Why Invest in Fintech Innovation?

For Informational Purposes Only  |  As of September 30, 2023
Risks of Investing in Innovation

Please note: Companies that ARK believes are capitalizing on disruptive innovation and developing technologies to displace older technologies or create new markets may not in fact do so. ARK aims to educate investors and seeks to size the potential investment opportunity, noting that risks and uncertainties may impact our projections and research models. Investors should use the content presented for informational purposes only, and be aware of market risk, disruptive innovation risk, regulatory risk, and risks related to certain innovation areas.

Please read risk disclosure carefully.

→ Aim for a cross-sector understanding of technology and combine top-down and bottom-up research.

→ Aim to understand the regulatory, market, sector, and company risks. (See Disclosure Page)

Sources: ARK Investment Management LLC, 2023.
Definitions, Risk & Disclosure Associated with Fintech

Disruptive Innovation Risk. Companies that ARK believes are capitalizing on disruptive innovation and developing technologies to displace older technologies or create new markets may not in fact do so. Companies that initially develop a novel technology may not be able to capitalize on the technology. Companies that develop disruptive technologies may face political or legal attacks from competitors, industry groups or local and national governments. These companies may also be exposed to risks applicable to sectors other than the disruptive innovation theme for which they are chosen, and the securities issued by these companies may underperform the securities of other companies that are primarily focused on a particular theme.

Financial Technology Risk. Companies that are developing financial technologies that seek to disrupt or displace established financial institutions generally face competition from much larger and more established firms. Fintech innovation companies may not be able to capitalize on their disruptive technologies if they face political and/or legal attacks from competitors, industry groups or local and national governments. Blockchain technology is new and many of its uses may be untested. Blockchain and Digital commodities and their associated platforms are largely unregulated, and the regulatory environment is rapidly evolving. As a result, companies engaged in such blockchain activities may be exposed to adverse regulatory action, fraudulent activity or even failure.

Software Industry Risk. The software industry can be significantly affected by intense competition, aggressive pricing, technological innovations, and product obsolescence. Companies in the software industry are subject to significant competitive pressures, such as aggressive pricing, new market entrants, competition for market share, short product cycles due to an accelerated rate of technological developments and the potential for limited earnings and/or falling profit margins. These companies also face the risks that new services, equipment or technologies will not be accepted by consumers and businesses or will become rapidly obsolete. These factors can affect the profitability of these companies and, as a result, the value of their securities. Also, patent protection is integral to the success of many companies in this industry, and profitability can be affected materially by, among other things, the cost of obtaining (or failing to obtain) patent approvals, the cost of litigating patent infringement and the loss of patent protection for products (which significantly increases pricing pressures and can materially reduce profitability with respect to such products). In addition, many software companies have limited operating histories. Prices of these companies' securities historically have been more volatile than other securities, especially over the short term.

Internet Company Risk. Many Internet-related companies have incurred large losses since their inception and may continue to incur large losses in the hope of capturing market share and generating future revenues. Accordingly, many such companies expect to incur significant operating losses for the foreseeable future and may never be profitable. The markets in which many Internet companies compete face rapidly evolving industry standards, frequent new service and product announcements, introductions and enhancements, and changing customer demands. The failure of an Internet company to adapt to such changes could have a material adverse effect on the company's business.

Wallet Definitions and Risks:

Desktop wallets: Desktop wallets are software that can be downloaded to your PC or laptop that allow you to store your private keys on that computer.

Mobile app wallets: Mobile app wallets are apps that let you store your keys on your mobile device. Many mobile app wallets allow you to use your cryptocurrencies for small retail transactions with certain businesses.

Private Key. A private key is like a password — a string of letters and numbers — that allows you to access and manage your crypto funds.

Online wallets: Online wallets are a type of software that lets you store and access your keys from any Internet-connected device. In this case, your private keys are stored remotely on third-party servers owned by the provider of the online wallet. You create a username and password just as you would for a traditional online bank account and then you are able to use the software easily. Online wallets are commonly associated with cryptocurrency exchanges, which are entities that facilitate the trading of fiat currency for cryptocurrencies.

