

Factsheet 31 December 2021

NIKKO AM ARK DISRUPTIVE INNOVATION STRATEGY

Assets are held in the Nikko AM Wholesale ARK Disruptive Innovation Fund. The Nikko AM ARK Disruptive Innovation Fund (retail) and Nikko AM KiwiSaver ARK Disruptive Innovation Fund invest in units in the wholesale fund, which the commentary refers to.

Market Overview

- During December, broad-based global equity indexes - as measured by the MSCI World, appreciated, even though the Omicron variant of the coronavirus and inflation fears damaged consumer confidence.
- Relative to the MSCI World Index, the Consumer Staples, Utilities, and Real Estate sectors outperformed, while the Consumer Discretionary, Communication Services, and Technology sectors lagged.

Fund Highlights

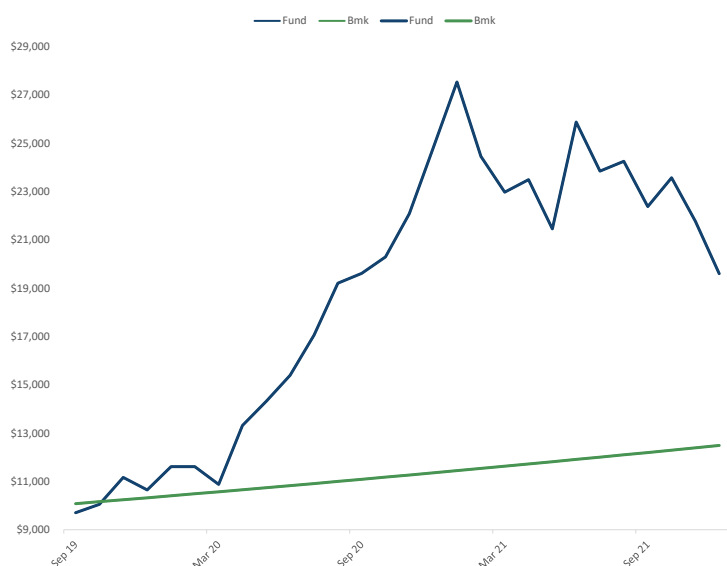
- The fund posted a negative return over the month.
- The top contributors include Intellia Therapeutics (NTLA), Iridium Communications (IRDM), Signify Health
- The top detractors include include Coinbase Global (COIN), Unity Software (U), Block (SQ).

Performance

	One month	Three months	One Year	Three Years (p.a.)
Wholesale ¹	-10.89%	-14.28%	-20.27%	
Retail ³	-9.97%	-12.42%	-20.96%	
KiwiSaver ³	-9.99%	-12.41%	-20.62%	
Benchmark ²	0.80%	2.41%	10.00%	
NASDAQ-100	0.58%	11.82%	33.50%	

1. Returns are before tax and before the deduction of fees.
2. Absolute return of 10% per annum. No fees, expenses or taxes.
3. Returns are before tax and after the deduction of fees and expenses and including tax credits (if any). Based on unit price.

Since Inception – Retail Fund^{3,2}



Investment Manager

The fund invests in the Nikko AM ARK Disruptive Innovation Fund managed by Nikko AM Americas. ARK Investment Management LLC is the Investment Adviser to Nikko AM Americas. Cathie Wood is ARK's founder and portfolio manager and is a highly experienced thematic investor.



ARK's transparent research approach is highly differentiated, seeking to capitalise on insights across multiple mediums.

The fund provides access to a global share portfolio that offers thematic exposure to disruptive innovation across a number of sectors and geographies.

