nikko am
Nikko Asset Management

NIKKO AM ARK GLOBAL DISRUPTIVE INNOVATION FUND

Fund Update

Fund Performance (%) AUD

	1 Mth	3 Mths	6 Mths	1 Yr	2 Yrs p.a.	3 Yrs p.a.	Since Inception p.a.
Fund growth return (net)	3.59	5.46	-2.38	-37.60	-40.00	-10.40	-3.40
Fund distribution return (net)	0.00	0.00	0.00	0.00	0.00	0.07	0.05
Total Fund return (net)	**3.59**	**5.46**	**-2.38**	**-37.60**	**-40.00**	**-10.33**	**-3.35**
MSCI All Countries World Index*	1.50	-0.69	5.04	-1.28	6.56	7.19	7.76

Source: Citi. Total Fund net returns are post fees, pre tax using redemption prices and assume reinvestment of distributions. Fund growth return is the change in redemption prices over the period. Fund distribution return equals Total Fund minus Fund growth return. Past performance is not an indicator of future performance. Inception date: August 2018.

*Reference Index shown for illustrative purposes only: MSCI All Countries World Index (with net dividends reinvested) expressed in Australian dollars (unhedged).

The Fund outperformed broad based global equities during the month (net).

Key contributors to absolute performance:

- **Tesla** shares saw gains on signs that recent price cuts are spurring demand for its Model Y. The stock also rallied after Ford announced that it halted production and shipments of its electric F-150 Lightning pickup due to a battery issue. Lastly, the Mexico President held a call with Tesla in anticipation of the announcement of a new plant near Monterrey. This will be one of eight new Gigafactories as part of the company's goal to produce 20 million vehicles a year by the end of 2030.
- **Roku** shares rallied after the company delivered a fourth quarter earnings beat, topping Wall Street expectations. During the quarter active accounts jumped 16% year over year, and streaming hours rose 23% year over year. The company also reaffirmed its commitment to deliver positive adjusted EBITDA in 2024 through a combination of operating expense control and revenue growth.
- **DraftKings** traded up after the company reported fourth-quarter earnings that surpassed analysts' estimates. Revenue surged 81% year-over-year, and management raised guidance for 2023. DraftKings is a sports betting, iGaming, and fantasy sports platform in the US and Canada.
- **Coinbase** traded up as the U.S. Securities and Exchange Commission (SEC) proposed a rule setting new restrictions on asset manager exposure to crypto assets and expanding the types of assets that require qualified custodians. Coinbase's Chief Legal Officer, Paul Grewal, reiterated that the SEC already recognizes Coinbase as a qualified custodian and should continue to do so under the new rule. Coinbase is a centralized cryptocurrency exchange serving both retail and institutional clients.
- **Twilio** shares traded up as the company delivered an earnings beat and a 21.6% YoY revenue growth. Following the company's layoffs in February, in an effort to drive meaningful cost savings, Twilio provided improved operating margins guidance and lowered stock compensation as a percentage of revenue in the near term. Lastly, the stock received another boost after its CEO Jeff Lawson bought $10 million worth of company stock.

Key detractors from absolute performance:

- **Shopify** traded down after the company reported fourth-quarter earnings. Gross merchandise volume (GMV) across Shopify merchants and total revenue grew 13% and 25%, respectively, on a year-over-year basis. For the first quarter, management expects total revenue growth to decelerate to the high teens. That said, Shopify has developed several business lines that could reaccelerate growth—Shopify Fulfilment Network and Shopify Components—as could the continued adoption of Shop Pay and a cyclical rebound in e-commerce demand.
- **Unity Software** traded down after the company's fourth quarter report, which included recently acquired ironSource, revenue growth was 43% year-over-year and, according to management, will accelerate in the range of 47% to 50% in the first quarter and 47% to 58% for the year, both growth rates were lower than consensus expectations. Management explained that the assumptions behind those forecasts are conservative, including no recovery in the mobile gaming market even though it seems to have stabilized. Meanwhile, strong execution has increased non-gaming to 30% of Create revenue. ARK's conviction remains high that Unity will maintain leadership as the 2D and 3D asset engine and monetization platform of choice for developers across many verticals.
- **Twist Bioscience** traded down after the company issued