Digital Wallet Risk. Digital wallets are convenient because you don't have to memorize your private key, write it down or store it elsewhere. However, a downside of wallets is that they, like any service connected to the Internet, are vulnerable to hackers and malicious code. Desktop and mobile app wallets that store keys locally on a device are susceptible to loss, destruction and theft. For example, if you lose your phone that has a mobile app wallet that stores your cryptocurrency keys, you may permanently lose your investment.
Digital Wallets Are Gaining Share In Online And Offline Transactions

In 2021, digital wallets facilitated 49% of e-commerce transactions, up from 18% in 2016. Since 2016, digital wallets have been gaining share at the expense of credit cards, bank transfers, and cash.

In 2021, digital wallets facilitated 29% of offline transactions, nearly double the 16% in 2018. Overtaking cash as the primary means of offline transactions during the COVID pandemic in 2020, digital wallets continue to gain share.

Sources: ARK Investment Management LLC, 2023. Worldpay, LLC 2017; Worldpay, LLC 2018; FIS 2020; FIS 2021; FIS 2022. Forecasts are inherently limited and cannot be relied upon. For informational purposes only and should not be considered investment advice or a recommendation to buy, sell, or hold any particular security. Past performance is not indicative of future results. Most recent data available as of December 31, 2022.
Digital Wallets Create Closed-Loop Ecosystems For Consumers and Merchants

After acquiring billions of users, digital wallets are onboarding millions of merchants to platforms that enable direct consumer-merchant transactions that disintermediate traditional financial institutions.*

*We estimate Cash App’s annual active users in 2022 using public filings, public investor presentations and conferences, and third-party mobile app data. We estimate the number of merchants within Block’s ecosystem by taking the average total payment volume (TPV) per annual active merchant account as disclosed in PayPal’s public filings and divide the figure by our estimate for Block’s consolidated TPV in 2022. Alipay’s consumer and merchant count source citations published in 2021 and 2020, respectively. PayPay and Kaspi’s consumer and merchant estimates are from each company’s second fiscal quarter and third fiscal quarter filings, respectively. Sources: ARK Investment Management LLC, 2023. Block, Inc, data as of 12/29/22; Sensor Tower Inc, data as of 01/25/23; Kaur, D. 2022; China Internet Watch 2022; Z Holdings, data as of 01/17/23; Kaspi, data as of 01/17/23. Forecasts are inherently limited and cannot be relied upon. For informational purposes only and should not be considered investment advice or a recommendation to buy, sell, or hold any particular security. Past performance is not indicative of future results.
**Digital Wallets Eliminate Middlemen By Enabling Direct Payments Between Consumers And Merchants**

In the traditional payment chain, several intermediaries take tolls on payments* between consumers and merchants. By enabling in-network transactions, digital wallet providers capture more value per transaction and can share the savings with merchants and consumers.

**Traditional Open-Loop Credit And Debit Card Transaction**

Steps Between Buyer and Seller: 9  
Estimated Intermediary Fees: 2.6%

**Closed-Loop Balance-Funded Transaction**

Steps Between Buyer and Seller: 3  
Estimated Savings: 2.4%

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*Estimated fees and payment processes are rendered for illustrative purposes only and are based on sources specific to payment infrastructure in the United States. To estimate intermediary fees under the current payment value chain in the US, we embed our estimate for interchange, card network, issuer, acquirer, and PSP fees. We assume that a closed-loop transaction can eliminate interchange, card network, issuer, and legacy acquirer fees, but we add back estimated costs associated with topping up digital wallet balances and usage of modern payment facilitators. Sources: ARK Investment Management LLC, 2023. Forecasts are inherently limited and cannot be relied upon. For informational purposes only and should not be considered investment advice or a recommendation to buy, sell, or hold any particular security. Past performance is not indicative of future results.
Closed-Loop Transactions Could Boost The Margin Structure Of Digital Wallet Providers

In 2022, Block paid ~60% of customer transaction fees to third parties for interchange, assessment, processing, and bank settlement fees. If Cash App customers were to use their balances to transact with Block merchants, Block's net take rate could more than double.*