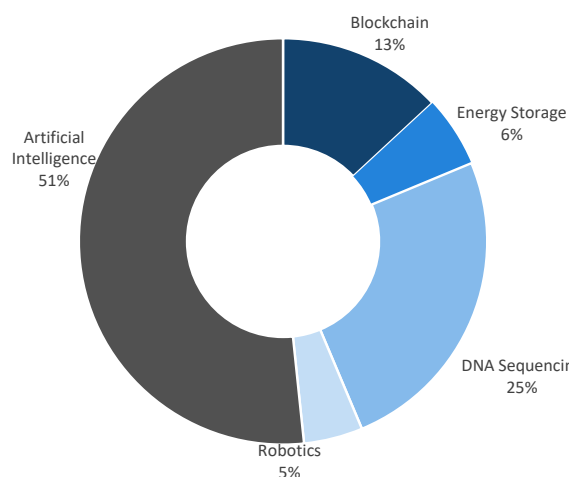
Disruptive innovation is caused by the introduction of new technologically enabled products or services that permanently change an industry or economic sector by providing greater simplicity, accuracy, customisation and accessibility while driving down costs.

Objective

The fund aims to achieve an absolute return of 10% per annum over a rolling five year period before fees, expenses and taxes.

Asset Allocation by Innovation Platform*

*Weights based on Manager's model portfolio, which may vary from the actual portfolio and does not factor in cash positions.



Portfolio Composition (Underlying Fund*)

	%		%
Cloud Computing	15.6	Energy Storage	2.6
Digital Media	14.9	Beyond DNA	2.5
E-Commerce	7.5	3D Printing	2.2
Gene Therapy	7.2	Social Platforms	2.2
Big Data & Machine Learning	6.8	Autonomous Vehicles	2.2
Instrumentation	6.3	Space Exploration	1.4
Blockchain & P2P	5.5	Robotics	1.0
Molecular Diagnostics	5.3	Targeted Therapeutics	0.9
Mobile	5.0	Development Infrastructure	0.8
Internet of Things	4.9	Next Generation Oncology	0.6
Bioinformatics	3.8		

Top 10 Holdings (Underlying Fund*)

	%	Country
Tesla Motors Inc.	8.33	US
Roku Inc.	6.10	US
Teladoc Health Inc.	5.42	US
Zoom Communications Inc	5.31	US
Unity Software Inc.	5.15	US
Coinbase Global Inc.	4.91	US
Spotify Technology Sa	4.23	Sweden
Twilio Inc.	3.79	Canada
Intellia Therapeutics Inc.	3.77	US
Exact Sciences Corp	3.62	US

Market Commentary (source: ARK Investment Management LLC)

During December, broad-based global equity indexes - as measured by the MSCI World, appreciated, even though the Omicron variant of the coronavirus and inflation fears damaged consumer confidence. As measured by the University of Michigan, consumer sentiment dropped to a level last seen at the worst of the coronavirus crisis in 2020. Beneath the surface of broad-based indexes, performance was mixed, if not ominous. According to The Leuthold Group, a record number of constituents in both the S&P 500 and the NASDAQ hit new lows in 2021, roughly 334 and 700 respectively, as the indices hit or approached respective all-time highs. Relative to the MSCI World Index, the Consumer Staples, Utilities, and Real Estate sectors outperformed, while the Consumer Discretionary, Communication Services, and Technology sectors lagged. While fears of inflation have hit stocks with high valuations based on current earnings, other markets do not seem to be discounting the same fears. In our view, long-term inflation fears are overblown, because inventories are stacking up in the face of weak consumption. In November, retail inventories rose more than 2%, the fastest pace since the 1990s, while imports jumped 4.7% and exports dropped 2.0%. Moreover, real consumption (including services) was flat, and the savings rate dropped to 6.9%, below the pre-coronavirus crisis level, leaving less room for future consumption and hoarding. These percent changes are not annualized, so multiply them by twelve to understand the drama unfolding here in the US. Both businesses and consumers seem to have overreacted to supply chain bottlenecks by building “inventories” of goods while government stimulus was flowing freely. In the short term, this has pushed US headline consumer price inflation to 6.8% on a year-over-year basis, a rate that we believe deflationary forces - good, bad, and cyclical, are likely to unwind during the next year. Additionally, the Chinese economy appears to be slowing as the government cracks down on real estate and other sectors, which is beginning to put downward pressure on commodity prices.

