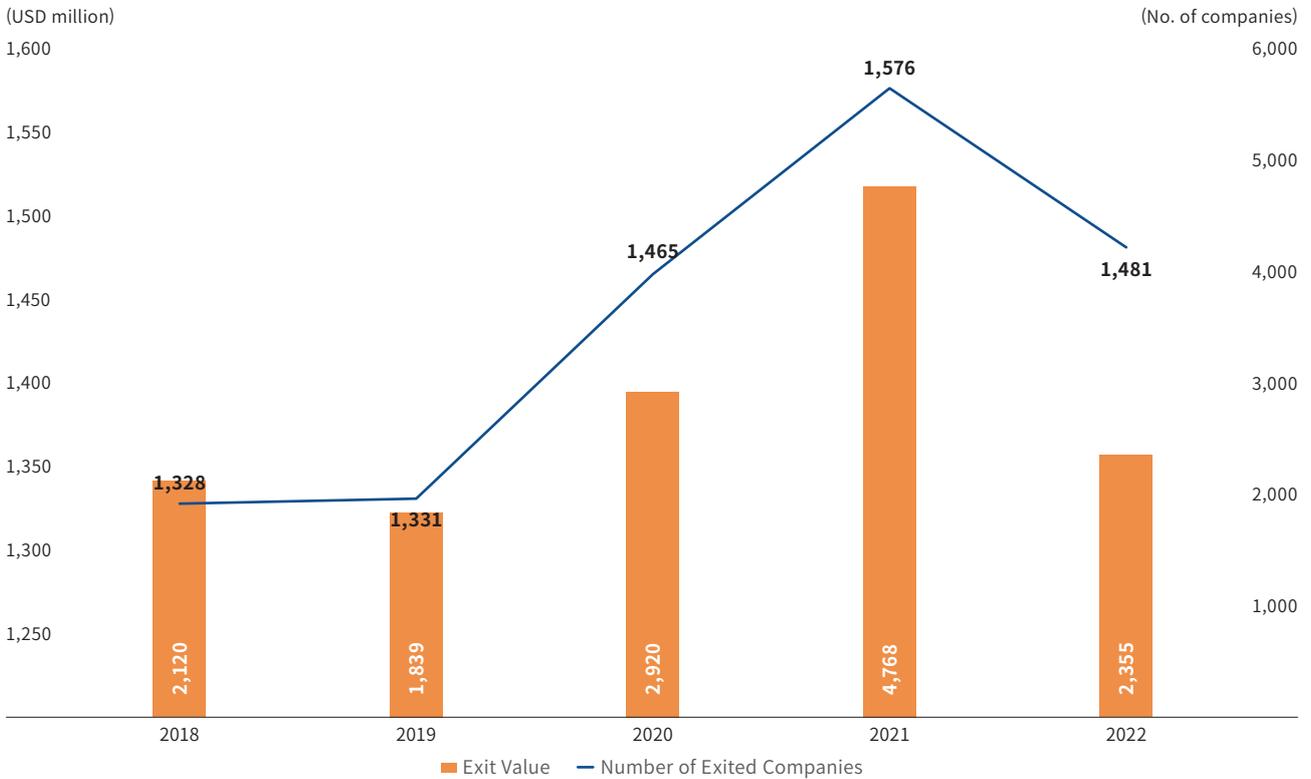
Source: KVCA

Exits

Exits by VC Funds

Throughout 2022, domestic VC funds exited investments with a total value of USD 2,355 million (KRW 2,973.8 billion), including USD 1,338 million (KRW 1,690.5 billion) of invested capital and USD 1,016 million (KRW 1,283.3 billion) of proceeds. Their exits resulted in a multiple on invested capital (MOIC) of 1.76x. Compared to the previous year, the total exit value decreased by 50.6% due to a 6.3% YoY decline in invested capital exited and a sharp 69.6% YoY drop in exit proceeds. The number of exited companies also declined by 95 YoY to 1,481.

[Figure 5] 5-year Trends in Exits by VC Funds



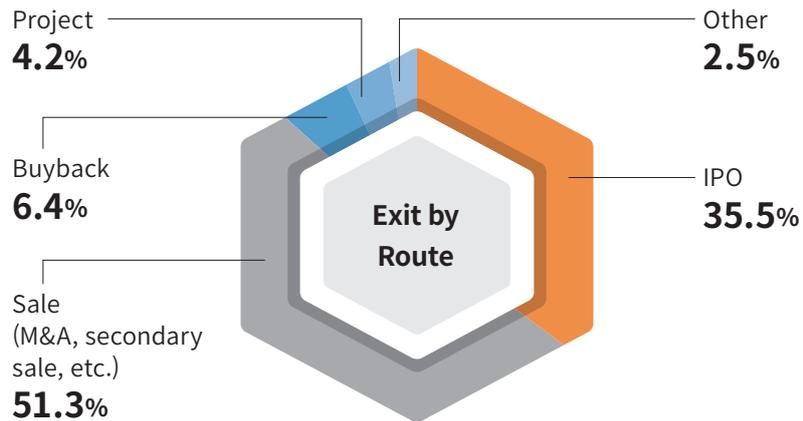
Source: KVCA

* Data as of December 31, 2022; The number of exited companies is based on the aggregate value of exits.

Exits by Route

The majority of VC-backed exits in 2022 were through sale exits (M&A, secondary sale, etc.) and IPOs, which accounted for 51.3% of the total exit value at USD 1,209 million (KRW 1,526.7 billion), and 35.5% of the total at USD 837 million (KRW 1,056.5 billion), respectively.

[Figure 6] Exits by Route



Source: KVCA

KOREA FUND OF FUNDS: **TRENDS IN FUNDRAISING, INVESTMENTS AND EXITS**

This report is updated on a semi-annual basis,
and its findings below are based on data from the second half of 2022.

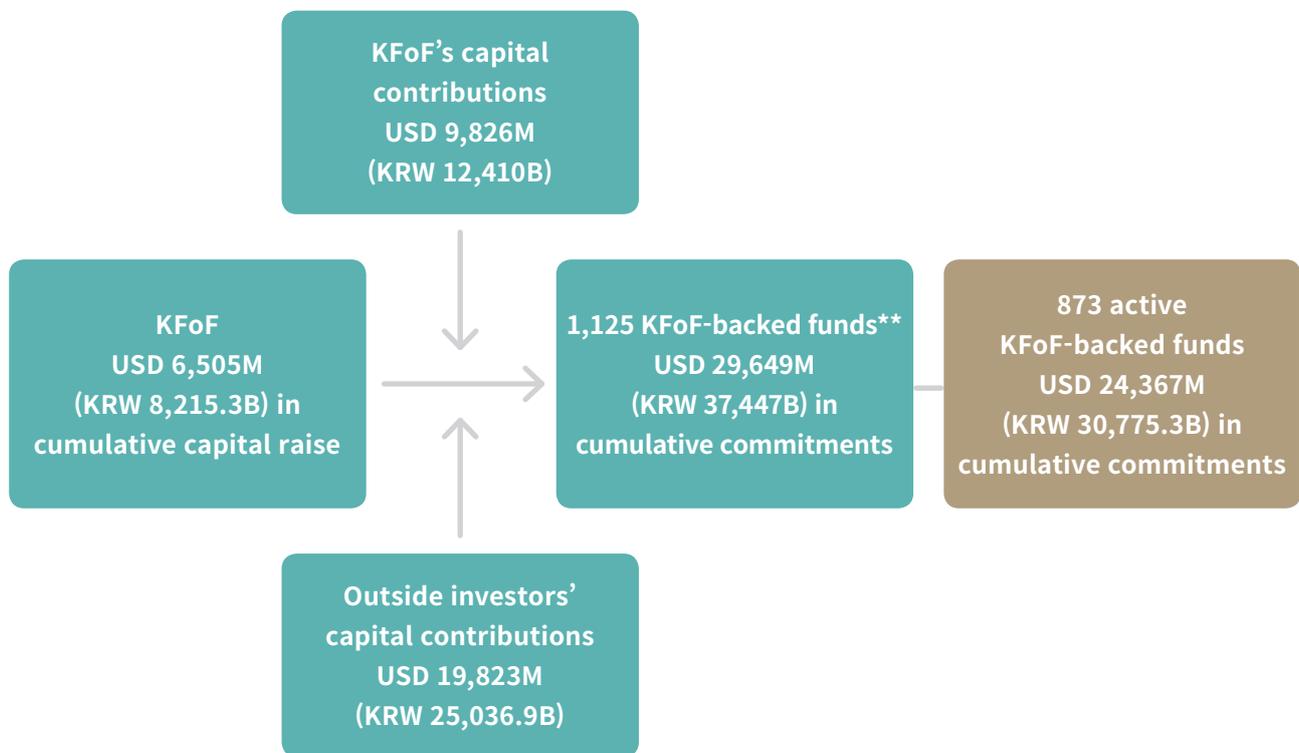
The exchange rate applied at the time of this writing is USD 1 = KRW 1,263.0
(basic exchange rate or market average rate as of December 31, 2022)



Korea Fund of Funds

As at the end of December 2022, Korea Fund of Funds (KFoF) raised a cumulative total of USD 6,505 million (KRW 8,215.3 billion) and created funds with total capital commitments of USD 29,649 million (KRW 37,447 billion), of which USD 19,823 million (KRW 25,036.9 billion) came from outside investors. To date, KFoF has deployed USD 22,283 million (KRW 28,143.1 billion) across 9,154 companies* through its 1,125 underlying funds**. Currently, 873 of these underlying funds remain active, with cumulative capital commitments of USD 24,367 million (KRW 30,775.3 billion).

