APPENDIX A: ECOSYSTEM ACTORS

Savers and Investors: Providers of Capital

Functionally, these are the actors with the surplus of capital described in the fundamental transaction.

The primary examples are investors and savers who may channel their wealth either directly without intermediation, indirectly with the intermediation of collective vehicles (particularly asset owners, such as pension funds and insurance companies), or through private wealth management.

Asset owners: Investors of Capital

These actors operate between providers and users of capital providing an investment management collective vehicle that facilitates the fundamental transaction. The collective vehicle is owned by the underlying members of the fund concerned. Although strictly speaking asset owners are agents of these members, they generally operate like principals in a mutual structure (that is, their profits are shared by their members).

The primary examples are pension funds, endowments and charities, and sovereign wealth funds.

Asset Managers: Investors of Capital

Like asset owners, these actors operate between providers and users of capital providing investment management services that facilitate the fundamental transaction. They are differentiated from asset owners through the nature of their function generally being the agent to the asset owners. They do not assume balance sheet risk the way that the asset owner or the end investor does. They also generally operate in a for-profit structure (profits are shared by their shareholders). We include private wealth firms here, although there is a case to include them as asset owners (in the case of family offices) or intermediaries.

The primary examples are asset management entities—generally independent asset management firms, banks, and insurance companies. This category also includes shadow banking system actors, like venture capitalists, private equity, hedge funds, and special investment vehicles.

Financial intermediaries

These actors operate between providers and users of capital providing services that facilitate the fundamental transaction. Functions provided by financial intermediaries in service of the ecosystem are brokering the relationship between providers and users of capital; gathering capital from multiple providers so that users of capital can attain scale; performing due diligence on users of capital, legal underwriting, and creation of assets/securities; and so on.

Examples include investment banks, commercial banks, brokers, consultants, custodians, exchanges, index providers, data providers.

Firms: Users of Capital

These are the actors with the deficit of capital and surplus of good ideas described in the fundamental transaction. Their function in the ecosystem is to provide return opportunities for the benefit of all actors. These actors end up as asset issuers making use of capital markets. They also act as sponsors of pension funds. Because asset management companies are firms, some overlaps exist.

Examples include: inventors, entrepreneurs, and businesses. The largest examples are publicly listed companies. Examples of assets/securities issued in exchange for capital include stocks, bonds, preferred stocks, mortgages, and private loans.

Regulators and Nongovernmental Organizations

These actors have influence over the entirety of the financial ecosystem. They have the authority to affect the nature of the fundamental transaction, as well as the actions of all actors in the ecosystem. Functionally, these various organizations ensure that the integrity of the fundamental transaction is maintained, that protection is assured for each actor, and that the ecosystem has minimum quality standards.

Examples include governments that make laws regulating the financial ecosystem; central banks that set monetary policy for the ecosystem; regulators that enforce the laws governing the ecosystem; securities regulators that enforce rules governing how capital and assets are exchanged; stock exchanges that set listing requirements and trading protocols; and quasi-regulators, such as self-regulatory organizations (e.g., FINRA in the United States).
Other examples include legal systems, such as criminal codes that protect investors against fraud and other illegal activities; taxation authorities; transfer agents, who ensure the smooth, legal, and timely execution of buy and sell orders; the International Monetary Fund, World Bank, and OECD, each of which has the power to influence the entire ecosystem with their international economic policies; activists or lobbyists, who agitate for changes to the ecosystem; and business schools, who educate those who participate in the financial ecosystem.

These organizations operate across the entire ecosystem space, including that on which all of the other actors' institutions are built. CFA Institute is one such organization, given the universal acceptance of its CFA Program and its influence over its members in ethics and professional practice.

Finally, there is the natural environment itself, and its representatives, which are considered a part of the ecosystem because natural capital both constrains and inspires economic growth.
## MEGATRENDS IMPACT IN THE SCENARIOS

<table>
<thead>
<tr>
<th>FINTECH DISRUPTION</th>
<th>PARALLEL WORLDS</th>
<th>LOWER FOR LONGER</th>
<th>PURPOSEFUL CAPITALISM</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DEMOGRAPHICS</strong></td>
<td>In general, financial services become cheap and available to many more segments of global society. These products range from microfinance to on-demand mobile asset allocation.</td>
<td>Deepening pension crises create large gaps in pension coverage with longevity. Collectively, these create prime conditions for pension poverty, partly offset by later retirement.</td>
<td>The world is fast changing and interconnected, with less stability and equilibrium in the financial system. This comes at a time when the importance of the market-based chain of intermediation from savings to investment grows to unprecedented size as aging demography develops.</td>
</tr>
<tr>
<td>Demographics + fintech = next generation investors expect to do more via technology.</td>
<td>Women become increasingly large players in capital formation and allocation, with different priorities, perspectives, and preferences.</td>
<td>In a world of shrinking population growth, stranded capital in fixed assets, such as real estate and infrastructure, create dislocations for policymakers stuck in old ways of thinking about how to drive output and not productivity.</td>
<td></td>
</tr>
<tr>
<td>Global Millennial predilection toward technology = preference for robo-advising + passive management.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TECHNOLOGY</strong></td>
<td>Innovations evolve with the potential to positively or negatively disrupt individuals, society, businesses, and governments. Also plays a highly disruptive role in finance’s evolution, in its jobs, and in ways of working.</td>
<td>New technologies allow huge numbers of the previously disenfranchised to peer into the lives of others and to see how they live, including their economic opportunities and moral values.</td>
<td>Costs are seen as an unacceptable drag on returns, precipitating transitions to lower-cost, higher-tech investment solutions and putting a high premium on innovation.</td>
</tr>
<tr>
<td>Social media helps spread legitimate disaffection with political issues to incite illegitimate expectations, notably on immigration, public services, and social infrastructure as a superficial and transactional part of the political process.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Megatrends Impact in the Scenarios, Continued