Fund Commentary

The top contributors include Intellia Therapeutics (NTLA), Iridium Communications (IRDM), Signify Health (SGFY), Roku (ROKU), and Iovance Biotherapeutics (IOVA). Shares of Intellia Therapeutics (NTLA), a next-generation biopharmaceutical company developing in and ex vivo gene editing therapeutics, contributed to performance on relatively little news during the month. In 2021, Intellia published positive clinical and preclinical results and received an FDA orphan drug designation for one of its gene therapy candidates, positioning it well for 2022, in our opinion. IRDM contributed to performance on relatively little news. ARK believes the company will surprise to the upside as its broadband service, Iridium Certus, grows and moves upmarket in the internet-of-things space. It could see widespread adoption by autonomous solutions. Shares of Roku traded up after reaching a multiyear agreement with Google to keep YouTube and YouTube TV on its platform. Roku is a leading player in the TV operating space with over 56 million active accounts.

The top detractors include Coinbase Global (COIN), Unity Software (U), Block (SQ), Tesla (TSLA), and Zoom Video Communications (ZM). In December, several crypto-related firm executives testified in front of Congress to help educate regulators on crypto’s potential. ARK believes regulation is crucial because it will open the doors for more investors. COIN traded down during the month, perhaps due to the broader crypto-market decline. After a relatively strong run, shares of Unity gave back during December. Shares were pressured as Director David Helgason sold 260k shares (~\$42 million) early in the month. Investors also reacted negatively upon the announcement of Unity’s acquisition of segments of Weta Digital. ARK, in contrast, looks at the acquisition as amenable to Unity’s expansion into high-performance game development, offering a hyper-realistic game engine to strengthen its position against Epic Games’ Unreal Engine. Square changed its name to Block as the company continues to focus on developing blockchain technology solutions, including a new feature this month that allows Cash App users to gift bitcoin. The name likely also symbolizes the fact that Square, now Block, has evolved separate businesses united by the company’s new name. Shares of Block traded down during the month.

Key Fund Facts

Distributions: Generally does not distribute	Estimated annual fund charges (Incl. GST)	Strategy Launch	Strategy size
Hedging: Any foreign currency exposure is unhedged.	Retail: 1.30%, refer PDS for more details	4 September 2019	\$83.8m
	KiwiSaver: 1.25% refer to PDS for more details		

Investment Manager *The fund invests in the Nikko AM ARK Disruptive Innovation Fund (the **Underlying Fund**), a sub-fund of the Nikko AM Global Umbrella Fund - an open-ended investment company established under Luxembourg law as a société d'investissement à capital variable (SICAV).

Contact Us www.nikkoam.co.nz | nzenquiries@nikkoam.com

This document is issued by Nikko Asset Management New Zealand Limited (Company No. 606057, FSP No. FSP22562), the investment manager of the Nikko AM NZ Investment Scheme, the Nikko AM NZ Wholesale Investment Scheme and the Nikko AM KiwiSaver Scheme. This information is for the use of researchers, financial advisers and wholesale clients. This material has been prepared without taking into account a potential investor’s objectives, financial situation or needs and is not intended to constitute personal financial advice, and must not be relied on as such. Recipients of this document, who are not wholesale investors (in accordance with Schedule 1, Clause 3 Financial Markets Conduct Act 2013), or their duly appointed agent, should consult a Financial Advice Provider and the relevant Product Disclosure Statement. Past performance is not a guarantee of future performance. While we believe the information contained in this presentation is correct at the date of presentation, no warranty of accuracy or reliability is given and no responsibility is accepted for errors or omissions including where provided by a third party. For full details on the fund, please refer to our Product Disclosure Statement on nikkoam.co.nz.