[Figure 1] KFoF at a Glance



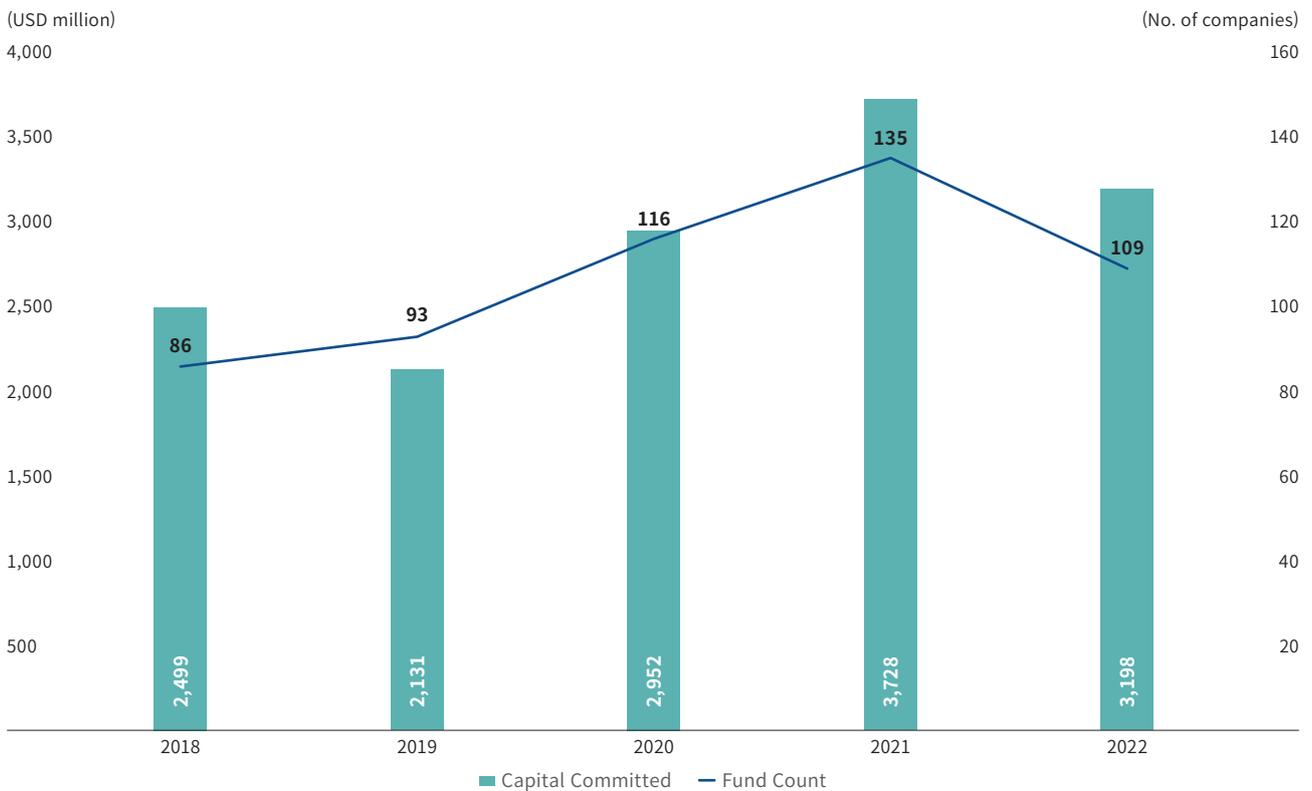
* Overlapping companies were removed from investment activity data.

** The underlying funds of KFoF include Korea Venture Funds (KVs), new technology venture investment partnerships, private equity funds (PEFs), corporate restructuring companies (CRCs), and private investment funds.

Fundraising

KFoF launched 109 funds and committed USD 3,198 million (KRW 4,039.3 billion) to the funds in 2022. The number of new funds fell by 26, and the total capital committed dropped by 14.2%, indicating a downward trend in fund creation compared to the previous year.

[Figure 2] 5-year Trends in Fund Creation by KFoF



Source: KVIC

* As of December 31, 2022

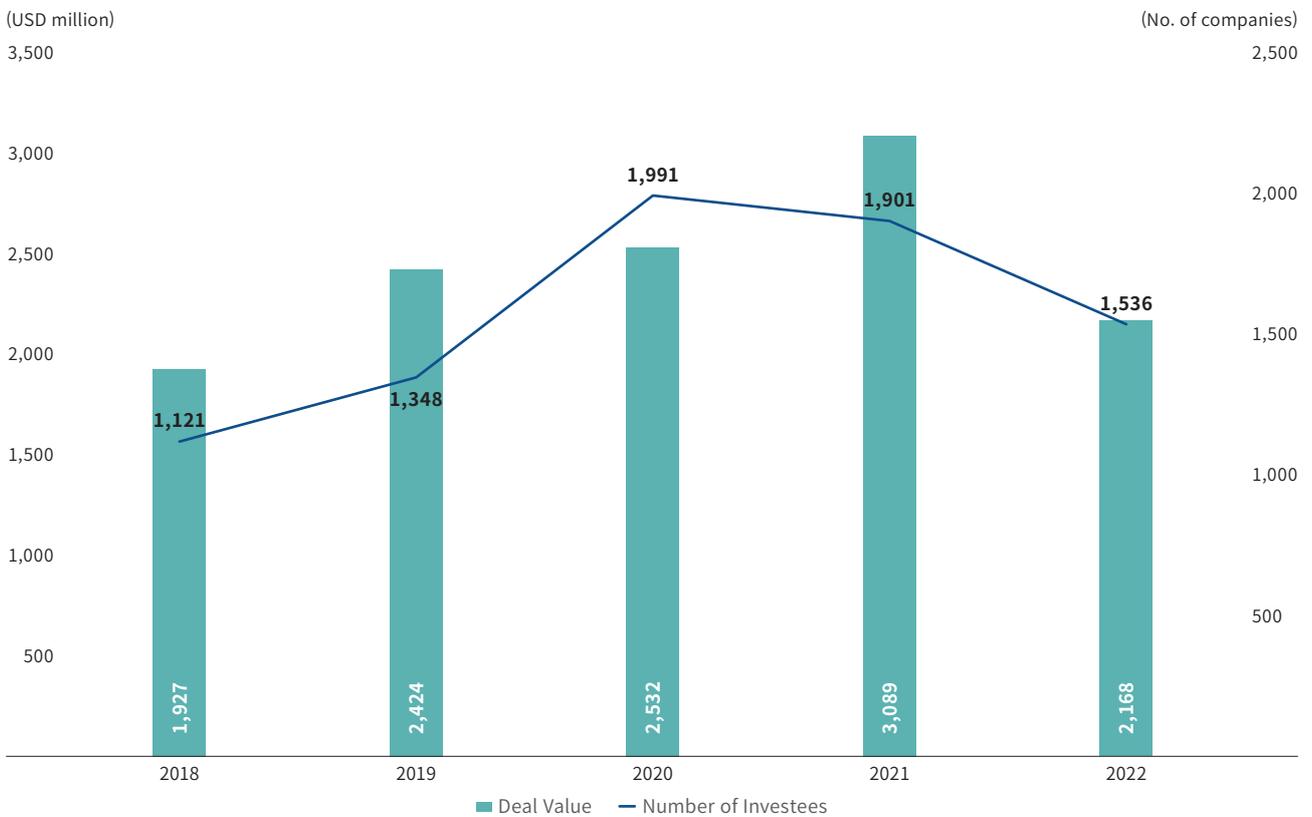
** The total amount committed between 2018 and 2022 is based on available data at the end of each year.

Investments

Investments by KFoF Underlying Funds

In 2022, 457 underlying funds of KFoF invested USD 2,168 million (KRW 2,738.1 billion) in 1,536 companies, representing a 29.8% year-over-year (YoY) reduction in deal value and a 19.2% YoY fall in the number of companies they invested in. This trend highlights a contraction in the market for VC investments, which is due to macroeconomic factors.

[Figure 3] 5-year Trends in Investments by KFoF Underlying Funds



Source: KVIC

* As of December 31, 2022

** The total amount invested between 2018 and 2022 is based on available data at the end of each year.

*** The number of investees above excludes overlapping companies.

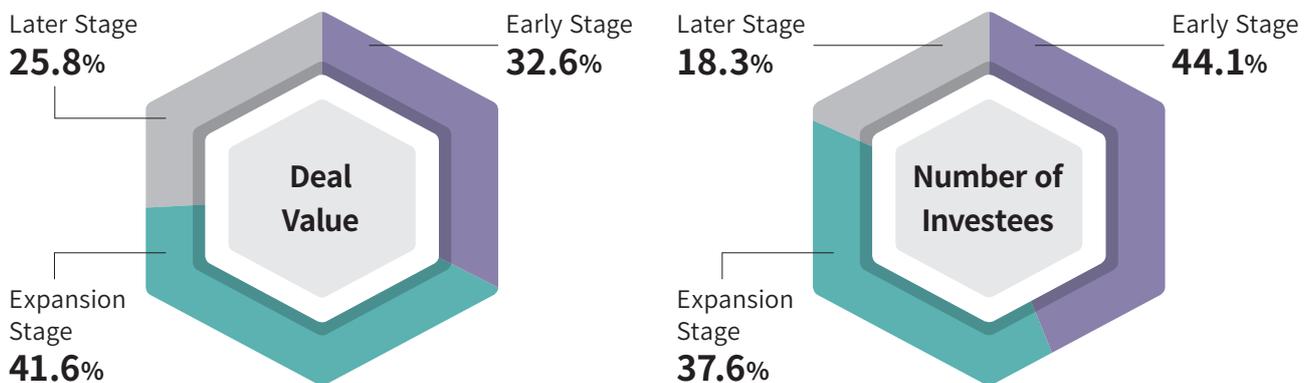
Deals by Stage

When it comes to the 2022 investments from the KFoF underlying funds distributed across different stages of investee companies, early-stage companies (defined as being 3 years old or younger) received USD 706.2 million (KRW 891.9 billion), accounting for 32.6% of the total deal value; expansion-stage companies (3-7 years old) secured USD 902.0 million (KRW 1,139.2 billion), 41.6% of the total; later-stage companies (above 7 years old) took in USD 559.8 million (KRW 707 billion), 25.8% of the total. On a count basis*, early-stage, expansion-stage and later-stage companies accounted for 44.1% (686), 37.6% (585) and 18.3% (284) of total investee companies, respectively.

As described earlier, the total deal value dipped by 19.2% and the number of investees slumped by 29.8% from the previous year. Of note was that early-stage companies experienced a relatively weaker downward trend in deal value, with a decrease of 12%. In contrast, the deal value fell by 33.5% and 39.8% for expansion-stage and later-stage companies, respectively, over the same period.