*In the above exercise, we illustrate a scenario in which Block captures 100% of the cost savings associated with the implementation of closed-loop transactions. In reality, we believe the benefits of such cost savings will be shared across Payment Service Providers (PSPs), consumers, and merchants. To calculate Block's gross take rate, we divide consolidated gross payment volume (GPV) by total transaction revenue. To calculate Block's net take rate, we divide total transaction gross profit by total GPV. We use the summed data disclosed by Block through the first three fiscal quarters of 2022. We embed 0.21% in costs associated with closed-loop transactions, attributable to ACH transactions and usage of third-party payment facilitators that help distribute the payment method to merchants. Sources: ARK Investment Management LLC, 2023. Block, Inc., data as of 01/19/23. Forecasts are inherently limited and cannot be relied upon. For informational purposes only and should not be considered investment advice or a recommendation to buy, sell, or hold any particular security. Past performance is not indicative of future results.
Public Blockchains Minimize The Need To Trust Centralized Authorities

Public blockchains shift the distribution of trust, potentially replacing institutions that rely on centralized authorities with decentralized, open-source software. The first profound application was self-sovereign, digital money. While centralized institutions must coordinate the functions of a financial system, public blockchains can operate as single, decentralized institutions. Instead of relying on accountants, regulators, and governments, public blockchains rely on a global network of peers to enforce rules.

### Traditional Institutions
- Manual, Centralized, Less Consistent, Opaque
  - Visa
  - J.P. Morgan
  - Federal Reserve
  - Transaction Settlement
  - Custody and Asset Management
  - Monetary Policy

### Public Blockchains
- Automated, Distributed, Consistent, Transparent
  - A distributed monetary system that facilitates the transfer and custody of scarce digital assets.
  - Transaction Settlement
  - Custody and Asset Management
  - Monetary Policy

Note: Each entity presented above is a representative sample of a "name brand" in their respective verticals. Forecasts are inherently limited and cannot be relied upon. For informational purposes only and should not be considered investment advice, or a recommendation to buy, sell or hold any particular security. Source: ARK Investment Management LLC, 2023
Public Blockchains Have Unique Characteristics

Public blockchain infrastructure serves as the backbone for new forms of economic coordination: it minimizes the need to trust centralized institutions. The decentralized, open, and permissionless characteristics of public blockchains lower the cost of coordination, among other potential advantages.

<table>
<thead>
<tr>
<th>Status Quo Infrastructure</th>
<th>Public Blockchain Infrastructure</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Centralized</strong></td>
<td><strong>Decentralized</strong></td>
</tr>
<tr>
<td>Central authorities mediate network activity</td>
<td>Distributed computer nodes mediate network activity</td>
</tr>
<tr>
<td><strong>Closed-Source</strong></td>
<td><strong>Open-Source</strong></td>
</tr>
<tr>
<td>Network rules are determined behind closed doors at the discretion of companies, platforms, and regulators</td>
<td>Network rules are open and auditable, coordinated by users and stakeholders</td>
</tr>
<tr>
<td><strong>Corporate-Run</strong></td>
<td><strong>User-Run</strong></td>
</tr>
<tr>
<td>Corporations facilitate coordination, often excluding network participants</td>
<td>Network participants facilitate coordination through a fair system of checks and balances</td>
</tr>
<tr>
<td><strong>Permissioned</strong></td>
<td><strong>Permissionless</strong></td>
</tr>
<tr>
<td>Geography and regulation control access to platforms</td>
<td>Anyone with an internet connection can participate and innovate</td>
</tr>
</tbody>
</table>
5 Reasons Investors Should Consider ARKF

1. **Exposure To Innovation**: Aims for thematic multi-cap exposure to fintech innovations including mobile payments, digital wallets, peer-to-peer lending, blockchain technology, and risk transformation.

2. **Growth Potential**: Aims to capture long-term growth with low correlation of relative returns to traditional growth strategies and negative correlation to value strategies.

3. **Tool For Diversification**[^1]: Offers a tool for diversification due to little overlap with traditional indices. It can be a complement to traditional value and growth strategies.