light fiscal second quarter revenue guidance based on a weaker-than-expected biopharma outlook. Twist left full-year and long-term top guidance intact, based on a 30% growth in quarterly order bookings that should generate revenue in the second half of the year. Historically, Twist has generated about 55-60% of its revenue in the second half. In ARK's view, Twist Biosciences is the preeminent provider of synthetic biology reagents and tools, particularly oligonucleotides, to the translational research and clinical markets. Its oligo pools have high target-enrichment efficiency that reduces customer operating expenses meaningfully. In addition, the company is likely to dominate the DNA storage market, specifically for write-once-read-never (WORN) datasets.

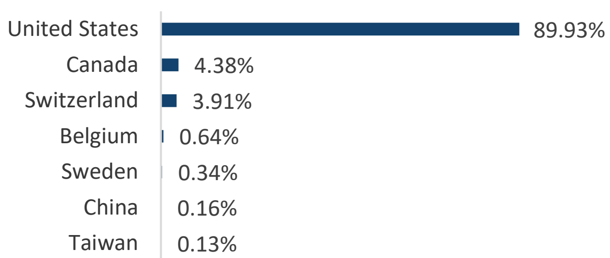
- **Gingko Bioworks** delivered a fourth quarter earnings beat, but traded down due to their lower 2023 full-year revenue guidance. This reduction in YoY revenue was foreseen due to the outsized performance in their biosecurity segment due to COVID-19. Nevertheless, the company also aims to add 100 new Cell Programs to its Foundry platform in 2023, targeting revenue of least $175 million. ARK maintains that Ginkgo's platform remains on its trajectory toward profitability and success.
- **Exact Sciences** traded down despite announcing a fourth quarter earnings beat and in-line guidance for 2023. ARK expects that as Exact's diagnostic capabilities continue to expand into indications other than colorectal cancer, the company will be well situated to replicate the standard-of-care status Cologuard has achieved in these other testing areas.

Top 10 Holdings – Underlying Fund*

Security Name	% of Fund
Tesla	9.88
Roku	8.53
Zoom Video Communications	8.16
Block	5.98
Exact Sciences Corp	5.12
Coinbase Global	4.84
UiPath	4.49
Shopify	4.38
Twilio	4.22
DraftKings	3.99

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

Country Exposure – Underlying Fund*



Portfolio Composition – Underlying Fund*

Element	Exposure (%)
Cloud Computing	18.45
Digital Media	13.89
E-Commerce	9.43
Gene Therapy	7.87
Instrumentation	7.00
Big Data & Machine Learning	6.37
Internet of Things	5.72
Mobile	5.54
Blockchain & P2P	5.24
Molecular Diagnostics	4.46
Beyond DNA	3.41
Energy Storage	3.36
Bioinformatics	2.24
Social Platforms	1.90
Autonomous Vehicles	1.14
3D Printing	1.12
Development of Infrastructure	0.99
Robotics	0.84
Targeted Therapeutics	0.64
Next Generation Oncology	0.40

Market Outlook

Broad-based global equity indexes (as measured by the MSCI World) pulled back following the release of higher-than-expected inflation reports in the US and Europe and a tighter than expected US labour market. Federal Reserve members ratcheted up hawkish commentary. The markets appear to be focused solely on the Fed's interest rate path, whipsawing with every public appearance. In ARK's view, the Fed is playing a dangerous game. In the real estate market, large platers defaulted on commercial property mortgages across major US cities, partly influenced by the historically rapid increase in rates and lower occupancy rates from a workforce shift to hybrid or remote environments.

Almost all major sectors within the MSCI World Index performed negatively in February, the Technology sector performed the best during the month and finished flat. Some of the largest beneficiaries of the rotation to cyclicals – Energy and Financial Services – could be disrupted significantly during the next five years. In ARK's view, autonomous electric vehicles and digital wallets, including blockchain technologies, cryptocurrencies, and decentralized financial services (DeFi), will disrupt and disintermediate both Energy and Financial Services.