There were variations in the decline of average deal size across the stages of investee companies. Early-stage companies recorded an average deal size of USD 1.0 million (KRW 1.3 billion), exhibiting a slight YoY drop, while expansion-stage companies reported an average deal size of USD 1.5 million (KRW 1.96 billion), showing a 13.2% YoY decrease. Later-stage companies had an average deal size of USD 2.0 million (KRW 2.47 billion), representing a 17.7% YoY decline.

[Figure 4] 2022 Deal Activity by Stage - KFoF Underlying Funds



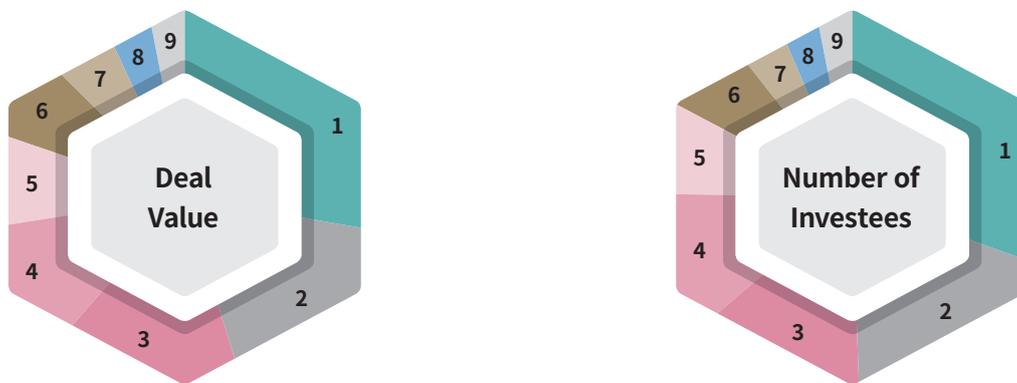
Source: KVIC

* Overlapping companies are excluded.

Deals by Industry

The industry that received the largest share of investments from the KFoF underlying funds in 2022 was ICT services, with USD 605.6 million (KRW 764.9 billion) comprising 28.0% of the total deal value. This was followed by biotechnology/healthcare, which raised USD 378.1 million (KRW 477.5 billion), accounting for 17.4% of the total, and distribution/services, which attracted USD 347.7 million (KRW 439.1 billion), accounting for 16.0% of the total. ICT services also constituted the highest portion of investee companies with 512 companies (30.8%), followed by distribution/services (18.9%), and biotechnology/healthcare (14.1%). The top three industries remained unchanged from the first half of 2022.

[Figure 5] 2022 Deal Activity by Industry - KFoF Underlying Funds



No	Sector	% of Total
1	ICT Services	28.0
2	Biotechnology/Healthcare	17.4
3	Distribution/Services	16.0
4	Film and TV/Performing Arts/Recording	11.2
5	Electrics/Machinery/Equipment	7.8
6	Other	7.2
7	Chemicals/Materials	5.6
8	ICT Manufacturing	3.9
9	Game	2.8

No	Sector	% of Total
1	ICT Services	30.8
2	Distribution/Services	18.9
3	Biotechnology/Healthcare	14.1
4	Film and TV/Performing Arts/Recording	11.7
5	Other	7.5
6	Electrics/Machinery/Equipment	6.7
7	Chemicals/Materials	4.0
8	ICT Manufacturing	3.4
9	Game	2.9

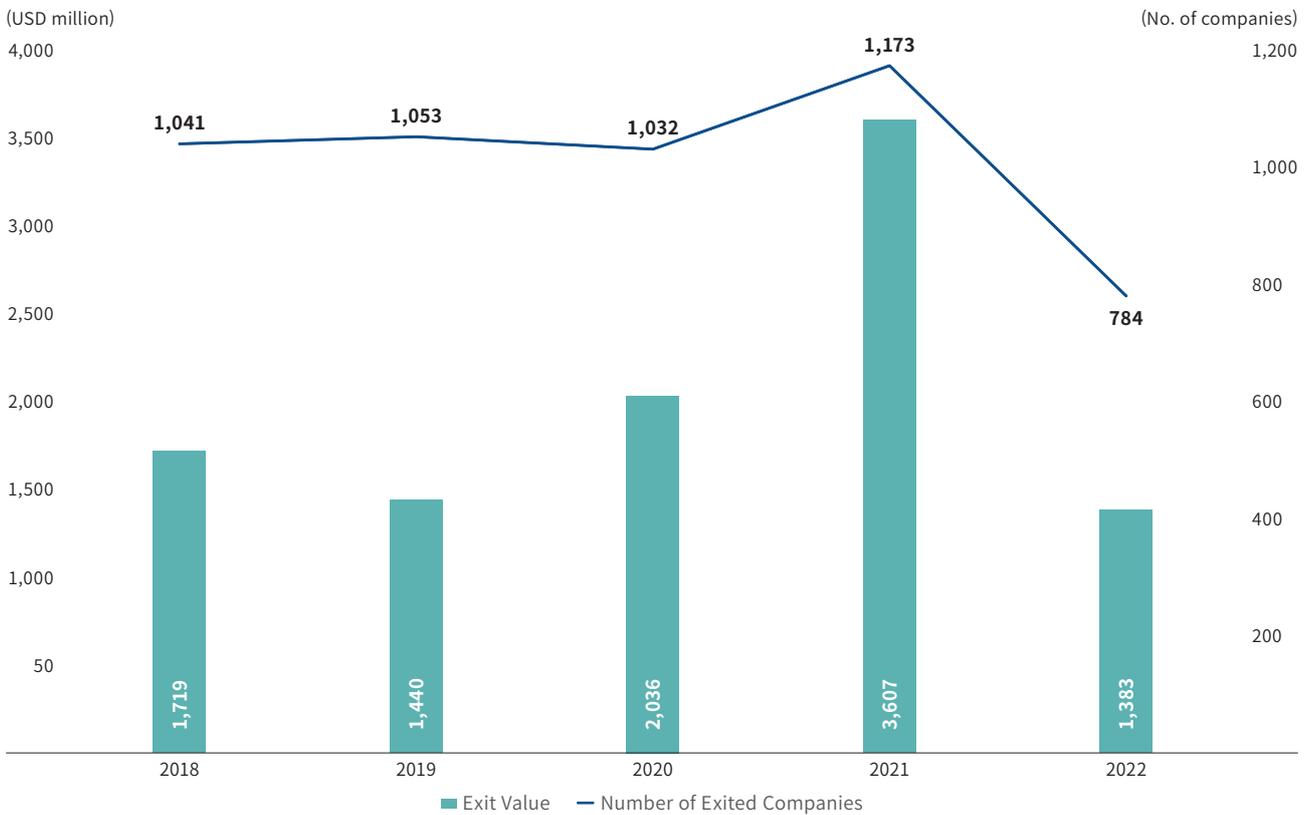
Source: KVIC

Exits

Exits by KFoF Underlying Funds

During 2022, KFoF-backed funds exited investments in 784 companies, with a total exit value of USD 1,383 million (KRW 1,746.3 billion). Of that exit value, USD 422 million (KRW 532.8 billion) in invested capital was exited and proceeds totaled USD 961 million (KRW 1,213.5 billion). The exits delivered a multiple on invested capital (MOIC) at 3.3x. However, the total exit value plunged by 61.7% compared to the prior year.

[Figure 6] 5-year Trends in Exits by KFoF Underlying Funds



Source: KVIC
* As of December 31, 2022

Exit Value and Exits by Industry

The largest exit was worth USD 97.7 million (KRW 123.4 billion), and the highest exit multiple was 170.2x, among the KFoF-backed exits made in 2022. The top industries by exit value were ICT services, biotechnology/healthcare, and distribution/services, which represented 26.5% (USD 390.7 million or KRW 493.4 billion), 18.7% (USD 276.1 million or KRW 348.7 billion), and 17.6% (USD 259.5 million or KRW 327.8 billion) of the total exit value, respectively. At the sub-industry level, software had the highest exit value of USD 288.0 million (KRW 363.8 billion), making up 19.5% of the total exit value, followed by medical materials/pharmaceuticals at 14.0% (USD 206.4 million or KRW 260.7 billion), wholesale and retail trade at 10.4% (USD 153.9 million or KRW 194.4 billion), information services at 7.0% (USD 102.6 million or KRW 129.6 billion), and professional services at 5.3% (USD 78.4 million or KRW 99 billion).

An aerial night view of a large industrial refinery or chemical plant. The facility is illuminated with numerous lights, and several large plumes of white steam or smoke are rising from different parts of the complex. In the background, dark, silhouetted mountains are visible against a dark, cloudy night sky. The overall scene conveys a sense of industrial activity and scale.

2H2022 KFOF **INVESTMENTS BY INDUSTRY**

The exchange rate applied at the time of this writing is USD 1 = KRW 1,263.0
(basic exchange rate or market average rate as of December 31, 2022)

During the second half of 2022, Korea Fund of Funds (KFoF) invested USD 837 million (KRW 1,057.3 billion) in 737 companies and projects through its underlying funds, marking a 36.5% decline in the number of companies receiving investment and a 53.2% decrease in the total amount invested compared to the same period last year. The average deal size of portfolio or investee companies was USD 1.1 million, down 26.3% from USD 1.5 million in the second half of 2021.