4. **Grounded In Research**: Combines top-down and bottom-up research in its portfolio management to identify innovative fintech companies and convergence across markets.

5. **Cost Effective**: Seeks to provide a lower cost alternative to mutual funds with true active management in an exchange traded fund (ETF) that invests in rapidly moving themes.

[^1]: Diversification does not assure a profit. The information herein is general in nature and should not be considered financial advice. An investor should consult a financial professional regarding the investor’s specific situation.
ARK Fintech Innovation ETF — ARKF

ARK’s Fintech Innovation ETF focuses on innovations that are revolutionizing the financial industry. Regulatory changes have shifted the economics of intermediating capital, reconfiguring the value-chain and allowing exploitation by competitors. Technology is changing the ability of financial institutions to assess risk, interact with customers, and facilitate transactions.

- Ticker: ARKF
- Fund AUM: $832.3 Million
- Typical Number of Holdings: 30-50 U.S. Equities/U.S.-listed ADRs
- Expense Ratio: 0.75%

### TOP 10 HOLDINGS

<table>
<thead>
<tr>
<th>Company</th>
<th>Weight (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>COINBASE GLOBAL INC - CLASS A</td>
<td>10.2%</td>
</tr>
<tr>
<td>SHOPIFY INC - CLASS A</td>
<td>8.7%</td>
</tr>
<tr>
<td>DRAFTKINGS INC-CL A</td>
<td>7.1%</td>
</tr>
<tr>
<td>BLOCK INC</td>
<td>6.8%</td>
</tr>
<tr>
<td>UIPATH INC - CLASS A</td>
<td>6.5%</td>
</tr>
<tr>
<td>TWILIO INC - A</td>
<td>5.8%</td>
</tr>
<tr>
<td>ROBINHOOD MARKETS INC - A</td>
<td>5.0%</td>
</tr>
<tr>
<td>GLOBAL-E ONLINE LTD</td>
<td>5.0%</td>
</tr>
<tr>
<td>INTUIT INC</td>
<td>4.0%</td>
</tr>
<tr>
<td>MERCADOLIBRE INC</td>
<td>3.9%</td>
</tr>
</tbody>
</table>

Total: 63.1%

### TECHNOLOGY BREAKDOWN

<table>
<thead>
<tr>
<th>Category</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digital Wallets</td>
<td>28.7%</td>
</tr>
<tr>
<td>Intelligent Devices</td>
<td>23.0%</td>
</tr>
<tr>
<td>Next Gen Cloud</td>
<td>17.9%</td>
</tr>
<tr>
<td>Neural Networks</td>
<td>15.8%</td>
</tr>
<tr>
<td>Cryptocurrencies</td>
<td>8.2%</td>
</tr>
<tr>
<td>Smart Contracts</td>
<td>6.0%</td>
</tr>
</tbody>
</table>

### SECTORS

<table>
<thead>
<tr>
<th>Sector</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financials</td>
<td>41.3%</td>
</tr>
<tr>
<td>Information Technology</td>
<td>31.7%</td>
</tr>
<tr>
<td>Consumer Discretionary</td>
<td>16.0%</td>
</tr>
<tr>
<td>Communication Services</td>
<td>8.3%</td>
</tr>
<tr>
<td>Health Care</td>
<td>2.1%</td>
</tr>
<tr>
<td>Real Estate</td>
<td>0.5%</td>
</tr>
</tbody>
</table>

Holdings are subject to change and should not be considered as investment advice, or a recommendation to buy, sell or hold any particular security. It should not be assumed that an investment in the securities identified was or will be profitable.

Source: ARK Investment Management LLC; All data as of September 30, 2023.
Thematic Strategies Focused on Disruptive Innovation

ARKK
ARK Innovation ETF

ARKW
ARK Next Generation Internet ETF

ARKQ
ARK Autonomous Tech. & Robotics ETF

ARKG
ARK Genomic Revolution ETF

ARKF
ARK Fintech Innovation ETF

ARKX
ARK Space Exploration & Innovation ETF

PRNT
The 3D Printing ETF

IZRL
Israel Innovative Technology ETF
Investors should carefully consider the investment objectives and risks as well as charges and expenses of an ARK ETF before investing. This and other information are contained in the ARK ETFs’ prospectuses, which may be obtained by visiting www.ark-funds.com. The prospectus should be read carefully before investing.