Since March 2021, the yield curve (as measured by the difference between yields on the 10-year Treasury bond and the 2-year Treasury note) has flattened 248 basis points, from 159 to -89 basis points, suggesting that if the Federal Reserve does not pull back its rate increases, both real growth and inflation could continue to surprise on the low side of expectations. US consumer sentiment (as of February 2023, measured by the University of Michigan) ticked up to levels slightly above those last seen during the 2008-2009 Global Financial Crisis and the early 1980s when the economy suffered two recessions and inflation and interest rates hit double digits, but is still below levels seen during COVID. Meanwhile, according to Federal Reserve Economic Data (FRED), the consumer saving rate has collapsed from 33% to 4.7%, near levels last seen during the 2008-2009 Global Financial Crisis, suggesting that consumers do not have the means for significant real consumption growth. Additionally, unprecedented stimulus during the COVID crisis helped consumers reduce their credit card debt burden. That said, credit card debt is now 9.5% higher than before the crisis, and interest rates have skyrocketed to 19%.

The combination of geopolitical forces and inventory hoarding pushed US consumer price inflation, a lagging indicator of inflation, to 6.4% on a year-over-year basis, a rate that ARK believes deflationary forces, good, bad, and cyclical, will continue to unwind. Tesla's CEO Elon Musk and Doubleline's CEO Jeff Gundlach have echoed ARK's concerns about the risk of deflation.

Innovation is the source of good deflation, as learning curves cut costs and increase productivity. Yet, ARK believes many companies have catered to the short-term-oriented, risk-averse shareholders and have satisfied demands for profits/dividends "now". As a result, many have leveraged their balance sheets to buy back stock, bolster earnings, and increase dividends. In so doing, many have curtailed investments in innovation and could be ill-prepared for the impact of disintermediation associated with disruptive innovation. Saddled with aging products and services, they could be forced to cut prices to clear unwanted inventories and service debt, causing bad deflation.

If ARK is correct in their assessment that growth, inflation, or both will surprise on the low side of expectations, scarce double-digit growth opportunities should be rewarded accordingly. The adoption of new technologies typically accelerates as concerned businesses and consumers change their behaviour much more rapidly than otherwise would be the case, giving new leadership an opportunity to surface in the equity market. ARK believes the coronavirus crisis and Russia's invasion of Ukraine have transformed the world significantly and permanently, suggesting that many innovation-driven strategies and stocks could be productive holdings during the next five to ten years.

In ARK's view, the wall of worry built on the back of high multiple stocks bodes well for equities in the innovation space. The strongest bull markets do climb a wall of worry, a fact that those making comparisons to the tech and telecom bubble seem to forget. No wall of worry existed or tested the equity market in 1999. This time around, the wall of worry has scaled to enormous heights.

While the 2022 bear market obscured many disruptive breakthroughs, innovation continued apace thanks to artificial intelligence (AI), genomics, and space exploration, among others. ChatGPT, a version of GPT-3 tuned for conversation dialogue, already scores above the national average on SAT questions, highlighting the power of AI. In the UK, a research hospital used an advanced version of gene editing called base editing to cure a 12-year-old girl with leukaemia who had failed dozens of therapies. SpaceX launched 61 Falcon9 rockets, reusing the last one within 21 days, compared to 356 days for the first one. In ARK's view, companies sacrificing short-term profitability to invest heavily in innovative technologies will enjoy exponential and highly profitable long-term growth opportunities.

Key Facts

Responsible Entity
Yarra Investment Management Limited

APIR Code
NIK1854AU

Investment Adviser
ARK Investment Management LLC

Asset Allocation (via Underlying Fund)

Global Equity	(Min 90%, Max 100%)
Cash	(Min 0%, Max 10%)

Buy/Sell Spread
0.20%/0.20%

Management Cost
1.35% p.a.

Distribution Frequency
Annual^

Fund Size
AUD 59.98 million

Minimum Investment
AUD 10,000

^We expect annual income distributions to be minimal or nil at times.

Contact Us

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Important Information

the future from investments in any asset or asset class described herein. If any of the assumptions used do not prove to be true, results may vary substantially. These targets are being shown for informational purposes only.