Overview of KVIC Industry Classification

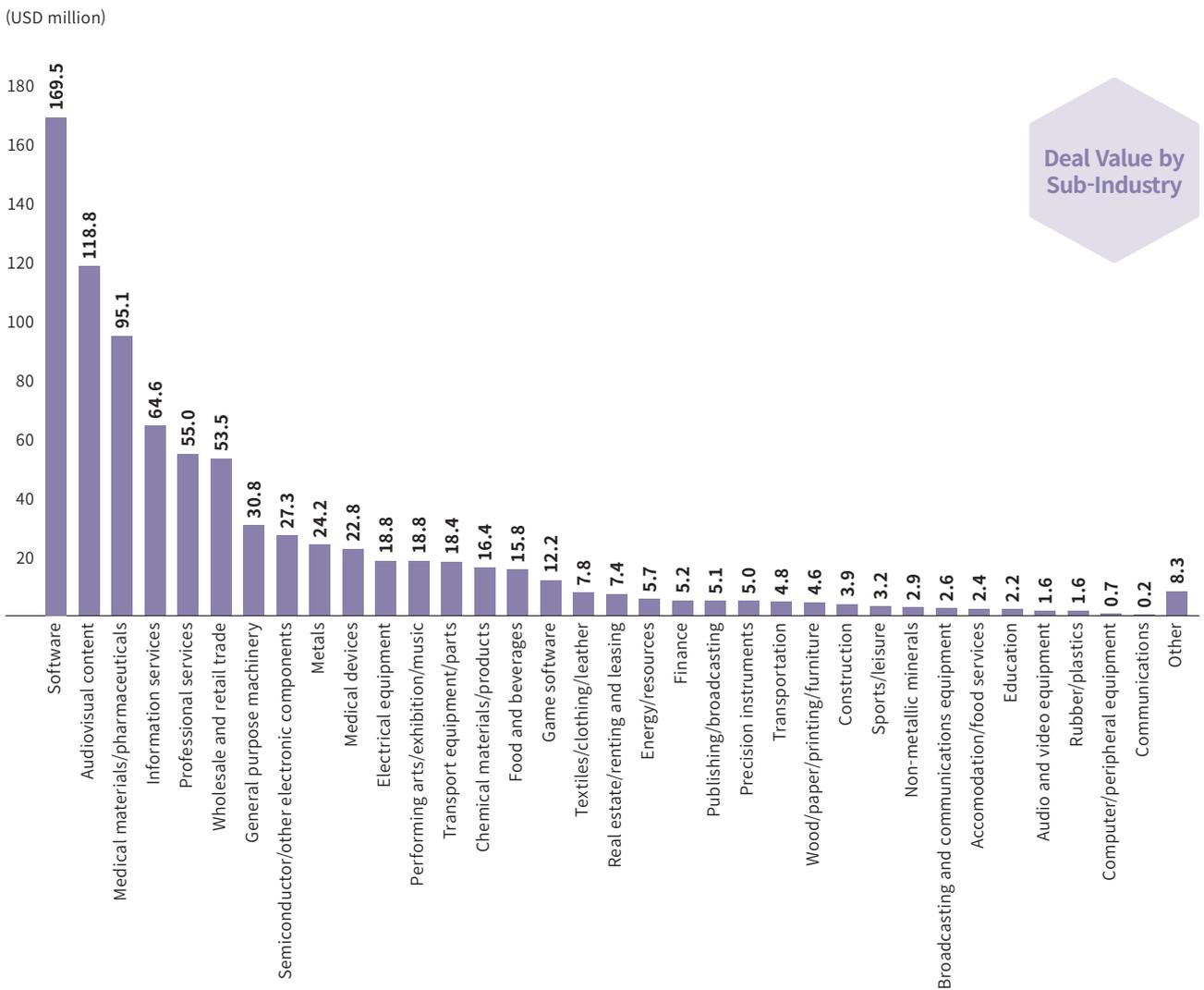
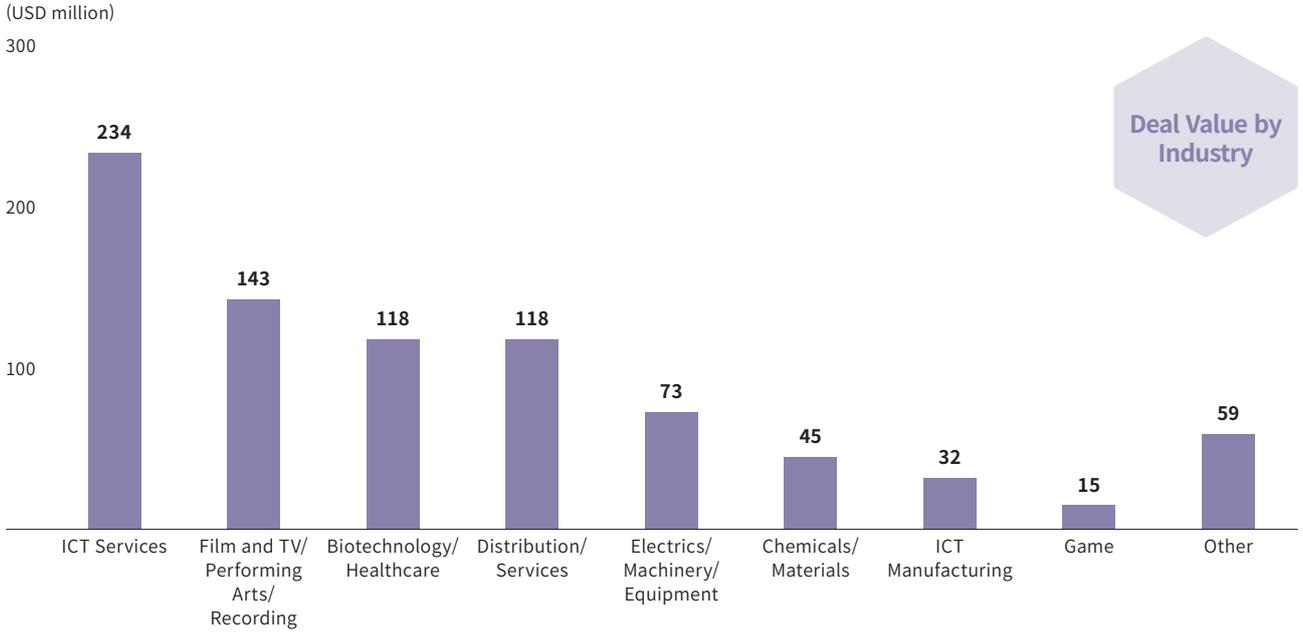
KVIC sorts portfolio companies into 9 industries and 36 sub-industries and compiles data accordingly.

- **9 industry categories:** 1) biotechnology/healthcare; 2) ICT services; 3) distribution/services; 4) electrics/machinery/equipment; 5) ICT manufacturing; 6) game; 7) chemicals/materials; 8) film and TV/performing arts/recording; and 9) other
- **36 sub-industry categories:** 1) medical materials/pharmaceuticals; 2) medical devices; 3) healthcare facilities/services; 4) software; 5) information services; 6) communications; 7) wholesale and retail trade; 8) professional services; 9) transportation; 10) education; 11) accommodation/food services; 12) general purpose machinery; 13) transport equipment and parts; 14) precision instruments; 15) electrical equipment; 16) semiconductor/other electronic components; 17) broadcasting and communications equipment; 18) computer/peripheral equipment; 19) audio and video equipment; 20) game software; 21) sports/leisure; 22) chemical materials/products; 23) metals; 24) non-metallic minerals; 25) rubber/plastics; 26) audiovisual content; 27) publishing/broadcasting; 28) performing arts/exhibition/music; 29) food and beverages; 30) construction; 31) finance; 32) energy/resources; 33) wood/paper/printing/furniture; 34) real estate/renting and leasing; 35) textiles/clothing/leather; and 36) other

[Table 1] KVIC Industry and Sub-Industry Classification

Industry	Biotechnology/Healthcare	ICT Services	Distribution/Services
Sub-Industry	Medical devices; medical materials/ pharmaceuticals; healthcare facilities/services	Software; information services; communications	Wholesale and retail trade; professional services; transportation; education; accommodation/food services
Industry	Electrics/Machinery/Equipment	ICT Manufacturing	Game
Sub-Industry	General purpose machinery; transport equipment/parts; precision instruments; electrical equipment	Semiconductor/other electronic components; broadcasting and communications equipment; computer/peripheral equipment; audio and video equipment	Game software; sports/leisure
Industry	Chemicals/Materials		Film and TV/Performing Arts/Recording
Sub-Industry	Chemical materials/products; metals; non-metallic minerals; rubber/plastics		Audiovisual content; publishing/broadcasting; performing arts/exhibition/music
Industry	Other		
Sub-Industry	Food and beverages; construction; finance; energy/ resources	Wood/paper/printing/furniture; real estate/ renting and leasing; textiles/clothing/leather; other	