<table>
<thead>
<tr>
<th>ECONOMIC IMBALANCES</th>
<th>PARALLEL WORLDS</th>
<th>LOWER FOR LONGER</th>
<th>PURPOSEFUL CAPITALISM</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FINTECH DISRUPTION</strong></td>
<td>The new work model is essentially cyborg (person plus machine), with critical skills in soft areas. Humans remain in demand for their situational fluency, social intelligence, innovation, creativity, and social media savvy.</td>
<td>The ceiling on income rises, and the floor rises, just not as fast. The uneven distribution creates tensions in politics and within businesses.</td>
<td>Geopolitical and social instability produce deeper fissures of inequality. Job fears, immigration, and desire for a fair share of a nonincreasing pie, all contribute to the fissures.</td>
</tr>
<tr>
<td><strong>GOVERNMENT FOOTPRINT</strong></td>
<td>Regulators can hinder fintech disruptions by clinging to regulations designed for 20th-century finance, but hyper-distributed technologies like blockchain could limit their influence.</td>
<td>The “have-nots” act on their disillusionment with the system through support for nationalism and populism with anti-elite overtones and financial services disengagement.</td>
<td>Central banks are unable to move interest rates up as much as desired to spur aggregate demand because of sovereign and consumer indebtedness.</td>
</tr>
<tr>
<td><strong>RESOURCE MANAGEMENT</strong></td>
<td>The rise of fintech permanently lowers costs of capital for all companies. Opportunities increase to deploy efficient resource-sparing technologies.</td>
<td>Firms find a new balance in stakeholder responsibility, with the growth of B corps and other organizations that passionately pursue a greater pro-social orientation.</td>
<td>The diffusion of lower prices for consumers globally and for bare essentials leads over time to larger numbers of consumers having nearly identical access to food, shelter, transportation, communication, computing, and other goods and services. A need arises for more capital to be allocated to developing economies and economies where demographics and demand for necessities continue to grow.</td>
</tr>
</tbody>
</table>
BIBLIOGRAPHY


PwC. 2015. “Peer Pressure: How Peer-to-Peer Lending Platforms Are Transforming the Consumer Lending Industry” (February).


About the Report

In 2016, CFA Institute commissioned the Institutional Investor Thought Leadership Studio to survey members of the investment management profession for an overview of the current and future state of the profession. A questionnaire was distributed to two lists, one drawn from Institutional Investor’s database, the other from CFA Institute. There were 1,145 responses (644 from CFA Institute) collected from 8–22 December 2016, with a margin of error of 2.9%. In addition, Institutional Investor conducted interviews with 19 executives in the investment management profession to obtain context and further details about the collected data.

Authors: Rebecca Fender, CFA Robert Stammers, CFA Roger Urwin, FSIP Jason Voss, CFA

Contributors: Giuseppe Ballocchi, CFA Richard Brandweiner, CFA Anne Cabot-Alletzhauser Margaret Franklin, CFA Lutfey Siddiqi, CFA

Steering Committee: Gary Baker, CFA, John Bowman, CFA, Michael Collins, Bjørn Forfang, Stephen Horan, CFA, Nick Pollard, Nitin Mehta, CFA, Kurt Schacht, CFA, Paul Smith, CFA

Additional thanks go to Bristol Voss, Nicole Lee, Tara Smith, and Melissa Carroll of CFA Institute, and Sam Knox of Institutional Investor Thought Leadership Studio, as well as the many industry leaders who participated in the research.
CFA Institute

CFA Institute is the global association of investment professionals that sets the standard for professional excellence and credentials.

The organization is a champion for ethical behavior in investment markets and a respected source of knowledge in the global financial community. The end goal: to create an environment where investors' interests come first, markets function at their best, and economies grow.

CFA Institute has more than 146,000 members in 160 countries and territories, including 140,000 CFA charterholders and 147 member societies.

The CFA Institute Future of Finance initiative is a long-term, global effort to shape a trustworthy, forward-thinking investment profession that better serves society.

For more information, visit www.cfainstitute.org/futurefinance or contact us at FutureFinance@cfainstitute.org to offer your ideas about how to shape the industry for the future. We encourage you to cite this report using the link www.cfainstitute.org/futurestate

Institutional Investor

Institutional Investor is among the world's leading investment information brands. Its highly regarded content reaches the world's most influential investors across an array of media platforms, conferences, capital markets databases and emerging markets information services. Institutional Investor's Thought Leadership Studio works closely with its clients to execute independent primary research, and to create relevant content to amplify the findings.