Investing in securities involves risk and there's no guarantee of principal.

**Fund Risks:** The principal risks of investing in ARKF: Equity Securities Risk. The value of the equity securities the Fund holds may fall due to general market and economic conditions. Foreign Securities Risk. Investments in the securities of foreign issuers involve risks beyond those associated with investments in U.S. securities. Financial Technology Risk. Companies that are developing financial technologies that seek to disrupt or displace established financial institutions generally face competition from much larger and more established firms. Fintech Innovation Companies may not be able to capitalize on their disruptive technologies if they face political and/or legal attacks from competitors, industry groups or local and national governments. A Fintech Innovation Company may not currently derive any revenue, and there is no assurance that such company will derive any revenue from innovative technologies in the future. Technology companies may have limited product lines, markets, financial resources or personnel. The products of technology companies may face rapid product obsolescence due to technological developments and frequent new product introduction, unpredictable changes in growth rates and competition for the services of qualified personnel. Blockchain technology is new and many of its uses may be untested. Blockchain and Digital commodities and their associated platforms are largely unregulated, and the regulatory environment is rapidly evolving. Because blockchain works by having every transaction build on every other transaction, participants can self-policing any corruption, which can mitigate the need to depend on the current level of legal or government safeguards to monitor and control the flow of business transactions. As a result, companies engaged in such blockchain activities may be exposed to adverse regulatory action, fraudulent activity or even failure. Digital assets that are represented and trade on a blockchain may not necessarily benefit from viable trading markets. For other risks regarding the fund please see the prospectus. Disruptive Innovation Risk. Companies that ARK believes are capitalizing on disruptive innovation and developing technologies to displace older technologies or create new markets may not in fact do so. Companies that initially develop a novel technology may not be able to capitalize on the technology. Companies that develop disruptive technologies may face political or legal attacks from competitors, industry groups or local and national governments. These companies may also be exposed to risks applicable to sectors other than the disruptive innovation theme for which they are chosen, and the securities issued by these companies may underperform the securities of other companies that are primarily focused on a particular theme. Digital Wallet Risk. Digital wallets are convenient because you don’t have to memorize your private key, write it down or store it elsewhere. However, a downside of wallets is that they, like any service connected to the internet, are vulnerable to hackers and malicious code. Desktop and mobile app wallets that store keys locally on a device are susceptible to loss, destruction and theft. For example, if you lose your phone that has a mobile app wallet that stores your cryptocurrency keys, you may permanently lose your investment.

Shares of ARKF are bought and sold at market price (not NAV) and are not individually redeemed from the ETF. ETF shares may only be redeemed directly with the ETF at NAV by Authorized Participants, in very large creation units. There can be no guarantee that an active trading market for ETF shares will develop or be maintained, or that their listing will continue or remain unchanged. Buying or selling ETF shares on an exchange may require the payment of brokerage commissions and frequent trading may incur brokerage costs that detract significantly from investment returns.

Securities in the ETF’s portfolio will not match those in any index. The active ETFs are benchmark agnostic and corresponding portfolios may have significant non-correlation to any index. Index returns are generally provided as an overall market indicator. You cannot invest directly in an index. Although reinvestment of dividend and interest payments is assumed, no expenses are netted against an index’s returns. An indication of interest in response to this advertisement will involve no obligation or commitment of any kind.

Portfolio holdings will change and should not be considered as investment advice or a recommendation to buy, sell or hold any particular security. Please visit www.ark-funds.com for the most current list of holdings for the ARK ETFs.

The information herein is general in nature and should not be considered financial, legal or tax advice. An investor should consult a financial professional, an attorney or tax professional regarding the investor's specific situation. Certain information was obtained from sources that ARK believes to be reliable; however, ARK does not guarantee the accuracy or completeness of any information obtained from any third party.

ARK Investment Management LLC is the investment adviser to the ARK ETFs.

Foreside Fund Services, LLC, distributor.