[Figure 1] 2H2022 KFoF Investment Activity by Industry and Sub-Industry



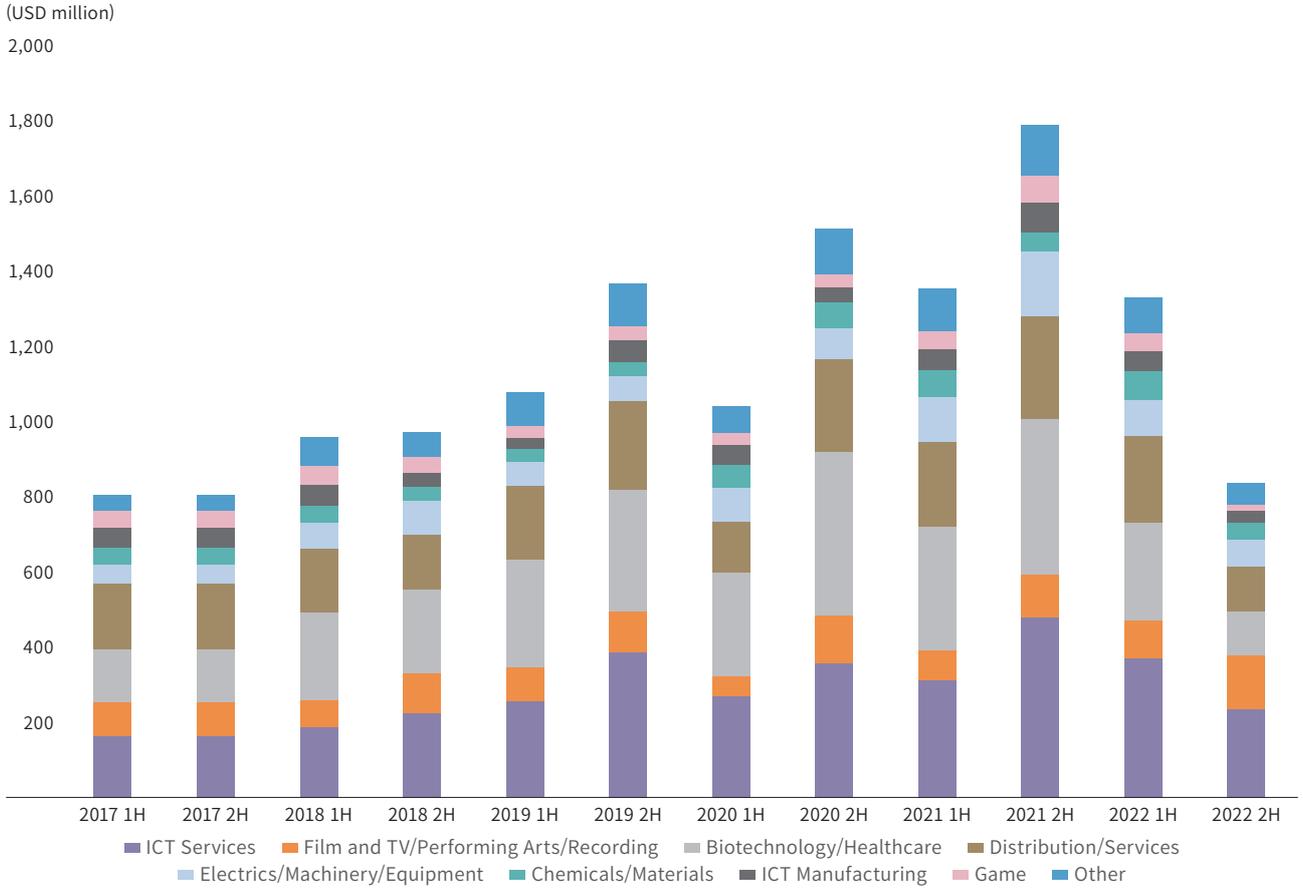
Source: KVIC

Looking at the annual trend, KFoF investments were weaker in the second half of 2022 than the first half, resulting in a decline in deal value across most industries compared to not only the same period last year but also the previous half of the year. Among the top industries that received the most investments from the underlying funds of KFoF were ICT services (USD 234 million, down 36.9% HoH), film and TV/performing arts/recording (USD 143 million, up 43.6% HoH), biotechnology/healthcare (USD 118 million, down 54.7% HoH), and distribution/services (USD 118 million, down 48.7% HoH). Of these, only film and TV/performing arts/recording reported an increase of 43.6% in deal value from the first half of 2022, climbing up to the second highest industry by deal value in the second half of the year.

At the sub-industry level, software, audiovisual content, and medical materials/pharmaceuticals led the way in terms of deal value, with USD 169.5 million (down 38.6% HoH), USD 118.8 million (up 45.5% HoH), and USD 95.1 million (down 56.8% HoH), respectively. Software had the highest number of portfolio companies, followed by audiovisual content. Transportation had the highest average deal size at USD 4.8 million per company.

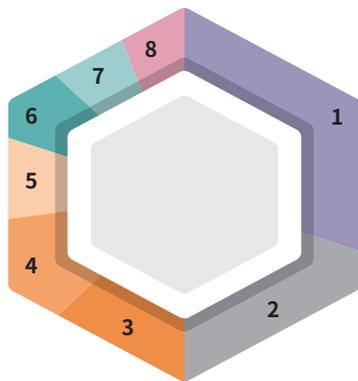
In the second half of 2022, there were six mega-deals greater than USD 7.9 million (KRW 10 billion), which is 15 less than the same period in the previous year. The key sectors that drove mega-deal activity in the second half of the year were film and TV/performing arts/recording, and ICT services, with three and two mega-deals, respectively. In addition, there were 33 deals valued at USD 3.96 million (KRW 5 billion) or more, a decrease of 100 compared to the same period last year. The largest funding went to a virtual production (VP) company that specializes in visual effects (VFX).

[Figure 2] Half-Yearly Trends in KFoF Investments by Industry



* As of December 31, 2022

[Figure 3] 2H2022 Industry Breakdown of Companies with USD 3.96M+ (KRW 5B+) in VC Funding from KFoF Underlying Funds



No	Sector	% of Total
1	ICT Services	30
2	Biotechnology/Healthcare	20
3	Film and TV/Performing Arts/Recording	13
4	Distribution/Services	10
5	Chemicals/Materials	7
6	ICT Manufacturing	7
7	Other	7
8	Electrics/Machinery/Equipment	6
9	Game	0

Source: KVIC

[Table 2] 2H2022 VC Investments by KFoF Underlying Funds

(USD million)

Industry/Sub-industry	2H2022	YoY change	Number of portfolio companies	Average amount invested
Total	837.1	-38.2%	737.0	1.1
ICT Services	234.3	-24.8%	235	1.0
Software	169.5	-21.7%	168	1.0
Information services	64.6	-32.0%	66	1.0
Communications	0.2	84.6%	1	0.2
Biotechnology/Healthcare	117.9	-64.3%	93	1.3
Medical materials/pharmaceuticals	95.1	-64.8%	68	1.4
Medical devices	22.8	-60.5%	25	0.9
Distribution/Services	117.9	-48.0%	126	0.9
Professional services	55.0	-40.4%	53	1.0
Wholesale and retail trade	53.5	-52.2%	65	0.8
Transportation	4.8	-64.9%	1	4.8
Education	2.2	-73.4%	6	0.4
Accommodation/food services	2.4	495.0%	1	2.4
Film and TV/Performing Arts/Recording	142.7	83.8%	108	1.3
Audiovisual content	118.8	74.3%	89	1.3
Performing arts/exhibition/music	18.8	267.1%	16	1.2
Publishing/broadcasting	5.1	17.4%	3	1.7
Electrics/Machinery/Equipment	73.0	-38.4%	51	1.4
Electrical equipment	18.8	-42.9%	14	1.3
General purpose machinery	30.8	-37.6%	23	1.3
Transport equipment/parts	18.4	-26.2%	10	1.8
Precision instruments	5.0	-55.6%	4	1.3
Chemicals/Materials	45.0	-37.6%	27	1.7
Chemical materials/products	16.4	-45.6%	17	1.0
Metals	24.2	-5.2%	6	4.0
Non-metallic minerals	2.9	-57.7%	3	1.0
Rubber/plastics	1.6	-83.7%	1	1.6
ICT Manufacturing	32.2	-44.3%	22	1.5
Semiconductor/other electronic components	27.3	-44.1%	17	1.6
Broadcasting and communications equipment	2.6	-64.3%	2	1.3
Audio and video equipment	1.6	-3.7%	2	0.8
Game	15.4	-66.1%	22	0.7
Game software	12.2	-69.8%	18	0.7
Sports/leisure	3.2	-37.1%	4	0.8
Other	58.8	-49.1%	53	1.1
Energy/resources	5.7	119.2%	7	0.8
Food and beverages	15.8	-54.4%	16	1.0
Finance	5.2	-73.4%	4	1.3
Textiles/clothing/leather	7.8	422.7%	4	2.0
Real estate/renting and leasing	7.4	-66.6%	5	1.5
Construction	3.9	363.5%	6	0.7
Wood/paper/printing/furniture	4.6	-83.1%	4	1.1
Other	8.3	16.3%	7	1.2

Source: KVIC

* As of December 31, 2022

Table 3 includes hashtags that describe either the features of products or services developed, produced or provided by portfolio companies that received USD 3.96 million (KRW 5 billion) or more in VC funding from the KFoF underlying funds in the second half of 2022, or the characteristics of the industries these portfolio companies belong to. The hashtags, sorted by industry, are intended to help readers better understand the characteristics of portfolio companies within the KFoF underlying funds.

[Table 3] 2H2022 Keyword Hashtags for Portfolio Companies with USD 3.96M+ (KRW 5B+) in VC Funding from KFoF Underlying Funds

ICT Services	<ul style="list-style-type: none"> #Hyper-Personalized Internet Curation Services #AR Character Video Maker App #Integrated Shipping and Logistics Management Platform for Exports & Imports #Security Program using Homomorphic Encryption #Big Data-based Legal Services Platform #Logistics Automation System #SaaS-based Communication Tool for Online Businesses #IoT-based Outsourced Supply Chain Management #Smart Learning for Infants and Toddlers
Biotechnology/ Healthcare	<ul style="list-style-type: none"> #Production of Hyaluronic Acid (HA) Fillers #Therapeutics for Fibrosis Diseases using Stem Cell-derived Proteins #Next-Generation New Gastrointestinal/Anticancer Drugs #Complement-Targeted Antibody Therapeutics for Rare Diseases #Microbiome-based Drug Discovery #Platform to Identify Main Causes of Cancer Immunotherapy Resistance
Distribution/ Services	<ul style="list-style-type: none"> #All-In-One Solution for Lodging Businesses #Services to Help Generate Income from Patents #Online Seafood Sales and Delivery
Electrics/ Machinery/ Equipment	<ul style="list-style-type: none"> #Automated Inspection Equipment for Semiconductor Printed Circuit Boards (PCBs) #Secondary Battery Separator Coating and Production
Film and TV/ Performing Arts/ Recording	<ul style="list-style-type: none"> #History Content for Kids #Film Production and Distribution #VP & VFX Content #Platform for Managing and Trading Content IP Assets
ICT Manufacturing	<ul style="list-style-type: none"> #Near Field Communication (NFC) Chip Production #X-Ray Detector for Industrial Applications
Chemicals/ Materials	<ul style="list-style-type: none"> #Ultra-High Purity (UHP) Tube/Pipe #Aluminum Melting and Casting
Other	<ul style="list-style-type: none"> #Production of Complex Yarns and Recycled Fibers from Plastic Waste #Mobile Quick and Easy Money Transfer

ANALYSIS OF UNICORNS AND UNICORN CANDIDATES IN KOREA

This report provides insights into the characteristics of unicorns and unicorn candidates backed by the underlying funds of KFoF through an analysis of the underlying funds' portfolio companies valued at USD 159 million (KRW 200 billion) or more. The analysis drew upon data on portfolio company valuations as of June 30, 2022.

The exchange rate applied at the time of writing is USD 1 = KRW 1,260.5
(basic exchange rate or market average rate as of December 30, 2022)



Current State of KFoF-backed Unicorns and Unicorn Candidates

Introduction

A unicorn is a mythical horse-like creature with a single horn projecting from its forehead. In business, what is a unicorn company named after the imaginary creature? The term “unicorn” was first coined in 2013 by Aileen Lee, founder of U.S. venture capital firm Cowboy Ventures. Today, the term is commonly used to describe a privately held startup company with a valuation of USD 1 billion or more.

There were 1,209 unicorn companies worldwide with a total valuation of USD 3,908 billion, according to The Complete List of Unicorn Companies (as of December 31, 2022) compiled by U.S. market research firm CB Insights. Of those, 15 unicorns are based in South Korea. They include Toss, Yello Mobile, Kurly, Tridge, WeMakePrice, MUSINSA, ZIGBANG, Megazone Cloud, Bucketplace, RIDI, GPclub, L&P Cosmetic, Yanolja, Aprogen, and IGAWorks, with a combined value of USD 34 billion.

KVIC MarketWatch analyzes the portfolio companies backed by KFoF's underlying funds identified as unicorns or unicorn candidates on a semi-annual basis and sheds light on the key characteristics of these companies. This report assesses the distribution of KFoF-backed unicorns and unicorn candidates—portfolio companies worth at least USD 159 million (KRW 200 billion)—by valuation, funding amount, industry, and company age. We used portfolio company valuations as of June 30, 2022 as a base to identify KFoF-backed unicorns and unicorn candidates. For analysis purposes, we divided the unicorns and unicorn candidates into three cohorts based on three valuation ranges: i) between USD 159 million and USD 397 million (KRW 200 billion – KRW 500 billion), ii) between USD 397 million and USD 793 million (KRW 500 billion – KRW 1 trillion), and iii) USD 793 million (KRW 1 trillion) or more. The report also includes semi-annual trends in unicorns and unicorn candidates.

In this report, unicorns refer to KFoF-backed portfolio companies belonging to the cohort of companies valued at USD 793 million (KRW 1 trillion) or more.

Portfolio Companies Analyzed

Our semi-annual analysis covered 153 unicorns and potential unicorns, which are defined as companies valued at USD 159 million or more, as of June 2022. This represents an increase of 44 (62 new entrants and 18 drop-offs) from our previous analysis that used a valuation cut-off month of December 2021. Of the 153 companies, 22 were valued at USD 793 million or more; 20 were valued between USD 397 million and USD 793 million; 111 were valued between USD 159 million and USD 397 million. All valuation ranges saw an increase in the number of companies compared to the previous half.

During the same period, a total of 18 existing companies were removed from the list of unicorns and unicorn candidates, primarily due to going public or being acquired by other companies. We found that some drop-offs from their respective cohorts moved to another cohort, which is a positive signal indicating an increase in the valuations of individual companies.

Valuation

The average and median valuations for the 153 companies we analyzed were USD 553 million (KRW 696.5 billion) and USD 259 million (KRW 326.5 billion), declining roughly by 7.6% and 4.0%, respectively, compared to our last analysis.

Despite the slightly lower valuations, the number of companies identified as unicorns and unicorn candidates rose significantly, which is positive. Seven new companies were added to the cohort in the valuation range of USD 793 million or more, and 36 new entrants were added to the cohort in the range of USD 159 million to USD 397 million, which in turn pushed the total number of companies in the cohort to 111, exceeding three digits.

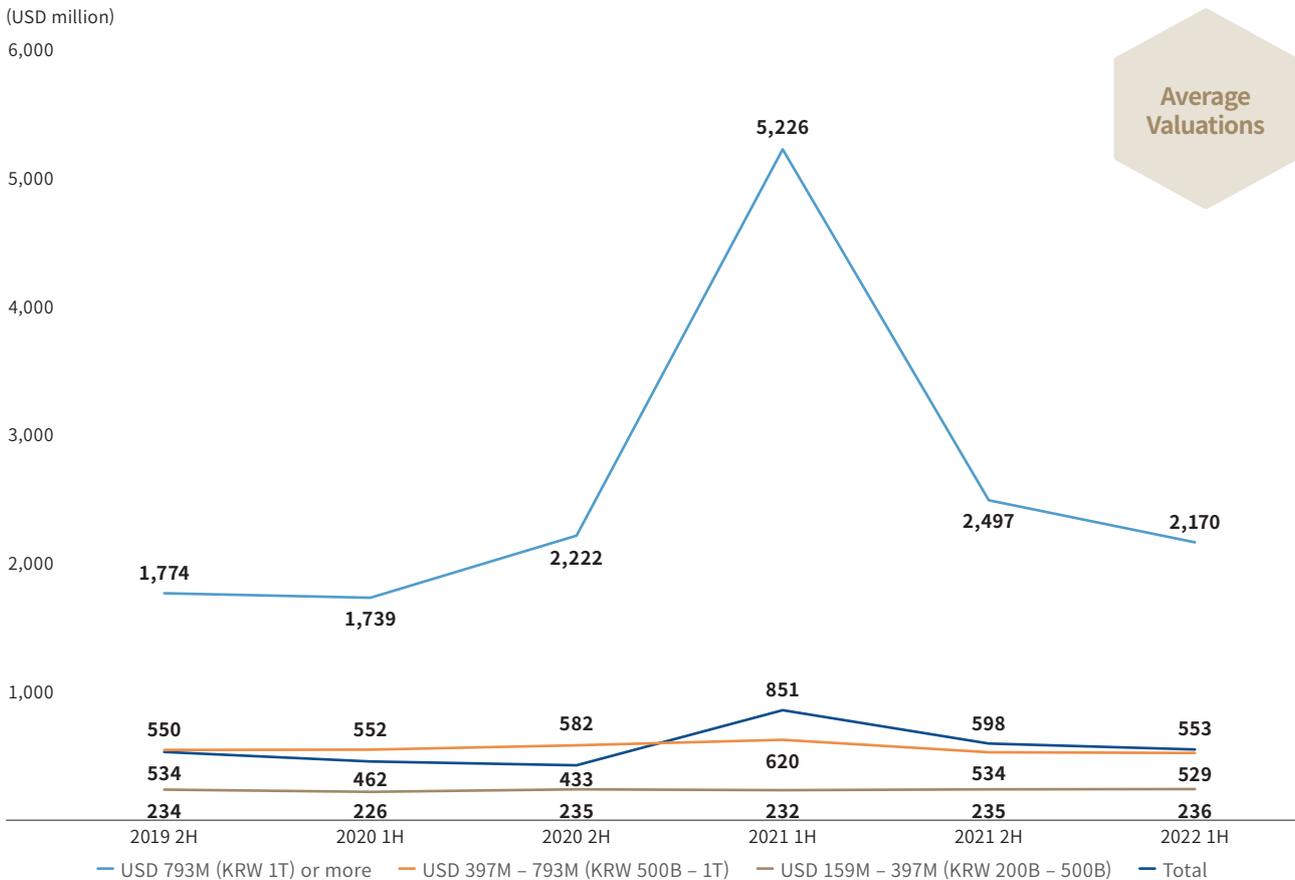
The average valuation fell by 13.1% year-over-year (YoY) for the cohort of companies valued in the USD 793 million-plus range, and decreased by 0.8% YoY for the cohort in the USD 397 million - USD 793 million range. However, the average valuation was up by 0.6% YoY for the cohort in the USD 159 million - USD 397 million range. The sharp decrease in average valuation for the cohort in the USD 793 million-plus range was the main driver behind the overall fall in average valuation for all three cohorts.

[Table 1] Valuation Distribution of Unicorns and Unicorn Candidates as of June 30, 2022

Valuation Range	Number of Companies (▲ indicates an increase; ▼ indicates a decrease from the full year of 2021)	
	Valuation Range	No. of Companies
USD 793 million or more (KRW 1 trillion or more)	22 (▲7)	
USD 397 million – USD 793 million (KRW 500 billion – KRW 1 trillion)	USD 714M – USD 793M (KRW 900B – KRW 1T)	1 (▼1)
	USD 635M – USD 714M (KRW 800B – KRW 900B)	4 (▲2)
	USD 555M – USD 635M (KRW 700B – KRW 800B)	2 (▼4)
	USD 476M – USD 555M (KRW 600B – KRW 700B)	4 (▼3)
	USD 397M – USD 476M (KRW 500B – KRW 600B)	9 (▲7)
USD 159 million – USD 397 million (KRW 200 billion – KRW 500 billion)	USD 317M – USD 397M (KRW 400B – KRW 500B)	16 (▲5)
	USD 238M – USD 317M (KRW 300B – KRW 400B)	31 (▲11)
	USD 159M – USD 238M (KRW 200B – KRW 300B)	64 (▲20)
Total	153 (▲44)	

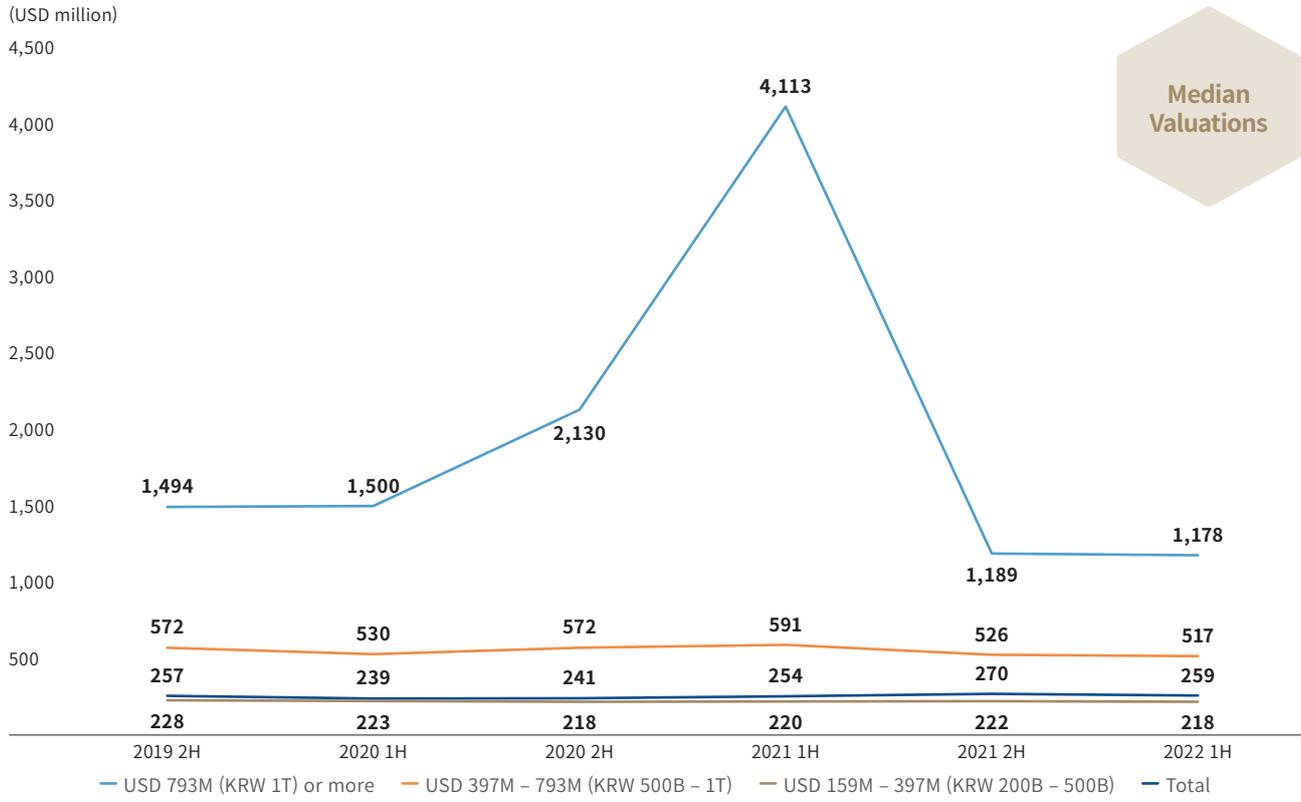
Source: KVIC

[Figure 1] Recent Trends in Valuation



Source: KVIC

[Figure 2] Recent Trends in Valuation



Source: KVIC

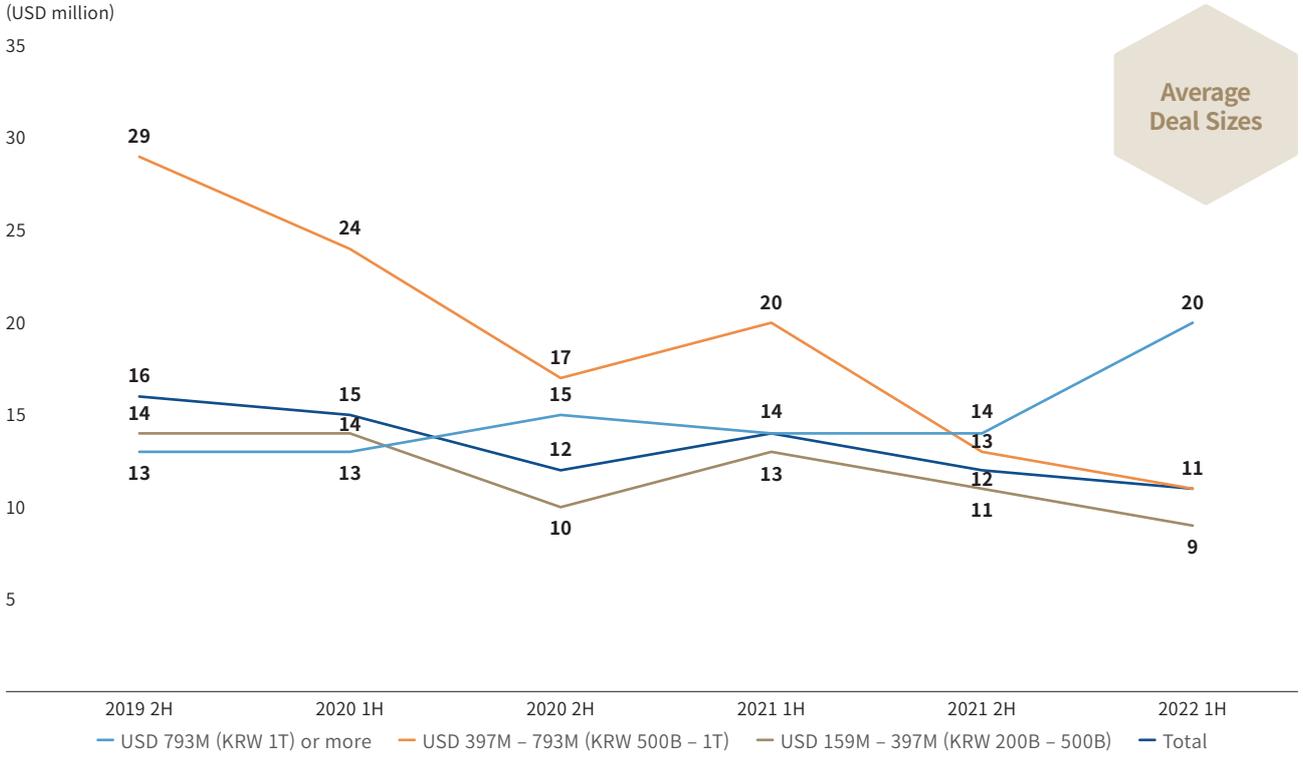
Funding Amount

By the end of June 2022, the underlying funds of KFoF and other FoFs managed by KVIC invested USD 1,704 million (KRW 2,148 billion) in the 153 companies analyzed here, with an average deal size of USD 11 million (KRW 14 billion) per company. The total funding amount experienced a 30.9% HoH increase, but the average deal size posted a 6.8% HoH decrease as the rise in the number of unicorns and unicorn candidates surpassed the increase in total funding amount.

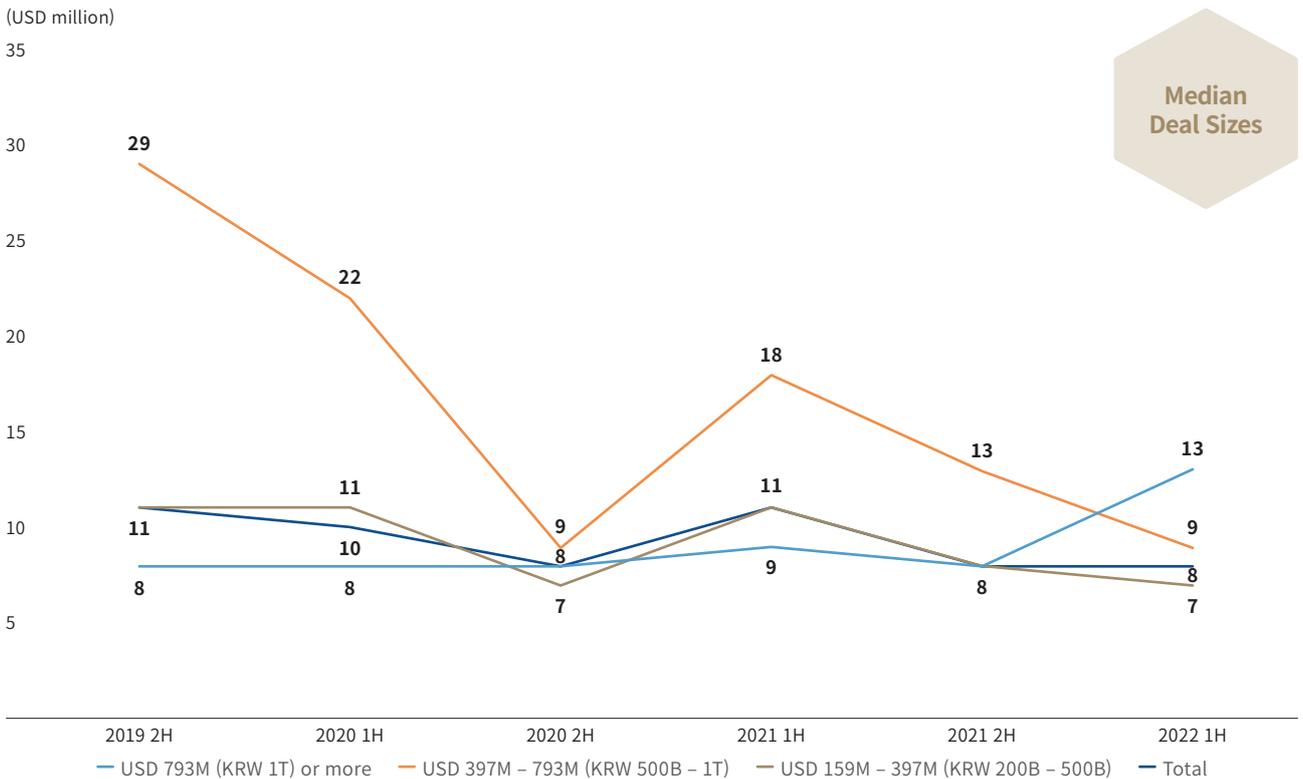
Looking at the three cohorts by valuation range, the unicorn cohort in the USD 793 million-plus valuation range received an average funding of USD 20 million (KRW 25.1 billion), up 40.1% HoH. Only the unicorn cohort reported a rise in average deal size. However, the average deal size was down by 17.1% HoH to USD 11 million (KRW 14 billion) for the cohort of companies in the USD 397 million - USD 793 million range, and fell by 15.4% HoH to USD 9 million (KRW 11.8 billion) for the cohort of companies in the USD 159 million - USD 397 million range.

The most notable change observed in our HoH analysis this time is the substantial increase in the average deal size of the unicorn cohort.

[Figure 3] Recent Trends in Deal Size



[Figure 4] Recent Trends in Deal Size



Industry

The top three industries producing the most unicorns and unicorn candidates were ICT services, biotechnology/healthcare, and distribution/services, according to the industry distribution of the portfolio companies using KVIC Industry Classification (see Overview of KVIC Industry Classification on the last page of this report for more details). The three industries constituted 57 (37.3%), 34 (22.2%), and 27 (17.6%) of the 153 companies, respectively, making up a combined share of 77.1%. This share remained consistent with the high levels of 82.6% in the previous half and over 80% in 2019.

Of the 44 new entrants to the list of unicorns and unicorn candidates, twelve were from ICT services, while six were from biotechnology/healthcare, and ten were from distribution/services. These three industries led the way in terms of new entrant count, accounting for a combined share of 63.6% (28), followed by other (7), game (3), electrics/machinery/equipment (3), chemicals/materials (2), and ICT manufacturing (1). Notably, the other industry witnessed a significant increase in the number of new entrants, driven by the addition of three new companies from textiles/clothing/leather, and two each from finance and real estate/renting and leasing within that industry. This trend indicates the portfolio companies' increasingly diverse business coverage.

[Table 2] Industry Distribution of Unicorns and Unicorn Candidates According to KVIC Industry Classification

KVIC Industry Classification	Number of Companies (▲ indicates an HoH increase; ▼ indicates an HoH decrease)		
	Sub-Industry Classification	No. of Companies	
ICT Services	57 (▲12)	Software	34 (▲5)
		Information services	22 (▲6)
		Communications	1 (▲1)
Biotechnology/Healthcare	34 (▲6)	Medical materials/pharmaceuticals	27 (▲9)
		Medical devices	7 (▼3)
Distribution/Services	27 (▲10)	Wholesale and retail trade	16 (▲7)
		Professional services	6 (-)
		Education	2 (▲1)
		Transportation	2 (▲1)
		Accommodation/food services	2 (▲1)
		Other	10 (▲7)
Finance	3 (▲2)		
Real estate/renting and leasing	2 (▲1)		
Food and beverages	2 (▲2)		
Game	8 (▲3)	Game software	8 (▲3)
Electrics/Machinery/Equipment	8 (▲3)	Electrical equipment	5 (▲2)
		Precision instruments	2 (▲1)
		Transport equipment/parts	1 (▲1)
Chemicals/Materials	5 (▲2)	Chemical materials/products	4 (▲2)
		Metals	1 (-)
ICT Manufacturing	3 (▲1)	Semiconductor/other electronic components	2 (-)
		Computer/peripheral equipment	1 (-)
Film and TV/Performing Arts/Recording	1 (-)	Publishing/broadcasting	1 (▲1)
Total			153 (▲44)

[Table 3] Industry Distribution of Unicorns and Unicorn Candidates According to the Korean Standard Industrial Classification (KSIC)

Korean Standard Industrial Classification (KSIC)	No. of Companies	Korean Standard Industrial Classification (KSIC)	No. of Companies
Application software publishing	28 (▲9)	Manufacture of smelting, refining and alloys of other non-ferrous metals	1 (-)
Research and experimental development on medical sciences and pharmacy	20 (▲7)	Wholesale of fruit	1 (-)
Database and online information provision	13 (▲3)	Wholesale of other processed food	1 (-)
Electronic commerce via internet	7 (▲3)	Research and experimental development on physics, chemistry and biology	1 (-)
Electronic commerce on a fee or contract basis via internet	6 (▲2)	Manufacture of physical properties testing, measuring and inspection equipment	1 (-)
System software publishing	6 (▼4)	Hosting and related service activities	1 (-)
Portals and other internet information media service activities	5 (▲2)	Manufacture of other non-woven and felt fabrics	1 (▲1)
Manufacture of other medical and surgical equipment and orthopedic appliance n.e.c.	5 (▼4)	Manufacture of storage devices	1 (▲1)
Mobile game software publishing	4 (▲1)	Manufacture of domestic non-electric cooking and heating appliances	1 (▲1)
Online game software publishing	4 (▲2)	Advertising agencies	1 (▲1)
Manufacture of medical supplies and related other medicaments	3 (▲2)	Manufacture of industrial gases	1 (▲1)
Other educational support activities	2 (▲1)	Renting of motor vehicles	1 (▲1)
Manufacture of accumulators	2 (-)	Non-specialized wholesale trade	1 (▲1)
Other financial investment businesses	2 (▲2)	Manufacture of instruments for measuring and testing electricity and electrical signals	1 (▲1)
Manufacture of perfumes and cosmetics	2 (-)	Manufacture of health functional foods	1 (▲1)
Manufacture of finished medicaments	2 (▲2)	Other professional services	1 (▲1)
Other information service activities n.e.c.	2 (▲2)	Manufacture of other chemical products n.e.c.	1 (▲1)
Manufacture of other electrical equipment n.e.c.	2 (▲2)	Dyeing and finishing of woven and knitted fabrics, including wearing apparel	1 (▲1)
Manufacture of non-memory electronic integrated circuits	2 (▲2)	Travel agency activities	1 (▲1)
Telecommunications resellers	1 (-)	Manufacture of dental instruments and appliances	1 (▲1)
Funeral homes and funeral related services	1 (-)	General cleaning of buildings	1 (▲1)
Manufacture of medicinal chemicals and antibiotics	1 (-)	General warehousing	1 (▲1)
Other activities auxiliary to financial service activities n.e.c.	1 (-)	Manufacture of unmanned aircraft and its assistant equipment	1 (▲1)
Manufacture of animal medicaments	1 (-)	Activities of freight forwarders and cargo agents and related services	1 (▲1)
News agency activities	1 (-)	Processing and preserving of other meat and meat products (except poultry)	1 (▲1)
Textbook and study book publishing	1 (-)	Bakeries	1 (▲1)
Manufacture of eyeglasses and optical lenses	1 (-)	Manufacture of work wear and similar garments	1 (▲1)
Renting of other real estate	1 (-)		

Company Age

As of June 30, 2022, the average age of the 153 companies included in our analysis was 8.7 years, showing an increase of 0.3 year compared to the average age of the 109 companies analyzed as of December 31, 2021. When sorted by valuation range, the average age of companies in the USD 793 million-plus range was 10.2 years, while those in the USD 397 million – USD 793 million range had an average age of 8.5 years, and those in the USD 159 million – USD 397 million range had an average age of 8.4 years. Overall, the average age of all three cohorts increased. The youngest company was 0.6 year old and the oldest was 28.2 years old.

[Table 4] Age Distribution of Unicorns and Unicorn Candidates as of June 30, 2022

Valuation Range	Average Company Age (number of years)	Oldest	Youngest
(▲ indicates an HoH increase; ▼ indicates an HoH decrease)			
USD 793 million or more (KRW 1 trillion or more)	10.2 (▲0.6)	19.3 (▲0.5)	1.5 (▲0.5)
USD 397 million - USD 793 million (KRW 500 billion – KRW 1 trillion)	8.5 (▲0.2)	20.4 (▼0.7)	3.3 (▲0.5)
USD 159 million - USD 397 million (KRW 200 billion – KRW 500 billion)	8.4 (▲0.3)	28.2 (▲1.1)	0.6 (▼0.4)
Total	8.7 (▲0.3)	28.2 (▲1.1)	0.6 (▼0.4)

Source: KVIC

Key Takeaways

Our HoH analysis found that KFoF-backed unicorn candidates worth USD 159 million or more typically have an average age of 8.7 years, receive USD 20 million (KRW 25.1 billion) from the KFoF underlying funds, and achieve an average valuation of USD 553 million (KRW 696.5 billion).

Eighteen companies from our previous analysis were excluded from the list of unicorns and unicorn candidates for our HoH analysis here, largely due to their public debuts or M&As. Some companies left from their previous cohort and moved to a different cohort as their valuations grew. Furthermore, 44 new entrants made the list, indicating the expansion of the VC market.

According to our analysis of data on unicorns and unicorn candidates as of June 30, 2022, the number of new entrants to the list increased sharply, although there was the slight drop in the average valuation. This suggests the continued growth of the Korean VC market.

We hope that KVIC's semi-annually updated analysis of unicorns and unicorn candidates will be useful in designing innovative growth policies aimed at fostering unicorn companies in Korea.

Overview of KVIC Industry Classification

KVIC sorts portfolio companies into 9 industries and 36 sub-industries, and collates data accordingly.

- **9 industry categories:** 1) biotechnology/healthcare; 2) ICT services; 3) distribution/services; 4) electrics/machinery/equipment; 5) ICT manufacturing; 6) game; 7) chemicals/materials; 8) film and TV/performing arts/recording; and 9) other.
- **36 sub-industry categories:** 1) medical materials/pharmaceuticals; 2) medical devices; 3) healthcare facilities/services; 4) software; 5) information services; 6) communications; 7) wholesale and retail trade; 8) professional services; 9) transportation; 10) education; 11) accommodation/food services; 12) general purpose machinery; 13) transport equipment and parts; 14) precision instruments; 15) electrical equipment; 16) semiconductor/other electronic components; 17) broadcasting and communications equipment; 18) computer/peripheral equipment; 19) audio and video equipment; 20) game software; 21) sports/leisure; 22) chemical materials/products; 23) metals; 24) non-metallic minerals; 25) rubber/plastics; 26) audiovisual content; 27) publishing/broadcasting; 28) performing arts/exhibition/music; 29) food and beverages; 30) construction; 31) finance; 32) energy/resources; 33) wood/paper/printing/furniture; 34) real estate/renting and leasing; 35) textiles/clothing/leather; and 36) other.

[Table 5] KVIC Industry and Sub-Industry Classification

Industry	Biotechnology/Healthcare	ICT Services	Distribution/Services
Sub-Industry	Medical devices; medical materials/ pharmaceuticals; healthcare facilities/services	Software; information services; communications	Wholesale and retail trade; professional services; transportation; education; accommodation/food services
Industry	Electrics/Machinery/ Equipment	ICT Manufacturing	Game
Sub-Industry	General purpose machinery; transport equipment/parts; precision instruments; electrical equipment	Semiconductor/ other electronic components; broadcasting and communications equipment; computer/peripheral equipment; audio and video equipment	Game software; sports/leisure
Industry	Chemicals/Materials		Film and TV/Performing Arts/Recording
Sub-Industry	Chemical materials/products; metals; non-metallic minerals; rubber/plastics		Audiovisual content; publishing/broadcasting; performing arts/exhibition/music
Industry	Other		
Sub-Industry	Food and beverages; construction; finance; energy/resources		Wood/paper/printing/furniture; real estate/renting and leasing; textiles/clothing/leather; other

Market Watch

Korea Venture Investment Corporation